Introduction

Introduction by the Dean

Welcome to the Marriott School of Management project on personal finance. At Brigham Young University’s Marriott School we are concerned about the financial literacy of individuals both inside and outside the University. A solid understanding of basic financial principles and the ability to manage finances wisely are important factors in the well-being of individuals and families. This project is one of our many efforts to increase the financial literacy and self-reliance of our own students as well as of families and friends outside the University.

As you work through this course, I hope you will take the time to do three things. First, read and study the material. Each chapter offers valuable information that will enrich your understanding of personal finance. The chapters have been carefully reviewed by our faculty and staff in the Marriott School. We think they are informative and clearly written. They are organized to be useful to young people with little financial knowledge, people who have extensive experience in financial matters, and everyone in between.

Second, as you read, focus on the principles taught in the course. We emphasize principles because principles don’t change over time. Types of financial assets, investment vehicles, and even financial theories may change, but principles do not. This focus will help you stay on course as you make financial decisions for yourself and your family.

Finally, apply these principles to your life by developing your own “Personal Financial Plan.” Spencer W. Kimball has counseled, “To be sure your life will be full and abundant, you must plan your life” (Ensign, May 1974, 86). We strongly encourage you to think through and write down your goals, the things you want to achieve in life. Develop a financial plan to help you accomplish your goals and then work to implement your plan. Such planning may be the single most important tool for achieving your personal and financial goals.

Thank you for your interest in this course. May this be the start of even greater learning and understanding as you work toward greater financial self-reliance.

Sincerely,

Lee Perry
Dean, Marriott School of Management
Brigham Young University
Introduction

Author’s Note

Welcome to this manual and the accompanying website at http://personalfinance.byu.edu on Personal Finance. We compiled information on the most important areas of personal finance for students, individuals, and families. We have developed a principles- and applications-based framework that we hope is clear and concise, and that applies the best practices used in the industry. While there may be differences of opinion as to what are the best practices in the areas discussed, this platform was developed to facilitate review and discussion of those practices.

The ideas presented in this manual were written for a Christian audience with membership in The Church of Jesus Christ of Latter-day Saint (LDS faith); however, the financial principles taught herein can be extended to members of any Christian faith. Readers who are not of the LDS faith may encounter a few unfamiliar terms within this text. While these terms may provide valuable insights to members of the LDS faith, a thorough understanding of these terms is not required to understand the financial principles taught here. If you have questions about any of these terms, feel free to contact me at personalfinance@byu.edu, or visit The Church of Jesus Christ of Latter-day Saints’ website (http://lds.org/topics) for more information.

This manual and website are updated every year for new information, changes to tax laws, and improvements in teaching methodologies. As such, I would appreciate feedback to help make the manual and website better and more useful. While I have tried to present the material in as fair and balanced a framework as possible and am incorporating changes as they become apparent, there may be errors of omission or commission. While this personal finance manual and the website have been approved by Brigham Young University’s Marriott School of Management for distribution, they remain the work of the author. Any errors are solely my responsibility and are not the responsibility of the Marriott School of Management, the faculty, or Brigham Young University.

Bryan L. Sudweeks, Ph.D., CFA

August 2016

How This Course Is Different

Dave Ramsey, a nationally syndicated radio talk show host, commented, “Personal finance is more personal than it is finance: it is more behavior than it is math” (KNBR, May 23, 2007). Learning about personal finance requires more than learning the languages of finance and math and more than just a change in spending habits—it requires a change in behavior. The three characteristics that make this course different from other courses on personal finance can help effect this change in behavior:
First, we take a different perspective on personal finance. Perspective—the way we look at things—influences our financial self-reliance because it directs the choices we make. Concerning perspective, the historian Will Durant wrote, “We need ‘to seize the value and perspective of passing things. . . . We want to know that the little things are little, and the big things big, before it is too late; we want to see things now as they will seem forever—‘in the light of eternity.’”1

Our perspective in this manual is unique—our perspective is that personal finance is not separate from our Christian lives; rather, personal finance is simply part of our Christian lives, part of living the gospel of Jesus Christ. In this course, our perspective on personal finance is based on a long-term view, on knowing what truly matters. This perspective will guide you as you make financial choices.

Second, we take a principles-based approach to personal finance. Unlike investment theory, investment vehicles, and financial assets, principles never change. A sound understanding of the correct principles of personal finance will act as a compass to guide you as you work toward achieving your personal and family goals. Richard G. Scott commented:

[The] inspired statement, “I teach them correct principles, and they govern themselves,” still applies. The Lord uses that pattern with us. . . Your consistent adherence to principle overcomes the alluring yet false life-styles that surround you. Your faithful compliance to correct principles will generate criticism and ridicule from others, yet the results are so eternally worthwhile that they warrant your every sacrifice.2

In this course you will learn how principles relate to every aspect of your personal finances. Understanding correct principles makes it easier to follow and apply the concepts discussed in this manual and website to your personal lives.

Finally, we take an applications-based or hands-on approach to personal finance. We learn best when we use the things learn in our daily lives. It is not enough to know what to do—we must do it. Accordingly, the final difference is that we apply the things learned in this manual in the creation of your individual or family Personal Financial Plan. This is part of Ezra Taft Benson’s advice to “Plan your financial future early, then live your plan.”3

To help you apply your learning and planning, we offer a companion website, http://personalfinance.byu.edu, which includes this book, PowerPoint presentations, learning tools, videos of my personal finance class taught at BYU, and other personal finance manuals compiled and developed by the faculty and staff at Brigham Young University. These tools will help you set goals, create a budget, work toward getting out of debt, evaluate different investments, buy a house or a car, invest wisely, save for retirement, and more. You will also receive extensive instructions for developing your own Personal Financial Plan, including helpful examples of completed financial plans.

I believe that changing your perspective, learning the principles that support successful financial management, and applying this knowledge to your own life through the tools we’ve provided
will increase your financial literacy and help you achieve the goals that are most important to you and your family. Best of luck to you as you begin this journey toward increased financial self-reliance.

Special Thanks

I express appreciation to the Rollins Center for eBusiness of the Marriott School of Management for its help and support in maintaining the website, the H. Taylor Peery Institute of Financial Services at the Marriott School for its help and support with the content, and the BYU Center for Teaching and Learning for its help with website design and implementation. Thanks also to Laura Dearden for the cover photos and design of the printed versions.

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been wonderful to put up with a dad who asks too many questions and makes too many comments on the topic of personal finance. Without them and their love and support, this project would not have been possible.

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We also encourage the free use of these materials by educational, non-profit, and other institutions. Please feel free to download and copy these personal finance manuals, Learning Tools, PowerPoint presentations, and all other materials from the website as needed for your schools and colleges. We have also included lesson plans and PowerPoint presentations on the website that are used here at Brigham Young University’s Marriott School of Management to help in the teaching of these materials.

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1 The Story of Philosophy, New York: Simon and Schuster, 1927, 1
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1. Personal Finance: Introduction and Understanding Why

Introduction

Personal finance. These two words can bring either fear or excitement into the heart of the reader. Why such varied responses to a simple two-word phrase? There are many different reasons.

One of the most prevalent is a lack of education. It is hard to make important decisions when you feel you are in unchartered territory. Other responses have been due to “misguided” information. Some individuals and companies have used personal finance as a tool to earn huge commissions on selling insurance and investment products without regard to the needs of the investors they supposedly serve, resulting in poor performance for the investors and uncertainty over missed goals. Still others have made unwise decisions based on solely acquiring assets and investments, but to the detriment of their spouses, families, and real success. While they may have acquired financial security, they have lost the things that will bring them what they desire most, which is happiness and joy. Others have learned their available options, determined their key doctrines and principles, followed those principles and applied them to their financial habits and goals, and have accomplished the goals that they have set for themselves and their families, including happiness in this life and in the world to come. The purpose of this manual and the accompanying website is to help you come to understand the process of personal finance or financial planning for yourself and those you love.

Personal finance in this manual is a five-step process. It is decide, educate, commit, believe, and achieve.

Decide. First, you must decide the “why” behind why you are doing this. Why do you want to learn personal finance? This is not as simple as some think. What is the real reason? What do you expect personal finance to bring into your life? What do you hope it will help you accomplish? What problems will it help you avoid? Too often, people get into the “how” of personal finance without knowing the “why,” and it leads to major problems later. Different perspectives are helpful.

Educate. Second, you must educate yourself to your available options. This is the “what” of personal finance. This is where we come to understand and prioritize the principles. It is not a simple process to become educated in this area. There is much to be learned in this area. Students have commented that education in this area (which includes using this manual) is similar to “drinking out of a fire hose.” Not only is there a lot of information, but much of this information changes every year, including tax rates, tax tables, contribution limits for retirement, contribution limits for education savings, estate tax
limits and percentages, etc. The challenge then is how do we keep up with both the large body of knowledge as well as the information that changes yearly? Notice that this personal finance manual is updated annually to take into account the changing nature of both types of information as I grapple with this same problem.

Commit. Third, once we know the “why” of our actions and the “what” that we need to do, it comes down to choice. We need to determine the goals that will most likely take us to where we want to be. But the challenge for most people is not setting goals. The challenge is how do we commit to really accomplish the goals that we have set? How do we help ourselves and others to set and accomplish the goals that will take us toward what we really want? How do we take responsibility for our choices? We will help address those issues.

Believe. Fourth, we must believe that we can accomplish the things we set out to accomplish. We must have the vision to know that we can accomplish these things if we are willing to put in the effort, work, and prayer. I believe that we who believe in God have an added benefit. If we seek God’s help in setting and committing to our personal and family goals, and then trust in His promises to us, He will help us accomplish them (Psalms 37:5). Not only will we accomplish our goals, but they will be the right goals for ourselves and our families.

Achieve. Finally, we must work to achieve the goals that we have set. We must be willing to make the necessary sacrifices. But we must also be sure that we keep balance in our goals and lives, ensuring that we accomplish our identity, integrity, and temporal goals in a consistent manner.

This course will work to help you accomplish each of these areas.

With “Decide,” we will discuss the critical doctrines and issues in this first chapter. This first chapter discusses the “whys” of learning more about personal finance. These are critical to understand before we begin any other part.

With “Educate,” the purpose of the entire manual is to help you to become educated to the information, data, and sources of information so you can be a wise consumer of financial information. Key in the education process is to understand the principles of each of the respective areas, the “what” of personal finance. If we can understand the key principles, we will be able to do much better in determining what goals we need to set and why. Read each chapter carefully with an emphasis toward how the principles relate to what you want to accomplish.

“Commit” will help us as we determine which goals we wish to accomplish and as we commit to those worthy goals. This is the “how” of personal finance. This is how we are going to get from where we are now to where we want to be. We must decide what is important and then make plans to help ourselves and our families reach these important milestones in our lives. Our second chapter will be instrumental in this area.
With “Believe,” we must believe we can accomplish what we want. We must have the faith of prophets of old who said: “I will go and do the things which the Lord has commanded, for I know that the Lord giveth no commandment unto the children of men save he shall prepare a way for them that they may accomplish the things which he commandeth them.”1 Throughout this series, we will be sharing not just the temporal application of information to help you in your goals, but also the spiritual side which can be an even greater source of power.

Finally, with “Achieve,” we must be willing to go and do the work necessary to achieve what we set out to do. We will be giving ideas throughout the course to help you in this area. Specifically, look for the application area of each chapter, including the case studies. These were specifically developed to help you as you apply the principles to specific situations in your lives.

Objectives

A. Understand the importance of perspective
B. Understand our perspective for this course
C. Understand the “whys” of personal finance
D. Understand the principles upon which that perspective is based
E. Understand the implications of that perspective

Understand the Importance of Perspective

The dictionary defines perspective as “one’s point of view, the choice of a context for opinions, beliefs, and experiences.”2 The historian Will Durant wrote of the human need “to seize the value and perspective of passing things. . .we want to see things now as they will seem forever—‘in the light of eternity.’”3

The challenge then is to see things in a consistent perspective—as they will seem forever. Neal A. Maxwell wrote of those without this perspective: “Living without God in the world brings a functional lack of consistent perspective. If there were no eternal truths, to what principles would mortals look for guidance? If not accountable to God, to whom are we ultimately accountable?”4

Our perspective—how we look at things—makes a difference in the choices we make. Do we recognize our difference in perspective as we look at the world around us? Do we recognize the implications of our differences in outlook, the differences of our eternal perspective as we go about our daily lives?

The purpose of this section is to articulate “another” perspective on wealth, this eternal perspective. This perspective is critical for us to understand, and it has a major influence on how we make choices.

In this manual and website, I take a different view from the world. I disagree with the belief that “money buys happiness.” The media continues to bombard us with the illusion that we have to spend money to be content or that to be happy, a person must be beautiful, sexy, thin, rich, or whatever it is they are selling at the moment.
Chapter 1. Introduction and Understanding Why

Most of us are not conscious of the effects of our perspectives on our everyday lives. When we have a proper perspective on life, there is pattern, beauty, and purpose instead of senseless, unconnected fragments. Along with that knowledge of the purpose of life, it is important that we understand correct principles so that we can make good choices.

On the subject of choices, Spencer W. Kimball said:

We hope we can help our young men and young women to realize, even sooner than they do now, that they need to make certain decisions only once... We can make a single decision about certain things that we will incorporate in our lives and then make them ours—without having to brood and re-decide a hundred times what it is we will do and what we will not do.... My young brothers [and sisters], if you have not done so yet, decide to decide!5

The purpose of this series is to help you in your understanding of perspective as it relates to personal finance and then to help you “decide to decide” to be wise in the management of your personal finances. When we have an eternal perspective, we understand things differently, view events differently, and make choices differently with respect to our families, friends, work and our personal finances.

Understand our Perspective for this Course

Our perspective is simple. It is this: Wise money management is simply living the gospel of Jesus Christ. It is putting Christ first in our lives, not our pocketbooks. “But seek ye first the kingdom of God, and his righteousness; and all these things shall be added unto you”.6

David A. Bednar talked of doctrines and then related them to principles. He said:

Principles are doctrinally based guidelines for what we ought to do. Therefore if there is a doctrine of the Atonement, then the first principle of the gospel is faith in the Lord Jesus Christ. Brothers and sisters, doctrine answers the why questions of our lives. Principles provide us with direction about the what and the how.7

So if money management is simply a doctrine of Christ, what are the “why” questions it should answer?

Understand the “Whys” of Personal Finance

Before we can decide about wise money management, we must understand and answer the question: “Why does the Lord want us to learn personal finance (or wise money management)?”

While there are likely many different “whys”, let me share a few thoughts on doctrines of Christ for why I believe God wants us to learn personal finance. Since perspective is so important, this question must be addressed from many different perspectives. Possible perspectives include
spiritual, temporal, family, and personal. You could come up with other perspectives as well. While there are an innumerable number of perspectives, these four seem to be important and will be addressed here.

1. Spiritual: Personal finance can help bring us to Christ

From a spiritual perspective, the ultimate purpose of everything we do, and God does, is to bring us to Christ. Because God’s work and glory is to bring to pass the “immortality and eternal life of man” and the only way we can have eternal life is through Jesus Christ, then the purpose of all mortal experience is to bring us to Christ. Learning to manage our finances according to gospel principles will help us grow spiritually as well as help build up our families and the kingdom of God.

C. Max Caldwell said:

Whatever the problem may be in a person’s life—failure to pay tithing, breaking the Word of Wisdom, casual church attendance, [or, I add, poor financial habits, the]—real issue is faith in Jesus Christ. If we can help people obtain the gift of faith in Christ, good works will follow. The end purpose of any law of God is to bring us to Christ. And how well will the law work? It depends on what we think of the Author of the law.

We have also been commanded by prophets and the scriptures to be financially wise.

[We] have been counseled for many years to prepare for adversity by having a little money set aside. Doing so adds immeasurably to security and sell being. Every family has a responsibility to provide for its own needs to the extent possible . . . If you have paid your debts and have a financial reserve, even though it be small, you and your family will feel more secure and enjoy greater peace in your hearts. May the Lord bless you in your family financial efforts.

Perspective also adds significantly to motivation. Whether we view this counsel on being financially wise as a nice thing to do or a commandment of God will provide a great difference in our motivation to do these things.

2. Temporal: Personal finance can help us become wiser stewards

From a temporal perspective, managing resources is a skill that Heavenly Father wants us to develop during mortality. “For he who is faithful and wise in time is accounted worthy to inherit the mansions prepared for him of my Father.”

Personal finance helps us learn to be wiser financial stewards over the things God has blessed us with. Joe J. Christensen said: “Our resources are a stewardship, not our possessions. I am confident that we will literally be called upon to make an accounting before God concerning how we have used them to bless lives and build the kingdom.”
I believe a critical question at judgment day from our Savior will not be: “How much money did you make?” Rather, it will be: “How well did you use the resources I blessed you with in the service of your fellow men?”

3. Family: Personal finance can help us return with our families back to Heavenly Father’s presence

The third perspective is family. An eternal perspective on finances can prepare us for eternal marriage, strengthen existing marriages, and be a conduit for positive parenting. Personal finance helps us keep our priorities in order. David O. McKay reminded us: “No other success can compensate for failure in the home.”

We show our love for our Savior as we pay our tithes and offerings. We are examples to our children as we put the Lord first and sacrifice through service, hard work, church and temple attendance. We build our communities and nation as we seek opportunities for service to our friends and fellowmen.

We will be disappointed in life if we gain the world’s riches and lose our spouses and families. We must learn to better apply personal finance in the Lord’s way, using His plan and obeying His commandments.

4. Individual: Personal finance can help us accomplish our divine missions

The fourth perspective is individual. I know we all have divine missions to perform here on earth, and personal finance can help us learn the lessons and develop the skills we need to accomplish those missions. Many of our missions will required material resources. Gene R. Cook said: “I bear testimony of the fact that if you keep the commandments, He nourishes you, strengthens you, and provides you means for accomplishing all things necessary to faithfully finish your divine mission here on earth.”

We are all at an important time in our lives, regardless of our age. Ask yourself: “Do I really believe that I have a mission here on earth to perform and am I performing it?”

Clearly, perspective is important, and by looking at many different perspectives we can understand more fully “why God wants us to learn personal finance.”

So if money management is simply a doctrine of Christ, are there principles upon which wise money management is based? Let me propose a few principles that are the foundation upon which this perspective is based. I call these my “Principles of Finance.”
Chapter 1. Introduction and Understanding Why

Understand the Key Principles on which Our Perspective is Based

Correct principles are fundamental laws or doctrines, which, if understood, will allow us to live or act according to truth. While easy to find, correct principles may not be easy to live. Richard G. Scott commented:

[The] inspired statement, “I teach them correct principles, and they govern themselves,” still applies. The Lord uses that pattern with us. You will find correct principles in the teachings of the Savior, His prophets, and the scriptures. While easy to find, true principles are not easy to live until they become an established pattern of life . . . Yet, as you resolutely follow correct principles, you will forge strength of character available to you in times of urgent need.16

What are those principles to which we must adhere? Let me propose a few principles that relate to understanding and using wealth wisely. These principles have made a major difference in my life and the life of my family.

Principle 1: Ownership

The Psalmist wrote: “The earth is the Lord’s, and the fullness thereof; the world, and they that dwell therein.”17 The apostle Paul, writing to the Corinthians, stated the same message: “For the earth is the Lord’s, and the fullness thereof.”18

We know from scriptures that the Lord was the creator of the earth19, the supplier of our breath20, the giver of our knowledge21, the provider of our life22, and the giver of all we have and are.23 Nothing we have is our own—it is all God’s. As such, there should be no feeling of pride for the things we have or are. These things do not belong to us, but are on loan from a loving Heavenly Father and His Son, Jesus Christ. These blessings that should encourage us to demonstrate greater obedience to God’s commandments. As we realize that all we have and all that we have become are gifts from a generous Heavenly Father and Son, we will find gratitude and obedience rather than pride.

Principle 2: Stewardship

A steward is one who actively directs the affairs of another. The apostle Paul stated: “Let a man so account of us, as of the ministers of Christ, and stewards of the mysteries of God. Moreover it is required in stewards, that a man be found faithful.”24 The Lord stated, “It is expedient that I, the Lord, should make every man accountable, as a steward over earthly blessings, which I have made and prepared for my creatures.”25

Being blessed with material things in life should not be seen only as a blessing but also as a responsibility. We will be required to give an account of our stewardship to Heavenly Father. In order for us to be wise stewards, it is our responsibility to learn everything we can about our
stewardship so we can manage it to the best of our abilities. The purpose of this manual and website is to help you understand and manage your stewardship better as it relates to personal finance.

**Principle 3: Agency**

President Thomas S. Monson taught: “When we came to the earth, we brought with us that great gift from God—even our agency. In thousands of ways we are privileged to choose for ourselves.”

The prophet Joshua counseled the people about agency, which is the ability to choose, when he said: “Choose you this day whom ye will serve; . . . but as for me and my house, we will serve the Lord.”

David O. McKay wrote: “Next to the bestowal of life itself, the right to direct that life is God’s greatest gift to man . . . Freedom of choice is more to be treasured than any possession earth can give.

We should do everything in our power to thank God for this wonderful right to choose, and then use that agency as wisely as we can.

**Principle 4: Accountability**

We have been blessed with the wonderful gift of agency, but we will also be held accountable for its use. The Lord counseled, “For it is required of the Lord, at the hand of every steward, to render an account of his stewardship, both in time and in eternity.”

The blessing of agency is an unconditional gift of God, and how we use that gift shows how much we love Him and His Son Jesus Christ. The first three principles outlined above are God’s gift to us. The fourth principle is our gift to God. We can, through our wise choices, show our Heavenly Father how much we love Him by obeying His commandments and striving to become more like His Son.

These four principles establish a spiritual foundation for understanding wealth that is based on our dependence on God and our need for financial self-reliance to fulfill His purposes. Everything we have is God’s, and the things we receive are all blessings from Him. They are not ours, but they have been given to us as a stewardship for which we can make choices. We should choose well, as we will be held responsible for what we do.
Chapter 1. Introduction and Understanding Why

Understand the Implications of that Perspective

The purpose of this section is to help understand the implications of an eternal perspective, which are many and varied, but make a big difference in how we live our lives.

**Implication 1. Life is about others**

Some believe the statement “it’s all about me.” They think life is only about them, that they are the center of the universe, that they decide what they should do, that what they want is right, regardless of what it is, and that they can do whatever they want, because they don’t have to account to anyone. Thoughtful consideration causes us to think about who created us, what our purpose is on earth, and where we can find the most joy.

The more we think deeply, the more we realize that this life is not about us, it is about what we do with our life. Life is a test, a training period or probationary time to show where our heart and our will really are. I believe that if we put Christ first in our lives, we will live eternally with God and our families. If we fail to put Christ first in our lives, in the end it really doesn’t matter what or who we put first.

**Implication 2. It’s About Faith**

Some feel personal finance is all about money. Some think money is the answer to all our problems. Someone commented: “If you can solve it with money, it is not a problem.” But is it really about money?

In most cases, financial problems are behavioral problems, not money problems. We all know what we should do: live on a budget, spend less than we earn, not go into debt, build a reserve, etc. But other things (ignorance, carelessness, compulsiveness, pride, and necessity) get in the way.

For most, it is not a question of knowledge, but of motivation. How do we motivate ourselves (and others) to do the things we know we should?

Boyd K. Packer answered this when he said: “True doctrine, understood, changes attitudes and behavior. The study of the doctrines of the gospel will improve behavior quicker than a study of behavior will improve behavior.”

Moreover, the Lord admonished: “But no temporal commandment gave I unto him, for my commandments are spiritual; they are not natural nor temporal.

The lesson for us then is to understand doctrine. Then we can apply it to help us do what we should. The “doctrine” is we have been commanded in the scriptures and by living prophets to:
Chapter 1. Introduction and Understanding Why

- Live within our means
- Get out of debt
- Build a reserve
- Save for long-term goals, and
- Teach our children.

From this perspective, we see that financial problems are not problems of money, but rather, problems of faith.

**Implication 3. We Can Have God’s Help**

Some think that they have to do all this work on their own to educate themselves about personal finance. They have to figure it out by themselves and they have to do it all themselves.

There are resources that are available that can be helpful in fulfilling this responsibility in personal finance. They key is to choose your help carefully. Ensure they are not trying to sell products or services. Make sure the principles taught are consistent with the principles of the gospel. This manual and website are good resources to help.

Most importantly, as you work and study, seek the help of the Spirit to guide you. Remember since the Lord has commanded us to be wise financially, He will help us to do it.

Our leaders have counseled: “Whatever our calling, regardless of our fears or anxieties, let us pray and then go and do.”

**Implication 4. Finances are a Spiritual Matter**

Many think money matters are only temporal matters. They feel that how they manage their money has nothing to do with their spirituality. They feel that scriptures talk only of spiritual things and not temporal issues such as financial matters. I consider money matters as spiritual matters for four reasons:

a. **All things are spiritual.** In the scriptures the Lord says, “All things unto me are spiritual, and not at any time have I given unto you a law which was temporal.”

b. **Money is a medium of exchange.** Sterling W. Sill said: “We can build temples with money, we can send out missionaries with money, we can erect educational institutions, operate hospitals, and pay our tithing with money . . . In many ways we can build up the kingdom of God with money.”

c. **There is no true freedom without financial freedom.** Many think they are totally free, even when they are in debt to others. They think that it is OK to be in debt. After all, it builds their credit score, doesn’t it? Ezra Taft Benson said: “No man is truly free who is in financial bondage.”
d. Money is a tool to teach gospel principles. Money is a tool to teach us many things, including the following gospel principles.

1. Seeking the kingdom of God first. By paying our tithes and offerings first, we show we love God more than we love material things.

2. The spiritual and physical creation. Money teaches and reinforces both the spiritual and physical creation, as we develop goals and budgets and work toward them.

3. The Law of the Harvest. We learn this as we invest for retirement and other long-term goals. We cannot cut corners with this law.

4. Christ-like characteristics. We learn Christ-like characteristics of charity as we save for our goals, learn and practice giving, serve and sacrifice for others, and as we give up things now for things greater in the future.

**Implication 5. We are Responsible for our Choices and our Finances**

Some feel that they are not responsible for their financial lives. It is someone else’s responsibility, their parents, the government, their children, etc. They should not have to think and labor for the things they receive.

We are responsible for all our choices, including our financial choices. We cannot spend our way into financial security. We must learn to and save for our own retirement. We must learn to and save for our long-term goals. If we choose, we must learn to and save to help our children with their missions and education. If we want to serve missions later on in life, we must learn to manage our finances wisely and save.

After children become adults, they are responsible for their finances. Parents are not responsible for their adult children’s finances—the adult children are. Likewise children are not responsible for their parent’s finances. Evidence is apparent that parents who continually support their children financially will find their children will always need support. Please note that it is hard for children to learn financial responsibility if they are continually rescued from their poor financial choices or if they do not have to work for what they get.

Others think money matters are a male responsibility for married couples. Some think if wives become knowledgeable about financial matters, their husbands will be upset. Others reason that since the husband makes the money, husbands get to decide where it goes.

Couples are jointly and equally responsible for their finances. The Proclamation on the Family states:

By divine design, fathers are to preside over their families in love and righteousness and are responsible to provide the necessities of life and protection for their families. Mothers
are primarily responsible for the nurture of their children. In these sacred responsibilities, fathers and mothers are obligated to help one another as equal partners.\textsuperscript{36}

Marriage partners are equally responsible. Moreover, control of money by one spouse as a source of power or failure by a partner to be a part of financial management are both incorrect attitudes. Marvin J. Ashton said:

Management of family finances should be mutual between husband and wife in an attitude of openness and trust. Control of the money by one spouse as a source of power and authority causes inequality in the marriage and is inappropriate. Conversely, if a marriage partner voluntarily removes himself or herself entirely from family financial management, that is an abdication of necessary responsibility.\textsuperscript{37}

When culture or other traditions go counter to this equality, it must be changed. Husband and wife are equal partners in the Lord’s view.

**Implication 6. Consumer Debt is an Addiction**

Some consider it is OK for them to go into debt to buy things, especially things they really want. You can’t have a car without a car payment, can you? It is OK to borrow, if you really want it, isn’t it?

Consumer debt is bad. It stops growth and savings, and is expensive, both economically and spiritually. James E. Faust stated: “Over the years the wise counsel of our leaders has been to avoid debt except for the purchase of a home or to pay for an education. I have not heard any of the prophets change this counsel.”\textsuperscript{38} Sadly, consumer, auto, and credit card debt not paid off monthly are not included in that short list of acceptable debt.

Perhaps the debt problem is more a problem of pride than it is of money? Don’t think of it as “I am going into debt.” Think of it as “I’m spending my children’s mission and education money” or “I am disobeying the teachings of my Savior.” Putting these financial decisions in this perspective may be helpful in making better choices.

**Implication 7. Every Family Should have a Budget**

Some feel that living on budgets is only for college students and those that need to be careful with their money, not more “mature” people like ourselves. We do not need to have a budget because we know where the money goes (it goes to pay our bills).

Spencer W. Kimball counseled:

Every family should have a budget. Why, we would not think of going one day without a budget in this Church or our businesses. We have to know approximately what we may receive, and we certainly must know what we are going to spend. And one of the
successes of the Church would have to be that the Brethren watch these things very carefully, and we do not spend that which we do not have.\textsuperscript{39}

**Implication 8. We Cannot Judge or Compare**

Some judge others by the outward appearance, by how much money they have, how they are using that money, or by the assets they own or control. They think that appearances are more important than the heart and that they have all the facts necessary to judge.

In the parable of the talents,\textsuperscript{40} the Lord gave different talents to different people. They each took the talents given them, took responsibility for those talents, and they used the talents to the best of their abilities. They each made different returns on their talents. But the end result was the same wonderful blessing: “Enter thou into the joy of thy lord,”\textsuperscript{41} regardless of the amount given.

None are in a position to judge based on the talents (or blessings) given them by God. We have been commanded: “Judge not, that ye be not judged. For with what judgment ye judge, ye shall be judged: and with what measure ye mete, it shall be measured to you again.”\textsuperscript{42}

Some, such as parents, bishops or other Church leaders must make judgments as part of their stewardships. The counsel to them is equally important, that they should judge by the “light of Christ.” The counsel is equally strong: “And now, my brethren, seeing that ye know the light by which ye may judge, which light is the light of Christ, see that ye do not judge wrongfully; for with that same judgment which ye judge ye shall also be judged.”\textsuperscript{43}

Just as we are in no position to judge others (or even ourselves) based on what we perceive based on financial blessings, we are in no position to judge or compare with others. Judgment and comparisons are Satan’s tools, not Christ’s. They come from, and lead to, pride, self-aggrandizement, and feelings of being better (or worse) than others. These are not part of Christ’s gospel where “all are alike unto God.”\textsuperscript{44}

**Implication 9. We Must Learn to be Financially Wise**

The prophet Malachi said: “Bring ye all the tithes into the storehouse . . . and prove me now herewith, saith the Lord of hosts, if I will not open you the windows of heaven.”\textsuperscript{45} Doesn’t it say that if I pay my tithing, the windows of heaven will open and I will get all the financial blessings that I need, regardless of any learning, education, thought, application, hard work or effort on my part?

The prophet Malachi promised that God will open the windows of heaven. However, there is no promise that the windows of heaven will be financial blessings or that paying tithing will eliminate all our financial problems. We still are stewards over what we have and are, and must learn to live in this increasingly challenging financial world. There are still more commandments which relate to finances in addition to just paying your tithing, i.e., living with your means, avoiding debt, teaching your children, building a reserve, preparing for retirement, missions, etc.
Chapter 1. Introduction and Understanding Why

Here are some interesting statistics:

- Average per household debt in the U.S. is $14,500 excluding mortgage debt in 2007
- Credit card users pay 12–20% more than cash users
- 40% of American families spend more than they earn
- The typical family pays $1,200 per year in interest
- About 60% of all active credit card accounts are not paid off monthly
- Most couples indicate that finances are a major stress on their marriages

Over the remaining chapters in this book and through the tools, PowerPoints, and videos available on the website at [http://personalfinance.byu.edu](http://personalfinance.byu.edu), we will work together to share what you can do to become more financially wise and better financial stewards, to help you to “decide” and “educate” so that you can “commit,” “believe,” and “achieve.”

Summary

Perspective is important in studying personal finance. Our perspective is simple. It is that personal finance is simply living the gospel of Jesus Christ; it is putting Christ first in our lives. Our view of the Savior, the way we look at life, at ourselves and others will have an important impact on how we utilize the blessings we have been given by God. It is critical that we have a correct perspective, as perspective impacts our choices.

The most critical question is “why” does God want us to learn personal finance? I believe it is due to four reasons, each related to a different perspective, to:

1. Spiritual. Bring us to Christ
3. Family. Help us return with our families back to Heavenly Father’s presence.

Four key principles constitute the principles on which this perspective is based. They are:

1. Ownership.
2. Stewardship.
3. Agency.
4. Accountability.

Finally, it is our responsibility to be financially wise. The purpose of this manual and accompanying website, PowerPoints and learning tools is to help you accomplish that purpose.
Financial Plan Assignments

Think about the things we have discussed regarding the purpose of wealth in our lives. The world has a different perspective on wealth – generally an incorrect perspective. To become truly wealthy, we must first have a correct perspective and understand the key principles for using wealth wisely. The scriptures state: “For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life.” This is the true kind of wealth. Think about what is necessary to have this correct perspective on wealth.

Read and discuss the following three important chapters that help us with perspective on wealth and our understanding of its key principles: 1 Timothy 6, Jacob 2, and Doctrine and Covenants 6. These chapters are available online at http://scriptures.lds.org/.

Learning Tools

The following Learning Tool will also be helpful as you prepare your Personal Financial Plan:

1. Personal Financial Plan (PFP) Table of Contents

   This is a recommended table of contents for your Personal Financial Plan.

Review Materials

Terminology Review

Accountability. This is a principle that states we are accountable for every choice we make. We do not make choices with no consequences or accountable; rather, we will be held accountability for the decisions and choices we make.

Agency. This principle is that we have choice in our lives. We are agents of will, who can make choices consistent with our beliefs and values. Moreover, the gift of “choice” is man’s most precious inheritance, and we should protect it carefully.

Application. Application is the “how” of how we do things. It is how we apply the doctrines and principles in our lives.

Doctrines. Doctrines are the reasons behind why we do things. They answer the “why” questions of our lives, which are generally the most difficult questions to answer.
Ownership. This is the principle that everything we have is the Lord’s, and we do not own the things we have and are. It is based on scripture and helps us to see our blessings as gifts on loan from a loving Father in Heaven.

Perspective. Perspective is how we look at things. It is important because it impacts choice. We can take many different perspectives in our view of different aspects of our lives, with the best perspective being the perspective that last the longest—an eternal perspective.

Principles. These are doctrinally based guidelines for how we should live our lives. Whereas doctrines answer the ‘why” questions, the principles are the “what” questions, i.e., what are the things and guideline we should be following and doing.

Stewardship. This is the principle that we are stewards over all that the Lord has, is, or will share with us. This view helps us realize the things we have are a gift and we should take care of them.

Review Questions

1. Why is it important to “decide to decide” now? What problems can it help us avoid?

2. Why does God want us to learn wise money management?

3. What is our perspective and why is it important?

4. What are the four key principles on which that perspective is based? Why are they important? What can we do to incorporate these principles into our lives now?

5. Some have asked, “If wealth is so bad, should we seek for riches?” What did Jacob say about this question in Jacob 2:18–19? What should we seek for first?

Case Studies

Case Study 1

Data

Brenda came from a family that had few worldly goods, but there was a lot of love in the home. She has come to talk with you about her finances because she respects you for the wonderful example you have set at work.

Application

She asks you, “What is the purpose of wealth in our lives?”
Case Study 1 Answers

You have lots of good ideas, but you share the following: Jacob shared with us one view of the purpose of wealth in our lives. He counseled us that if we seek wealth, we should do it for the right reasons, and it is OK to do so only after we seek the kingdom of God. The purpose of wealth is not to build ourselves up, and its possession does not allow us to think we are better than other people. Rather, it is to help us bless our families, serve our fellow men, and build the kingdom of God.

Case Study 2

Data

Brenda continues to ask you questions regarding your perspective and principles for using wealth wisely. She is intrigued by your thoughts and answers. She asks if there are principles that you know and have lived that have made a difference in your life.

Application

Share the four key principles for using wealth wisely discussed in this chapter. Why is each principle important? What can we do now to incorporate each principle into our lives now?

Case Study 2 Answers

There are several good answers for these questions. You might respond with:

Our perspective is simple. It is that personal finance is simply living the gospel of Jesus Christ. That perspective is based on four key principles:

1. Ownership: Everything we have or are is a gift from God.
   - It is important because the things we have are not ours but are on loan from a loving Father in Heaven.
   - We can incorporate this principle into our lives by learning that when we share with others, we are only giving back to God what was His in the first place.

2. Stewardship: We are stewards over the things the Lord has blessed us with.
   - It is important because we must learn to be better stewards over our blessings because we will be held accountable for what we do with these blessings.
   - We can incorporate this into our lives by learning as much as we can about the things we need to do so we can become the best stewards we can over the blessings our Heavenly Father shares with us.

3. Agency: The gift of “choice” is man’s most precious inheritance.
Chapter 1. Introduction and Understanding Why

- It is important because we need to use this gift wisely so we can return and live with God eternally.
- We can incorporate this into our lives by studying all areas of our decisions and decision-making processes so we can have the information needed to make the best decisions possible.

4. Accountability: We are accountable for our choices, including our financial choices.
- We are the final decision-makers in life.
- It is important because we must learn to choose wisely.
- We can incorporate this into our lives by setting good goals and then by making wise choices to help us attain those goals—goals that our Heavenly Father would have us seek for.

1 1 Nephi 3:7.
2 In en.wikipedia.org/wiki/perspective, May 1, 2007
3 The Story of Philosophy, New York: Simon and Schuster, 1927, p. 1
4 “Take Especial Care of Your Family,” Ensign, May 1994, 88
6 Matt. 6:33.
7 David A. Bednar “Teach them to Understand,” Ricks College campus Education Week Devotional, June 4, 1998, Rexburg, Idaho.
8 Moses 1:39.
17 Psalms 24:1.
18 1 Corinthians 10:26.
19 John 1:3
20 Acts 17:24-25
21 Moses 7:32
22 Acts 17:28
23 Mosiah 2:21
24 1 Corinthians 4:11.
26 Thomas S. Monson, “Ponder the Path of Thy Feet,” Ensign, November 2014.
27 Joshua 24:15.
28 Conference Report, Apr. 1950, p. 32; italics added.
29 Doctrine and Covenants 72:3.
31 D&C 29:35.
33 D&C 29:34.
40 Matthew 25:14-30
41 Matthew 25: 21, 23.
43 Moroni 7:18.
44 2 Nephi 26:33.
45 Malachi 3:10.
46 John 3:16.
Introduction

Once you have a correct perspective on wealth and understand the key doctrines (whys) and principles (whats) for using wealth wisely, the next important step is to begin your Personal Financial Plan (PFP) and to set personal and family goals. Ezra Taft Benson counseled:

*Plan for your financial future.* As you move through life toward retirement and the decades which follow, we invite all . . . to plan frugally for the years following full-time employment. Be even more cautious . . . about “get-rich” schemes, mortgaging homes, or investing in uncertain ventures. Proceed cautiously so that the planning of a lifetime is not disrupted by one or a series of poor financial decisions. Plan your financial future early; then follow the plan.¹

My purpose is to help you plan for your financial future, to help you set meaningful goals, and encourage you to accomplish those goals. In this chapter, I will share a few steps I have found helpful as I have considered my own life goals. I hope these suggestions will be useful in your life.

Setting personal goals is not simply writing a list of things you would “like” to accomplish. Rather, it is a process of understanding yourself, your aspirations, your desires, and your values and then trying to understand what God wants you to accomplish. Once you have determined these things, you must then combine your understanding of yourself and what God desires for you into a plan of action to help you become your best self. Marvin J. Ashton commented, “True happiness is not made in getting something. True happiness is becoming something. This can be done by being committed to lofty goals. We cannot become something without commitment.”²

Objectives

There are four objectives for this chapter:

1. Learn how wise financial planning can help you achieve your goals.
2. Understand the requirements for your Personal Financial Plan.
3. Identify what you want to accomplish in life.
4. Understand the three distinct types of goals
5. Understand and apply the principles of effective goal-setting.

Learn How Wise Financial Planning Can Help You Achieve Your Goals

Financial planning is the process of planning how to make use of your available resources to achieve your personal and family goals. The purpose of financial planning is to help you use
your resources more wisely. Financial planning will help you determine where you are personally and financially, where you want to be, and how you will get there.

While financial planning may not help you make more money (although it likely will), it will help you make better choices and become a better steward over the things you have been blessed with.

Financial planning is not easy. Some people are uncomfortable discussing financial matters and need help in overcoming this barrier. As you work through the material in this manual, you will learn how to get beyond this fear of finance. Motivation and time are required to complete an accurate financial plan and to accomplish the many things you must do each day in regard to personal finance. Good record-keeping is also necessary, both before and during the planning period. This course includes a variety of tools to help with record-keeping so you can become more financially self-reliant.

As a result of financial planning and this course, you will be able to:

- Manage the unplanned
- Accumulate wealth for special purposes
- Save for retirement
- Protect your assets
- Invest intelligently, and
- Minimize your tax payments.

**Understand the Requirements for Your Personal Financial Plan**

Your Personal Financial Plan (PFP) is a document that accounts for all critical areas of your personal financial life. It is your individual roadmap for achieving your personal and family goals. It is a critical part of Ezra Taft Benson’s admonition to plan our financial futures early, and then live our plans. It requires you to think through what you want, determine where you are now, set goals for where you want to be, develop a plan to get you there, and then implement and revise the plan as needed.

I recommend a six-step process for putting together your Personal Financial Plan:

**Step 1: Decide What You Want**

Deciding what you want establishes what is important to you. It expresses your core values and beliefs. Think through the things you need to decide. What is truly important to you? What do you feel Heavenly Father wants you to do or be? How would you like to be remembered when you leave this life? What do you want to accomplish with your life? These are probably the most important questions you will ever ask and answer. If we can plan our lives with purpose early on, it will be so much easier to accomplish those plans.
**Step 2: Evaluate Your Financial Health**

Evaluating your financial health helps you determine where you are financially. If you don’t know where you are, how can you determine how to get to where you need to be? To evaluate your financial health, develop a balance sheet, an income statement, and a budget, and calculate your financial ratios. Determine where you are financially right now – are you financially healthy? Are you solvent (do you have sufficient cash in your wallet or in your checking account to pay your bills)? How much debt do you have? How much are you saving each month and year?

**Step 3: Define Your Personal and Financial Goals**

Once you know what is important to you and where you are financially, it is critical to define your personal goals. You will achieve what you set your mind to, and you will accomplish the goals that are important to you.

But, the first step is to write your goals down. Attach a cost to each goal. Remember, there are more costs than just financial costs. What are the true costs of your goals in terms of time, money, and effort?

It is also important to determine potential obstacles. By identifying the obstacles early in the analysis, you increase your ability to plan for, avoid, and overcome those obstacles.

Set a date for when your goals are to be completed. In what time-frame can the goal be reasonably accomplished? Make your goals SMART: specific, measurable, achievable, reportable, and time-bound. Then, share them with others so they may hold you accountable for your goals.

**Step 4: Develop a Plan of Action**

Know what you should work on and when. Your plan should be:

- Flexible—it should be able to change as your situation in life changes.
- Liquid—it should have the ability to convert non-cash assets into cash with relative ease and without excessive costs.
- Protective—it should be able to meet unexpected large expenses without difficulty for the inevitable challenges that will come.
- Tax efficient—it should pay the government only that which is owed and not a penny more.

Think long term and consider future needs. Develop a spending plan (also called a budget), and use it wisely. Plan for big-ticket purchases, such as houses and cars. Plan for managing debt, and remember that debt is the enemy to growth. Decide now what you will go into debt for and what you will not go into debt for. Plan for insurance and protect yourself. Determine and write your Investment Plan and follow that plan. Plan for the expenses of children, including missions and
education. Plan for retirement. Most importantly, plan your financial future early; then live your plan. And plan your life with purpose.

**Step 5: Implement Your Plan**

Once you have your plan, implement it. Use common sense and moderation in the things you do. Set wise goals and work toward them each day.

Use wisdom in your plan, and stay positive. Remember that your plan is a goal to set your sights on, not a stick to beat yourself with. Realize that detours will come, but stay on track after the detours. We all encounter detours, but good things come to those who hang in there!

**Step 6: Revise Your Plan as Necessary**

Revision is an important part of your plan. Remember that people and goals change—you need to account for this. Review your goals annually at a minimum, and make sure your plan still matches your goals. If necessary, fine tune your plan. Remember, your plan is etched in paper, not in stone.

Much of your plan is personal and challenging as you try to understand yourself, your family, and the things you want to accomplish. The purpose of this course is to help you identify critical areas and make important decisions.

**Identify What You Want to Accomplish in Life**

As an undergraduate student at Brigham Young University, I read a poem by Jessie B. Rittenhouse that had a major impact on how I felt about goals:

I bargained with Life for a Penny, and Life would pay no more,  
However I begged at evening, when I counted my scanty store.  
For Life is a just employer, He will give you what you ask,  
But once you have set the wages, why, you must bear the task.  
I worked for a menial’s hire, only to learn, dismayed,  
That any wage I had asked of Life, Life would have willingly paid.³

I worry that too many of us do not think about what we want to get out of life. Instead, we wander aimlessly through life and forget who we are. We set our wages too low—settling for just a single penny. Unless we make some changes, we will be disappointed with the penny we receive from life. Ezra Taft Benson said:

Every accountable child of God needs to set goals, short- and long-range goals. A man who is pressing forward to accomplish worthy goals can soon put despondency under his feet, and once a goal is accomplished, others can be set up. Some will be continuing
goals. . . Now there is a lifetime goal—to walk in his steps, to perfect ourselves in every virtue as he has done, to seek his face, and to work to make our calling and election sure.\textsuperscript{4}

The gospel can give us wonderful direction in our lives if we will follow the teachings of Christ. Following Christ’s teachings has made all the difference in my life. His teachings have helped my family and me put our most important priorities first as we have set our major goals. The scriptures tell us: “Be thou humble, and the Lord thy God shall lead thee by the hand, and give thee answer to thy prayers.”\textsuperscript{5}

We can get more out of life if we put this scripture into action. As we dedicate our lives to understanding ourselves, our goals, and our desires, and as we learn and do God’s will, He will help us understand the direction our lives should take. I like the saying that states: “You can do it your way or you can do it better.” With God’s help, it will always be better.

Goal-setting is not easy, but it is doable. All goals have costs in terms of time, effort, or money, or a combination of the three. Time costs refer to the time you spend on your goals. For example, some goals require a certain number of hours or minutes of your day to accomplish. My second daughter, Natalie, is a runner. She has signed up for many marathons. She knows that to run a marathon takes six months of preparation. She needs time to train and get ready. She plans on spending four to six hours a week to prepare for each of her 26.2-mile runs.

Effort costs denote intermediate goals you must accomplish so you can achieve your overall goal. My wife and I have a goal to run three times a week in the morning at 5:30 a.m. To do this, we have set another goal to get to bed each evening before 9:30 p.m. so we get sufficient sleep to allow our bodies to function.

Financial costs refer to the amount of money necessary to achieve a specific goal. My son, when he was 13, wanted to get a car when he got his license. To achieve his goal of purchasing an automobile, he would need to save a specific amount of money each month for the next 36 months.

There is no difference between financial and personal goals. Financial goals are simply personal goals with a monetary cost attached.

**Understand the Three Distinct Types of Goals**

To best understand goals, we must look to the Master and ask: “What is God’s ultimate goal for His children?” As we read and study, His ultimate goal for us is eternal life. We all likely have a similar goal—eternal life for ourselves and our families. So we have our first and overall goal, eternal life with our families. The rest of our goals are then intermediate goals to help us to our overall goal.
Chapter 2. Planning Your Life With Purpose

A philosopher over a century ago said: “We are not human beings having a spiritual experience. We are spiritual beings having a human experience.”6 The key then is to keep both the spiritual and the temporal balanced in our personal and family goals.

As we think of goals, I believe there are three different types of goals we should be aware of: goals related to identity, integrity, and temporal measures.7 Identity goals are goals that relate to our long-term view of how we see ourselves. These goals help us be better in our long-term view of what we are and what we want to become.

- We are children of God
- We may be spouses
- We may be parents to our children
- Regardless, we must never lose sight of who we are.

Integrity goals relate to the characteristics and standards you want to achieve in the work and service you provide. These goals relate to:

- How we will work
- What we will and will not do
- Characteristics and skills we wish to attain.

We must strive to have integrity in all we do, regardless of the temptations and enticements which beset us. We must always be willing to accept responsibility for our choices and to be held accountable.

Temporal goals relate to the temporal measures of success that we hope to accomplish. These goals relate to:

- Money, title, or fame
- Influence, rank or power
- Assets, investments, or possessions.

We must be vigilant as temporal goals are generally the most visible and easily measured of our goals, and hence may be worked on more than some of the more important goals.

Understanding the different types of goals can help us to have balance in our goals. Balance is important. Temporal goals, if unchecked, might override more lasting and eternal goals of identity and integrity. They also, if not balanced, may lead to trade-offs, such as working longer hours, spending less time with family, or taking assignments inconsistent with personal values due to “extenuating circumstances.” If not careful, life can easily become an “unending stream of extenuating circumstances.”8 Goals in other areas could also cause concern if not worked toward in a balanced manner.
We have been given counsel to help us in our process of setting goals. Steven Wheelwright counseled:

First, align your goals regarding your personal identity with those the Lord has for each of us as a beloved son or daughter of God, and then pursue a righteous lifestyle consistent with that identity. Second, set standards for your own efforts, endeavors and work that are consistent with the integrity exemplified in the life of our Savior. Third, seek heavenly counsel and guidance as you make choices regarding temporal goals and accomplishments. Be diligent in "seeking the Kingdom of God first," serving the one and only true master, and "laying up treasures in Heaven."

Having balance in the types of goals you set can be helpful in understanding and setting your goals.

Understand and Apply the Principles of Effective Goal-Setting

An important part of your Personal Financial Plan is to set your personal and family goals. Understanding goal-setting is one of the biggest challenges in life, and understanding how to set good goals is even more challenging. M. Russell Ballard indicated possible pitfalls of not setting goals:

I am so thoroughly convinced that if we don’t set goals in our life and learn how to master the techniques of living to reach our goals, we can reach a ripe old age and look back on our life only to see that we reached but a small part of our potential. When one learns to master the principles of setting a goal, he will then be able to make a great difference in the results he attains in this life.

The challenge, then, is learning to master the principles of setting goals. In my own experience, I have found the following nine principles helpful in setting realistic and effective goals—goals that will make a great difference in the results we attain in this life.

1. Strive to Learn What Heavenly Father Wants You to Do or Be

Learning what Heavenly Father would have you do or be is one of the most important tasks you will ever accomplish. John H. Groberg said:

What is your mission in life? What does God expect you to accomplish during your sojourn here upon the earth? And are you doing it? To help answer these questions, I hope the Spirit of the Lord will impress upon us all the importance of at least these three eternal truths: 1. God, our Father in Heaven, does have a specific mission for all of us to fulfill and perform while we are here upon this earth. 2. We can, here and now, in this life, discover what that mission is. 3. With his help we can fulfill that mission and know and have assurance, here and now, that we are doing that which is pleasing to him. With
the help of the Spirit of the Lord we can understand these truths and move the course of our life in tune with them.\textsuperscript{11}

Finding out what He would have us do is not easy, nor does it happen in a short amount of time. But we can come to know and have God’s guidance in our lives, if we seek it. We have been promised: “Ask, and it shall be given you; seek, and ye shall find; knock, and it shall be opened unto you.”\textsuperscript{12}

I have also found that if we do what Heavenly Father wants us to do first, He will help us accomplish what we want to do, and we will do it better because we have His help.

My wife and I made this discovery as a newly married PhD student in Washington, D.C. I was attending school full-time in the afternoon and evenings, working part-time at the Capital Markets Department of the World Bank, and trying to be a good husband and father. Then, the leader of our local congregation asked me to teach seminary, an early morning scripture study class for high school students each weekday morning at 6 a.m.

I remember discussing this with my wife and thinking how easy it would be to justify declining the request to teach. But we also realized that if we wanted God’s help with my PhD program, we needed to serve where He wanted us. So we accepted the calling. I enjoyed teaching seminary and getting to know these amazing young people, and while I filled this calling, I was able to complete the PhD program in less than three years.

\section*{2. Seek Heavenly Father’s Help in Setting Goals}

God would like to help all of us understand what He would have us do. The scriptures note “Trust in the Lord with all thine heart; and lean not unto thine own understanding. In all thy ways acknowledge him, and he shall direct thy paths.”\textsuperscript{13} H. Burke Peterson wrote:

\begin{quote}
Do you think for a moment that Heavenly Father would have sent one of His children to this earth by accident, without the possibility of a significant work to perform? . . . If you will let Him, I testify that our Father in Heaven will walk with you through the journey of life and inspire you to know your special purpose here.\textsuperscript{14}
\end{quote}

With the Lord’s help, not only can you reach your goals, but more importantly, you will have the confidence that the goals you set are the right goals for you. We have been admonished to “counsel” with the Lord:

\begin{quote}
Counsel with the Lord in all thy doings, and he will direct thee for good; yea, when thou liest down at night lie down unto the Lord, that he may watch over you in your sleep; and when thou risest in the morning let thy heart be full of thanks unto God; and if ye do these things, ye shall be lifted up at the last day.\textsuperscript{15}
\end{quote}
In order to receive Heavenly Father’s help, we must be worthy and willing to hear the promptings of the Spirit. How do we do that? The following are five steps I recommend to help you as you seek Heavenly Father’s help in setting goals:

**A. Study the scriptures.** The scriptures will give you both general and specific direction for which way you should go. I know that all of life’s questions can be answered through prayerful study of the scriptures. Read them daily and remember that they were written for us.

**B. Seek guidance through prayer.** Prayer is one of the most underused yet most incredible powers in the universe. God truly loves us and wants us to be successful. However, to receive guidance from the Lord, we must be brave enough to ask, humble enough to listen, and wise enough to act on the guidance we receive. Make prayer a part of your daily routine. “Be thou humble and the Lord thy God shall lead thee by the hand, and give thee answer to thy prayers.”

**C. Read your patriarchal blessing.** A patriarchal blessing is a blessing given by an ordained patriarch to LDS Church members to give guidance and help from God. It provides specific counsel for you that can benefit you throughout your life. On the subject of patriarchal blessings, Ezra Taft Benson said:

> Receive a patriarchal blessing. Study it carefully and regard it as personal scripture to you—for that is what it is. A patriarchal blessing is the inspired and prophetic statement for your life’s mission together with blessings, cautions, and admonitions as the patriarch may be prompted to give . . . Receive your patriarchal blessing under the influence of fasting and prayer, and then read it regularly that you may know God’s will for you.

What does your patriarchal blessing say you should do? What cautions does it give you? What advice does it share? Ponder these things and write them down, perhaps in a journal or notebook. I am teaching at BYU because of one line in my patriarchal blessing that admonished me to “get a doctorate.” I am extremely grateful that I followed that admonition. It has made a major difference in my life.

**D. Remember fathers’ and priesthood blessings.** In the scriptures, we read of fathers blessing their children and posterity. If you haven’t received a father’s or priesthood blessing in a while and you feel it would be beneficial, ask for one from your father or a Church leader. I have received a father’s blessing every year since I was a child until my father passed away in 2008.

Father’s blessings and blessings from other priesthood holders have been very important in my decision-making process throughout my life. When I went back to school in 1984, I asked my father for a father’s blessing. In it I was promised that if I lived close to the
Spirit, I would be blessed with the ability to “work beyond my natural abilities.” Those words caused me to pause and think: “Since God gave me my abilities, couldn’t He help me work beyond them as well?” I tried to obey the commandments, live close to the Spirit, and work as hard as I possibly could, and I feel that blessing was realized. In fact, there has not been a day gone by since that day when I have not prayed for myself and my family to be able to “work beyond our natural abilities.”

E. **Attend your church, temple, or other places of worship.** Much of the inspiration we need to keep our lives on the right track can be revealed to us as we attend church and other places of worship. If you can, don’t let your education, your job, or anything else get in the way of regular church and temple attendance. Attending these places is a wonderful use of your time.

As you study the scriptures, make prayer a part of your daily routine, read your patriarchal blessing, seek father’s and priesthood blessings, and attend church and other places of worship, God will guide and help you.

3. **Start with the End in Mind**

When I read Stephen R. Covey’s book *The 7 Habits of Highly Effective People*, I particularly liked the habit “Begin with the end in mind.” Start by writing your obituary. How do you want to be remembered? Do you want to be remembered for your money and fame, or for your integrity?

Next, pretend you have only a week left to live. What would you want to do? Would it be to work more hours at the office? Would it be to buy that new car? Would it be to renew an old friendship? Would it be to finish your personal history? How would you spend that last week?

Now, pretend you have only a month to live. What would you do differently today if you knew you had only one month to live? Now pretend you have only a year to live, five years to live, and finally a life to live; write down what you would do in that time. Starting with the end in mind will help you prioritize your goals and realize what things are really important to you.

4. **Write Down Your Goals**

As a common adage states, “A goal not written is only a wish.” Write down your goals as you think about them. What do you enjoy doing? What do you like doing with your family and friends? What makes you really love life? Write these things down and begin working on them.

I remember reading in high school about a man who wrote down 150 major goals in high school and accomplished over 130 of them during his lifetime. Each goal was carefully thought out, and through continuous review and planning, the man was able to accomplish most of his goals.

Once you have written down your goals, think and pray about them. Are they what you should be working toward? If not, revise your list and continue thinking and praying about them. Once
you have a list of goals you feel good about, put fire and desire into them. You must be willing to work toward your goals, which is probably one of the most difficult things you will do.

5. Make Your Goals SMARTER

We have all heard about SMART goals. Yours should be SMARTER. SMARTER is an acronym that may help as you strive to set effective goals.

S = Specific. Goals should be specific. They should answer the questions of who, what, where, when, and why. A general goal would be to get in shape. A specific goal would be to run three miles three times a week at 5:30 a.m. on Monday, Wednesday and Friday mornings.

M = Measurable. Goals should be measurable. You must be able to track progress toward your goal. A non-measurable goal would be to save for retirement. A measurable goal would be to have an annuity that pays you $50,000 per year in retirement or to have a savings goal of 20% of your gross income each year saved in retirement or other savings accounts.

A = Achievable. Goals should be achievable. Achievable goals are goals that your attitudes, abilities, skills, and interests can help you accomplish.

R = Reportable. Reportable goals are goals that you can and are willing to report on each period: to yourself, to a spouse or friend, and to God. When we share our goals with others, it increases dramatically our likelihood of working toward them.

T = Time-bound. Time-bound goals have a specific time frame. A goal is time-bound if you set a specific date it is to be achieved by. A non–time-bound goal would be to gain an education. A time-bound goal would be to earn a bachelor’s degree in four years.

E = Evaluated. In the process of goal setting, your goals should be evaluated often. You should judge the effectiveness of the goal and its impact and ability to bring you toward your higher goals often.

R = Reassess. Over time you will need to evaluate your goals and reassess the goal as your situation changes. Goals are written on paper, not in stone. As such, they need to be evaluated and reassessed periodically to make sure you are working toward where you should be working.

6. Review Your Goals Often

That which we remember and review often, we are more likely to accomplish. Write down your goals and review them often. I recommend that you set aside time to periodically review and update your goals on either a daily or a weekly basis. The more important the goal, the more often we should review it. Generally, setting a specific time each week to work on your goals, i.e., Sunday evenings at 8:30 p.m. is a much better option.
I also recommend that you write down your goals and place them where you will see them often, perhaps on the refrigerator door or bathroom mirror. The more often we are reminded of our goals, the better our chances of achieving them.

7. Remember Your Goals Will Change

Times change and so will you. That doesn’t mean that goal-setting is a useless or unimportant exercise—it simply means that your goals must be flexible, just like you. Keep your major goals in mind, and remember that some of them will change over time. If you always keep your major goals in mind and work toward them, you will be able to accomplish them.

8. Set Fun Goals

Life is too short to be serious all the time, so I make a point to set some fun goals. I want to take my whole family to China to walk 20 miles on the Great Wall of China. I want to take my family river rafting through the entire Grand Canyon (I took my wife last year). I want to take my family back to Kauai, Hawaii, for a family reunion. I want to climb Pilot Peak in Nevada. Fun goals are an important part of life.

9. Remember, Success Is Not Measured by Achievement, but by Striving

While goals are an important part of life, we should be careful not to make the achievement of goals our only criteria for success. Marvin J. Ashton counseled:

Set your goals—without goals you cannot measure your progress. But don’t become frustrated because there are no obvious victories. Remind yourself that striving can be more important than arriving. If you are striving for excellence—if you are trying your best day by day with the wisest use of your time and energy to reach realistic goals—you are a success.19

Summary

The most important question you will ever ask is “What does God want me to do or become?” Answering this question is the key to setting “real” goals. If you know what He wants you to do or become and you become that, you can achieve no higher goal.

His goal is to help us to become like Him because He loves us. Remember the following counsel from the Lord as you proceed through this series: “Seek not for riches but for wisdom, and behold, the mysteries of God shall be unfolded unto you, and then shall you be made rich. Behold, he that hath eternal life is rich.”20

We discussed the importance of setting goals, and the blessings that can come. We discussed the three types of goals: identity, integrity and temporal goals, and how we needed balance in our goals. We then discussed nine principles of effective goal-setting:
1. Strive to learn what God wants you to do.
2. Seek God’s help in setting goals.
3. Start with the end in mind.
4. Write down your goals.
5. Keep your goals SMART ER.
6. Review your goals often.
7. Remember your goals will change.
8. Set fun goals.
9. Remember, success is not measured by achievement, but by striving.

As you develop your Personal Financial Plan, think about your future. Think about what you want to accomplish in every aspect of your life—not just the financial aspects. Put thought and prayer into it. Write your goals out in detail and then include those goals as part of your Personal Financial Plan. While it may not seem very pertinent, determining what you want to accomplish in life will probably be one of the most important exercises you will do in this series.

Assignments

Financial Plan Assignment

Your assignment is to think through the things you want to accomplish in life. This is not a short-term assignment, and it is likely the most important part of your entire financial plan. The purpose of this assignment is to write down your goals for your future and determine where you want to be in the next day, week, month, year, or in 50 years. Thomas S. Monson stated: “When we deal in generalities, we rarely have success; but when we deal in specifics, we rarely have a failure.” Be very specific with the goals you set.

As you think through your goals, recognize that there are many different ways to organize them. You can organize them by time frame: short-term, less than one year; medium-term, more than one year and fewer than 10 years; and long-term, more than 10 years. You can organize them by responsibility: family, work, education, church, and so on. Or you can organize them by priorities, with your highest-priority goals first.

Write about your top three goals in detail. Goals and house plans are very similar: the more detailed the house plans, the closer the completed house will be to the planned house, and likely, the better the house. Likewise, the better and more thought-out the goals, what you actually become will be much closer to what you planned to be.

Next, answer the question: What do you think God wants you to do or become? If we truly believe that Heavenly Father knows us intimately and only does what is best for us, then we can become nothing better than what He wants for us. The challenge, then, is to come to understand His will for us and to try to become that. While it often takes a lifetime to truly understand what
He wants for us, we can know, through study, prayer, and hard work, some important information about the direction our lives should take.

Finally, write your obituary. What do you want to be remembered for? If we think about how we want to be remembered, we can better live our lives in that direction.

**Learning Tools**

The following are examples of some goals to help you set your personal goals:

**2A or 2B. Complete Personal Financial Plan**

This is an example of a completed Personal Financial Plan. It includes an example of goals from a student who took this course previously.

**Review Materials**

Terminology Review

**Action Plan.** This is your plan to accomplish our individual and family goals.

**Financial Planning.** This is the process of helping yourself and others to use their resources more wisely to achieve their personal and family goals. It should help determine where you are, where you want to be, and how you will get there.

**Goals.** These are things we would like to accomplish. They are often divided by time, i.e., short-term, in the next 12 months; medium-term, from 2-10 years; and long-term, beyond 10 years. They may also be divided by type, i.e., identity, integrity, and temporal goals. They will take effort and resources, but are things that are important to us and are what we want to accomplish.

**Identity goals.** These are goals that relate to our long-term view of who we are and how we see ourselves. These goals help us be better in our long-term view of who we are and what we want to become.

**Integrity goals.** Integrity goals relate to the characteristics and standards you want to achieve in the work and service you provide. These goals relate to how we will work and live, what we will and will not do, and characteristics and skills we wish to attain.

**Mission Statement.** This can be your individual and family purpose and passion. It can also include other things such as family mottos, family mission statements, what you stand for, etc.
Chapter 2. Planning Your Life With Purpose

**Personal Financial Plan.** This is a document that contains all critical areas of your personal financial life. It is your individual and personal roadmap for achieving your personal and family goals. It entails 6 steps: 1: Decide What You Want, 2: Evaluate Your Financial Health, 3: Define your Personal and Financial Goals, 4: Develop a Plan of Action, 5: Implement Your Plan, and 6: Revise Your Plan as Necessary.

**Real Goals.** These are goals you really want to accomplish, and are willing to work hard and seek Heavenly Father’s help in accomplishing them.

**SMARTER Goals.** SMARTER is an acronym for helping you as you strive to set effective goals. It is: S = specific, M = measurable, A = assignable, R = realistic, T = time-bound, E = evaluated, and R = reassessed.

**Temporal goals.** These are goals that relate to the temporal measures of success. It could be money, title, fame, positions at work or in industry, include influence, rank or power, or assets, investments, or possessions.

**Values Statement.** These are the values you will live by to help you accomplish your vision and mission.

**Vision Statement.** This is your vision of what it is you want to become. It is seeing or visualizing with your mind’s eye what you will be in the future.

**Review Questions**

1. What is the role of financial planning in your life? What can it help you achieve?
2. Why is it so important to set goals? What does setting goals help you do? Why is it important to write down your goals?
3. What is the difference between a goal and a wish?
4. What are two basic things required to complete an accurate financial plan?
5. Why is record-keeping an important part of completing an accurate financial plan?
6. What are the different costs associated with setting a goal?
7. According to M. Russell Ballard, what is one of the dangers of not setting goals?

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1 “To the Elderly in the Church,” Ensign, Nov. 1989, 4, italics added.
5 Doctrine and Covenants 112:10.
6 Pierre Teilhard de Chardin.
9 Ibid.
Chapter 2. Planning Your Life With Purpose

12 Matthew 7:7-8.
13 Proverbs 3:5-6.
15 Alma 37:37.
16 D&C 112:10.
17 “To the ‘Youth of the Noble Birthright’,” Ensign, May 1986, 44–45.
18 For example, Genesis 49:28, Deuteronomy 33:1.
20 Doctrine and Covenants 6:7.
21 “Seven Steps to Success with Aaronic Priesthood Youth,” Ensign, Feb. 1985, 22.

Introduction

Once you have a correct perspective on wealth, have begun your Personal Financial Plan, and have set your personal goals, the next step is to determine how you are going to attain your goals. Although some goals require only discipline and time, many goals also require careful financial planning. For these goals, it is essential to determine what resources you currently have, how much time until the resources are needed, and what additional resources are needed to help you attain those financial goals.

The purpose of this chapter is to help you measure your financial health and then create a plan to improve it. Before you can determine what you must do to get where you want to go, you must first determine where you are currently. To determine your current financial status or health, you must learn how to prepare various financial statements and learn what they represent. Once you identify from your financial statements where you are financially, and from your goals where you want to be, you can develop a plan for accomplishing your goals.

Objectives

Once you have completed this chapter, you should be able to do the following:

1. Understand the principles of successful budgeting
2. Develop and implement a budget
3. Calculate your net worth using a personal balance sheet
4. Develop a personal income statement and use it to analyze your spending

To determine where you are financially, you must first understand financial statements. Financial statements are documents that accurately reflect your personal financial position at a specific point in time. These statements help you evaluate your financial health.

There are several different kinds of financial statements. A budget records expected income and spending for the future, generally for a month or a year. A balance sheet records your assets (what you own) and liabilities (what you owe) at a specific point in time, usually at the end of a month, quarter, or year. An income statement records spending over a specific period of time, generally a month or a year. A budget is planning for future spending, a balance sheet is a record of your spending (as represented by your assets and liabilities) as of the present time, and an income statement is a record of your past spending.
Every company uses financial statements to determine how to manage themselves so as to achieve their shareholders’ goals. Similarly, individuals and families can use financial statements to help them understand where they are financially and to help them meet their goals.

Understand the Principles of Successful Budgeting

Using a budget effectively will likely have a greater impact on whether or not you will achieve your financial goals than any other change you could make to your financial habits. As such, it is a critical topic. On this topic, Spencer W. Kimball said:

> Every family should have a budget. Why, we would not think of going one day without a budget in this Church or our businesses. We have to know approximately what we may receive, and we certainly must know what we are going to spend. And one of the successes of the Church would have to be that the Brethren watch these things very carefully, and we do not spend that which we do not have.

If one of the reasons for the successes of large organizations, such as the LDS Church, is that those responsible watch budgets carefully, shouldn’t we, as individuals and families, watch our own budgets carefully as well?

In addition to keeping a record of expected income and expenses for the coming month or year, a budget is a way of making sure your financial resources are being used for the things that matter most to you—your personal and family goals.

While it is fairly easy to record your cash inflows and outflows and to make plans for achieving your financial goals, it takes discipline and sacrifice to actually follow through on the plans you outlined in your budget. While not easy, the results are apparent. Research has shown that those who effectively budget accumulate more wealth than those who do not.

The principles of effective budgeting are simple:

1. Know yourself and your goals, and work toward them.
2. Spend less than you earn.
3. Keep good records for spending, taxes, and other purposes.
4. Use a budgeting method that meets your individual and family needs and objectives.

Whatever method you choose, it should accomplish the above four principles.

There are five main types of budgeting methods to help meet your needs and objectives:

1. The Envelope Method
2. The 60% Rule
3. Spreadsheets
4. Budgeting Software
5. DNAH-ial Methods (Do Nothing and Hope)

The **Envelope Method.** The requirements for this method are few and inexpensive. You prepare envelopes for each category. The logic is to plan your spending for each month, take the money planned for each category, and place that money in individual envelopes. Once a bill comes, take the money from the corresponding envelope and pay the bill. Once the money is gone from one envelope and you need more, you must shift money between other envelopes or make do with what you have. The key is there is no getting money outside the system. It is simple and very effective if done correctly.

The **60% Solution.** This method requires a journal or spreadsheet. The logic is to determine your gross salary each month and then take 60% of that amount and only spend that amount each month. You then take 20% of your salary and save it for long-term goals and 20% of your salary and save it to pay your taxes at year-end. Once you have spent your money, you cannot go outside the method for more money. While not as effective, as long as individuals stick to the 60% rule it can help significantly in the savings process.

**Spreadsheet Methods.** This method requires a computer and spreadsheets. The logic is to determine your gross salary and take home pay each month after taxes and other deductions. You then determine spending by categories (rows) and dates (columns), and prepare a budget for each category. As bills come in, you pay the bills and input the spending on each date (column) and row (category). If done well, you plan in adequate amounts for a financial reserve and for long-term goals. This method can be useful if it is updated regularly and reviewed often.

**Computer Software Methods.** The requirements for this method are more expensive. They require a computer and personal finance software, such as Mint.com (free), Quicken, Mvelopes, etc. The logic is to determine your gross salary and take home each month after taxes and other deductions. Then you determine your spending by category, and budget each category in the software program. You also determine your savings and budget each period for savings. The key is to work within your budget for each spending and saving category. As the software obtains receipts and credit card information from financial institutions directly via the Internet, you categorize the information. You can plan in adequate amounts for a financial reserve and for long-term goals. If set up correctly, this method can save significant time and effort and can be a great tool to help you achieve your goals.

**DNAH-ial Methods (Do Nothing and Hope).** This is the method used by most individuals, and it is the cheapest and least time consuming. It requires nothing. Individuals deny there is a concern, and hope things work out. They only respond when things get so bad that they have to act. The downside is that there is no planning, no preparation for long-term goals and objectives, and likely no savings.

Which is the best method? In my experience, the best plans are those that:
1. Are low cost and relatively easy to use;
2. Allow downloading of bills from banks and credit card companies—makes data entry easier;
3. Allow adequate categorization of spending for income, spending, reporting and tax purposes; and
4. Minimize the time spent in doing finances (I spend roughly 1-2 hours per week).

Individuals and families should use whatever method is best for them. However, what I recommend for most individuals and families is Mint.com for those starting out, spreadsheets for the few Excel wizards among us, and Quicken for more advanced users.

**Develop and Implement a Budget**

There is a process to creating an effective budget:

1. Know what you want to accomplish.
2. Track spending.
3. Develop a cash budget.
4. Implement your budget.
5. Compare your budget to your actual expenses and make changes where necessary to achieve your goals.

An example of a budget is found in Chart 1. In addition, examples of more detailed budgeting spreadsheets can be found in the Learning Tools section of the website (Learning Tools 4 and 31).

**Step 1: Know What You Want to Accomplish**

The first step in creating an effective budget is to know what is important to you and then write it down in the form of goals. In the previous section, you thought about what you wanted out of life, and you wrote down your goals. You should be working toward these goals. It is not enough to just want to save money—you should know what you are saving for. Your goals must be SMARTER: specific, measurable, achievable, reportable, time-bound, evaluated, and reassessed.

**Step 2: Track Spending (Your Expenses)**

The second step in creating an effective budget is generating a statement that accurately reflects your income and expenses for a month or for another specified period of time.

Certain methods of payment are easier to track than others. Checks and credit cards, for example, leave an automatic paper trail that is easy to examine at the end of a week or a month. Cash, on the other hand, is more difficult to track because an automatic physical record is not created each
time it is used. To accurately track all expenses, you must keep a notebook in which you record all expenditures paid for in cash, or, better yet, record them electronically.

**Chart 1. Budget Example**

<table>
<thead>
<tr>
<th>Monthly Budget for the Month of ________ 20XX</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income:</strong></td>
<td>Budget</td>
<td>Actual</td>
</tr>
<tr>
<td>Wages/Salaries (After Taxes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expenditures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tithes and Offerings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortgage or Rent</td>
<td></td>
<td></td>
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<tr>
<td>Utilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt Payments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
<td></td>
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<tr>
<td>Medical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Expenditures</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income minus Expenditures</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Budgeting software may also be helpful as you track your expenses. Software such as Intuit, Quicken, Microsoft Money, and the free Mint.com can reduce the time necessary to follow your finances. Such software is especially useful if it is tied to your bank, credit card companies, or investment accounts through the Internet. Budgeting software is a great investment that can save you time if it is set up and runs properly and in a timely manner, but it is not required to become financially self-reliant.

To develop a cash budget, you must first determine your annual income. One way to do this is to examine last year’s total income and make adjustments for the current year for any additional expected work or sources of income. You should also estimate your tax liability for the current year and your monthly take-home pay.

Next, you must determine your expenses. To complete this step, refer to the record you made while tracking your expenses. First, identify all fixed expenses. Be sure your fixed expenses are
truly fixed expenses. Fixed expenses are expenses those you don’t directly control; they are often (but not always) monthly or semiannual expenses. Examples of fixed expenses include mortgage payments, rent, tuition and books, and life and health insurance costs. While some might consider cable TV or cell phone plans fixed expenses, they are generally variable expenses.

After you have identified your fixed expenses, identify your variable expenses. Variable expenses are expenses those you have control over—you can modify or eliminate the amount you spend on these things. Variable expenses include things like food (to a degree), entertainment, fuel, clothing, magazine subscriptions, and cable TV (contrary to some people’s beliefs, you can live without cable TV, the internet, or an iPad).

If reviewing your fixed and variable expenses shows that your expenditures exceed your income, or if you find that you live month to month and do not put money into some sort of savings account, look for ways to reduce your fixed expenses and reduce or eliminate your variable expenses.

One of the worst uses of your hard-earned income is paying interest, particularly on credit card and consumer loans. Carefully consider how credit card or loan payments will impact your future income. Pay off your credit card debt and avoid consumer debt! You want to be earning interest on investments, not paying it on debts.

Heber J. Grant said:

If there is any one thing that will bring peace and contentment into the human heart, and into the family, it is to live within [one’s] means. And if there is any one thing that is grinding and discouraging and disheartening, it is to have debts and obligations that one cannot meet.²

I would like to recommend a better way to budget. Many individuals determine how much they will save according to how much money is left at the end of each month. They receive their paychecks, pay their tithes and expenses, and then save what they do not spend during the rest of the month. This is an incorrect pattern for budgeting monthly income because individuals are paying themselves last. I recommend a different pattern.

After you have paid your tithes and offerings to the Lord through your church, pay yourself a predetermined amount or percentage directly into savings, then budget and live on the remaining income. Using this pattern will help you keep your priorities in order (see Chart 3).

Gordon B. Hinckley stated:

In managing the affairs of the Church, we have tried to set an example. We have, as a matter of policy, stringently followed the practice of setting aside each year a percentage of the income of the Church against a possible day of need. I am grateful to be able to say
that the Church . . . is able to function without borrowed money. If we cannot get along, we will curtail our programs. We will shrink expenditures to fit the income. We will not borrow.³

Chart 2. Budgeting: The Old Way

From my work with students, I have found that the average student cannot account for about 20 percent of what he or she spends each month. Many students are not sure what is important to them, so they spend money on many different things in an attempt to find out what makes them happy. Once they understand what is important to them, write down their goals, and begin working toward those goals, they find that saving between 10 and 20 percent of their income is not a difficult challenge. They begin spending their money on things that really matter—things that take them toward their personal and family goals.


L. Tom Perry suggested something similar to this new pattern for budgeting when he wrote:

After paying your tithing of 10 percent to the Lord, you pay yourself a predetermined amount directly into savings. That leaves you a balance of your income to budget for
taxes, food, clothing, shelter, transportation, etc. It is amazing to me that so many people work all of their lives for the grocer, the landlord, the power company, the automobile salesman, and the bank, and yet think so little of their own efforts that they pay themselves nothing. 4

I strongly recommend that students, after graduating, set a goal to save between 10 percent and 20 percent of every dollar they make after college. My wife and I set that goal nearly 30 years ago, and it has made a significant difference in the life we live today.

**Step 3: Develop a Cash Budget (A Better Way)**

The third step in creating an effective budget is to develop a cash budget. A cash budget is a plan for controlling cash inflows and outflows. Its purpose is to balance income with expenditures and savings. The old method for preparing a cash budget is found in Chart 2.

**Step 4: Implement Your Budget**

The fourth step in creating an effective budget is to try your budget for a month. Record all income and expenses in their proper categories; accurate record-keeping is a crucial part of good budgeting. Add up all the amounts listed in each category, and make a note of how much you have left over in each category at the end of each week. Be financially prudent—don’t buy things you don’t need or haven’t budgeted for.

Adjust your plan as necessary to make it work for you. Try to be financially prudent, and use each month as a learning experience to help you do better the next month.

For income, negative is under budget and positive is over budget. For taxes and expenses, negative is under budget and positive is over budget.

If you can’t figure out where you are, the best map in the world can’t help you get where you want to go. A well-developed budget that is based on your current financial situation can be your best road map to financial freedom. Marvin J. Ashton stated:

> Some claim living within a budget takes the fun out of life and is too restrictive. But those who avoid the inconvenience of a budget must suffer the pains of living outside of it. The Church operates within a budget. Successful business functions within a budget. Families free of crushing debt have a budget. *Budget guidelines encourage better performance and management.* 5

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4 Taxpayers who successfully manage their money and live within their means are called prudential taxpayers.

5 Financial experts generally agree that a good budget guideline should provide for:
- A reasonable savings fund.
- A prudent amount for living expenses, including food, clothing, shelter, and transportation.
- A reasonable amount for debt repayment.
- A reasonable amount for retirement savings.
- A reasonable amount for insurance payments.
- A reasonable amount for entertainment and recreation.
Step 5: Compare Your Budget to Your Actual Expenses and Make Changes Where Necessary to Achieve Your Goals

The fifth step in creating an effective budget is to compare your budget to your actual spending (see Chart 4). As necessary, adjust the amounts you have budgeted for different expenses to create a more effective budget. As you make adjustments, don’t reduce payments to God or to yourself.

Chart 4. Budget Example with Differences

Bill and Suzy Smith
Monthly Budget for the Month of September 20XX

<table>
<thead>
<tr>
<th>Income:</th>
<th>Budget</th>
<th>Actual</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>2,875</td>
<td>2,760</td>
<td>-115</td>
</tr>
<tr>
<td>Taxes</td>
<td>375</td>
<td>360</td>
<td>15</td>
</tr>
<tr>
<td>Wages/Salaries (After Taxes)</td>
<td>2,500</td>
<td>2,400</td>
<td>100</td>
</tr>
<tr>
<td>Other Income</td>
<td>200</td>
<td>250</td>
<td>50</td>
</tr>
<tr>
<td>Total Income</td>
<td>2,700</td>
<td>2,650</td>
<td>-50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditures</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tithes and Offerings</td>
<td>325</td>
<td>318</td>
<td>-7</td>
</tr>
<tr>
<td>Savings</td>
<td>405</td>
<td>398</td>
<td>-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Living Expenditures</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>300</td>
<td>320</td>
<td>20</td>
</tr>
<tr>
<td>Mortgage or Rent</td>
<td>700</td>
<td>700</td>
<td>0</td>
</tr>
<tr>
<td>Utilities</td>
<td>300</td>
<td>325</td>
<td>25</td>
</tr>
<tr>
<td>Transportation</td>
<td>180</td>
<td>165</td>
<td>-15</td>
</tr>
<tr>
<td>Debt Payments</td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Insurance</td>
<td>150</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>Medical</td>
<td>40</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Clothing</td>
<td>150</td>
<td>100</td>
<td>-50</td>
</tr>
<tr>
<td>Other</td>
<td>100</td>
<td>75</td>
<td>-25</td>
</tr>
<tr>
<td>Monthly Living Expenditures</td>
<td>1,970</td>
<td>1,925</td>
<td>-45</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>2,700</td>
<td>2,641</td>
<td>-59</td>
</tr>
<tr>
<td>Total Income minus Expenditures</td>
<td>0</td>
<td>9</td>
<td>-9</td>
</tr>
</tbody>
</table>

Creating a budget is a learning experience. You will not create a perfect budget right away, but you can refine it after each month. If your budgeting plan fails repeatedly, the “envelope system” may work.
Calculate Your Net Worth Using a Personal Balance Sheet

The second thing you must do to determine where you are financially is to calculate your net worth using a personal balance sheet, which is a snapshot of your financial position on a given date, usually the end of a month or year. It lists the dollar amounts of your liabilities (what you owe to others) and of your assets (what you own of monetary value).

How do you calculate your net worth? Your net worth (also referred to as equity) is the difference between your assets and your liabilities.

There are multiple ways to appraise each type of asset or liability. Calculate the value of each asset or liability correctly, because if you do not, you will have an incorrect view of your financial position. Having an incorrect view of your financial position may result in making bad financial decisions.

An example of a balance sheet is found in Chart 5. In addition, a balance sheet template can be found in the Learning Tools section of the website (Learning Tool 4: Budget Balance Sheet and Income Statements).

Assets: What You Own

Your assets are not limited to the total amount of money you have on hand; rather, they include all the valuable goods you own. Their value is based on the assumption that you could sell these goods and receive their market value. Assets come in many forms, including monetary assets, investment assets, and retirement assets; assets also include real estate, vehicles, personal property, and so on.

Assets can be subdivided into four categories: income-generating assets, appreciating assets, depreciating assets, and income-consuming assets. Income-generating assets are the best type of assets. These assets generate income or capital gains, which may eventually allow you to have income without having to work. Included in this category are financial assets such as stocks, bonds, or mutual funds; rental properties that are structured well; and even some types of insurance.

Appreciating assets are those that may have historically appreciated in value. Examples include your home, education, and certain types of business assets.

Depreciating assets depreciate in value. Often, the minute you take ownership of these assets (e.g., drive a car off the lot), they drop in value. This category includes assets such as automobiles, recreational vehicles, boats, etc.

Finally, income-consuming assets are those that require a constant infusion of cash to keep operative. Examples include automobiles (which require maintenance, fuel, and insurance),
homes (property taxes, repair, upkeep, and insurance), and recreational properties (property taxes, repair, upkeep, and insurance), etc.

Different types of assets fulfill different needs for an individual or family, such as liquidity, protection, and capital appreciation.

**Monetary (or current) assets** include cash and other financial assets that can easily be converted into cash. This characteristic is known as liquidity. Liquidity is important in case of an emergency because it means that funds can be accessed in a relatively short period of time. Examples of monetary assets include cash, savings accounts, certificates of deposit, money market deposit accounts, and other financial assets that can be easily accessed in times of need. The value of a monetary asset is usually calculated according to its current market value—the price at which it could be sold. Monetary assets are also called current assets.

**Investment assets** are similar to monetary assets in that they can be redeemed for cash; however, they are generally less liquid and are used to save for a particular long-term goal. These assets provide mid- to long-term capital appreciation for the investor. Examples of investment assets include stocks, bonds, and mutual funds that an individual or family purchases now with the hope that the investments will be worth more in the future. The value of an investment asset is usually calculated according to its current market value.

**Retirement assets** are a particular type of investment asset in which money is specifically set apart to be used after retirement. These assets are used both to save and to earn a return for retirement. They are designed to provide funds that will allow you to live comfortably after you retire. Be aware that there are significant penalties (i.e., taxes and fees) if you use these assets before you turn retirement age as defined by the government (59½ for qualified retirement plans). Examples of retirement assets include company pensions, IRAs, and traditional and Roth 401(k) plans. The value of a retirement asset is usually calculated according to its current market value.

**Housing or real estate assets** include tangible assets such as land, dwellings, vacation homes, and rental properties. For many people, housing assets represent the bulk of their savings. These assets are often, but not always, the place where you live and will eventually retire. People often purchase housing assets to fulfill personal goals or to earn capital appreciation and income. The value of a housing asset is based on its current market value or its appraised value; the appraised value is established by an independent appraiser who takes into account similar houses in the neighborhood or city.

**Automobiles and other vehicle assets** include tangible assets such as cars, trucks, and recreational vehicles, which typically must be inspected and licensed. These assets provide transportation, recreation, and other benefits. The value of a vehicle asset is based on its current market value or its book value. The value of this type of asset usually depreciates each year.
Bill and Suzy Smith  
Balance Sheet as of: _______________, 201X

<table>
<thead>
<tr>
<th>Assets:</th>
<th>Amount</th>
<th>Liabilities:</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current (or Monetary) Assets</td>
<td></td>
<td>Current Liabilities</td>
<td></td>
</tr>
<tr>
<td>Cash and Checking</td>
<td>$1,000</td>
<td>Current Unpaid Balances</td>
<td>$200</td>
</tr>
<tr>
<td>Savings/CDs</td>
<td>5,000</td>
<td>Visa/MasterCard</td>
<td>500</td>
</tr>
<tr>
<td>Other Assets</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td></td>
<td>Long-Term Liabilities</td>
<td></td>
</tr>
<tr>
<td>Stocks/Bonds</td>
<td>0</td>
<td>Mortgage Loan</td>
<td>0</td>
</tr>
<tr>
<td>Mutual Funds</td>
<td>2,500</td>
<td>Auto Loans</td>
<td>500</td>
</tr>
<tr>
<td>Other Investments</td>
<td>0</td>
<td>College Loans</td>
<td>3,000</td>
</tr>
<tr>
<td>Retirement Plans</td>
<td></td>
<td>Other Debts</td>
<td>0</td>
</tr>
<tr>
<td>401(k), 403b, 457 Plans</td>
<td>1,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRAs</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td>Total Liabilities</td>
<td>4,200</td>
</tr>
<tr>
<td>Primary Residence</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automobiles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automobiles</td>
<td>3,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Property</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. Assets</td>
<td>750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Assets</td>
<td>$14,450</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Net Worth (Assets minus Liabilities) $10,250

**Personal property assets** include tangible assets such as boats, furniture, and clothing that are purchased to meet specific individual needs or wants. The value of a personal property asset is determined by its current market value, which typically depreciates each year.

**Other assets** include any other tangible or intangible assets, such as business ownership, collections, and hobbies. These assets differ greatly, but they are all generally used to fulfill specific personal or business objectives. The value of these assets is usually calculated according to current market value or appraised value; however, because of the individual nature of these assets, they are often difficult to appraise and may have value only to their owner.

Add up the values of all your different types of assets to determine their total dollar value.
Liabilities: What You Owe

While liabilities also come in many forms, there are two major forms of liabilities: current and long-term.

**Current liabilities** are debts that must be paid off within the next year; they are usually debts for the short-term expenses of your home or business. Current liabilities include debts related to credit cards, utility bills, tuition and books, and non-mortgage housing expenses. These liabilities should be recorded on your personal balance sheet at the current amount owed plus any accrued interest.

**Long-term liabilities** are debts that must be paid off at a date farther away than one year from now; these debts are typically used to cover long-term expenses, such as student loans, auto loans, and home mortgages. These liabilities should be recorded on your personal balance sheet at the current amount owed.

Net Worth: What You Are Worth Financially

The difference between your assets and liabilities is known as your equity, or net worth. Do you owe more than you own? If so, you are technically insolvent!

What is a good level of net worth? The word good is relative when it comes to net worth. Your optimal level of net worth will depend on your age, your goals, and where you are in the stages of your financial life. These stages include the wealth-accumulation stage, the approaching-retirement stage, and the retirement stage of your life. As a general rule, a good level of net worth means that your assets are greater than your liabilities. As you age, the difference between your assets and liabilities should increase, with your assets always being the greater of the two.

The question of where you are now versus where you should be is a personal question that you must answer for yourself. As you try to answer this, ask yourself the following questions:

- What does my balance sheet show?
- Is my net worth growing?

The answers to these questions often depend on the stage you are at in life. For example, if you just graduated from high school or college, you are most likely in the accumulation stage of your life; therefore, your net worth should be growing. If you are retired, then you are probably using your savings for retirement expenses. In this case, your net worth is likely decreasing. Ask yourself these important questions:

- Am I reaching my personal goals?
- Am I planning for emergencies?
- Do I have adequate liquid assets?
Chapter 3. Budgeting and Measuring Your Financial Health

- Am I out of credit card and consumer debt (other than using my credit card for convenience and paying off the balance each month)?
- Am I saving sufficiently for retirement and for my other financial goals?

If you can answer each of these questions affirmatively, you are likely financially “healthy.” However, remember that we all can—and should—improve!

**Develop a Personal Income Statement and Use It to Analyze Your Spending**

A personal income statement is like a financial motion picture of your cash inflows and outflows. This type of statement is based entirely on actual cash flows, not accruals. An example of an income statement is found in Chart 6. If the statement looks familiar, it is because the income statement is just the “actual” column of your budget.

**Chart 6. Income Statement Example, Bill and Suzy Smith**

<table>
<thead>
<tr>
<th>Monthly Income Statement for the Month of ____, 201X</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income:</strong></td>
</tr>
<tr>
<td>Wages/Salaries (After Taxes)</td>
</tr>
<tr>
<td>Other Income</td>
</tr>
<tr>
<td>Income Available for Living Expenses</td>
</tr>
<tr>
<td><strong>Expenditures for Donations/Savings:</strong></td>
</tr>
<tr>
<td>Tithes and Offerings</td>
</tr>
<tr>
<td>Savings</td>
</tr>
<tr>
<td><strong>Expenditures for Living Expenses:</strong></td>
</tr>
<tr>
<td>Food</td>
</tr>
<tr>
<td>Rent</td>
</tr>
<tr>
<td>Utilities</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Debt Payments</td>
</tr>
<tr>
<td>Insurance</td>
</tr>
<tr>
<td>Medical</td>
</tr>
<tr>
<td>Clothing</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td><strong>Total Expenditures for Living Expenses:</strong></td>
</tr>
<tr>
<td><strong>Total Living Expenses and Offerings/Savings:</strong></td>
</tr>
<tr>
<td><strong>Total Income minus Expenditures:</strong></td>
</tr>
</tbody>
</table>

**Income: Cash Inflows**

Income includes cash inflows such as wages, tips, royalties, salaries, and commissions. Income is the amount you earn, which is not necessarily equal to the amount you receive. This is because
some expenses, such as taxes, health-care costs, 401(k) contributions, and so on, are deducted from your check before you receive it.

**Expenditures: Cash Outflows**

As discussed in the Chapter 2 section, “Develop and Implement a Budget,” fixed expenses are expenses that you don’t directly control, and variable expenses are those that you have control over.

There may be differences of opinion concerning what constitutes a fixed versus a variable expense. For example, while one spouse might consider dates each weekend a fixed expense, another might consider it a variable expense. Be careful that variable expenses are not considered fixed expenses. Realize also that most fixed expenses are variable over longer periods of time; for example, you can buy a smaller house or get by with a used instead of a new car.

**Using Ratios to Analyze Your Spending**

Once you have completed your personal balance sheet and your personal income statement, use your financial statements to answer the following three questions.

**Question 1: Do I have adequate liquidity in case of emergency?** Two ratios can help you determine whether or not you have enough monetary assets to pay for a large, unexpected expense or to tide you over in case of a period of reduced or eliminated income: the current ratio and the “month’s living expenses covered” ratio.

The current ratio tells you how many times over you could pay off your current liabilities with the cash you have on hand. To calculate your current ratio, divide the amount of your monetary assets (your current assets) by the amount of your current liabilities. The more times you can pay off your current liabilities, the better off you are financially. A ratio greater than two is recommended. Track the trend of this ratio; if it’s going down, you need to make changes to improve your financial situation.

The second important ratio is the “month’s living expenses covered” ratio. This ratio tells you how many months you could survive financially if you lost all current sources of income. To calculate this ratio, divide the amount of your monetary assets by the amount of your monthly living expenses. Realize that your living expenses should not include charitable contributions, taxes, or savings, because if you lost your job, you would not have these expenses or savings.

A ratio that allows you to pay your living expenses for three to six months is recommended. The ratio should be equal to at least as many months as it would take to get a new job if you lost your current job. Again, track the trend of this ratio—it should be improving. If it isn’t, you need to make some changes to improve your financial situation.
In the example above, the current ratio is calculated as current assets divided by current liabilities. Bill and Suzy have $6,000 in current assets divided by $700 in current liabilities, or a current ratio of 8.57. Bill and Suzy could pay their current bills 8.6 times with the money they have in their savings. They are well above the recommended ratio.

Their “month’s living expenses covered” ratio is calculated as monetary assets divided by monthly living expenses. Bill and Suzy have $6,000 in current or monetary assets divided by $1,925, which is their monthly living expenses, or a ratio of 3.1 times. Bill and Suzy could pay 3.1 months of living expenses with their existing monetary assets. They are within the recommended range of three to six months, although they are on the lower side.

**Question 2: Can I meet my debt obligations?** The debt ratio and the long-term debt coverage ratio can help you determine whether or not you can meet your current or long-term debt obligations.

Your debt ratio tells you whether you could pay off all your liabilities if you liquidated all your assets. This ratio is equal to your total liabilities divided by your total assets and represents the percentage of assets that are financed with borrowed money. Track this trend; this ratio should go down as you grow older.

Your long-term debt coverage ratio tells you how long you could continue to make payments on your long-term debt based on the amount of money you have for living expenses. To calculate this ratio, divide the amount you have available for living expenses (i.e., wages minus taxes) by the amount of your long-term debt payments. The higher this ratio, the better; a higher ratio indicates that you could cover your debt payments for a longer period of time. Track this trend; this ratio should go up over time.

In the example above, Bill and Suzy’s debt ratio is $4,200 divided by $14,450 or 29 percent. Roughly 29 percent of their assets are financed with borrowings, and most of that is with student loans. Once Bill and Suzy buy their first home, this ratio will likely increase. A good goal is to make this ratio zero percent, meaning you have paid off all your liabilities, including your mortgage.

Their long-term debt coverage ratio is $2,650 divided by $50, or a ratio of 53 times. They have very little debt and are doing well. Debt coverage ratios should be higher than 2.5. Because they are renting and don’t have a mortgage, this ratio is very low.

The inverse of the long-term debt coverage ratio is called the debt service ratio. The debt service ratio is long-term debt payments divided by monthly living expenses. Ideally, this ratio should be very low—at least less than 40 percent. In Bill and Suzy’s case, their long-term debt payments are $50 divided by money available for monthly living expenses, or $2,650. Their ratio is 1.9 percent. Only 1.9 percent of their income goes to paying long-term debts. Taking one divided by the long-term debt coverage ratio of 53 gives the same result.
Question 3: Am I saving as much as I think I am? The net savings ratio and the gross savings ratio can help you determine whether you are saving as much of your income as you think you are.

Your net savings ratio tells you what proportion of your after-tax income you are saving. To calculate this ratio, divide the amount of income you save by the amount of income you use to cover living expenses. In the United States, the average ratio has ranged between negative 2 percent and 8 percent; however, your ratio may vary from this average depending on your current financial stage and your personal goals. As always, track the trend of this ratio—if it is decreasing, make the necessary changes.

Your gross savings ratio tells you what proportion of your before-tax income you are saving. This ratio is equal to your total savings divided by your total income. I recommend that, at a minimum, this ratio should be 10 percent. For most students, I recommend between 10 and 20 percent. As you get older, this savings ratio should also increase.

In the example given, Bill and Suzy’s net savings ratio is calculated as their monthly savings divided by their total income after taxes, or $398 divided by $2,650, giving a ratio of 15 percent. They are saving 15 percent of their net pay.

Bill and Suzy’s gross savings ratio is calculated as the monthly savings divided by their total income before taxes, or $398 divided by $2,760, or 14 percent. They are saving 14 percent of their total pay. While 14 percent is good, I recommend you set a goal to save 20 percent of your gross income, if possible.

Summary

Before you can attain your goals, you must first understand where you are financially. To do this, you must prepare the various financial statements described in this chapter. Of these financial statements, the most important is your budget. Following your budget is critical to living within your means. You must know what income you have coming in and what income you are spending.

In this chapter, I have recommended a new way of budgeting. Instead of saving what is left over at the end of the month, I have suggested that you determine your income, pay the Lord first, pay yourself second (between 10 percent and 20 percent), and then budget and live on the remainder. This practice will help you save for your goals much more quickly and will greatly improve your chance of attaining them.

I also explained the importance of using your personal balance sheet to create a snapshot of where you are financially and to help you calculate your net worth. Remember, your net worth will change depending on where you are in life, and ideally, it should get better over time.
Finally, I touched on the personal income statement and explained specific ratios that can help you see how well you are doing with regard to liquidity, debt, and savings. Ideally, these ratios should also be improving over time.

Joseph B. Wirthlin commented:

I advise you to be patient in financial matters. Avoid rash or hurried financial decisions; such decisions require patience and study. Get-rich-quick schemes seldom work. Beware of debt. Be especially careful of easily obtained credit even if the interest is tax deductible. You young couples should not expect to begin your married lives with homes, automobiles, appliances, and conveniences comparable to those your parents have spent years accumulating.⁶

Assignments

Financial Plan Assignments

While the previous chapter helped you determine where you wanted to be, this chapter helps you see where you are right now. Financial statements help you understand your current financial position.

If you are not already living on a budget, your assignment is to begin today. Begin keeping a record of all your expenses, using the recording method of your choice. Your budget is probably the single-most important tool that will help you attain your goals. Use it wisely and refer to it often. It is important to remember that recording expenses alone is not budgeting. Recording expenses is just record-keeping. You need to plan where your money should go and then see that you follow your plan.

In addition to making a budget, put together your own personal or family balance sheet. Be conservative in evaluating your assets, and be exact in evaluating your liabilities. Follow the methods discussed in this chapter and see where you are financially.

Finally, calculate your financial ratios regarding liquidity, debt, and savings. Are your assets as liquid as they should be? Are you reducing debt as you should? Are you saving as much as you should?

Learning Tools

The following Learning Tool may be helpful as you prepare your personal financial statements.

4. Budget, Balance Sheet, and Income Statements
This is an excel spreadsheet that includes a one-year budget, a two-period balance sheet, an income statement, and financial ratios for determining where you are financially.

**Review Materials**

**Terminology Review**

**60% Solution budgeting method.** A process of budgeting where you determine your gross salary each month, take 60% of that amount and only spend that amount each month. Do not spend beyond that amount. This leaves 20% of your salary for long-term goals and 20% of your salary for taxes at year-end.

**Appreciating assets.** These are assets which may or which have historically appreciated in value.

**Assets.** These are things that you own that have value.

**Automobiles and Other Vehicles.** These are depreciable assets, such as cars, trucks, and RVs that normally must be inspected and licensed.

**Balance sheet (personal).** This is a financial snapshot of your financial position on a given date.

**Budgeting Process.** These are the steps you take to create your budget. It includes: 1. Know what you want to accomplish, 2. Track your spending (your expenses), 3. Develop your cash budget, 4. Implement your budget, 5. Compare it to actual expenses, then make changes where necessary to achieve your goals.

**Budgeting the Better Way.** This is a budgeting process where you pay the Lord first, and yourself second, then pay your bills. This makes paying yourself a higher priority.

**Budgeting the Old Way.** This is a budgeting process where whatever was left at the end of the month went into savings. The challenge is that there is never anything left at the end of the month.

**Computer Software budgeting method.** This process uses commercially available budgeting software such as such as Mint.com (free), Quicken, Mvelopes, or others. Determine your gross salary and take home each month after taxes and other deductions, determine spending by category, and budget each category. Work to within your budget for each spending category. You will obtain receipts and credit card information directly via internet from financial institutions.
Chapter 3. Budgeting and Measuring Your Financial Health

Current ratio. This is your monetary assets divided by your current liabilities. This ratio tells you how many times you could pay off your current liabilities with your liquid cash on hand.

Debt ratio. This is your total liabilities divided by your total assets. This ratio tells you whether you could pay off all your liabilities if you liquidated all your assets. This represents the percentage of your assets financed with borrowing.

Depreciating assets. These are assets which depreciate. Often, the minute you take ownership of these assets, i.e. drive these assets off the car lot, they drop in value.

DNAH-ial Budgeting Method. This is a method many people use. It stands for DNAH-ial - Do nothing and hope. It is not recommended.

Envelope budgeting method. A process of budgeting where you prepare divide spending each month into categories, create envelopes for each category of spending, and once a bill comes, take the money from the corresponding envelope and pay the bill.

Expenses. This is where your money goes. There are two types of expenses: fixed expenses, which are expenses you don’t directly control; and variable expenses, which are expenses you can control.

Financial Ratios. These are ratios that can help you to analyze your spending.

Gross Savings Ratio. This is your income for savings divided by your gross income. This ratio tells you what proportion of your total income is being saved.

Housing. These are appreciating tangible assets, such as land, dwellings, vacation home, or rental property used for personal goals or capital income.

Income Statement (personal). This is a financial record your inflows and outflows of cash. It is on a cash basis. The statement is based entirely on actual cash flows, not accruals.

Income-consuming assets. These are assets perhaps listed above which require a constant infusion of cash to keep operative.

Income-generating assets. These are the best type of assets. These assets generate income or capital gains which may eventually allow you to have income without your having to work.

Investment Assets. These assets include stocks, bonds, mutual funds that are invested for the future. These are also income-producing assets used to accumulate wealth to satisfy specific goals.
Liabilities. This is what you owe to others. Liabilities come in two major forms: current liabilities, liabilities that must be paid-off within the next year, and long-term liabilities, liabilities that extend beyond one year.

Long-term Debt Coverage ratio. This is your income available for living expenses divided by long-term debt payments. This ratio tells how long you could make monthly payments on your debt based on the amount of money you have available for living expenses (which is wages less taxes). The inverse of this ratio is the Debt Service ratio.

Monetary (or Current) Assets. This is cash or other assets that can be easily converted into cash. These may be also income-producing assets. They provide necessary liquidity in case of an emergency.

Month’s Living Expenses Covered ratio. This is your monetary assets divided by your monthly living expenses. This ratio tells you how many months you could survive in the event of the loss of all current income. Your living expenses do not include charitable contributions, taxes or savings.

Net worth or equity. This is the difference between your assets, the things you own of value, and your liabilities, what you owe to others.

Personal Property. These are depreciating tangible assets, such as boats, furniture, clothing, etc.

Retirement plans. These are income-producing assets, such as pensions, IRAs, 401Ks, Roths, SEPs etc. by you or employer used to accumulate wealth for retirement.

Savings Ratio. This is your income for savings divided by your income available for living expenses. This ratio tells you what proportion of your after-tax income is being saved.

Spreadsheet budgeting method. Using a computer and spreadsheets, determine your gross salary and take home each month after taxes and other deductions. Determine spending by categories (rows) and dates (columns), and budget for each category. As bills come in, input the spending on each date (column) and row (category).

Review Questions

1. Why is it necessary to understand financial statements? Why is it necessary to create your own personal financial statements?
2. According to Spencer W. Kimball, who should have a budget? Why?
3. What is the process of creating an effective budget?
4. What is the main difference between the “old way” and the “new way” of budgeting (see Chart 1 and Chart 2)? Why is this so important to the success of your financial plan?

5. Why is it important to calculate your net worth? What does your net worth say about your financial position? What is a “good” net worth?

Case Studies

Case Study 1

Data
Steve and Mary Jo, both 35 years old, own a house worth $150,000 and have a yearly income of $50,000, monetary assets of $5,000, two cars worth $20,000, and furniture worth $10,000. The house has a $100,000 mortgage, they have college loans of $10,000 outstanding, and the cars have outstanding loans of $10,000 each. Bills totaling $1,150 for this month have not been paid ($1,000 is to pay off their credit card that they use for bills). They are requesting your help.

Calculations
Using the data above, create a balance sheet to calculate Steve and Mary Jo’s net worth. How are they doing?

Case Study 1 Answers
The balance sheet for Steve and Mary Jo should look like this:

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Residence</td>
<td>$150,000</td>
</tr>
<tr>
<td>Monetary Assets</td>
<td>$5,000</td>
</tr>
<tr>
<td>Automobiles</td>
<td>$20,000</td>
</tr>
<tr>
<td>Furniture</td>
<td>$10,000</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$185,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Bills</td>
<td>$1,150</td>
</tr>
<tr>
<td>First Mortgage</td>
<td>$100,000</td>
</tr>
<tr>
<td>College Loan</td>
<td>$10,000</td>
</tr>
<tr>
<td>Automobiles (2 * $10,000)</td>
<td>$20,000</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$131,150</td>
</tr>
<tr>
<td>Net Worth (Assets – Liabilities)</td>
<td>$53,850</td>
</tr>
</tbody>
</table>

Generally, they are doing OK. While they have a positive net worth, most of that value is from the equity of their home.

Case Study 2

Data
Steve and Mary Jo, who make $50,000 per year, calculated their average tax rate at 15 percent. They contribute 12 percent of their income to charity and pay themselves 10 percent of their income. They have 25 years and $100,000 remaining on their 6-percent mortgage ($7,730 per year), three years and $20,000 remaining on their 7-percent auto loan ($7,410), and 10 years and $10,000 remaining on their 3-percent college loan ($1,160). In addition, utilities and property taxes were $2,270 per year, food was $6,000, insurance was $1,500, and other expenses were $5,430.

Calculations
Calculate their income statement using the “better” method, and round values to the nearest $10. How are they doing?

Case Study 2 Answers
Their income statement should look like this:

<table>
<thead>
<tr>
<th>Annual Income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>$50,000</td>
</tr>
<tr>
<td>Taxes (15%)</td>
<td>7,500</td>
</tr>
<tr>
<td>Income for Living Expenses</td>
<td>42,500</td>
</tr>
<tr>
<td>Paying the Lord (12%)</td>
<td>6,000</td>
</tr>
<tr>
<td>Paying Yourself (10%)</td>
<td>5,000</td>
</tr>
<tr>
<td>Total Income</td>
<td>$31,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage</td>
<td>$7,730</td>
</tr>
<tr>
<td>Utilities, Taxes</td>
<td>2,270</td>
</tr>
<tr>
<td>Food</td>
<td>6,000</td>
</tr>
<tr>
<td>Insurance</td>
<td>1,500</td>
</tr>
<tr>
<td>College Loan</td>
<td>1,160</td>
</tr>
<tr>
<td>Car Payment</td>
<td>7,410</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>5,430</td>
</tr>
<tr>
<td>Total Living Expenses</td>
<td>$31,500</td>
</tr>
</tbody>
</table>

They seem to be doing OK; they are saving money, and it appears that they are living within their income. We need more information though.

This is the way Steve and Mary Jo calculated their annual expenses. (For information on using a financial calculator, see Learning Tool 3: Financial Calculator Tutorial, and Learning Tool 12: Excel Financial Calculator.)

Mortgage PV = $100,000, I = 6%, N = 25 * 12, PMT = ? * 12 = $7,730
College Loan PV = $10,000, I = 3%, N = 10 * 12, PMT = ? * 12 = $1,160
Car PV = $20,000, I = 7%, N = 3 * 12, PMT = ? * 12 = $7,410
Chapter 3. Budgeting and Measuring Your Financial Health

Case Study 3

Data
Steve and Mary Jo would like you to help them understand where they are financially. You have Steve and Mary Jo’s balance sheet and income statements, which were prepared earlier.

Calculations
They ask for help to calculate each of the six key liquidity, debt, and savings ratios.

Application
Using the data and calculations, comment on how well they are doing. What can and should they be doing to improve?

Case Study 3 Answers

Liquidity Ratios

Current ratio = current assets / current liabilities

$5,000 / 1,150 = 4.35 times

Month’s living expense covered ratio = monetary assets / (annual living expenses / 12)

$5,000 / (31,500 / 12) = $5,000 / 2,624 [(M + F + I + CL + CP + OE) / 12] = 1.9 months (Living expenses do not include charity, taxes, or paying yourself because if you were not earning money, you would not pay these expenses.)

Steve and Mary Jo are somewhat liquid. They have a good current ratio (>2) but could only cover annual living expenses for less than two months (>3–6+ months is much better). They need to cut expenses and reduce debt.

Debt Ratios

Debt ratio = total liabilities / total assets

$131,150 / 185,000 = 70.9%

Long-term debt coverage ratio = income available for living expenses (wages – taxes or W – T) / long-term debt payments (debt you would not pay off in 12 months)

$42,500 (W – T) / (7,730 + 1,160 + 7,410) (M + CL + CP) = $42,250 / 16,300 = 2.6 times

Their debt service ratio or inverse of the long-term debt coverage ratio is $16,300 / 42,500 = 38.6%.

They have lots of debt—71 percent of their assets are financed, and their long-term debt ratio is 2.6 times, just above the 2.5 times caution level. Thirty-nine percent of their total
income available goes to cover just debt payments. Just think—they could be investing that money instead of paying it!

Savings Ratios
Savings ratio = income available for savings and investment / income available for living expenses

\[
\frac{\$5,000 \text{ (PY)}}{42,500 \text{ (W – T)}} = 11.8\%
\]

Gross savings ratio = income available for savings and investment / gross salary

\[
\frac{\$5,000}{50,000} = 10\%
\]

They are saving 11.8 percent of their income available for living expenses, and 10 percent of their gross salary. This is OK, but it should be the minimum amount. I hope students taking this class will save much more, perhaps 20 percent of their gross salary.

Ratio Summary

<table>
<thead>
<tr>
<th>Overall Situation</th>
<th>Actual</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Ratio</td>
<td>4.4 Times</td>
<td>&gt; 2</td>
</tr>
<tr>
<td>Month’s LEC Ratio</td>
<td>1.9 Times</td>
<td>&gt; 3 – 6+</td>
</tr>
<tr>
<td>Debt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt Ratio</td>
<td>70.9%</td>
<td>0% (See Note 1)</td>
</tr>
<tr>
<td>LT Debt Cov. Ratio</td>
<td>2.6 Times</td>
<td>&gt; 2.5</td>
</tr>
<tr>
<td>% Inc. to Pay Debt</td>
<td>38.0%</td>
<td>0% (See Note 1)</td>
</tr>
<tr>
<td>Savings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings Ratio</td>
<td>11.8%</td>
<td>&gt; 10%</td>
</tr>
<tr>
<td>Gross Savings Ratio</td>
<td>10.0%</td>
<td>10% Min (See Note 2)</td>
</tr>
</tbody>
</table>

Notes:
1. It depends on your age. Ideally, it should decrease to zero.
2. While the minimum is 10 percent, it should increase as the situation allows.

Recommendations:

Liquidity—Steve and Mary Jo are somewhat liquid, but they do not have enough monetary assets. They need to significantly increase their monetary assets by saving more. They should set a goal to have an LEC ratio of at least three to six times. To conserve cash, they need to reduce spending, and perhaps sell some assets. They are paying so much on debt payments that they cannot build their savings and emergency fund. They likely need a stricter budget.

Debt—Steve and Mary Jo are carrying way too much debt. Seventy-one percent of their assets are financed by debt. They are very close to the danger range of a debt coverage ratio of 2.5 times. Currently, 38 percent of their income is used for long-term debt payments. While they have equity in their home, that is where most of their net worth
currently resides. Given the recent housing crisis, the amount of equity in their home has likely dropped. They should cut expenses, reduce their debt, and perhaps sell their expensive cars and purchase cheaper ones.

Savings—Steve and Mary Jo are saving 10 percent of their income, which is good. However, their total investment assets are only $5,000. Having $5,000 in monetary assets at a savings rate of $5,000 per year means they only began saving within the last year. While they can’t do anything about the fact that they should have begun saving earlier, they need to save more now. I would encourage them to reduce their spending and increase their savings goal to 20 percent, if possible, which is what I recommend for my students. After a three-to-six month emergency fund, I would help them to take additional funds and use it to pay off debt.

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1 Conference Report, April 1975, pp. 166–167
2 Gospel Standards, compiled by G. Homer Durham, 1941, 111
3 “To the Boys and to the Men,” Ensign, Nov. 1998, 51
4 “Becoming Self-Reliant,” Ensign, Nov. 1991, 64
5 “It’s No Fun Being Poor,” Ensign, Sept. 1982, 72; italics added
6 “Patience, a Key to Happiness,” Ensign, May 1987, 30
4. Tax Planning: Paying All You Owe and Not a Penny More

Introduction

The present tax system in the United States was established in 1913 with the passage of the Sixteenth Amendment to the Constitution. This amendment gave Congress the power to impose an income tax. When this tax was first established, only about one percent of the population had to pay income taxes. Since that time, tax laws have changed immensely. Now, paying taxes has become one of the most complex procedures citizens must go through to fulfill their civic responsibilities.

Whether we like it or not, taxes are a fact of life. Taxes are also a critical part of any financial plan. We include a discussion of taxes early in this course because taxes have an impact on nearly every part of financial life: investing, saving, managing cash, dealing with debt, owning a home, planning for retirement, securing insurance, and planning your estate. Since taxes are such a crucial financial element, you need to understand and plan for them so you can achieve your personal and family goals.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the principles of tax planning
2. Understand how tax planning can help you attain your personal goals
3. Understand the tax process and tax strategies that will help you lower your taxes
4. Understand strategies to minimize tax payments for a given level of income
5. Understand the major features of the U.S. tax system

Understand the Principles of Tax Planning

Regarding taxes and the other laws of the land, the Lord has said the following: “Let no man break the laws of the land, for he that keepeth the laws of God hath no need to break the laws of the land. Wherefore be subject to the powers that be, until he reigns whose right it is to reign and subdues all enemies under his feet.”

Some citizens have tried to minimize their obligation to pay income taxes. We all should obey the laws of the land, including the laws that require us to pay taxes. However, we should learn to be wise stewards so that we pay all the taxes we legally owe—and not a penny more.

There are five principles of effective tax management:
1. Know yourself, your goals, vision, and values. This is critical. What are you trying to accomplish during your life for yourself and your family? What do you want to become? What is the vision of what you see for yourself and your family? What are the values you will follow as you strive to accomplish these things?

2. Keep good records for tax and other purposes. It is important that you keep good records, including records of spending, donations, investments, etc. Taxes impact so many areas of our lives. As such, it is important that we keep good records so that we pay every dollar we owe, and not a penny more.

3. Understand the tax system so you can make wise decisions regarding your finances. It is important that you understand how taxes are calculated so you can use this knowledge to help you legally reduce your tax bill. After all, it is likely one of your larger bills each year.

4. Get good help if needed to make better decisions. Often, we do not have enough information to make the best decisions we need. As such, don’t be afraid to pay to have help of certified tax experts to help you understand and reduce your tax bill.

5. Finally, Pay everything you owe, and not a penny more. It is a blessing to live in the countries we all live in. As such, we are responsible to pay our taxes, consistent with our leader’s counsel.

**Understand How Tax Planning Can Help You Attain Your Personal Goals**

Tax planning is important because taxes are the largest single annual expense for most families. The average American spends more on taxes than on food, clothing, and medical care combined; he or she must work for more than three months just to earn enough to pay taxes. In 2011, Americans needed to work 104 days to cover the costs of their federal, state, and local taxes. The day on which taxes were covered, called Tax Freedom Day, fell on April 24 in 2016, 114 days into the year (See Figure 1).

The statistics in Figure 1 illustrate why tax planning and tax strategies should be critical parts of your financial life. The less you owe Uncle Sam, the more you can save for your personal and financial goals.

**Understand the Tax Process and Tax Strategies That Will Help You Lower Your Taxes**

Preparing your income tax is a seven-step process:

1. Calculate your gross income. This is your income from all sources minus IRS-allowed losses, exclusions, and deferrals.
2. Subtract adjustments to gross income; the result is your adjusted gross income (AGI).
3. Subtract the greater of your standard deduction or your itemized deductions.
4. Subtract your exemptions; the result is your taxable income.
5. Refer to the IRS tax table and calculate your tentative tax.
6. Subtract your credits; the result is your total tax owed.
7. Subtract any taxes already paid. This leaves the amount of your balance due or amount of your refund.

**Figure 1. Tax Freedom Day, 1900-2016**

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**Step 1: Calculate Your Gross Income**

Your gross income comprises income from all sources unless it is allowed to be specifically excluded or deferred by the IRS. It includes active income from wages or a business; passive income from activities in which the taxpayer does not actively participate; and portfolio income from interest, dividends, and capital gains from securities. Total income also includes alimony, business income, taxable IRA distributions, tax refunds from the previous year (but only if the excess was deducted in the previous year), royalties, farm income, unemployment compensations, taxable Social Security benefits, and any other income.
Occasionally the IRS allows certain sources of income to be excluded from your total income. These waived amounts are called exclusions. They include certain employer-provided fringe benefits, life insurance proceeds that were received because of a death, scholarships or grants not in excess of college expenses, interest on U.S. Series I or EE savings bonds (when the principal and interest from these bonds have been used for qualified educational expenses), municipal bond interest, inheritances (up to a specific amount), child support payments, and some welfare benefits.

The IRS also allows certain sources of income to be deferred and recognized and a later date. These amounts are called deferrals. Deferrals include contributions, earnings, and interest on qualified retirement accounts. Taxes on these accounts are deferred until the individual retires and withdraws funds from these accounts.

Income also includes some losses, such as net capital losses (up to $3,000 per year), sole proprietorship losses, and active participation real estate losses.
Step 2: Subtract Adjustments to Get Your Adjusted Gross Income (AGI)

Adjustments are deductions from your total income allowed by the IRS. The resulting number is your adjusted gross income. Adjustments include items that are paid for on a before-tax basis and items that reduce income for specific payments or taxes. Items paid for on a pre-tax basis include contributions to flexible spending plans or health savings accounts, where money for medical expenses is paid before tax. Contributions to individual retirement accounts (IRAs) are also adjustments. Reductions in income for specific payments include interest payments on student loans, tuition and fees deductions, and deductions of one-half self-employment tax. Note that as your adjusted gross income increases beyond a specific amount, certain adjustments to your income are phased out or eliminated, such as the ability to contribute to certain kinds of individual retirement accounts. Total income minus adjustments gives you your Adjusted Gross Income (AGI).

Step 3: Subtract Itemized or Standard Deductions

Once you know your AGI, the next step is to determine your itemized deductions. Itemized deductions are IRS-allowed reductions in adjusted gross income that are used to calculate taxable income. There are two different ways to determine deductions; one way you must calculate yourself, and the other way is calculated for you. It is important for you to understand what can and cannot be deducted because every deduction results in less tax money you must pay and more money you can keep and use to achieve your personal goals.

Table 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Standard Deduction (MFJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$11,900</td>
</tr>
<tr>
<td>2013</td>
<td>$12,200</td>
</tr>
<tr>
<td>2014</td>
<td>$12,400</td>
</tr>
<tr>
<td>2015</td>
<td>$12,600</td>
</tr>
<tr>
<td>2016</td>
<td>$12,600</td>
</tr>
</tbody>
</table>

The first method of calculating deductions is to let the government calculate them for you. Each year, the government determines a “standard deduction,” which is an estimate of what the average family would be able to deduct by itemizing. Unlike itemized deductions, which are limited for higher levels of AGI, the standard deduction remains the same for all income levels. The standard deduction amount does vary depending on your filing status: the amount will be different depending on whether you are single, married filing jointly, head of household, or married filing separately. The following has been the standard deduction for married filing jointly (MFJ) for the last few years (see Table 2).

The second method for determining deductions is for the taxpayer to itemize all the deductions he or she can legally take. The government allows taxpayers to remove certain expenses it deems important from a taxpayer’s income. It is the taxpayer’s responsibility to determine and document those deductions. Some of the most common deductions include medical and dental
expenses, tax expenses, interest on home mortgages, charitable contributions, and investment-related expenses.

The government allows deductions for medical and dental expenses that exceed 7.5 percent of your AGI, un-reimbursed qualified job expenses that exceed 2 percent of AGI, and casualty and theft losses that exceed 10 percent of AGI. For example, if your AGI is $50,000, you can only deduct medical expenses that are more than $3,750 (50,000 * .075). The definition of acceptable medical and dental expenses can be found in IRS Publication 17.

Certain tax expenses are also deductible against your income earned. These expenses include investment losses up to $3,000 per year, state and local income taxes, real estate taxes, and county or city income taxes. Some states impose a personal property tax (generally a tax on vehicles), which is also deductible. The government also allows you to deduct the interest you pay on your home mortgage as well as interest on home equity loans up to a $100,000 loan limit.

Table 3. Mileage Deductions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Charitable Mileage</td>
<td>.14 per mile</td>
<td>.14 per mile</td>
<td>.14 per mile</td>
<td>.14 per mile</td>
<td>.14 per mile</td>
</tr>
<tr>
<td>deduc...ions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Mileage</td>
<td>.550 per mile</td>
<td>.565 per mile</td>
<td>.560 per mile</td>
<td>.575 per mile</td>
<td>.540 per mile</td>
</tr>
<tr>
<td>Deductions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moving/Medical Mileage</td>
<td>.230 per mile</td>
<td>.240 per mile</td>
<td>.235 per mile</td>
<td>.230 per mile</td>
<td>.190 per mile</td>
</tr>
<tr>
<td>Deductions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You may also deduct contributions to charitable organizations. The requirement for this deduction is that the charitable organization must be qualified (registered as a 501(c)(3) nonprofit organization). Regardless of the size of the donation, you should get a receipt for your donation from the charity.

Further deductions can be taken for certain expenses relating to investing. The government wants to encourage investment, so interest paid on investments is deductible, although the deduction is
limited to the amount of investment income you earn. You can also deduct investment costs; after offsetting investment income, you can deduct up to $3,000 in investment losses per year. Losses in excess of $3,000 can be carried forward to deduct in future years.

Certain mileage deductions may also be made, depending on the usage of your personal vehicle (see Table 3). These uses may be related to charity, business, moving, or medical expenses.

If your income rises above a certain level, you begin losing a percentage of your deductions. The higher your income gets, the more your allowable itemized deductions are reduced. While these calculations are complicated, be aware that these adjustments may be applicable.

The challenge to the taxpayer is to determine whether his or her calculated deductions are greater than the government’s standard deduction. It may be to your advantage to itemize your deductions. If the government’s standard deduction is greater than your itemized deduction, then it is to your advantage to take the standard deduction. Once you understand the tax system, you can utilize the deductions that minimize your tax payments and maximize the amount that is left over for your personal goals.

**Step 4: Subtract Exemptions to Get Your Taxable Income**

An exemption is a government-determined amount for each person who is supported by the income on a single tax return. This is a specific amount of money that can be deducted for each qualifying person in the household, and the amount changes from year to year. Once you have calculated your AGI, subtract your deductions and exemptions. The resulting total is your taxable income. Table 4 shows the exemption amounts for the last few.

<table>
<thead>
<tr>
<th>Year</th>
<th>Exemption Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$3,800</td>
</tr>
<tr>
<td>2013</td>
<td>$3,900</td>
</tr>
<tr>
<td>2014</td>
<td>$3,950</td>
</tr>
<tr>
<td>2015</td>
<td>$4,000</td>
</tr>
<tr>
<td>2016</td>
<td>$4,050</td>
</tr>
</tbody>
</table>

**Step 5: Refer to the Tax Table and Calculate Your Tentative Tax**

Once you have determined your taxable income, determine your filing status. Your filing status is based on your marital and family situation. Filing status is a factor in determining your standard deduction and your correct amount of tax. Your marital status on the last day of the year determines your status for the entire year. The five filing status options are:

1. **Single**: Generally, if you are unmarried, divorced, or legally separated, your filing status is single.
2. **Married filing jointly**: If you are married, you and your spouse may file a joint return.

3. **Married filing separately**: Married taxpayers may elect to file separate returns.

4. **Head of household**: If you are unmarried and paid more than half the cost of maintaining a home for you and a qualifying person, you may file as head of household.

5. **Qualifying widow(er) with dependent child**: If your spouse died during the last two years, you have a qualifying child, and you meet certain other conditions, you may file as a qualifying widow(er) with dependent child.

### Table 5. Tax Tables for Married Filing Jointly

<table>
<thead>
<tr>
<th>Year</th>
<th>If Taxable Income Is Over</th>
<th>But Not Over</th>
<th>Tax Is</th>
<th>Plus This Percentage of the Excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>0</td>
<td>$17,400</td>
<td>0</td>
<td>10% $17,400</td>
</tr>
<tr>
<td></td>
<td>$17,400</td>
<td>$70,700</td>
<td>$1,740</td>
<td>15% $70,700</td>
</tr>
<tr>
<td></td>
<td>$70,700</td>
<td>$142,700</td>
<td>$9,735</td>
<td>25% $142,700</td>
</tr>
<tr>
<td></td>
<td>$142,700</td>
<td>$217,450</td>
<td>$27,735</td>
<td>28% $217,450</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>$17,850</td>
<td>0</td>
<td>10% $17,850</td>
</tr>
<tr>
<td></td>
<td>$17,850</td>
<td>$72,500</td>
<td>$1,785</td>
<td>15% $72,500</td>
</tr>
<tr>
<td></td>
<td>$72,500</td>
<td>$146,400</td>
<td>$9,983</td>
<td>25% $146,400</td>
</tr>
<tr>
<td></td>
<td>$146,400</td>
<td>$223,050</td>
<td>$28,458</td>
<td>28% $223,050</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
<td>$18,150</td>
<td>0</td>
<td>10% $18,150</td>
</tr>
<tr>
<td></td>
<td>$18,150</td>
<td>$73,800</td>
<td>$1,815</td>
<td>15% $73,800</td>
</tr>
<tr>
<td></td>
<td>$73,800</td>
<td>$148,850</td>
<td>$10,163</td>
<td>25% $148,850</td>
</tr>
<tr>
<td></td>
<td>$148,850</td>
<td>$226,850</td>
<td>$28,925</td>
<td>28% $226,850</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
<td>$18,450</td>
<td>0</td>
<td>10% $18,450</td>
</tr>
<tr>
<td></td>
<td>$18,450</td>
<td>$74,900</td>
<td>$1,845</td>
<td>15% $74,900</td>
</tr>
<tr>
<td></td>
<td>$74,900</td>
<td>$151,200</td>
<td>$10,313</td>
<td>25% $151,200</td>
</tr>
<tr>
<td></td>
<td>$151,200</td>
<td>$230,450</td>
<td>$29,388</td>
<td>28% $230,450</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>$18,550</td>
<td>0</td>
<td>10% $18,550</td>
</tr>
<tr>
<td></td>
<td>$18,550</td>
<td>$75,300</td>
<td>$1,855</td>
<td>15% $75,300</td>
</tr>
<tr>
<td></td>
<td>$75,300</td>
<td>$151,900</td>
<td>$10,368</td>
<td>25% $151,900</td>
</tr>
<tr>
<td></td>
<td>$139,350</td>
<td>$212,300</td>
<td>$29,518</td>
<td>28% $212,300</td>
</tr>
</tbody>
</table>
Once you have determined your filing status, check the IRS tax tables for the current year. Find the table and the line that represents your taxable income for the year. Cross-reference this amount with your filing status to determine your tax amount. Table 5 shows the last few years of the tax tables for the filing status of *Married Filing Jointly* from the IRS.

The government has also set up a system to ensure that all income-earners pay some tax. There is an alternative minimum tax (AMT) that is aimed at preventing the wealthy from avoiding income taxes. For most people, this minimum tax has no effect; however, it may be significant for the wealthy. Note that this tax is becoming more and more prevalent.

**Step 6: Subtract Credits to Calculate Total Tax Owed**

Credits are different from deductions. Credits are more valuable because they are dollar-for-dollar reductions in your tax liability, whereas deductions only reduce taxable income. Credits are either refundable (paid to the taxpayer even if the amount of the credits exceeds the tax liability) or non-refundable. Refundable credits include reductions for earned income, taxes withheld on wages, and estimated income tax payments. Non-refundable credits include child tax, child and dependent care, elderly and disabled, adoption, and education. Many of these credits are phased out for taxpayers in higher income brackets.

The Child Tax Credit is given for each child of the household under 17 years old at the end of the year. A qualifying child is one whom the taxpayer can claim as a dependent. This credit is given in addition to the exemption claimed for the child, and it can even become a tax refund for low-income families or a refundable credit. However, the Child Tax Credit begins to phase out after the taxpayer’s income exceeds a specific amount. The amount phased out is based on the number of credits—it is not a percentage phase-out.

Education tax credits include the American Opportunity Tax Credit and the Lifetime Learning Credit. The American Opportunity Tax Credit gives parents or students a 100-percent tax credit for the first $2,000 paid and a 25-percent tax credit on the next $2,000 for the first four years of college. The result is a credit of up to $2,500 per year for the first four years of college. Qualifying expenses include tuition and books—but not room and board—at an accredited vocational school, college, or university.

After your fourth year of college, the Lifetime Learning Credit can be applied to offset 20 percent of the first $10,000 for tuition and related expenses for all eligible students in the family (up to $2,000).

Another important credit is the Adoption Credit, which allows for a credit of up to $12,970 for the qualifying cost of adopting a child under the age of 18.

Taxpayers may be eligible for additional credits if they are disabled, over 65 and have a low income, pay taxes in other countries, or overpay Social Security taxes because they work more than one job.
Step 7: Subtract Taxes Paid to Get Total Taxes Owed or Amount of Refund

Once you have calculated the total tax you owe, subtract the amount of taxes you have already paid. The result will either be the amount of taxes you owe or the amount you will have refunded to you.

Understand Strategies to Minimize Tax Payments for a Given Level of Income

There are four strategies to minimize your tax payments for a given level of income or to maximize after-tax income:

If your income rises above a certain level, you begin losing a percentage of your deductions. The higher your income gets, the more your allowable itemized deductions are reduced. While these calculations are complicated, be aware that these adjustments may be applicable.

The challenge to the taxpayer is to determine whether his or her calculated deductions are greater than the government’s standard deduction. It may be to your advantage to itemize your deductions. If the government’s standard deduction is greater than your itemized deduction, then it is to your advantage to take the standard deduction. Once you understand the tax system, you can utilize the deductions that minimize your tax payments and maximize the amount that is left over for your personal goals.

1. Maximize Your Deductions

It is important to understand which deductions the government allows. By maximizing your deductions, you are reducing your taxable income—the amount on which your taxes are based. Suggestions for maximizing your deductions include the following:

- Use your home as a tax shelter. Interest payments on the mortgage you took out to purchase your home can be deducted from your AGI to reduce your taxable income.
- Shift and bunch your deductions to get the maximum benefit in a specified year.
- Continue to give to your church with tithes and offerings. While you do not give solely for a tax deduction, because you are already giving, you might as well get the tax deduction.
- Keep good records of all charitable contributions, including mileage and any in-kind donations to charities.
- Keep good records of health-related and moving-related expenses.

2. Maximize Long-Term Capital Gains and Stock Dividend Income

A long-term capital gain is a gain on an investment asset that you hold for more than one year before selling. For example, if you bought a mutual fund for $10 two years ago, and you sold it for $15 this year, you have a gain of $5. Since you held the fund for more than one year, the gain is considered a long-term capital gain. Long-term capital gains income is taxed at a lower rate.
than ordinary income. Try to earn as much capital gains income as possible each year (versus ordinary income).

All income is not taxed equally. Stock dividends are taxed at a preferential tax rate compared to bond interest, whereas bond and savings interest is taxed at ordinary tax rates. Qualified stock dividends are taxed at the dividend preferential rate (20, 15, or zero percent preferential rate, depending on your marginal tax rate). To see if dividends are qualified or not, see Learning Tool 32: Taxes on Security Earnings – Qualified Dividends.

Here are some key suggestions:

- Focus on long-term capital gains. These are not taxed until the asset is sold.
- Maintain a long-term buy-and-hold strategy on mutual funds and stocks to defer taxes until the assets are actually sold.
- Manage your portfolio on a tax-efficient basis—it’s not what you make, but what you keep after taxes and inflation that makes you wealthy.
- If your risk tolerance allows, increase your allocation to stocks, stock mutual funds, stock index funds, and ETFs since stock dividends are taxed at a lower tax rate.

3. Earn Tax-Exempt Income

Tax-exempt income is excluded from your total income, meaning you do not have to pay taxes on it. Some key suggestions for using the strategy of earning tax-exempt income include the following:

- Look for tax-free investments. Municipal bond interest is free from federal tax and may be free from state and local tax as well. By investing in municipal bonds, you pay an implicit tax—the rate of return is lower than a comparable taxable bond. Depending on your marginal tax rate, it may or may not make sense to do this. Remember, the goal is to maximize your after-tax profits.

- Use medical savings accounts, also called flexible spending accounts, to pay medical bills. This way you are reducing income by paying medical bills with before-tax dollars.

- Contribute to charity by donating appreciated long-term capital assets. If you donate your appreciated assets to charity, not only do you get the full value of the donation, but you also do not have to pay the capital gains on the appreciated assets. For example, suppose you have a stock you bought for $10 per share and it is now worth $20 per share. If you sold it and used the income to pay your tithes and offerings, you would receive $20 but would have to pay capital gains taxes on your $10 gain. At a 15 percent tax rate, you would only have $18.50 after taxes. However, if you donated the stock to your church or any qualified charity, i.e., a donation-in-kind, the church or charity receives the stock, you receive a receipt for $20, and you do not have to pay capital gains tax on that stock.
Chapter 4. Tax Planning

For help with this process, see Learning Tool 8: Tithing Share Transfer Example in the Learning Tools section of the website.

4. Defer Taxes to the Future or Eliminate Future Taxes

Deferring taxes to the future means that you put off paying taxes on your current income now and then pay taxes on the money when you withdraw it at retirement. The following are key recommendations:

- Invest as much as your budget will allow in your 401(k) and your other tax-deferred retirement plans, especially if they are matched accounts. Individual retirement accounts, 401(k) plans, and SEP IRA plans defer taxes to the future.

- Invest in specific-purpose investment vehicles that eliminate all future taxes. You invest in these vehicles with after-tax dollars, and if the assets are used for the purpose that you specified, you never pay taxes on the earnings again. The following are key recommendations:
  
  o Save for retirement using a Roth IRA or Roth 401(k) investment vehicle. Earnings on Roth investment vehicles are tax eliminated, i.e., you invest with after-tax money, and then you are not taxed on those assets ever again, as long as you take them out after age 59½.

  o Save for your children’s educations using a Coverdell Education Savings Account (Education IRA) or a state 529 savings plan. You invest in these vehicles with after-tax dollars and earnings are never taxed, assuming they are used for qualified educational expenses.

  o Save for your children’s college-tuition expenses using government Series EE or Series I savings bonds. If the principal and interest are used to pay for college tuition, the interest is tax-free (subject to specific income limits). Focus on your rate of return and your tax rate. If your after-tax return on these vehicles is higher than you could make other places, it may be a good place to invest for your children’s education.

Learn to Be More Efficient with Your Taxes

Below are some ideas that may be helpful as you work toward better organization and preparation of your taxes:

1. **Be organized with your record-keeping.** One of the difficult things about preparing your tax return is knowing where all your useful receipts are. Keep a folder that is dedicated to holding all your tax receipts over the year. Make this folder readily available. Any time you do anything that may have a tax consequence, put the receipts in that folder. An electronic system, such as Quicken or Mint.com, makes it easy to record and remember details about charitable
contributions or payments toward taxes for future use.

2. **Keep copies of the previous year’s tax returns.** When preparing your taxes, review your tax returns from last year. Review your exclusions, tax deferrals, deductions, exemptions, and other areas to make sure you are not missing out on any legal tax reductions. Keep copies of all your lists of deductions and receipts so you will have the necessary backup if you are audited. You should keep copies of the last seven years of your tax returns.

3. **Keep good records for itemizing deductions.** Keep records of things you donate to Deseret Industries, the Salvation Army, United Way, and other charitable organizations: these donations can increase your tax deductions. You should also keep good records showing what non-cash charitable contributions you make, such as miles you travel for church-related or Boy and Girl Scouts activities.

4. **Spend time in December calculating potential investment gains and losses.** Remember, you can offset gains from your investment portfolio with your investment losses and costs, and you can deduct up to $3,000 per year in net portfolio losses. While this may not seem like much, if you know you have $2,000 in investment gains for the year, you could look to assets you want to sell that have investment losses; you could then sell those assets with a corresponding $2,000 loss—thereby canceling out any increase in income from your investments and reducing your tax bill.

5. **Make charitable contributions with appreciated long-term capital assets.** Donate to your church or charity using appreciated assets and avoid the capital gains taxes.

6. **Understand the major features of the U.S. tax system.** The United States tax system is structured as a progressive, or graduated, tax system. This means that increased income is taxed at increased rates. The logic behind this system is that people who earn more can afford to pay a higher percentage of their earnings in taxes. There are four major types of taxes: income, capital gains, income based, and non-income based.

**Income Taxes**

The tax system is complicated by the fact that different types of earnings are taxed differently—a policy consistent with the government’s view that tax policy should encourage specific earning behaviors. To understand tax policies, there are three terms you should know: marginal tax rate, average tax rate, and effective marginal tax rate.

Your marginal tax rate is the percentage of the last dollar you earn that will go toward federal income taxes. This rate is important to know when you are calculating returns on various assets. Any new income will be taxed at this rate, and any additional deductions will save taxes at this rate. This rate refers to what tax bracket you are in.
Your average tax rate is the average amount out of every dollar you earn that goes toward federal income taxes. This is your overall tax rate on income earned. This rate is calculated by dividing your tax liability by your taxable income.

Finally, your effective marginal tax rate is the average amount out of every dollar you earn that is paid to all local, state, and federal income taxes. This rate is calculated by dividing your tax liability by your total income.

**Capital Gains Taxes**

Capital gains taxes are taxes on the appreciation of an asset. Capital gains can be either short-term or long-term; these designations refer to how long you owned the asset before you sold it. This tax can also be realized or unrealized, depending on whether or not you have sold the asset. If you owned the asset for less than 12 months and then sold it, appreciation of the asset would be considered realized short-term capital gains, and the gain would be taxed at your marginal tax rate. If you owned the asset longer than 12 months before selling it, any appreciation of the asset would be considered a realized long-term capital gain.

The tax rate on investment income depends on your marginal tax rate (see Figure 2 below). If your marginal tax rate is 15 percent or lower, long-term capital gains are taxed at zero percent. If your marginal tax rate is between 25 and 35 percent, long-term capital gains are taxed at 15 percent. Finally, if your marginal tax rate is 39.6 percent, long-term capital gains are taxed at 20 percent. The changes to the Medicare Tax will be discussed more below.

**Figure 2. Tax Changes in 2016**

<table>
<thead>
<tr>
<th>Marginal Tax Rate (Ordinary Income)</th>
<th>Capital Gains and Dividends</th>
<th>Medicare Tax Earned Income</th>
<th>Inv. Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>0%</td>
<td>2.9%</td>
<td>0%</td>
</tr>
<tr>
<td>15%</td>
<td>0%</td>
<td>2.9%</td>
<td>0%</td>
</tr>
<tr>
<td>25%</td>
<td>15%</td>
<td>2.9%</td>
<td>0%</td>
</tr>
<tr>
<td>28%</td>
<td>15%</td>
<td>2.9%</td>
<td>0%</td>
</tr>
<tr>
<td>33% (below $250,00 AGI)</td>
<td>15%</td>
<td>2.9%</td>
<td>0%</td>
</tr>
<tr>
<td>33% (above $250,000 AGI)</td>
<td>15%</td>
<td>3.8%</td>
<td>3.8%</td>
</tr>
<tr>
<td>35%</td>
<td>15%</td>
<td>3.8%</td>
<td>3.8%</td>
</tr>
<tr>
<td>39.6%</td>
<td>20%</td>
<td>3.8%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Unrealized capital gains taxes are postponed until you sell an asset. While you can postpone capital gains taxes, you cannot postpone taxes on distributed earnings from mutual funds or taxes on dividends from stocks and interest from bonds.

Capital gains can also be earned through home ownership. Perhaps you purchased a house years ago for $150,000 and it is worth $400,000 today. Gains of up to $500,000 for couples and $250,000 for individuals are exempt from taxes if the home is your principal residence and if you have lived there and owned the home for two of the five years preceding the sale.
Chapter 4. Tax Planning

Income-Based Taxes

The third major type of tax is income-based taxes, such as FICA (Federal Insurance Contributions Act). FICA is a mandatory insurance program that is administered by the federal government to provide support to your family in the event of death, disability, health problems, or retirement. To pay for FICA, you and your employer each pay 7.65 percent of your gross salary into the federal system, for a total of 15.3 percent. Of the 7.65 percent, 6.2 percent is paid into Social Security. The amount you pay into Social Security is capped (i.e., income over a certain limit is not taxed) and adjusted annually for inflation. The remaining 1.45 percent is paid into Medicare, a health-care insurance program for the elderly and disabled; this program has no annual cap.

You are responsible for only half of these income-based taxes unless you are self-employed, and then you must pay the entire 15.3 percent yourself.

Starting in 2013, those earning more than $200,000 (Single filing) or $250,000 (Married-Filing-Jointly) will be taxed an additional 0.9 percent on earned income and an additional 3.8 percent on investment income to help fund Medicare (see Figure 2). Note that companies are not responsible for contributing any additional amount to the changes to the Medicare Tax.

In addition to these taxes, there are also state income taxes and local income taxes. Local income taxes are uncommon, but some larger cities, such as New York City, impose such a tax.

Non-Income-Based Taxes

Non-income-based taxes include sin taxes, excise taxes, and state sales tax. These taxes are imposed when goods are purchased. This category also includes real estate and property taxes that are imposed annually or semiannually on assets owned. Finally, there are gift and estate taxes; these taxes may be imposed when assets are transferred from one owner to another. The tax is imposed on the person transferring the assets, not the person receiving the assets.

Summary

Tax planning is a critical part of financial planning because it influences so many different areas of your personal financial life. The average American worked over 100 days last year just to pay his or her federal, state, and local taxes.

Preparing your income tax is a seven-step process:

1. Determine your gross income from all sources, subtract your exclusions
2. Subtract adjustments to total income; the result is your adjusted gross income
3. Subtract the greater of your standard deduction or itemized deductions
4. Subtract your exemptions; the result is your taxable income
5. Refer to the IRS tax table and calculate your tentative tax
6. Subtract your credits; the result is your total tax owed
Chapter 4. Tax Planning

7. Subtract any taxes already paid; this leaves either the amount of your balance due or the amount of your refund

Each of these steps is critical to correctly calculating your federal income tax.

There are four strategies to minimizing your tax payments:

1. Maximize your deductions.
2. Maximize capital gains income.
3. Earn tax-exempt income.
4. Defer taxes to the future or eliminate future taxes.

By using these strategies effectively, you can reduce your tax liability and the amount of taxes you are legally required to pay at a given level of income.

We concluded with some ideas that may be helpful as you work toward better organization and preparation of your taxes:

1. Be organized with your record-keeping.
2. Keep copies of the previous year’s tax returns.
3. Keep good records for itemizing deductions.
4. Spend time in December calculating potential investment gains and losses.
5. Understand the major features of the U.S. tax system.

The United States tax system is a progressive, or graduated, tax system. Increased income is taxed at higher rates. The four major taxes are income taxes, capital gains taxes, income-based taxes, and non-income-based taxes.

Taxes are a required part of living in the United States. However, there is no law that requires us to pay more than is legally due. By utilizing the recommendations and ideas in this chapter, you can fulfill your responsibility as a wise financial steward and legally minimize your tax payments to the government.

Assignments

Financial Plan Assignments

Your assignment is to understand both the taxes you paid last year and the taxes you will pay this year. Get a copy of last year’s income tax form. What form did you use (e.g., 1040A, 1040EZ, etc.)? Why did you use that form?

Think about what you are going to do differently this year in regard to your taxes. What form are you going to use this year? What additional strategies can you use to legally reduce your tax payments?
Chapter 4. Tax Planning

Learning Tools

The following Learning Tool may be helpful.

8. Tithing Share Transfer Example

This document is an example of a form you can use to pay your tithes and other offerings with appreciated stock or mutual funds.

Review Materials

Terminology Review

Bankruptcy Chapter 13. This process prepares a repayment plan in which the court binds both the debtor and the creditors to terms of repayment. The debtor retains property and makes regular payments to a trustee out of future income to pay creditors over the life of the bankruptcy plan.

Bankruptcy Chapter 7. This process liquidates assets and uses them to pay creditors according to precedence in the Bankruptcy Code. It is the quickest, simplest and the most frequently selected (75%) kind of bankruptcy filing. Certain debts cannot be waived by Chapter 7 bankruptcy such as child support, student loans, drunk driving fines, etc.

Carelessness. A reason for debt. We understand its costs, but we become lazy.

Compulsiveness. A reason for going into debt. We lack the self-control to discipline our purchases.

Counseling: non-profit credit counseling agencies. These are agencies set up specifically to help people reduce the credit-card debt load in their lives. The non-profit companies have arrangements with many of the credit companies. Working with them, they can reduce or even eliminate your interest payments with specific creditors.

Counseling: For-profit credit counseling agencies. These are companies whose goal is to make money through helping people get out of debt. They often consolidate debt into a single loan with a lower rate, or get homeowners into a interest-only home loan and use the excess cash to pay down debt.

Credit Counseling Agencies (CCAs). These may be either non-profit or for-profit agencies to help you get out of debt. You should use these with caution.

Debt Cycle. It is the process of why and how we go into debt.
**Chapter 4. Tax Planning**

**Debt Elimination: Expensive Debt First.** This is one of the personal strategies. The logic is to pay off your most expensive debts first.

**Debt Elimination: Smallest Debt First.** This is one of the personal strategies. The logic is to pay off the smallest debts first. Then take the money saved to pay off all your other debts. You have success early on as you pay off the smallest debts first.

**Debt Reduction Strategies.** These are strategies for reducing debt. It is a six-step process: 1. Remember perspective, the “why’s” and “what’s.” Accept that you have a debt problem; 2. Write down your goals so you know where you want to be. Stop incurring new debt; 3. See where you are by making a list of all your bills and debts. Admit the need to change your habits and lifestyle if being debt free is important; 4. Look for one-shot ways of reducing debt; 5. Organize a debt repayment Plan; and 6. Follow through on the Plan until total debt elimination.

**Debt.** It is the process of borrowing something with the expectation to pay it back in the future with interest.

**Home Equity Loans.** This is a personal debt strategy. You take our a home equity loan, which is a loan against the equity in your home (the difference between what the home is worth and how much you owe on it) to pay off your debts.

**Ignorance.** A reasons for going into debt. We don’t understand interest and its costs.

**Interest.** The cost of using borrowed money. Interest must always be paid,

**Necessity.** One of the reasons for going into debt. It is we truly cannot feed our families.

**Pride.** A reason for going into debt. How we look to others is more important than how we look to God.

**Review Questions**

1. In regard to taxes, what is our obligation as citizens?
2. Why is tax planning important?
3. What are the seven steps to calculating your income taxes?
4. What are the four strategies to minimizing your tax payments?
5. Give five ways to help better organize and prepare your income taxes.
Case Studies

Case Study 1

Data

Matt and Janina, ages 42 and 40, are married and filling out their 2016 taxes. They have four children, three under 17 and one a dependent in college. They contributed $5,000 to a traditional IRA in 2016 and contributed $2,500 to a flexible spending plan. They can only deduct medical bills above 7.5 percent of AGI and job-related expenses above 2 percent of AGI. Exemptions are $4,050 per person, the standard deduction for married filing jointly is $12,600, and the child tax credit is $1,000 per child under 17. Tax rates for 2016 for married filing jointly are:

<table>
<thead>
<tr>
<th>Taxable Income for 2016</th>
<th>Tax Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to $18,550</td>
<td>10%</td>
</tr>
<tr>
<td>$18,550 to $75,300</td>
<td>$1,855 plus 15% of the amount over $18,550</td>
</tr>
<tr>
<td>$75,300 to $151,900</td>
<td>$10,368 plus 25% of the amount over $75,300</td>
</tr>
</tbody>
</table>

| Income: Earned income | $80,000 |
| Interest income       | 10,000  |
| Expenses: Home mortgage interest | 6,800 |
| Un-reimbursed medical bills | 7,000 |
| Un-reimbursed job-related expenditures | 2,000 |
| Tithes and offerings  | 9,600   |

Calculations

Using the married filing jointly status and the information above, calculate their taxes first using the standard deduction and then using itemized deductions. Calculate their marginal tax rate and average tax rate on gross income.

Recommendations

Which way should they calculate their taxes? What could they do to reduce their taxes?

Case Study 1 Answers

Calculations: Standard Deduction Method

1. Income from all sources $90,000
   minus 401(k) deferral -5,000
   = Gross Income 85,000
2. Less flexible spending adjustment -2,500
   = Adjusted Gross Income $82,500
3. Minus standard deduction -12,400
4. Minus exemptions -24,300 $4,050 * 6
   = taxable income 45,900
5. Look up tax in tax table:
   Tax: 1,885 10% on first $18,550
        4,058 15% on next amount
   Tentative tax $5,913
6. Child tax credit -3,000 (3 * $1,000 child tax credit)
7. Total tax due $2,913

Calculations: Itemized Deduction Method
1. Income from all sources $90,000
   Less 401(k) deferral -5,000
   = Gross Income 85,000
2. Less flexible spending adjustment -2,500
   = Adjusted Gross Income $82,500
3. Deductions
   Home mortgage interest 6,800
   Medical expenses 813 (7,000-(82,500 * .075))
   Job-related expenditures 350 (2,000-(82,500 * .02))
   Tithing 9,600
   Total deductions -17,563
4. Minus exemptions -24,300 (4,050 * 6)
   = taxable income $40,637
5. Look up tax in tax table:
   Tax $40,637-18,450=22,187 * .15 3,313 15% on remainder
   Tentative tax $5,168
6. Child tax credit -3,000 (3 * 1,000 child tax credit)
7. Total tax due $2,168

Calculations
Calculate their marginal and average tax rate on taxable income.
Their marginal tax rate, the tax rate they would pay on each new dollar of income, is 15 percent for both the standard and itemized deduction calculation.

Their average tax rate, the rate they actually pay in taxes, is their taxes divided by their gross income.

Standard deduction = 2,913 / 85,000 = 3.4%
Itemized deduction = 2,168 / 85,000 = 2.6%
Chapter 4. Tax Planning

Recommendations

Method
Using the itemized versus the standard deduction nets a savings of $774 over the standard deduction. Matt and Janina should use the itemized method.

What could they do to reduce their taxes?
There are lots of different answers you could give; however, you do not have specific data in the case that leads to any specific recommendation. Following are a few assumptions and ideas:

1. Maximize Deductions
   • If they own a home, they could keep records of their home interest payments and property taxes.
   • If they are involved in charity, they could deduct the miles they drive to and from the charity.
   • If they have non-cash contributions, such as donations to Goodwill, they could keep good records of these donations.
   • If they have appreciated financial assets, they could contribute these to charity instead of cash, reducing taxes paid, increasing deductions and eliminating capital gains taxes.

2. Emphasize Capital Gains
   • If they have investments, they could use a passive strategy and purchase a low-turnover fund to minimize their mutual fund distributions, increase capital gains, and reduce their taxes.
   • If they invest in stocks or stock mutual funds, stock dividends are taxed as a preferential rate versus bond interest at their marginal tax rate.

3. Receive Tax-Exempt Income
   • If his work has a flexible spending plan, they could contribute to this to pay medical bills with pre-tax dollars and reduce his AGI.
   • If they have investments, they could also invest in municipal bonds, which are federal tax-free (but would likely have a lower return)

4. Defer Income and Taxes to the Future or Eliminate Future Taxes
   • If they have qualified retirement plans at work, they could contribute to these plans (likely a 401(k) or 403(b) plan). These plans might also include a company match or free money. They must look to their budget and determine if they can afford to do this. If they do not have qualified retirement plans, they both could contribute to a traditional Individual Retirement Plan to reduce their AGI.
   • They have kids, so I assume they want to provide for their education. They could contribute to education plans for their kids, i.e., an Education IRA or state 529
Plan, which would reduce their investment income in the future, as interest on these vehicles is tax-free.

- If they wanted to save for retirement, they could use a Roth IRA or Roth 401(k)/403(b) and never have to pay taxes on these earnings again.

Case Study 2

Data

Your friend Brian, a financial analyst, comes to you with a surefire method of reducing taxes. He says that if you buy into a certain product (this product can be many different types of tax schemes), you will not have to pay taxes on the earnings and it will save you taxes. It doesn’t sound right, so what should you do?

Application

To what lengths should you go to avoid taxes?
Where should your best tax advice come from?

Case Study 2 Answers

Only legal methods should be used when calculating taxes. If something seems too good to be true, it probably is. Get another opinion. It’s not worth losing your integrity or going to prison over bad tax advice. You are ultimately responsible for your choices and for paying taxes. Where you get your tax advice, and how and what you pay for your taxes and other obligations is your choice.

Your best tax advice should come from the IRS. The IRS has many publications that can help you as you determine the taxes you should pay. In addition, good advice should come from those who make it a business of giving tax advice.

1 Doctrine and Covenants 58:21–22
5. Cash Management: Making the Little Things Count

Introduction

The term “cash management” used to mean putting your money into a checking or savings account. Since each bank had similar interest rates, there was little benefit to shopping around for higher returns. However, times have changed. An increase in competition and a reduction in banking regulations have resulted in a much different environment for managing cash and short-term liquid assets today.

The institutional environment has also changed. Previously, only banks could offer checking accounts, and only brokerage houses could sell financial assets such as stocks, bonds, and mutual funds. Now banks can offer financial services, including financial assets, and brokerage houses can offer checking accounts and other services. The challenge now is for you to understand the different alternatives available and to choose the alternatives that will help you achieve your financial goals the fastest.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the principles of cash management
2. Understand cash-management alternatives and how to compare them
3. Know the different types of financial institutions and understand how they can help you meet your financial goals
4. Understand the time commitment necessary for you to effectively manage your finances

Understand the Principles of Cash Management

Cash is important; it provides needed protection because of its liquidity. Liquidity means that your funds are immediately accessible; having liquid funds protects you from having to sell less-liquid, long-term investments at substantial discounts or losses.

The principles of cash management were best summed up by Benjamin Franklin when he wrote “A penny saved is a penny earned.” We are stewards over the resources we have, not only the large stewardships, but also over the small stewardships as well, i.e. the pennies. And as we take care of the small stewardships, we will find that the larger stewardships (the dollars) take care of themselves.
There are three main trade-offs regarding cash management. The first is the risk-return trade-off: higher liquidity means less risk and, therefore, lower returns. Generally speaking, the more liquid the financial asset, the lower the return you can expect to receive on the asset.

The second is the spending-investment risk trade-off: cash on hand is easier to spend than other financial assets.

The third is the return-time expended trade-off: since returns are smaller with cash-management assets, the time you spend managing those assets should be much less than the time you spend managing other types of financial assets.

In spite of these three trade-offs, you can still impact your portfolio in significant and positive ways by using your liquidity wisely. The key to using your liquidity wisely is relating cash management to your personal goals.

What goals do you want to accomplish? Let cash management help you. For example, do you want to save more money? Automate your savings account and pay yourself at specified intervals. Arrange for your bank or financial institution to transfer a specific amount of money each week or month into your savings or mutual fund account. Contribute to your company retirement plan each month with a specific amount that goes directly to that account.

Do you want to cut down on the time you spend working on your personal finances? Use cash-management software, such as Intuit’s Quicken or Mint.com. When properly set up, these programs can substantially reduce the amount of time necessary to manage your finances.

Cash management is an essential part of your emergency fund. Your emergency fund is a resource you can use to meet unexpected needs for cash. The general rule of thumb for an emergency fund is to have sufficient liquid assets to cover three to six months of expenses. I recommend that you substitute the term “income” for the term “expenses” because your income should be higher than your expenses. Keeping three to six months of income in your emergency fund means there is a greater chance you will not need to tap into long-term savings to meet short-term cash needs.

Is it still wise to have an emergency fund in this world of credit cards and home equity lines of credit? The answer is yes, absolutely! It may even be more necessary than it was in the past. Credit cards and home equity lines of credit may be canceled if you lose your job or have a debilitating accident. Secure, available funds that can be accessed quickly provide peace of mind in a troubling world. Gordon B. Hinckley stated:

May the Lord bless you . . . to set your houses in order. If you have paid your debts, if you have a reserve, even though it be small, then should storms howl about your head, you will have shelter for your wives and children and peace in your hearts.1
Being able to provide for one’s family and to feel secure financially are great goals for cash management.

**Understand Cash-Management Options and How to Compare Them**

There are many options for helping you manage your cash, and each has its own benefits and costs. Traditional cash-management alternatives include checking accounts and savings accounts. Less traditional, but still important, options for cash management include money market deposit accounts, certificates of deposit, money market mutual funds, U.S. Treasury bills, U.S. Series EE bonds, and U.S. Series I bonds.

The best way to evaluate cash-management alternatives is to review the characteristics of each type of account, such as liquidity, required minimum balances, interest rates, safety, costs, and benefits. Liquidity refers to how quickly and easily you can access your money. Required minimum balance refers to how much money must be in the account in order for you to qualify for specific benefits, such as a low interest rate or check-writing privileges. Interest rate refers to the Annual Percentage Rate (APR) of return received on the money in the account. Safety refers to the guarantee that the assets will be protected by either a direct guarantee (i.e., FDIC or NCUA insurance) or an indirect guarantee (i.e., the asset is a liability of the U.S. government). Costs are the costs associated with holding the account, including late fees, overdraft protection fees, and minimum balance fees. Benefits include special tax incentives that could make your earnings tax free at the state or federal level.

**Checking Accounts**

Checking accounts are the most common form of cash-management alternatives. Checking accounts generally come in two forms: (1) non-interest-bearing accounts and (2) interest-bearing accounts, also called negotiable order of withdrawal accounts (NOW). Because checking accounts allow immediate access to your funds, they are among the most liquid of all cash-management alternatives. However, with that high liquidity come low interest rates or even no interest at all. The rates on interest-bearing accounts are generally low and fixed.

Minimum balances on checking accounts are generally low, but there is some variation depending on the type of account. Checking accounts from banks are very safe; they are insured by the FDIC, and they carry no penalties for early withdrawal. Banks, credit unions, and other financial institutions can give you more information about setting up a checking account.

**Savings Accounts**

Savings accounts, also called time deposits, are next on the cash-management list. In the past, withdrawals and other transactions that affected a savings account would be registered in a “passbook”; hence the term “passbook savings” was coined. Savings accounts are now called statement accounts, and the customer receives a monthly statement from the financial institution.
Money in a savings account is deposited for a specific term (e.g., a day, week, month, or quarter) and hence is less liquid than money in a checking account. However, with the reduction in liquidity there is usually a slight increase in interest rate. Required minimum balances are low in savings accounts, although the amount does depend on the type of account. Savings accounts are very safe and are generally FDIC-insured; however, there are penalties for early withdrawal. Information on setting up savings accounts is available from banks, credit unions, and other financial institutions.

In addition to checking accounts and savings accounts there are other, less-traditional alternatives you should evaluate and understand.

**Money Market Accounts (MMA)**

An MMA is similar to a savings account, but instead of having a fixed rate of interest, its interest rate varies with the current level of market interest rates. Such accounts are also known as money market demand or deposit accounts.

MMAs are liquid and give you the ability to add and withdraw funds on a daily basis. Even though liquidity is high in MMAs, interest rates are variable and are generally higher than rates on savings accounts. Required minimum balances may be much higher than those required for savings accounts, from $500 to $1,000 depending on the account. MMAs are safe and are generally FDIC-insured. Other features of these accounts may include limited check-writing ability. There are generally no penalties for early withdrawal from an MMA, as long as your balance does not drop below the account’s minimum balance. Information on money market accounts and how to purchase them can be found in the *Wall Street Journal* and at various financial institutions and brokerage houses.

**Certificates of Deposit (CDs)**

Certificates of deposit pay a fixed rate of interest for keeping funds in your account for a fixed period of time. They are similar to savings accounts and time deposits. Interest rates are fixed for the life of the deposit, and the longer the term of the deposit, the higher the interest rate.

CDs are less liquid than other cash-management alternatives because the money must be deposited for a certain amount of time; however, with that reduction in liquidity comes a higher interest rate. The required minimum balance for a CD account is generally higher than it is for a savings or checking account. CDs are very safe and are generally FDIC-insured. CDs enforce penalties if you withdraw money before the end of the specified term. Information on CD rates and how to purchase CDs is available from the *Wall Street Journal* and various financial institutions.
Money Market Mutual Funds (MMMFs)

Money market mutual funds are not bank instruments; they are actually funds managed by mutual fund companies. These companies pool funds from many investors to buy a portfolio of securities. Because they are working with pooled assets, mutual fund companies can usually purchase higher-yielding investments that give higher returns to investors. Investments can be either taxable securities or tax-advantaged securities, such as municipal bonds, which are federal tax free.

MMMFs are liquid—you can generally deposit and withdraw money every day. While the increased liquidity results in lower interest rates, rates are still competitive (the rates depend on the individual funds). Minimum balances for MMMFs are much higher than for checking or savings accounts and may exceed $3,000. While MMMFs are generally considered safe, they are not FDIC- or NCUA-insured. Other features of such accounts may include limited check-writing ability. MMMFs are bought by the share and carry an administrative fee. There are no penalties for early withdrawal. Information on money market mutual funds can be found at various brokers and at www.bankrate.com.

MMMFs may be either taxable or tax free depending on the type and location of the securities the MMMF invests in. If the MMMF invests only in government securities, the interest earned (but not the capital gains) is state tax-free. If the MMMF invests only in municipal securities, then the interest is federal tax-free. If the MMMF invests only in municipal securities from your state, the interest may be both federal and state tax-free.

U.S. Treasury Bills

Treasury bills (T-bills) are short-term notes of debt that are issued by the federal government. They can take from one to 12 months to mature, and investors do not receive explicit interest on these assets. T-bills are purchased at a discount, and when the bill matures, investors receive the full face value.

T-bills can be very liquid, depending on maturity. Even though they are liquid, interest rates are competitive with current market rates. As the maturity of the T-bill increases, its interest rate generally increases. The required minimum balance of $1,000 is high. T-bills are very safe assets, even though they are not guaranteed by the FDIC, because they are government debt. Other benefits to T-bills include their exemption from state and local income tax; also, since T-bills are purchased at a discount and do not yield explicit interest payments, you do not pay taxes on interest until the bill matures. There are penalties for early withdrawal. Information on T-bills and how to purchase them is available from the Wall Street Journal, www.treasurydirect.gov, and various brokerage institutions.


**U.S. Series EE Bonds**

U.S. Series EE bonds are government savings bonds that are issued by the Treasury in small denominations (as small as $25); these bonds have variable interest rates. Bonds are purchased at face value, and when the bonds mature, principle and interest is paid. The interest rate paid on EE bonds is fixed for six months; interest rates are set biannually.

Series EE bonds are liquid in the sense that they can be cashed at any time after one year. Ideally, you should hold them for at least five years to ensure there will not be an interest penalty; after five years, these bonds can be cashed at any bank. Interest rates are competitive. Required minimum balances are low, and these bonds can be purchased in denominations from $25 to $10,000. Series EE bonds are very secure because they have an implicit government guarantee. Other features include interest being exempt from state and local income tax; interest may even be federal tax-free if the interest and principal are spent on eligible college expenses (mainly tuition and fees). One drawback to Series EE bonds is that there is a three-month interest penalty if you withdraw funds before the five-year term is over. Information on rates and how to purchase Series EE bonds can be found at [www.savingbonds.gov](http://www.savingbonds.gov). Investors can purchase savings bonds for up to $10,000 per year in electronic bonds and another $5,000 per year from their IRS tax refund. If your Modified Adjusted Gross Income (MAGI) is above specified limits in the year you cash the bonds, you cannot exclude the interest income from your income taxes for EE and I Savings bonds (see Table 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Filing Single</th>
<th>Married Filing Jointly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$72,850–87,850</td>
<td>$109,250–139,250</td>
</tr>
<tr>
<td>2013</td>
<td>$74,700–89,700</td>
<td>$112,050–142,050</td>
</tr>
<tr>
<td>2014</td>
<td>$76,000–91,950</td>
<td>$113,950–143,900</td>
</tr>
<tr>
<td>2015</td>
<td>$77,200–92,199</td>
<td>$115,751–145,749</td>
</tr>
<tr>
<td>2016</td>
<td>$77,550–92,550</td>
<td>$116,300–146,300</td>
</tr>
</tbody>
</table>

Your Modified Adjusted Gross Income is your adjusted gross income with certain items added back, such as foreign income, foreign-housing deductions, student-loan deductions, IRA contribution deductions, and deductions for higher-education costs.

**U.S. Series I Bonds**

U.S. Series I bonds are government savings bonds that are also issued by the Treasury in small denominations (as small as $25). Series I bonds have variable interest rates that are linked to inflation and a specified real rate of return.

Series I bonds, like Series EE bonds, are liquid in the sense that they can be cashed at any time. Ideally, you should hold them for at least five years to ensure there will be no interest penalty; after that they are very liquid and can be cashed at any bank. Interest rates are variable and change with inflation. Required minimum balances are low, and bonds can be purchased in
denominations ranging from $25 to $10,000. Series I bonds are very secure because they have an implicit government guarantee. There is a three-month interest penalty if you cash these bonds before five years. Other features include interest being exempt from state and local income tax; interest may even be federal tax-free if the interest and principal are spent on eligible college expenses (mainly tuition and fees). Because interest is not paid until maturity, there are no taxes on interest until the bond is redeemed. Information on rates and how to purchase Series I bonds can be found at www.savingbonds.gov. Series I bonds have the same MAGI limits as Series EE bonds above (see Table 1).

Comparing Cash-Management Alternatives

When comparing cash-management alternatives, it is critical to understand and accurately compare the following five areas:

1. **Interest rates**: Certain cash-management assets are compounded annually, others are compounded quarterly, and still others are compounded daily. Use a consistent method of comparing interest rates when considering cash-management alternatives. Because of the Truth in Savings Act of 1993, financial institutions are required to report the rate of interest using the annual percentage yield (APY). Look for this yield when comparing alternatives. It includes the impact of different compounding periods. The APY = \((1 + \frac{\text{APR}}{\text{Periods}})^{\text{Periods}} - 1\).

2. **After-tax returns**:While certain assets may have lower returns, these same assets may be exempt from federal, state, and local taxes. Consider tax advantages and after-tax returns. The after-tax return equals your before-tax return (the reported APY) times one minus your marginal tax rate (the tax rate of each additional dollar of earnings).

   \[
   \text{After-Tax Return} = \text{Before-Tax Return} \times (1 - \text{Marginal Tax Rate})
   \]

Your marginal tax rate equals your federal marginal tax rate plus your state marginal tax rate (if applicable) plus your local tax rate (if applicable).

If any of the cash-management assets have tax advantages, meaning they are federal and/or state tax-free, calculate the equivalent taxable yield (ETY). The ETY is the yield you would have to make on an equivalent taxable asset to give you the same after-tax return as the tax-advantaged asset.

To calculate the ETY, first calculate the after-tax return of the tax-advantaged asset. Second, divide that after-tax return by one minus your marginal tax rate (your marginal federal, state, and local tax rates).

\[
\text{ETY} = \frac{\text{After-Tax Return}}{1 - \text{Marginal Tax Rate}}
\]
To gain a better understanding of after-tax returns and equivalent taxable yields, see Learning Tool 26: After-Tax, ETY, and Other After-Inflation Returns in the Learning Tools section of the website.

3. Inflation: Remember, it is not what you earn but what you keep after taxes and inflation that makes you wealthy. Calculating the return after inflation, or the “real return,” is important. The real return is calculated using the following equation:

\[
\text{Real Return} = \frac{1 + \text{nominal return}}{1 + \text{inflation}} - 1
\]

If inflation is a concern for you, there are inflation-linked bonds, such as U.S. Government Series I bonds and Treasury Inflation-Protected Securities (TIPS), that take changes in inflation into account to determine yields.

4. Safety: Some investors consider all deposits at financial institutions to be safe. However, some banks and other financial institutions have historically made decisions that are not consistent with proper fiscal responsibility, and some investor deposits have been lost. FDIC and NCUA insurance are available for up to $250,000 per depositor (not per account). If your assets are greater than $250,000 and you want more insurance, deposit your assets in multiple federally insured institutions.

Although MMMFs are not insured, they may be invested in a diversified portfolio of government bonds, which are guaranteed by the government. MMMFs may also be invested in short-term corporate bonds, which have very little risk. A certain degree of safety exists because of this broad diversification and because this debt is very short-term (often less than 90 days). While there may be some concern for safety with MMMFs, it is not generally a major concern.

5. Maturity and interest-rate adjustment periods: When considering cash-management alternatives, consider the maturity of the investment. Some of these assets require the investment to be held for a minimum amount of time, e.g., CDs and EE/I bonds. In addition, consider how often the interest rate could change and the potential impact of those rate changes on your financial situation.

In summary, your choice of cash-management assets depends on five areas. First, your goals and risk tolerance: What is the purpose for the money you are investing? Second, the type of asset preferred: Are you investing in CDs, MMAs, MMMFs, or savings bonds? Third, your tax situation: What is your marginal tax rate? Fourth, the location of the financial assets: If they are municipal securities, are they municipal bonds from your state or from another state, and is there a state income tax in your state? And fifth, your use of the funds from savings bonds: Will the principal and interest be used for tuition at a qualified school?
Know the Different Types of Financial Institutions and Understand How They Can Help You Meet Your Financial Goals

There are many different types of financial institutions that offer the various cash-management alternatives we have just discussed. The distinction is blurring between which services are offered by traditional banks and which are reserved for non-bank financial institutions.

There are two major types of financial institutions: banks (i.e., deposit-type financial institutions) and non-banks (i.e., non-deposit-type financial institutions). The choice of institution you use depends on which institution will best serve your needs and help you achieve your goals the fastest.

Deposit-type financial institutions (i.e. banks) mainly fall under four classifications: commercial banks, savings and loan associations, credit unions, and Internet banks.

- Commercial banks generally compete by offering the widest variety of services; however, they usually do not offer the highest interest rates on deposits or the lowest interest rates on loans.

- Savings and loan associations have slightly different ownership arrangements than banks but are similar to commercial banks. Savings and loan associations may offer slightly higher rates on deposits and somewhat lower rates on loans than commercial banks.

- Credit unions are similar to savings and loan associations, but they are not-for-profit organizations and are owned by their members. They can sometimes offer higher rates on savings accounts and lower rates on loans because they are not driven to provide a profit to shareholders.

- Internet banks are electronic banks that do not have traditional brick-and-mortar branches. Because they have fewer branches, employees, and capital expenditures than traditional banks, they can generally pay higher interest rates on deposits and charge less for loans than traditional banks do.

Non-deposit-type financial institutions (i.e. non-banks) consist of two main kinds: mutual fund companies and brokerage firms.

Mutual fund companies have broken into the banking arena. With many mutual fund companies, you can now write checks against your mutual fund account. Brokerage firms have also gotten into the act. Many brokerage firms now issue credit cards and ATM cards, make loans, and allow you to write checks. Brokerage firms offer these and many other account features that were once reserved for traditional banks.

Both banks and non-banks offer online financial services, which allow you to access bank balances and other resources 24 hours a day. With the blurring of roles between deposit and non-
Choosing a financial institution is a challenge. The key is to consider what you want to accomplish (your goals) and then to consider what the financial institution can provide. What do you look for in a financial institution? Your choices should ultimately and most importantly reflect your understanding of yourself and your investment needs. Consider these questions:

- Are you looking for low costs, low fees, and high returns on deposits?
- What services are important to you?
- Do you need loans, mortgages, or working capital for a small business?
- How important is safety for your deposits?
- Do you require government insurance? If so, know that this factor limits the types of institutions you can choose.
- What services does the financial institution provide? If all you require is a high return on your cash-management assets, then your choices are much broader.

The main goal of cash management is to give you sufficient liquidity to help you achieve your financial goals. Only you can determine which goals are most important to accomplish now. Please note that you do not need to limit yourself to just one financial institution to help you achieve your goals. You can use more than one financial institution to take advantage of each institution’s strengths.

**Choosing a Financial Institution**

In choosing a financial institution, consider the traditional three Cs of banking: costs, convenience, and consideration.

**Cost:** How expensive is it? What are the monthly fees? Minimum balances? Charges per check? Balance-dependent scaled fees? Interest rates received on deposits? Interest rates charged on loans?

**Convenience:** How convenient is it for you to work with the institution? What is the availability of branches and ATMs? Are they close to your home and work? Does the institution offer overdraft protection, safety deposit boxes, credit cards, etc.?

**Consideration:** Does the institution offer personalized financial advice and give attention to detail? How important is it that a bank officer remembers your name and is happy to work with you?

The options for choosing a financial institution are many and varied. It is critical that you understand your goals and then work with the institution—or institutions—that offer you the
most benefits. Note that whichever institution or institutions you choose, it is your responsibility to make sure that they do what they say they will and that they do it correctly.

**Understand the Time Commitment Necessary to Effectively Manage Your Finances**

The authors of *The Millionaire Next Door* point out:

> People who become wealthy allocate their time . . . in ways consistent with enhancing their net worth. [They] allocate nearly twice the number of hours per week to planning their financial investments as [those who do not become wealthy] do.²

If those who become wealthy allocate nearly twice as many hours per week to planning their financial investments as those who do not become wealthy, shouldn’t we, who are trying to become financially self-reliant, do the same?

We all have the same 24 hours in each day to spend however we see fit. It is important that you plan and spend sufficient time on your financial responsibilities each week to ensure you are moving toward your financial goals. Unless you are *spending one or two hours per week* on your financial responsibilities, such as your goals, budget, insurance, retirement, and investment framework, it may be difficult for you to reach your personal and financial goals.

Set aside time once a week to review and update your goals and review what you want to accomplish in life. Update your budget. How are you doing with maintaining your budget? Balance your cash-management accounts and ensure that all charges and balances are correct by comparing them to your credit card and electronic fund transfer statements. Be alert to the possibility of human error and computer problems; these kinds of mistakes can happen quite often.

Use wisdom in your cash-management framework. Never deposit cash in an ATM; there is no way to confirm that deposit. If you do find mistakes in your statement, contact your financial institution quickly and correct the error. Write or call your institution within 60 days of receiving your statement, state the problem, and correct the error. If the problem cannot be resolved, write to the address below:

Board of Governors of the Federal Reserve System  
Division of Consumer and Community Affairs  
20th Street and Constitution Avenue, N.W., Stop 801  
Washington, D.C. 20551

**Summary**

Cash management refers to how you manage your cash and liquid assets. Liquid assets allow you to invest your money and earn an acceptable return while at the same time keeping your assets available to pay bills or cover emergencies. While liquid assets are low-risk and are great for
emergency funds, their return is generally very low. The challenge of cash management is to balance the risk of lower returns with the need for liquidity.

Good cash management is important because it will help you earn more income on your liquid assets; in this way, cash management can help you achieve your personal goals. There are three main trade-offs regarding cash management. The first is the risk-return trade-off: higher liquidity means lower returns. The second is the spending-investment risk: cash on hand is easier to spend than other financial assets. The third trade-off is the return–time expended risk: since returns are smaller with existing liquid assets, the time you spend managing those assets should be much less than the time you spend managing other types of financial assets. In spite of these three trade-offs, you can still influence your portfolio in a positive and significant way by using your liquidity wisely.

Traditional cash-management alternatives include checking accounts and savings accounts. Less traditional, but still important, alternatives include money market deposit accounts, certificates of deposit, money market mutual funds, asset-management accounts, U.S. Treasury bills, U.S. Series EE bonds, and U.S. Series I bonds. While rates for each of these assets can change from day to day, you can find current rates at major financial Internet sites and in the pages of most financial newspapers, such as the *Wall Street Journal*.

When you are comparing cash-management alternatives, it is critical to accurately evaluate four areas. First, use a consistent method for comparing interest rates. Cash-management assets can be compounded annually, quarterly, or daily. Use a consistent method of comparing interest rates when considering cash-management alternatives.

Second, use a consistent method of comparing after-tax returns. While certain assets may have lower returns, these same assets are often exempt from state and local taxes, and they may be exempt from federal taxes if the assets are used for college tuition. Consider tax advantages and after-tax returns. If the assets have tax advantages, calculate the equivalent taxable yield; the taxable yield is the yield you would have to make on a taxable asset to give you the same after-tax return as the tax-advantaged asset.

Third, consider inflation. Remember, it is not what you earn but what you keep after taxes and inflation that makes you wealthy. Calculate the “real return” of each of your assets.

Fourth, consider safety. FDIC and NCUA insurance are available for amounts up to $250,000 per depositor (not per account).

We concluded by discussing different types of financial institutions that offer the various types of cash-management alternatives. The distinction is gradually blurring between which services are offered by traditional banks and which services are reserved for non-bank institutions.
There are two major types of financial institutions: banks (deposit-type financial institutions) and non-banks (non-deposit-type financial institutions). Which institution you use depends on which will serve your needs the best and which will help you achieve your goals the fastest.

Deposit-type financial institutions generally fit into four categories: commercial banks, savings and loan associations, credit unions, and the newer Internet banks. The two main types of non-bank financial institutions are mutual fund companies and brokerage firms.

Assignments

Financial Plan Assignments

Your assignment is to review your current cash-management framework. What interest rate(s) are you earning on your savings account(s)? What are you paying in fees and expenses on your savings account(s)?

What interest rate(s) are you earning on your checking account(s)? What are you paying in fees and expenses on your checking account(s)?

Which cash-management vehicles should you be using to help you get higher interest rates on savings or checking accounts and still maintain adequate liquidity to meet your needs for cash? Are there less-traditional alternatives, such as Internet banks, that can give you a higher return with the same amount of liquidity and safety?

Learning Tools

The following Learning Tool may be helpful as prepare your Personal Financial Plan:

26. After-Tax, ETY, and After-Inflation Returns

This document is an example of a spreadsheet you can use to calculate your after-tax returns, equivalent taxable yields on tax-advantaged assets, and after-inflation returns on all assets.

Review Materials

Terminology Review

Adjustments. Adjustments are deductions from total income allowed by the IRS to get your Adjusted Gross Income (AGI). These include (among others): qualified medical savings contributions (flexible spending accounts), contributions to individual retirement accounts (IRA), contributions to Health Savings Accounts (HSAs), student loan interest and tuition and fees deduction (IRS 970) (within limits), one-half self-employment tax,
etc. Losses include net capital losses (up to $3,000), sole proprietorship losses, and active participation real estate losses

**Average tax rate.** This is the average amount of every dollar you earned that was paid for federal income taxes. It is generally calculated at income taxes paid divided by AGI or Total income.

**Capital gains taxes.** These are taxes you pay on assets held a specific period of time.

**Credits.** Credits are dollar for dollar reductions in your taxable liability. Credits are worth significantly more than deductions.

**Deductions.** Deductions are IRS allowed reduction amounts (standard deduction) or taxpayer determined amounts (itemized deductions) to get taxable income from your Adjusted gross income.

**Effective marginal tax rate.** This is the average amount of every dollar you earned that paid for all local, state, and federal income taxes.

**Excise “sin taxes” and state sales taxes.** These are taxes imposed when goods are purchased.

**Exemptions.** An exemption is an amount of money set by the government that you can deduct for each qualifying person in your household.

**Gift and estate taxes.** These are taxes imposed when assets are transferred from one owner to another.

**Gross Income.** Gross income for tax purposes is all income, unless specifically excluded or deferred.

**Income Taxes.** Income taxes are a progressive tax meaning that the more you earn the more you pay.

**Itemized Deductions.** These are allowable deductions (if you itemize) and include: charitable contributions (cash, in kind, and/or mileage), home mortgage interest, medical expenses (>10% AGI), un-reimbursed qualified job expenses (> 2% AGI), casualty and theft expenses (> 10% AGI), etc.

**Local income taxes.** These are uncommon; but some larger cities, for example, New York City, impose such a tax.

**Long-term capital gains.** These are gains from assets held for 366 days or longer. These are taxed at a preferential tax rate.
Marginal tax rate. This is the percentage of the last dollar that you earned that will go toward federal income taxes.

Medicare. This is a health care insurance program for elderly and disabled.

Non-refundable credits. Non-refundable credits include child tax, child and dependent care, elderly and disabled, adoption, hope learning, and lifetime learning and are only good up to the amount of taxes owed.

Real estate and property taxes. These are taxes imposed annually or semi-annually on assets owned.

Refundable Credits. These are credits paid to the taxpayer even if the amount of the credits exceeds the tax liability.

Short-term capital gains. These are gains from assets held less than 366 days. These are taxed at your ordinary tax rate.

Social Security or FICA. This is a mandatory insurance program administered by the federal government that provides support in the event of death, disability, health problems, or retirement.

State taxes. Most states impose an income tax; however, some, like Texas and Nevada do not. Alaska actually pays you to live in that state

Tax Freedom Day. This is the day you stop working for the government and begin working for yourself.

Tax Tables. These are tables to help you calculate how much taxes you owe.

Taxes. These generally are your largest single annual expense. These may include personal, income, business, transportation and other taxes. Taxes can further be divided into Federal taxes, or taxes we pay the Federal government; State taxes, or taxes we pay the state government, and local taxes, which are taxes we pay the local government.

Review Questions

1. What are the three main trade-offs regarding cash management?
2. What is the key to using liquidity wisely? Why?
3. What is an emergency fund? Why should you have one? How much should you have in your emergency fund?
4. What are six account characteristics that can be used to analyze cash-management alternatives?
5. What are the four key areas used to compare cash-management alternatives?
Case Studies

Case Study 1

Data
Bill is an investor in the 15-percent federal marginal tax bracket and 7-percent state tax bracket. Suzie is an investor in the 35-percent federal tax bracket and 7-percent state tax bracket. They are each considering purchasing one of the following bonds for their investment portfolios:
1. A 6.5-percent corporate bond (all taxable)
2. A 4.75-percent municipal bond (federal tax free)
3. A 5.0-percent treasury bond (state tax free)

Calculations
Calculate the after-tax returns for each of the above bonds for both Bill and Suzie. Which bonds should Bill and Suzie purchase and why?

Case Study 1 Answers

Calculations
Bill (Taxable return * (1 – tax rate) = after-tax return)
CB: $0.650 * (1 – (.15 + .07)) = 5.07%
MB: $0.475 * (1 – .07) = 4.42%
TB: $0.500 * (1 – .15) = 4.25%

Suzie
CB: $0.65 * (1 – (.35 + .07)) = 3.77%
MB: $0.475 * (1 – .07) = 4.42%
TB: $0.5 * (1 – .35) = 3.25%

Recommendations
The corporate bond is the best for Bill. The municipal bond is the best for Suzie.

Case Study 2

Data
Kaili and Taylor are in the 25-percent federal and 7-percent state tax bracket. They have a $3,000 wedding gift that they will invest either for school tuition or for a vacation.

Calculations
If they invest the $3,000 in a U.S. Series I bond that earns 4.8 percent, what is the equivalent taxable yield (ETY) if the principal and interest are
A. used to pay for law school tuition?
B. used to pay for a family vacation?

Case Study 2 Answers

Calculations
A. If Kaili and Taylor use the principal and interest for tuition, the bond is both federal and state tax exempt. The formula is
\[
\text{Return after tax} = \text{return before tax} \times (1 - \text{tax rate})
\]
Since this asset is federal and state tax free, the equivalent yield on a taxable bond would be the tax-free return divided by 1 minus the tax rate, which includes both federal and state taxes (mathematically, you divide both sides of the equation by \((1 - \text{tax rate})\)).
\[
4.8\% = x \times (1 - (.25+.07)) \quad \text{or} \quad x = 4.8\% / .68
\]
\[
x = 7.06\%
\]

B. If Kaili and Taylor use the principal and interest for a family vacation, it is only state tax-free.
The after-tax rate yield is
\[
\text{After-tax rate} = 4.8\% \times (1 - .25) \quad \text{or} \quad 3.6\%
\]
The equivalent taxable yield is
\[
\text{ETY} = 3.6\% / (1 - (.25 + .07))
\]
\[
x = 5.29\%
\]

**Case Study 3**

**Data**
Your buddy Paul asks you about real returns. After you show him the correct method for calculating real returns, he wants to know what his real return is on his money market account. He shows you his brokerage statement, where he is earning a 4.5-percent yield. He also estimates that inflation will be 3.5 percent this year. Paul is in the 35-percent federal and 7-percent state marginal tax brackets.

**Calculations**
What is his after-tax, after-inflation return?

**Recommendations**
What are the implications of this result for cash-management decisions?

**Case Study 3 Answers**

**Calculations**
\[
\text{After-tax return} = \text{before-tax return} \times (1 - \text{(federal + state marginal tax rate)})
\]
\[
4.5\% \times (1 - (.35 + .07)) = \text{The after-tax return is 2.61%}
\]
\[
\text{Real Return} = [(1+ after-tax return) / (1 + inflation)] - 1
\]
The after-tax, after-inflation return is: \((1.0261/1.035) - 1 = -.86\%\)

**Note:** You must take out taxes before you take out the impact of inflation.

**Implications**
- It is very difficult to do much more than keep up with taxes and inflation with liquid assets.
Chapter 5. Cash Management

- Only the amount needed to meet immediate emergency needs and short-term goals should be invested in this account.

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1 “To the Boys and to the Men,” *Ensign*, Nov. 1998, 51
6. Understanding and Managing Credit: Be Wise

Introduction

Credit is a wonderful tool that has allowed many people to achieve goals they might not have otherwise been able to achieve, such as buying a home or paying for higher education. However, credit has also been the downfall of many people who have not used it wisely. Understanding both the positive and negative aspects of credit will help you be wise as you pursue your financial goals.

The credit card can become a very destructive financial instrument if not carefully watched and controlled. If credit card debt gets out of control, it can cause not only financial troubles but personal heartache as well. Gordon B. Hinckley said, “Debt can be a terrible thing. It is so easy to incur and so difficult to repay. Borrowed money is had only at a price, and that price can be burdensome.”

Objectives

This chapter focuses on the following four objectives to help you better understand credit reports and credit cards:

1. Learn the principles of using credit wisely
2. Learn about credit bureaus, credit reports, and credit scoring
3. Identify appropriate uses for credit cards and explain how they can help you achieve your financial goals
4. Learn how credit cards work and describe the costs involved
5. Learn how to manage credit cards and open credit

Principles of using Credit Wisely

Proper understand of the principles of using credit wisely can help us to be wiser consumers of credit. Following are a few principles of using credit wisely which may be helpful as to try to minimize the use of credit.

1. **Know what you want out of life.** Know yourself, your mission, values, vision and goals. It is important that you have an idea of what you are trying to accomplish so that you can slowly become that vision of yourself. Make sure that everything you do is consistent with the things you are trying to accomplish and the values you hold dear.
2. **Know where you are financially.** This is especially important in regards to your budget, assets and liabilities. Hide no bills from your spouse and make sure you understand all assets and liabilities.

3. **Keep current on all bills.** Pay off all credit cards and other debt monthly—you do not need a balance to build credit. Set a goal to not go into debt except for those things that the prophets and apostles have counseled. Work hard to not spend money you don’t have.

4. **Make only planned purchases from your budget.** Only make purchases that are in your budget and that are planned for, particularly large purchases. Use this planning time each quarter or month to wisely determine your needs and wants, and then to plan accordingly.

5. **Be wise in your use of credit and debt.** Don’t go into debt except for a modest home and modest education. Do not fall for the monthly payments trap that says you can pay a certain amount each month.

6. **Review your credit score and credit reports annually.** This is to ensure correctness and no identity theft which is becoming more prevalent. Work to improve your credit reports and raise your credit score to above 750 if possible.

---

**Learn About Credit Bureaus, Credit Reports, and Credit Scores**

Credit bureaus are private companies that collect and report information from creditors, public records, and various institutions. There are over 1,000 different credit bureaus; the three major ones are Equifax, Experian, and TransUnion.

Credit reports are files of information that credit bureaus compile about specific individuals. Most individuals who have any type of credit (credit cards, checking accounts, loans, etc.) have a credit report.

The information on your credit report is very detailed. It includes personal demographics, such as your age, social security number, previous addresses, employment history, and criminal convictions. The report also includes information about your credit history, including a list of any inquiries you have made about your credit in the last two years. Factors that determine your credit worthiness include your annual income, how long you have lived at your current residence, how long you have been employed at your current job, and how many bank accounts and credit cards you have. Other factors that determine your credit worthiness include your age, your employment history, and your credit history.

Although the information gathered by the credit bureaus is about you, it may not always be correct. It is estimated that 70 percent of Americans have at least one negative remark on their credit reports, and almost half of all credit reports contain incorrect or obsolete information.
You have specific rights related to your credit reports. If you are ever denied a line of credit, you can request a free copy of your credit report from each of the credit bureaus. If you would like to review your credit report, you can request a free copy once a year from each of the three major credit reporting agencies (Equifax, Trans Union, and Experian) by going to www.annualcreditreport.com and filling out several forms.

You should review your credit report from each credit bureau once a year to make sure there are no mistakes on it. Even simple mistakes can result in a lower credit score, which may prevent you from getting a mortgage or a consumer loan; these mistakes may even increase the cost of your auto insurance.

When you are reviewing your credit report, look for open lines of credit that you were not aware of and other indications that someone may be committing fraud by using your information. If you think there are mistakes on your credit report, you need to have them investigated. If an investigation does not clear up a mark on your credit report, but you still disagree with it, you can add a personal statement of up to 100 words to your credit report explaining what happened with a specific creditor. When you apply for credit, potential lenders can see your explanation of what happened and consider it when they make their lending decisions.

Credit evaluation is the process potential creditors use to determine whether or not an individual deserves to be given credit. This evaluation is based on an analysis of specific financial information from various sources.

A credit score is the result of that credit evaluation. Financial institutions developed credit scores as a way of determining which borrowers are most likely to repay their loans. While for students a GPA is based on grades, for borrowers a credit score is based on factors such as credit history, length of credit, repayment history, and types of credit owed.

Your credit score takes into account specific factors surrounding your debt and debt habits. You are assigned a single score that lending institutions use to base their decisions on whether you qualify for credit. Your credit score also determines what interest rate you will pay on the credit an institution offers you. Generally, the higher your credit score, the lower the interest rate you will have to pay.

One of the most important investments that may be affected by your credit score is a loan for a new home purchase. Your credit score can have a significant impact on whether or not you get this type of loan: nearly 75 percent of all mortgage loans are sorted according to credit scores. Your credit score may also affect the cost of your insurance. For these and many other reasons, understanding credit and maintaining a high credit score are important to your overall financial health.

Research by E-Loan showed the following statistics on how credit scores affected what interest rate consumers paid on loans (see Table 1).
Table 1. Credit Scores and Interest Rates Paid

<table>
<thead>
<tr>
<th>Credit Score Range</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit scores above 760</td>
<td>3.27 percent</td>
</tr>
<tr>
<td>Credit scores from 700 to 759</td>
<td>3.49 percent</td>
</tr>
<tr>
<td>Credit scores from 680 to 699</td>
<td>3.67 percent</td>
</tr>
<tr>
<td>Credit scores from 660 to 679</td>
<td>3.88 percent</td>
</tr>
<tr>
<td>Credit scores from 640 to 659</td>
<td>4.31 percent</td>
</tr>
<tr>
<td>Credit scores from 620 to 639</td>
<td>4.86 percent</td>
</tr>
</tbody>
</table>

For a $300,000, 30-year loan with monthly payments, the difference in how much someone with a credit score of 760 (3.27 percent) paid in interest compared with how much someone with a credit score between 620 and 639 (4.86 percent) paid was significant; there was an increase in interest payments over the life of the loan of $99,275 on a $300,000 loan. There is a direct correlation between your credit score and the interest rate you pay.

What Is a FICO Score?

The most common type of credit score is the FICO score, which was developed by Fair, Isaac, and Company of San Rafael, California. Fair, Isaac, and Company is not the only credit scoring company, but lending institutions use FICO scores more often than the credit scores provided by other companies. Lenders usually base your interest rate on your FICO score, which can range from 300 to 850. Generally, the higher your FICO score, the lower the interest rate lenders will charge you. There are three main FICO scores, including FICO Score 8 (which is the most widely used), FICO Score 2, which is used for mortgage lending, and FICO Score 8 which is used for auto financing.

Before 2001, consumers were not allowed to see their credit scores. However, in March 2001, new legislation allowed the public to access their credit information for a price. You can now purchase a copy of your FICO credit score from www.myfico.com or purchase credit scores from other credit scoring and reporting companies, such as Experian, TransUnion, and Equifax. I generally recommend purchasing a FICO credit score as these are most used in the industry. Please also note that promotional codes for MyFICO are generally available on the Internet (search “MyFICO promotional code”). Getting a copy of your credit report and credit score does not affect your credit score.

How Is Your Credit Score Determined?

There are a number of different institutions that calculate credit scores. Since the FICO score is the most common, this chapter will discuss how your credit score is determined based on the FICO scoring methodology.

About 35 percent of your credit score is based on your payment record. This is why it is important to pay your bills on time. Do what the scriptures and our leaders have counseled: do not get into debt in the first place, if possible. If you are in debt, make timely payments, and get out of debt as soon as you can.
Another 30 percent of your credit score is based on the total amount you owe as a percent of your available credit or credit limit. Generally, try to keep your usage of credit below about 15 percent of your available credit limit. Keep your balances low, especially on revolving debt. If you are hoping to get a mortgage loan in the future, it may be wise to pay off your revolving credit every week so that the amount you owe is a small percentage of your total available credit.

Around 15 percent of your credit score is based on the length of your credit history. You should keep your oldest accounts open whenever possible to show you have learned to manage credit over a longer period of time. However, you do not want to have too many accounts open at one time.

Approximately 10 percent of your credit score is based on your application history. Do not apply for credit too often. If you are applying for a new credit card every quarter, the question arises as to what you are doing with your available credit. For most people, one to three credit cards is generally sufficient. Realize that each time you apply for credit it is noted on your credit report.

Finally, 10 percent of your credit score is based on a credit mix. You do not want to have too many of the same kind of card. Having a Sear’s, Nordstrom’s, and Kohl’s card may actually bring down your credit score because they are all similar stores. Be cautious of retail stores that offer a 10- to 20-percent discount on your first purchase if you apply for their store credit card. These types of cards can have negative effects on your credit score.

**What Should You Do Regarding Your Credit Score?**

Just as you manage your assets carefully, you should manage your liabilities carefully. You must take an active role in managing your credit score. Ideally, you should review your FICO score every two years and review your credit reports annually; do these things more often if you are planning to take out a loan for a house within the next 12 months. By planning ahead, you can resolve any inaccuracies on your credit report before you apply for a loan; planning ahead can help you get the highest credit score—and the lowest interest rate—possible.

**Identify Appropriate Uses for Credit Cards and Explain How They Can Help You Achieve Your Financial Goals**

There are five main benefits for using credit cards:

1. **Emergencies:** Credit cards can be useful when you don’t have cash on hand and need to pay for something immediately, such as an auto repair or an insurance co-payment.

2. **Reservations:** Credit cards can be used to guarantee hotel rooms, rental cars, and other rental items. This is an important use, especially if you travel.

3. **Convenience:** With a credit card, you can buy things over the phone or on the Internet. Credit cards make purchasing things very easy. They also provide you with a record of everything you spend, an important bookkeeping benefit.
4. **Cash flow and timing**: If something is on sale, and you know you have the cash coming in a week, you can actually buy the item before you pay for it. In this way, you can take advantage of sales (but remember, you do not save money by spending).

5. **Free services**: Often, credit cards offer rewards, such as extended warranties, travel insurance, airplane miles, gasoline rebates, and cash rebates—all of which can reduce the overall cost of some items.

While there are benefits to using credit cards, there are drawbacks as well. Credit cards must be used wisely to avoid problems. The following is a list of some of the problems associated with using credit cards:

**Increased spending**: People don’t take as much time to think about how much they’re spending when they use a credit card. Research has shown that, on average, people spend 30 percent more with a credit card than they do with cash.

**Losing track of spending**: It’s easy to lose track of what you spend with your credit card. It requires discipline to track the charges you make.

**Interest and other costs**: Interest charges can range anywhere from 8 percent to 25 percent. In addition to these interest charges, you must take into account compounding periods, annual fees, and other miscellaneous fees, such as cash advance fees and balance transfer fees. Often, the costs of using credit cards are double or triple the costs of using other types of loans.

**Obligations on future income**: Most importantly, when you use credit cards, you put obligations on future income. As you take on more debt, you not only obligate future income, but you also limit future flexibility should emergencies arise.

**Using a Credit Card Effectively**

The following are some important keys to using your credit card effectively:

1. **Know your personal and family goals.** What do you want to accomplish individually and as a family? What do you want to accomplish financially? A leading financial publication recently reported that the average baby boomer will pay $1,200 in interest annually. That is a lot of money. Instead of paying interest, why not use that money to attain your financial goals?

2. **Spend money only on things planned for in your budget.** If you understand your goals, and if your budget is consistent with your goals, you will buy only things you have planned for in your budget. If expenses you hadn’t planned for arise and you decide they are necessary expenses, you will have to go back and revise your budget to make them work.
3. **Do not go into debt.** It is wise to not go into debt except for a home or an education. Follow this advice and avoid credit card debt whenever possible.

4. **Use wisdom in deciding what to buy.** Use wisdom in your expenditures. Learn to get away from the “buy now, pay later” mentality, and adopt the “save now, buy later” mentality.

**Learn How Credit Cards Work and Describe the Costs Involved**

Companies issue credit cards to earn money. Annual fees can be anywhere from $0 (no fee) to $300 a year. Interest rates are high: some are as high as 25 percent before compounding! Balance transfer fees can also be very high—they can start at 3 percent and increase with each transfer. Cash advance fees usually start at 4 percent and can go higher. Often, these fees can’t be paid back until the original, less costly debt is paid back; this results in even higher costs to you. Penalty rates sometimes exceed 25 percent, and late fees are also high. All of these charges are added on top of a 1.5 to 5 percent charge to merchants.

**How Credit Cards Work**

A credit card is one type of open credit. Open credit is an agreement you make with a financial institution (in this case, a credit card company) that allows you to borrow money up to a specific limit; it is expected that you will pay back the loan at a specific interest rate and pay other attached fees as well. Many factors determine how much open credit will cost you annually: the balance owed, the interest rate, the balance calculation method, the cash advance costs, the annual fee, and the additional penalty fees.

By understanding how open credit works, you can avoid the pitfalls this type of credit can present. There are several key factors you should understand about open credit before you apply for this type of loan:

**Interest rate:** Credit card companies state the interest rate as an annual percentage rate, or APR. This is the true, simple interest rate that is charged over the life of the loan. However, the APR does not take into account compounding periods or the time value of money (see Chapter 9—Time Value of Money). You should also watch out for teaser rates. Teaser rates are introductory rates used to attract new customers (some are as low as 2.9 percent) but these rates change after a specified period of time. Don’t be fooled—read the fine print.

**Compounding period:** The compounding period is how often interest is charged to your account. Most credit card companies compound interest daily. It’s interesting to note that when you save money, interest is compounded monthly, but when you borrow money, interest is compounded daily. Any time you borrow money, remember that you are paying interest, not earning it.
Balance calculation methods: You should understand that credit card companies use three main balance calculation methods: average daily balance, previous balance, and adjusted balance. The most commonly used method of calculating your balance is the average daily balance. This method adds up your average daily balances for each day during the month, divides the total by the number of days in the month, and multiplies the result by your monthly interest rate (your APR divided by 12). The previous balance method is the most expensive method. This method takes the previous balance you owed last month and multiplies it by your monthly interest rate. The last method, the adjusted balance method, is the least expensive. This method takes your previous balance, subtracts your payments, and multiplies the total by your monthly interest rate.

Cash advances: Avoid using cash advances. Cash advances are an extremely expensive way to borrow money. Interest begins to accrue as soon as you get a cash advance because they are not considered normal credit card charges. Generally, the interest rate charged on cash advances is higher than the interest rate charged on purchases. In addition, there is usually a cash advance fee of between two and four percent of the cash amount advanced. Moreover, some cards require you to pay the purchase balance before you can pay the cash advance balance so that the credit card company earns the higher interest rate for a longer period of time.

Grace period: A grace period, or period over which you do not pay interest on new purchases, normally lasts from 20 to 25 days. The grace period excludes cash advances and often doesn’t apply if you carry over a balance from a previous month. If you do not owe a balance for the previous month, a grace period means that you could avoid paying for a purchase for nearly two months. However, you need to watch out because not all credit cards offer a grace period.

Credit card philosophy: Before you apply for open credit, you should determine your personal credit card philosophy. What kind of credit card user will you be? There are three main types of credit card users: credit users, convenience users, and combined convenience and credit users. If you use your credit card to borrow money you don’t have, you are a credit user. Credit cards are one of the most expensive ways to borrow. Credit users typically carry a balance from month to month. If you are a credit user (it is not a good idea to be one), look for a card with a low APR.

If you use your credit card only because it’s convenient, you are a convenience user. Convenience users generally pay off their credit card balance each month. If you are a convenience user, look for credit cards that offer low annual fees, long interest-free grace periods, and free benefits.

Combined convenience and credit users need to balance the interest rate and the annual fee to obtain the lowest overall cost for the card. Find the card that best matches your needs.

Learn How to Manage Credit Cards and Open Credit

Open credit can be either good or bad, depending on how you use it. There are five keys to managing your open credit:
Chapter 6. Understanding and Managing Credit

1. Reduce Your Balance

If you have a balance, commit to reducing it each month. Do not take on any additional debt. You need to set a goal to reduce your balance and then just do it. Commit to remaining debt-free.

2. Protect Yourself against Fraud

You should save your credit card receipts. At the end of the month, compare your receipts to your statement. Once you have done this, you can destroy the receipts. Use caution when giving out your credit card number, especially over the phone. In addition to these precautions, be aware of where your cards are at all times. Never leave a store without your credit card.

If your credit cards are lost or stolen, there are a number of things you must do, and you must do them quickly. First, you should call your credit card company immediately. Make sure you have a photocopy all of your credit cards, front and back, and keep the toll-free numbers for your credit card companies handy so you can report any loss or theft. Put your credit card information in a safe place.

Second, you should immediately file a police report in the jurisdiction of the loss. This shows the credit card company that you are serious, that you are diligent, and that you are trying to find your credit card.

Third, you should call the three national credit-reporting organizations and the Social Security Administration to place a fraud alert on your name and social security number. The phone numbers for all four organizations are listed below:

- Equifax: 888-766-0008
- Experian: 888-397-3742
- TransUnion: 800-680-7289
- Social Security Administration fraud line: 800-269-0271

3. Be Aware of Signs of Trouble in Credit Card Spending

Consider the following questions:

- Do you make only the minimum payment each month?
- Have you reached your credit limit on any of your cards?
- When you dine with friends, do you pay the entire bill on your credit card and then have your friends reimburse you with cash?
- Do you wait for your monthly bill to determine how much you have charged?
- Do you get cash advances because you do not have enough in your checking account to pay bills or other expenses?
- Have you been turned down for credit or had a card canceled by a credit card company?
- Have you withdrawn money from savings to pay off credit card bills?
• Do you think it is too much trouble to figure out how much of your credit card bill is interest?
• Does your stomach start churning when you get your credit card bill?

If you answered “yes” to any of these questions, you may be having some trouble managing your credit card spending.

4. Control Your Spending

Part of controlling your spending is committing to always live on less than you earn. If you have problems doing that, cut up your credit cards. If nothing else works, use the envelope method of budgeting. The envelope method involves placing money for each budget category in an envelope. When the cash in the envelope for a particular budget category is gone, you have nothing more to spend in that category.

5. Opt Out

One final option is to “opt out.” Do you want to stop receiving credit card applications in the mail? There is a national credit opt-out number you can call to take your name off the mailing lists of all four major credit-reporting agencies. Dial 1-888-567-8688 (1-888-5OPTOUT). You will be asked for your home telephone number, name, and social security number. You will then be sent a form to fill out and sign. After doing this, you will have much less junk mail. You can also opt out on the Internet by going to www.optoutprescreen.com. After you fill out the information on the site, you will be immediately removed from the mailing list for credit card applications for five years.

Opting out is easy and painless and can also help eliminate some types of credit card and identity fraud.

Summary

We have discussed credit evaluations, credit reports, and credit scores. Understanding how these matters impact you is critical, especially if you are looking to buy a house. Your credit score not only influences how much you will pay for a mortgage (or other types of credit) but it also influences your insurance costs.

There are appropriate uses for credit cards, and they can be useful in helping you attain your personal goals. Credit cards can be used for emergencies, reservations, convenience, cash flow, and free services.

There are several drawbacks to having credit cards. When you have credit cards, you are more likely to spend more, lose track of spending, pay higher interest rates and fees, and obligate future income. You need to be very careful if you use credit cards.
Before you apply for a credit card, consider the interest cost (or APR), compounding period, balance calculation method, costs for cash advances, and grace period. Depending on the reasons behind why you use credit cards, you are either a credit user, one who uses the card for borrowing; a convenience user, one who uses the card only for convenience; or both a credit and a convenience user.

Open credit can be either good or bad, depending on how you use it. The five keys to managing your open credit are

1. Reduce your balance.
2. Protect yourself against fraud.
3. Beware of trouble signs in credit card spending.
4. Control your spending.
5. Opt out.

Understanding credit and using it wisely are important parts of the modern financial world.

**Assignments**

**Financial Plan Assignments**

Your assignment is to evaluate how you are doing in managing credit. Since credit evaluation and credit scoring are important tools in the acquisition of a home and other important purchases, it is important that you understand where you stand.

Your first assignment is to get a copy of your credit report. If you are from the United States, you can, by law, obtain one free copy of your credit report each year from one of the major credit report suppliers (Experian, TransUnion, or Equifax). Go to [www.annualcreditreport.com](http://www.annualcreditreport.com) and supply the necessary information. You will select one of the major providers and input the necessary identification information, and the credit reporting agency will provide you a copy of your credit report online. You can also go to [www.myfico.com](http://www.myfico.com); for about $15, you can get both a copy of your credit report (from your choice of supplier) and your FICO credit score.

Once you have your credit report, read it thoroughly and ensure it is accurate. If there are problems, follow the process we discussed to improve your score and remove inaccuracies from your credit reports.

Next, review your credit score. Read through your credit score report in detail. Write down the things you can do to improve your credit score and work on them.

**Learning Tools**

The following Learning Tools may be helpful as you prepare your Personal Financial Plan:
18. Credit Card Repayment Spreadsheet

This Excel spreadsheet helps you determine how long it will take you to pay off a specific credit card or loan based on the balance owed, annual percentage rate, compounding periods, and payments per month.

9. Debt Amortization and Prepayment Spreadsheet

This Excel spreadsheet is a debt amortization and prepayment schedule to help you reduce and eliminate your debt.

20. Debt Elimination Schedule with Accelerator

This spreadsheet allows you to input your different debts and interest rates. It then prioritizes that debt based on interest rates and creates a repayment plan based on the minimum payments due each month. This repayment plan is consistent with Marvin J. Ashton’s plan in the article “One for the Money.” This spreadsheet also allows you to include an accelerator amount and an amount in addition to your normal monthly payments; you will be able to see how long it will take you to pay off your debt.

Review Materials

Terminology Review

**CD Laddering**: the process of getting a higher interest rate by buying longer term CDs and purchasing them more often. For example, 1 month CD rates are too low, but you like 6 month rates. Take the amount of money you want to invest, divide it by 6 (or any number), then invest 1/6 of your money every month in a 6 month rate. You are creating a ladder of CDs, and every month you have money coming in. You would then reinvest that in another 6 month CD.

**Corporate bonds**: Debt instruments issued by corporations to fund the requirements of the companies.

**EE Bonds**: US government savings bonds where the interest rate is set every 6 months and tied to current market interest rates.

**Equivalent Taxable Yield**: This is the yield you would need to earn on a fully taxable security to give the same after-tax return that you receive on a tax advantaged security, i.e., a security that has specific tax advantages (i.e., tax free for Federal or State or both).

**I Bonds**: Inflation linked US government savings bonds, where the rates on the bonds are tied to inflation.
Money Market Account or Money Market Deposit Account: A non-financial account that pays interest based on current interest rates in the money markets. They typically require a higher minimum balance to avoid monthly fees and typically have a higher rate of interest.

Savings Bonds: Bonds issued by the US government with tax advantages to encourage savings.

Review Questions

1. What is the difference between a credit evaluation and a credit report?
2. How can you obtain one free credit report per year from each of the three credit bureaus (Equifax, TransUnion, and Experian)?
3. What should you do if you find an error on your credit report?
4. What are the benefits of having and maintaining a high credit score?
5. What are the five most important factors in determining your credit score?

Case Studies

Case Study 1

Data
Steve and Adrianna Tanner recently graduated from college and started their first jobs. Based on their combined salary of $90,000, the bank pre-approved them for a home loan, and they found the perfect house. However, when they went in to finalize the loan, they were told they did not qualify for the loan because of their low credit scores.

Application
A. What didn’t this couple do?
B. What should they have done?
C. What can they do to remedy the situation?

Case Study 1 Answers

A. Steve and Adrian Tanner did not determine their credit score before applying for a loan. Do not leave things to chance! If you know your credit score, you may be able to get a lower rate for your loan.

B. They should have reviewed their credit reports and tried to resolve any problem areas before applying for a loan. They also should have gotten their credit score to see how they were perceived by the financial community.

C. They can get their annual credit report free from each of the three agencies we discussed, and they can pay to get their credit score. They should then work to improve their credit score so they can get the lowest rate possible for a loan.
Case Study 2

Data
Steve carried an average daily balance of $600 this month. His balance last month was $1,000, and he made a $900 payment on the 15th of this month.

Calculations
Calculate the monthly interest charges for credit card accounts that charge interest rates of 10 percent, 16 percent, 18 percent, and 24 percent.

Fill in the following chart:

<table>
<thead>
<tr>
<th>Interest Rate (%)</th>
<th>10%</th>
<th>16%</th>
<th>18%</th>
<th>24%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average daily balance</td>
<td>$5.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Application
Since the average daily balance is the most commonly used method of calculating balance, how important is it to get a low interest rate?

Case Study 2 Answers

Calculations
The formula for calculating your finance charge is your average daily balance multiplied by the interest rate divided by 12 months.

<table>
<thead>
<tr>
<th>Interest Rate (%)</th>
<th>10%</th>
<th>16%</th>
<th>18%</th>
<th>24%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average daily balance</td>
<td>$5.00</td>
<td>$8.00</td>
<td>$9.00</td>
<td>$12.00</td>
</tr>
</tbody>
</table>

Application
If you use credit cards to finance spending (which is not recommended), it is important that you get a low interest rate on your card.

Case Study 3

Data
Bill was reading about the importance of keeping a high credit score and got his FICO score of 690. He heard a rumor that to improve his FICO score, he needed to reduce the number of cards in his name. Bill canceled three of his five credit/bank cards that he had not used in a long time. The next time he got his FICO score he discovered it had dropped by 40 points.

Analysis
A. List three possible reasons why his score may have dropped.
Chapter 6. Understanding and Managing Credit

B. What should he have done to make sure the canceled cards helped, and not hurt, his score?
C. What might he do to improve his score?

Case Study 3 Answers

A. There are three possible reasons his score may have dropped:

1. History: One of the cards he canceled had the longest history. His score may have dropped as his time with credit was lessened due to the dropped card.

2. Available credit: Each of the canceled cards had a large amount of available credit. When these were canceled, they decreased his total available credit and increased his percentage usage each month, resulting in a lower score.

3. Mix: Perhaps the cards canceled resulted in a mix of credit that was biased toward one type of card. This may have lowered his score.

B. He should have done the following to make sure his score did not drop:

1. History: He should have made sure the cards he canceled did not have the longest credit history.

2. Limit: Before dropping the cards, he should have gone to his existing credit/bank card companies and requested an increase in credit limit, at least to match the amount he had previously. If they would not increase the limit, he should have kept the old cards.

3. Mix: Even though the cards may not have been used, if they had given a better mix, it may have been wise to keep them. He should have avoided having too many of the same types of cards.

C. The following are things he might do to improve his credit score:

1. Payment record: Tighten his budget and save 20 percent of his income. Pay bills on time and don’t miss!

2. Amount owed: Use that 20 percent and any additional money to pay down debt (after he has started his emergency fund). This will reduce his amount owed and his usage of available balances.

3. Limits: Call his credit card companies and request an increase in credit limits. This will help his use of available balances.
4. *Credit history*: Ask his parents to include him on one of their credit cards (I am not sure I would do this). This will increase his credit history (this is called piggybacking, and it works only for families, not individuals).

5. *Application history*: Do not apply for new cards. Generally, I recommend between two to four cards for most individuals. Do not get new cards just for store credit.

6. *Credit mix*: Do not apply for too many of the same type of cards.

**Case Study 4**

Data

Bethany, a BYU student, was reading about the importance of having a high credit score. She went to www.annualreport.com but found she has no credit history. She pays her bills on time, has a checking account, and has a debit card.

Questions

A. Why might she not have a credit report?
B. What can she do to improve her credit history?
C. Does a debit card help build credit?
D. If banks will not allow her to get a credit card, what could she do?
E. How could she get a secured credit card?

**Case Study 4 Answers**

A. She may not have credit history because she has not had much credit. Even though she pays her bills on time, the bills may be in other students’ names. She may also be an international student without a social security number.

B. She could try to get a credit card. This would be helpful to her in improving her credit history.

C. A debit card does not help build credit.

D. If she cannot get a credit card, she should (carefully) look into a secured credit card. If she can find one with low fees, she will put money into the card and can charge up to the amount of money on the card. Credit reporting agencies cannot tell the difference between a credit card and a secure credit card.

E. She should check with her bank or www.bankrate.com for a card that does not charge an application or insurance fee and that has a low annual fee.

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1 “Thou Shalt Not Covet,” *Ensign*, Mar. 1990, 4
2 http://myfico.com, 2 May 2012
7. Understanding Consumer and Mortgage Loans

Introduction

For many years, inspired religious leaders have urged their followers to get out of debt and live within their means. Gordon B. Hinckley spoke directly to members of the Church of Jesus Christ of Latter-day Saints in the October 1998 conference when he said:

I am suggesting that the time has come to get our houses in order. . . I am troubled by the huge consumer installment debt which hangs over the people of the nation, including our own people. I recognize that it may be necessary to borrow for a home, of course. But let us buy a home that we can afford and thus ease the payments which will constantly hang over our heads without mercy or respite for as long as 30 years. . . I urge you to look to the condition of your finances. I urge you to be modest in your expenditures; discipline yourselves in your purchases to avoid debt to the extent possible. Pay off debt as quickly as you can, and free yourselves from bondage.1

As Gordon B. Hinckley points out, excessive debt is one of the financial problems that many people struggle with today. This chapter aims to explain exactly what consumer debt is. This chapter also offers tips to help you better manage consumer debt throughout your life.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the principles of effective consumer loan use
2. Explain the characteristics and costs of consumer loans
3. Explain the characteristics and costs of mortgage loans
4. Understand how to select the least expensive sources for consumer loans and how to reduce the costs of borrowing

Understand the Principles of Effective Consumer Loan Use

Consumer loans are loans you obtain to pay for items that are fairly expensive and that you usually don’t need (at least not urgently). Such items include electronics, automobiles, furniture, and recreational vehicles. Consumer loans are very expensive and should rarely be used. They encourage you to buy now rather than to save for the future. Committing future earnings to today’s consumption may keep you from achieving more important long-term personal goals. Consumer loans also reduce the amount of money you can save for your goals because they require you to pay interest with money you might otherwise have saved and invested. Most importantly, loans are almost always unnecessary unless their purpose is to pay for an education or a home.
When should you obtain a consumer loan? The following are a few questions to ask yourself if you are thinking of borrowing:

1. Do I really need to make this purchase? Is this a need or a want? Separate these two categories.

2. Is this item in your budget and/or your financial plan? Most items should be saved for, not borrowed for.

3. Can I pay for this item without borrowing? What is the after-tax cost of borrowing versus the after-tax cost of using savings and losing your return on those savings? Compare these two alternatives.

4. What is the total cost of this loan, including interest costs, fees, and its impact on your other goals? Can you maintain sufficient liquidity and still achieve your other goals? Choose wisely.

5. Will this purchase bring you closer to your personal goals or take you further away from them? If the purchase brings you closer to your goals, including your goal of obedience to God’s commandments (including the commandment to get out of debt), make the purchase. If the purchase takes you further away from your goals, don’t make it.

If you answer these questions honestly, it will be much easier to determine whether you should take out a consumer loan or not.

The principles of effective consumer loan use are exactly the same as the principles of effective loan use:

1. **Know yourself.** This includes your values, vision and goals. What is important to you, not just now, but in the future? What do you want to accomplish with your life? What is the vision of what you want you and your family to become? The key is to have the vision of your bigger “yes” in the future so you can say no to the current temptations to spend. “Where there is no vision, the people perish.”

2. **Know where you are, your spending and your income.** If married, do not hide any liabilities or assets from each other. How much do you owe, and what are your assets? In order to be able to get where you want to go, you must know where you are now. Have a realistic idea of your income, spending, debt and investment progress. Get on your budget and plan for the things you want to accomplish.

3. **Set your priorities.** Decide now the things you will do and what you will not do? Make those decisions now, so you won’t have to re-decide time after time. Strive to learn from your experiences, the experiences of your family, and others. Thankfully, we have
Chapter 7. Consumer and Mortgage Loans

the teachings of leaders and scriptures who have given us counsel. Resolve to not go into debt except for a modest home and modest education. Be wise in your expenditures.

4. Finally, pay as you go. You cannot spend yourself into financial security. Live within your means, and do not spend that which you do not have, and follow your goals and decisions.

If you are in debt add, let me add a few points which will be discussed in the next chapter.

5. Prioritize your debts. Which are the most important? Give priority to secured debts for house or car. If the time comes that you cannot pay all your debts, determine which are most important, such as a roof over your head and food and transportation.

6. Develop a debt repayment plan. Automate it and follow it closely. A debt repayment plan is how you will pay back your debts. You must be able to continue to meet your current needs for yourself and your family, and have sufficient to repay the debt when it comes due.

7. Do not take on any new debt. Debt stops growth, both physically and spiritually. Do not add to your debt burden as you strive to pay off your debts.

Explain the Characteristics and Costs of Consumer Loans

It is important to understand that different consumer loans have different characteristics—there isn’t just one type of consumer loan. Some of the different types of loans, which we will compare and discuss in the following paragraphs, include single-payment and installment loans, secured and unsecured loans, variable-rate and fixed-rate loans, and convertible loans. The following is a list of these different types of consumer loans and their characteristics:

Single-payment loans are also known as balloon loans. Normally, these loans are used for short-term lending of one year or less. They may also be used to temporarily finance a purchase until permanent, long-term financing can be arranged; this is why these loans are sometimes called bridge loans or interim loans. This type of loan is repaid in one lump sum, including interest, at the end of the specified term—for example, at the end of one year.

Lending institutions calculate interest on a single-payment loan using the simple-interest method. With the simple-interest method, the principal and interest are due when the loan matures. Simple interest is equal to your average amount borrowed multiplied by your interest rate multiplied by the time (in years) that you hold the loan. Your average amount borrowed for a single payment loan is the same as your principal. If there are no fees, your APR and your simple interest rate are the same. The APR formula is:

$$\text{APR} = \left[ \frac{\text{Interest payments} + \text{fees}}{\text{number of years}} \right] / \text{Average amount borrowed}$$
Suppose you take out a $1,000 loan for one year for 12 percent. Assume you pay fees of $20 for a credit check and $20 for a processing fee. Your interest rate is 12 percent. However, your APR = \([($120 in interest + $40 in fees) / 1 year] / $1,000 \) (your average amount borrowed) = 16 percent. Notice how the imposition of fees raises your APR.

Now suppose this loan was for two years. Would your APR be different? The calculation would be: \[APR = \left[\frac{($240 in interest + $40 in fees) / 2 years}{1,000}\right] \]

Installment loans are loans that are repaid at regular intervals—for example, every month. Each payment includes part of the principal and some interest. An installment loan amortizes over the length of the loan, which means that with each monthly payment you make, more of your payment goes toward paying off the principal and less goes toward paying for interest. The amount of interest you pay each month is calculated based on simple interest. Installment loans are typically used to finance purchases of houses, cars, appliances, and other expensive items.

### Table 1. Simple Interest Method

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<table>
<thead>
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**Average = $551.55**  **Total Interest = $66.19**  **Actual APR = 12.0%**

The total paid is $66.19 interest and $40 in fees. This is divided by one year and then divided by $551.55, the average amount borrowed. This calculation gives us an APR of 19.3 percent.

Because of the complexity of this type of loan, it is best to calculate your payments using either a financial calculator or a spreadsheet program. **Learning Tool 18: Credit Card Repayment Spreadsheet** can help you determine your payments and interest costs. With this spreadsheet you can also calculate how long it will take to pay off a specific credit card or loan based on the
balance owed, annual percentage rate, compounding periods, and payments per month. **Learning Tool 9: Debt Amortization and Prepayment Spreadsheet** can help you calculate how long it will take to pay off your debt as well.

For example, assume the same $1,000 loan as above, but instead of a single-payment, we will pay for it monthly. How do you calculate the APR for installment loans? The formula is the same. From your spreadsheet, I will build a simple loan amortization table from which you can calculate two different items: average amount borrowed and interest rate paid (see Table 1).

**Secured loans** use one of your assets, such as a home or a car, as collateral to guarantee that the lending institution will get the amount of the loan back, even if you fail to make payments. Examples of secured loans include home equity loans and car loans. Because these loans are backed by collateral, they usually have lower interest rates.

**Unsecured or signature loans** do not require collateral and are generally offered only to borrowers with excellent credit histories. Unsecured loans typically have higher interest rates, which may range between 12 and 26 percent—sometimes even higher.

**Fixed-rate loans** maintain the same interest rate for the duration of the loan. The majority of consumer loans are fixed-rate loans. Normally, lenders charge higher interest rates for fixed-rate loans than they do for variable-rate loans. This is because lenders can lose money if market interest rates increase, leaving the loan rate lower than the current market interest rate.

**Variable-rate loans** have an interest rate that is adjusted at different intervals over the life of the loan. There is usually a maximum interest rate, or cap, that can be charged on the loan as well as a maximum amount that the interest rate can increase each year. The interest rates on these loans may change monthly, semiannually, or annually. The interest rate is adjusted based on an index, such as the prime rate or the six-month Treasury bill, as well as on an interest-rate spread. Lenders usually charge a lower interest rate up front for variable-rate loans because the lender will not lose money if the overall market interest rates increase.

**Convertible loans** are loans in which the interest-rate structure can change. For example, a convertible loan may start off having a variable interest rate and then switch to having a fixed interest rate at some predetermined time in the future; the opposite process may occur as well.

**The Loan Contract**

The loan contract is the most critical document of the loan process. It describes what the lender requires of you once you are granted the loan. Whenever you borrow, you put your future into someone else’s hands; therefore, you need to know what you are doing. Read the entire contract and make sure you fully understand the details of the loan before you sign the loan agreement.

One of the most important things you should remember about loan contracts is that none of the clauses in the contract are in your favor. Let’s talk about four clauses you should be aware of:
1. The insurance clause requires you to purchase life insurance that will pay off your loan in the event of your death. It benefits only the lender and increases the total cost of the loan. This clause is often used in mortgage loans.

2. The acceleration clause requires you to pay for the entire loan in full if you miss just one payment. This clause is often—but not always—disregarded if you make a good-faith effort to catch up on your missed payment, but it is still a risk.

3. The deficiency clause stipulates that if you do not pay back the loan, and the company takes your collateral, you must pay any amount in excess of the collateral’s value; this clause takes effect if the money earned through the sale of your collateral does not satisfy the loan. You must also pay any charges incurred by the lender that are associated with the disposal of your collateral.

4. The recourse clause allows the lender to collect any outstanding balance via wage attachments and garnishments. This clause may also allow the lender to put liens on other properties you own (these properties can act as secondary collateral) should you fail to repay your loan.

Special Types of Consumer Loans

There are a number of special types of consumer loans that are different from traditional consumer loans. These include home equity loans, student loans, and automobile loans.

Home equity loans are also known as second mortgages. In a second mortgage, you use the equity in your house (i.e., the difference between what you paid for the house and what the house is worth today) to secure your loan.

The benefits of a home equity loan are that you can usually borrow up to 80 percent of the equity in your home, and the interest payments may be tax-deductible. With this type of loan, you can also get a lower interest rate because the house is secure—it can’t be moved. One disadvantage of this type of loan is that it limits your future financial flexibility because you can have only one outstanding home equity loan at a time. Moreover, a home equity loan puts your home at risk: if you default on a home equity loan, you can lose not only your high credit score but your home as well.

Home equity lines of credit (HELOC) are also second mortgages that use the equity in your home to secure your loan. These are generally adjustable rate notes that have an interest-only payment, at least in the first few years of the note. These have lower rates of interest than other consumer loans.

The benefit of these loans is that the interest may be tax-deductible, reducing the cost of borrowing. The problem is that these loans will often keep people from making the hard financial choices to curb their spending. Why worry about spending when you can get a home equity loan
or HELOC to pay off your credit cards each year? These loans also sacrifice future financial flexibility and put your home at risk if you default.

**Student loans** have low, federally subsidized interest rates; these loans are often used to pay for higher education. Examples of federal student loans that are available to parents and students include federal-direct loans, plus-direct loans, Stafford loans, and Stafford-plus loans.

One benefit of federal student loans is that some have specific advantages, such as subsidized interest payments and lower interest rates. Also, you can defer payment of federal-direct loans and Stafford loans until six months after you graduate or discontinue full-time enrollment. The disadvantages of these loans are that there is a limit to how much you can borrow, and, like all debts, you must pay these loans back.

**Automobile loans** are secured by the automobile the loan is paying for. This type of loan usually has a term of two to six years.

The advantage of an automobile loan is that it usually charges a lower interest rate than an unsecured loan. The disadvantage is that you must make interest payments, and since vehicles depreciate quickly, you are often left with a vehicle that is worth less than what you owe on the loan.

**Payday loans** are short-term loans of one or two weeks and are secured with a postdated check. The postdated check is held by the payday lender and cashed on the day specified. These loans charge very high interest rates—some payday loans charge more than 500 percent on an annual percentage rate basis (APR). I recommend you avoid using these loans completely.

The APR is equal to the simple interest paid over the life of the loan. The APR takes into account all costs for a year, including the interest rate, the cost of pulling credit reports, and all other fees; the total cost may be significant. To calculate the APR for any loan, multiply the amount of money paid in fees and interest by the number of periods in a year to get the annual cost of the loan; then divide the annual cost by the amount borrowed.

For example, suppose you paid $20 to borrow $100 for two weeks by writing a postdated check for $120. There are 26 two-week periods in a year. Thus the equation for finding your annual payment for this loan would be $20 * 26 = $520. In other words, you would pay $520 dollars in interest for a $100 loan: Consider that $520/$100 results in 520 percent interest. That is very expensive cash! Do not use payday loans!

**Explain the Characteristics and Costs of Mortgage Loans**

Mortgage loans are used to finance the purchase of a home or investment property. There are a number of different things you should consider when deciding how to finance a home. Your choice of loans should be based on four key concepts:
1. Your time horizon: How long do you expect to have the mortgage, and how certain are you of that time horizon?
2. Your preference (if any) for low required payments: How important are lower payments in the initial years of the loan?
3. Your tolerance for interest-rate risk: Are you willing to assume the interest-rate risk of the loan?
4. Your work status: Are you or have you been a member of the armed forces? If so, you may qualify for special mortgage programs.

Types of Mortgage Loans

There is basic terminology you must understand before we discuss mortgages.

**Conventional loans** are neither insured nor guaranteed. They are loans with amounts below the maximum amount set by the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddy Mac) for a single family loan (see Table 2). Fannie Mae and Freddy Mac are the major purchasers of mortgages from the loan brokers or originators, so they set the standard as to the type of loans they will purchase. This maximum amount changes over time. Conventional loans require Private Mortgage Insurance (PMI) if the down payment is less than 20 percent. PMI guarantees payment to the lender should you fail to make payments. Borrowers can eliminate PMI by having equity greater than 20 percent.

**Table 2. Conventional Loan Limits for Fannie Mae and Freddie Mac (Single Family)**

<table>
<thead>
<tr>
<th>Year</th>
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<td>2012</td>
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<tr>
<td>2013</td>
<td>$417,000</td>
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</tr>
<tr>
<td>2015</td>
<td>$417,000</td>
</tr>
<tr>
<td>2016</td>
<td>$417,000</td>
</tr>
</tbody>
</table>

Loan limits are 50 percent higher in Alaska, Guam, Hawaii, and the U.S. Virgin Islands.

**Jumbo loans** are loans in excess of the maximum eligible for purchase by the two Federal Agencies. Some lenders also use the term to refer to programs for even larger loans, such as loans in excess of $500,000.

**Piggyback loans** are two separate loans, one for 80 percent of the value of the home and one for 20 percent. The second loan has a higher interest rate due to its higher risk; it is used to eliminate the need for Private Mortgage Insurance, the cost of which can be substantial.

There are eight main types of mortgage loans available in the United States: fixed-rate mortgages (FRMs), variable- or adjustable-rate mortgages (ARMs), variable or fixed interest-only mortgages (IO), option adjustable-rate mortgages (Option ARMs), negative-amortization (NegAm), balloon mortgages, reverse mortgages, and special loans.
Fixed-rate mortgages (FRMs) have a fixed rate of interest for the life of the loan. These are the least risky types of mortgage from the borrower’s point of view because the lender assumes the major interest-rate risk. For many years, this was the most common type of mortgage.

The benefits of fixed-rate mortgages include higher initial monthly payments (a greater percentage of each payment goes to pay down principal), no risk of negative amortization, and interest-rate risks that are transferred to the lender. The risks include higher interest rates (lenders must be compensated for increased interest-rate risk) and higher monthly payments that are more difficult to pay, particularly for those not on a regular salary.

Variable- or adjustable-rate mortgages (ARMs) have a rate of interest that is pegged to a specific interest-rate index that changes periodically. Generally, the initial interest rate is lower than that of a fixed-rate loan because the borrower assumes more of the interest-rate risk. However, due to the risk of rising future interest rates, ARMs may result in significantly higher interest rates in the future. ARMs may have a fixed rate for a certain period of time; after this period ends, the interest rate begins to adjust on a periodic basis.

The benefits of variable-rate loans include lower initial interest rates that vary with national interest rates, lower monthly payments (because of the lower interest rates), and no risk of negative amortization. The risks include a possible “payment shock” if interest rates rise, perhaps beyond what borrowers are able to pay, and somewhat higher monthly payments that may be difficult for those not on a regular salary.

Fixed or variable interest-only loans are FRMs or ARMs with an option that allows the borrower to make interest-only payments for a certain number of years; payments are then reset to amortize the entire loan over the remaining duration of the loan. Some borrowers will take out an interest-only loan to free up principal to pay down other, more expensive debt. However, once the interest-only period has passed, the payment amount resets, and the increase in payment can be substantial.

The benefits of fixed or variable interest-only loans include lower initial monthly payments and greater flexibility; these benefits may be helpful if the borrower could better use his or her money elsewhere. Because borrowers only pay interest costs (and not principal), they can afford higher loan amounts to buy more house, with the expectation that they may move before the payments increase. The risks of these kinds of loans include a substantial increase in monthly payments when the interest-only period ends and the fact that there is no amortization of principal during the initial interest-only period. For example, if a borrower takes out a fixed-rate interest-only mortgage with a 10-year interest-only option, the borrower pays interest for the first 10 years. In year 11, however, the borrower must pay substantially higher payments as the loan now must amortize over 20 years instead of the normal 30 years. The borrower must assume appreciation of the house to make money. The main risk of interest-only loans is that many borrowers do not have the discipline to invest savings from principal, so they spend it. In addition, there is the risk of borrowing too much money because of the lower initial payments.
Option adjustable-rate mortgages (option ARMs) have interest rates that adjust monthly and payments that adjust annually. There are “options” on the payment amount, one of which is a minimum payment option, which may be smaller than the interest-only payment. The minimum payment option often results in a growing loan balance (termed negative amortization). The lender specifies a specific maximum balance for the loan, i.e., 110 percent or 125 percent of its original value. Once this maximum is reached, payments are automatically increased. The loan becomes fully amortized after 5 or 10 years, regardless of the increase in the amount of principal and interest payments.

The benefits of option ARMs include lower initial monthly payments and greater flexibility; these benefits are especially appealing if borrowers have better use for their money elsewhere. Borrowers can afford more house, and they may move before the payments increase. The risks of option ARMs include major “payment shock” when the negative amortization or option period ends and the payment is reset. There is the risk that the borrower will borrow too much money. There is also the risk that the minimum monthly payments will be insufficient to cover principal and interest costs, and the difference, called negative amortization, will be added to the loan principal. This type of loan should be avoided as it is highly risky for borrowers.

Negative-amortization mortgages (NegAm) are loans in which scheduled monthly payments are insufficient to amortize, or pay off, the loan. Interest expenses that have been incurred, but not paid, are added to the principal amount; this process increases the amount of the debt. Some NegAm loans have a maximum negative amortization that is allowed. Once that limit is reached, payments increase automatically to ensure that interest is sufficient to not exceed the limit.

A benefit of NegAm mortgages is that borrowers do not have to make full payments on the loans, and hence they conserve cash. The risk is that borrowers may find themselves at the negative-amortization limit, where payments are automatically reset to a level higher than the borrowers can afford.

Balloon mortgages have scheduled interest and principal payments that will not result in the loan being paid in full at the end of the term. The final payment, or balloon, to pay off the loan can be very large. These loans are often used when the debtor expects to refinance the loan when it approaches maturity.

The benefit of balloon mortgages is that borrowers do not have to make full payments on the loans, and hence they conserve cash. The risk is that borrowers may get to the end of the payment period and not be able to come up with the required balloon payment.

Reverse mortgages have proceeds that are made available against the homeowner’s equity. In essence, a financial institution purchases the seller’s home and allows the seller to stay in the home until he or she dies. Reverse mortgages are typically used by cash-poor but home-rich homeowners who need to access the equity in their homes to supplement their monthly income at retirement.
The benefit of these mortgages is that the homeowners have an increased income stream to use for retirement, and they can stay in their homes until they die. The disadvantage is that if death occurs soon after the loan is closed, the lender has purchased the house for a very low cost.

**Special loans** are insured or guaranteed. Insured loans are issued by others but insured by a United States federal agency. The Federal Housing Administration (FHA) does not originate any loans but insures the loans issued by others based on income and other qualifications. With an FHA loan, there is lower PMI (1.5 percent of the loan), but it is required for the entire life of the loan. While the required down payment is very low, the maximum amount that can be borrowed is also low.

Guaranteed loans are issued by others but guaranteed by a federal agency. The Veterans Administration (VA) guarantees loans issued by others. These loans are only for ex-servicemen and women as well as those on active duty. These loans may be for 100 percent of the home value.

**Understand How to Select the Least Expensive Sources for Consumer Loans and How to Reduce the Costs of Borrowing**

**Consumer Loans Categorized by Total Cost**

The least expensive types of consumer loans are obtained from parents or family, home equity lenders, and secured-loan lenders (including mortgage lenders).

More expensive consumer loans are obtained from credit unions, savings and loan institutions, and commercial banks.

The most expensive types of consumer loans are obtained from credit card companies, retail stores, finance companies, and payday lenders.

The key is to only purchase those things you really need and to pay as little for the privilege of borrowing as you can. Ideally, you should save your money first and then purchase what you need with cash.

**Reducing Your Borrowing Costs**

Listed below are four ways to reduce your borrowing costs:

1. **Understand the key relationships in borrowing.** The total interest cost of your loan is directly related to the interest rate and the maturity length. Keep the interest rate low and the maturity short. The amount of your periodic payment is inversely related to both the maturity and interest rate of your loan. Keep both low. Finally, some sources of lending are cheaper than others. Generally, parents are cheaper lenders than banks.
2. Understand the key clauses for consumer and mortgage loans. Remember, all clauses are in the lender’s favor, and very few, if any, are in the borrower’s favor. You are putting your future in someone else’s hands when you borrow—you are committing future earnings to today’s consumption. Use wisdom in your decisions and know what you are doing before you do it. Read documents very carefully and understand them before you sign them.

3. Know the steps to reducing consumer costs. First, if possible, don’t get into debt in the first place. Remember what religious leaders have said about managing debt and staying out of debt. In emphasizing how burdensome debt can be, J. Reuben Clark Jr. said the following:

> Once in debt, interest is your companion every minute of the day and night; you cannot shun it or slip away from it; you cannot dismiss it; it yields neither to entreaties, demands, or orders; and whenever you get in its way or cross its course or fail to meet its demands, it crushes you. 

Second, remember your goals and budget. Remember that ignorance, carelessness, compulsiveness, pride, and necessity can be offset by wisdom, exactness, discipline, humility, and self-reliance. If you really need something, plan and save for it; don’t borrow for it.

Third, compare the after-tax cost of borrowing with the after-tax cost of using savings and losing your return. It makes little sense to borrow at a high interest rate when you have savings earning a lower rate. Use the following formula:

\[
\text{After-tax lost return} = \text{nominal interest rate} \times (1 - \text{tax rate})
\]

\[
\text{Tax rate} = \text{federal, state, and local marginal tax rates}
\]

For example, assume you are looking to purchase a new television set. You have $500 in savings earning 4.0 percent or you can borrow $500 from the television store at an APR of 14.5 percent for two years. If you are in the 25-percent federal marginal tax rate and 7-percent state marginal tax rate, your after-tax lost return is 2.7 percent or \(0.04 \times (1 - (0.25 + 0.07))\). Clearly it would be better to take your savings and purchase the television set than to pay 14.5 percent interest.

Finally, maintain a strong credit rating. The more you do to increase your credit score, the more attractive you will be to potential lenders and the lower the interest rate you will have to pay on your loan.

4. Reduce the lender’s risk. If you can reduce the risk of the loan to your lender, your lender may be able to offer you a lower interest rate. You can reduce the lender’s risk in a number of ways:

*Use a variable-rate loan.* If you choose to use a variable-rate loan, the lender is not penalized if market interest rates increase. Be aware that by choosing a variable-rate loan, you reduce the risk to the lender but increase the risk for yourself. While I prefer fixed-rate mortgages, reducing the lender’s risk may result in a lower rate (at least initially).
Chapter 7. Consumer and Mortgage Loans

*Keep the loan term as short as possible.* The shorter the term, the less time the lender is at risk.

*Provide collateral for the loan.* If a lender has collateral for a loan, there is less risk for the lender because the collateral can be sold if you cannot pay back the loan as promised.

*Put a large down payment on the item to be financed.* Lenders realize that the greater the amount of money you have already paid for an item, the less likely you are to walk away from your loan. Lending you money becomes less risky for lenders if you are willing to make a large down payment.

**Summary**

Inspired religious leaders have urged their congregations to get out of debt and live within their means. We need to heed that counsel. In this chapter, we discussed the dangers of consumer loans and how these loans can keep you from achieving your goals. We also identified characteristics of specific types of consumer loans and learned how to calculate the costs of borrowing. Finally, we outlined the types of consumer loans according to their cost and discussed ways you can reduce the costs of borrowing.

**Consumer loans** pay for items that are fairly expensive; you usually don’t need these items (at least not urgently). Such items include electronics, automobiles, furniture, and recreational vehicles.

Consumer loans are very expensive and should rarely be used. They encourage you to buy now rather than to save for the future, a practice that may keep you from achieving more important long-term personal goals. Consumer loans also require you to pay interest with money you might otherwise invest for your goals.

It is important for you to understand that different consumer loans have different characteristics. Know what you are getting into before committing to a loan.

**Mortgage loans** are used to finance the purchase of a home or investment property. Your choice of mortgage loans should be based on three key factors: (1) Your time horizon: How long do you expect to have the mortgage, and how certain are you of that time horizon? (2) Your preference (if any) for low required payments: How important are lower payments in the initial years of the loan? And (3) Your tolerance for interest-rate risk: Are you willing to assume the interest-rate risk of the loan?

There are four main ways to reduce your borrowing costs:

1. Understand the key relationships in borrowing
2. Understand the key clauses for consumer loans and mortgage loans
3. Know the steps to reduce borrowing costs
4. Reduce the lender’s risk
Financial Plan Assignments

Think through the purpose of any consumer loans you have. Are they necessary? Could you have gotten by without them? If you have consumer loans outstanding, write down the costs of those loans in terms of interest rates, fees, grace period, balance calculation method, and any other fees or expenses. What can you do to pay off these loans quickly and get back on the path to debt elimination? Resolve now not to get into debt except for a home or education.

Learning Tools

The following Learning Tools may be helpful as you prepare your Personal Financial Plan:

9. Debt Amortization and Prepayment Spreadsheet

This Excel spreadsheet gives a debt amortization and prepayment schedule to help you as you reduce and eliminate your debt.

18. Credit Card Repayment Spreadsheet

This Excel spreadsheet helps you determine how long it will take you to pay off a specific credit card or loan based on the balance owed, annual percentage rate, compounding periods, and payments per month.

20. Debt Elimination Spreadsheet with Accelerator

This spreadsheet allows you to input your different debts and interest rates. It then prioritizes your debt based on interest rate and creates a repayment plan based on the minimum payments each month. This spreadsheet also allows you to include an accelerator amount (an amount in addition to your normal monthly payments) to show you how long it will take you to pay off your debt.

Review Materials

Terminology Review

Consumer Loans

Auto Loans. Auto loans are consumer loans that are secured with an automobile. Because they are secured, they have a lower interest rate than an unsecured loan or credit card. They normally have a maturity length of 2 to 6 years. The risk is that you will often be left with a vehicle that is worth less than what you owe on it.
Balloon loans. These are loans which payments including interest and principle are not sufficient to pay off the loan at the end of the loan period, but require a large “balloon” payment at some point in the future to fully pay off. This type of loan is not recommended.

Convertible loans. These loans begin as a variable-rate loan and can be locked into a fixed-rate loan at the then current interest rate at some predetermined time in the future (for a specific cost).

Fixed-rate loans. Have the same interest rate for the duration of the loan. Normally have a higher initial interest rate as the lender could lose money if overall interest rates increase. The lender assumes the interest rate risk, so they generally add an interest premium to a variable rate loan

Home Equity Lines of Credit (HELOC). Home equity lines of credit are basically second mortgages which use the equity in your home to secure your loan. These are generally adjustable rate notes that have an interest only payment, at least in the first few years of the note. Interest rates are variable and are generally interest only in the first few years. They have lower rates of interest than other consumer loans.

Home Equity Loans. Home equity loans are basically second mortgages which use the equity in your home to secure your loan. Normally can borrow up to 80% of your equity in your home

Installment Loans. Installment loans are loans which are repaid at regular intervals and where payment includes both principal and interest. These are normally used to finance houses, cars, appliances, and other expensive items. These loans are amortized, which is the process of the payment going more toward principal and less toward interest each subsequent month. These may be secured or unsecured loans, variable-rate or fixed-rate loans.

Payday Loans. These are short-term loans of 1-2 weeks secured with a post-dated check which is “held” by the lender and then cashed later. These have very high interest rates and fees, APR > 720%. Typical users are those with jobs and checking accounts but who have been unable to manage their finances effectively.

Secured loans. Secured loans are guaranteed by a specific asset, i.e. a home or a car, and typically have lower interest rates.

Single payment (or balloon) loans. These are loans that are repaid in only one payment, including interest. These are generally short-term lending of one year or less, sometimes called bridge or interim loans, often used until permanent financing can be arranged. These may be secured or unsecured.
Student Loans. These are loans with low, federally subsidized interest rates used for higher education. Examples include Federal Direct (S) and PLUS Direct (P) available through the school; Stafford (S) and PLUS loans (P) available through lenders. Some are tax-advantaged and have lower than market rates. Payment on Federal Direct and Stafford loans deferred for 6 months after graduation.

Unsecured loans. Unsecured loans require no collateral, are generally offered to only borrowers with excellent credit histories, and have higher rates of interest – 12% to 28% (and higher) annually.

Variable-rate loans. Have an interest rate that is tied to a specific index (e.g., prime rate, 6-month Treasury bill rate) plus some margin or spread, i.e. 5%). Can adjust on different intervals such as monthly, semi-annually, or annually, with a lifetime adjustment cap. Normally have a lower initial interest rate because the borrower assumes the interest rate risk and the lender won’t lose money if overall interest rates increase.

Mortgage Terminology

Balloon Mortgages. These are mortgage loans whose interest and principal payment won’t result in the loan being paid in full at the end of the term. The final payment, or balloon, can be significantly large. These loans are often used when the debtor expects to refinance the loan closer to maturity.

Conventional loans. These are loans that are neither insured or guaranteed. They are below the maximum amount set by Fannie Mae and Freddy Mac of $417,000 in 2016 (single family). They require Private Mortgage Insurance (PMI) if the down payment is less than 20%.

FHA Loans. These are Federal Housing Administration (FHA) Insured Loans. The FHA does not originate any loans, but insures the loans issued by others based on income and other qualifications. There is lower PMI insurance, but it is required for the entire life of the loan (1.5% of the loan). While the required down payment is very low, the maximum amount that can be borrowed is also low.

Fixed rate mortgages (FRMs). These are mortgage loans with a fixed rate of interest for the life of the loan. These are the least risky from the borrower’s point of view, as the lender assumes the major interest rate risk above the loan rate. These are the most-recommended option for new home buyers.

Interest only Option loans. These are FRMs or ARMs with an option that allows interest only payments for a certain number of years, and then payments are reset to amortize the entire loan over the remaining years. Some will take out an interest only loan to free up principal to pay down other more expensive debt. Once the interest-only
period has passed, the payment amount resets, and the increase in payment can be substantial. These are generally not recommended.

**Jumbo loans.** These are loans in excess of the conventional loan limits and the maximum eligible for purchase by the two Federal Agencies, Fannie Mae and Freddy Mac, of $417,000 in 2016 (some areas have higher amounts). Some lenders also use the term to refer to programs for even larger loans, e.g., loans in excess of $500,000.

**Negative Amortization Mortgages** (NegAm). These are mortgage loans in which scheduled monthly payments are insufficient to amortize, or pay off the loan. Interest expense that has been incurred, but not paid is added to the principal amount, which increases the amount of the debt. Some NegAm loans have a maximum negative amortization that is allowed. Once that limit is hit, rates adjust to make sure interest is sufficient to not exceed the maximum limit.

**Option Adjustable Rate Mortgages** (Option ARMs). This is an ARM where interest rate adjusts monthly, and payments annually, with “options” on the payment amount, and a minimum payment which may be less than the interest-only payment. The minimum payment option often results in a growing loan balance, termed negative amortization, which has a specific maximum for the loan. Once this maximum is reached, payments are automatically increased and the loan becomes fully amortizing after 5 or 10 years, regardless of increase in payment and must be repaid within the 30 year limit. These are not recommended.

**Piggyback loans.** These are two separate loans, one for 80% of the value of the home and one for 20%. The second loan has a higher interest rate due to its higher risk. The second loan is used to eliminate the need for PM Insurance. With a piggyback loan, PMI is not needed, but these are much harder to get now.

**Reverse Mortgages.** These are mortgage loans whose proceeds are made available against the homeowner’s equity. Financial institutions in essence purchase the home and allow the seller the option to stay in the home until they die. Once they die, the home is sold and the loan repaid, generally with the proceeds. These are typically used by cash-poor but home-rich homeowners who need to access the equity in their homes to supplement their monthly income at retirement.

**VA Loans.** These are Veterans Administration (VA) Guaranteed Loans. These loans are issued by others and guaranteed by the Veterans Administration. They are only for ex-servicemen and women as well as those on active duty. Loans may be for 100% of the home value.

**Variable or Adjustable Rate Mortgages** (ARMs). These are mortgage loans with a rate of interest that is pegged to a specific index that changes periodically, plus a margin that is set for the life of the loan. Generally the interest rate is lower compared to a fixed rate
Chapter 7. Consumer and Mortgage Loans

loan, as the borrower assumes more of the interest rate risk. The may have a fixed rate for a certain period of time, then afterwards adjust on a periodic basis.

Review Questions

1. What are seven different types of consumer loans?
2. What is the most critical document of the loan process? Why?
3. What are the three concepts that should be considered before obtaining a home mortgage?
4. What are the benefits of getting a fixed-rate mortgage? A variable-rate mortgage?

Case Studies

Case Study 1

Data

Matt is offered a $1,000 single-payment loan for one year at an interest rate of 12 percent. He determines there is a mandatory $20 loan-processing fee, $20 credit check fee, and $60 insurance fee. The calculation for determining your APR is (annual interest + fees) / average amount borrowed.

Calculations

A. What is Matt’s APR for the one-year loan, assuming principal and interest are paid at maturity?

B. What is Matt’s APR if this was a two-year loan with principal and interest paid only at maturity?

Case Study 1 Answers

Matt’s interest cost is calculated as principal * interest rate * time.

A. The APR for the one-year loan is:
   Interest = $1,000 * 0.12 * 1 year = $120
   Fees are $20 + $20 + $60 = $100
   His APR is (120 + 100) / 1,000 = 22.0%

B. The APR for the two-year loan is:
   Interest = $1,000 * 0.12 * 2 years = $240
   Fees are $20 + $20 + $60 = $100
   His APR is
   \[ \frac{(240 + 100)}{2} / 1,000 = 17.0\% \].
Since this is a single-payment loan, the average amount borrowed is the same over both years. Note that Matt’s APR is significantly higher than his stated interest rate because of the fees charged. He should be very careful of taking out this loan.

Case Study 2

Data
Matt has another option with the same $1,000 loan at 12 percent for two years. But now he wants to pay it back over 24 months and he has no other fees.

Calculations
Using the simple interest and monthly payments, calculate:
A. The monthly payments
B. The total interest paid
C. The APR of this loan

Note: The simple-interest method for installment loans is simply using your calculator’s loan amortization function.

Case Study 2 Answers

A. To solve for simple interest monthly payments, set your calculator to monthly payments, end mode:
   \[ PV = -1,000, \ I = 12\%, \ P/Y = 12, \ N = 24, \ PMT=? \]
   \[ PMT = \$47.074 \]
B. Total interest paid = 47.074 x 24 – 1,000 = ?
   \[ \$129.76 \]
To calculate the APR, it is \((\text{interest} + \text{fees}) / 2\) / average amount borrowed (which changes each year as you pay it down in an amortized or installment loan). The average amount borrowed of $540.68, which is the average of the monthly principle outstanding (see Table 3). The APR is calculated as \((\$129.76 / 2 \text{ years}) / \$540.68 = 12\%\).
### Table 3. APR Calculation

<table>
<thead>
<tr>
<th>Amount Received:</th>
<th>1,000</th>
<th>Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>1,000.00</td>
<td>Payment</td>
</tr>
<tr>
<td>Interest</td>
<td>10.00</td>
<td>$37.07</td>
</tr>
<tr>
<td>Principle</td>
<td>8.88</td>
<td>$38.20</td>
</tr>
</tbody>
</table>

| Amount | 962.93 | Payment | 47.07 |
| Interest | 9.63 | $37.44 | $925.48 |
| Principle | 9.25 | $37.82 | $887.66 |

| Amount | 925.48 | Payment | 47.07 |
| Interest | 8.49 | $38.52 | $810.89 |
| Principle | 8.49 | $38.52 | $810.89 |

| Amount | 810.89 | Payment | 47.07 |
| Interest | 8.11 | $38.96 | $771.92 |
| Principle | 8.11 | $38.96 | $771.92 |

| Amount | 771.92 | Payment | 47.07 |
| Interest | 7.72 | $39.33 | $732.57 |
| Principle | 7.72 | $39.33 | $732.57 |

| Amount | 732.57 | Payment | 47.07 |
| Interest | 7.33 | $39.75 | $692.82 |
| Principle | 7.33 | $39.75 | $692.82 |

| Amount | 692.82 | Payment | 47.07 |
| Interest | 6.93 | $40.15 | $652.68 |
| Principle | 6.93 | $40.15 | $652.68 |

| Amount | 652.68 | Payment | 47.07 |
| Interest | 6.53 | $40.55 | $612.13 |
| Principle | 6.53 | $40.55 | $612.13 |

| Amount | 612.13 | Payment | 47.07 |
| Interest | 6.12 | $40.95 | $571.18 |
| Principle | 6.12 | $40.95 | $571.18 |

| Amount | 571.18 | Payment | 47.07 |
| Interest | 5.71 | $41.36 | $529.82 |
| Principle | 5.71 | $41.36 | $529.82 |

| Amount | 529.82 | Payment | 47.07 |
| Interest | 5.30 | $41.78 | $488.04 |
| Principle | 5.30 | $41.78 | $488.04 |

| Amount | 488.04 | Payment | 47.07 |
| Interest | 4.88 | $42.19 | $445.85 |
| Principle | 4.88 | $42.19 | $445.85 |

| Amount | 445.83 | Payment | 47.07 |
| Interest | 4.46 | $42.62 | $403.23 |
| Principle | 4.46 | $42.62 | $403.23 |

| Amount | 403.23 | Payment | 47.07 |
| Interest | 4.03 | $43.04 | $360.19 |
| Principle | 4.03 | $43.04 | $360.19 |

| Amount | 360.19 | Payment | 47.07 |
| Interest | 3.60 | $43.47 | $316.72 |
| Principle | 3.60 | $43.47 | $316.72 |

| Amount | 316.72 | Payment | 47.07 |
| Interest | 3.17 | $43.91 | $272.81 |
| Principle | 3.17 | $43.91 | $272.81 |

| Amount | 272.81 | Payment | 47.07 |
| Interest | 2.73 | $44.35 | $228.47 |
| Principle | 2.73 | $44.35 | $228.47 |

| Amount | 228.47 | Payment | 47.07 |
| Interest | 2.28 | $44.79 | $183.68 |
| Principle | 2.28 | $44.79 | $183.68 |

| Amount | 183.68 | Payment | 47.07 |
| Interest | 1.84 | $45.24 | $138.44 |
| Principle | 1.84 | $45.24 | $138.44 |

| Amount | 138.44 | Payment | 47.07 |
| Interest | 1.38 | $45.69 | $92.75 |
| Principle | 1.38 | $45.69 | $92.75 |

| Amount | 92.75 | Payment | 47.07 |
| Interest | 0.93 | $46.15 | $46.61 |
| Principle | 0.93 | $46.15 | $46.61 |

| Amount | 46.61 | Payment | 47.07 |
| Interest | 0.47 | $46.61 | $0.00 |
| Principle | 0.47 | $46.61 | $0.00 |

Total Int. = 129.76
Actual APR = 12.0%

### Case Study 3

**Data**

You are looking to finance a used car for $9,000 for three years at 12 percent interest.

**Calculations**

A. What are your monthly payments?
B. How much will you pay in interest over the life of the loan?
C. What percent of the value of the car did you pay in interest?
Case Study 3 Answers

A. To solve for your monthly payments, set PV equal to -9,000, I equal to 12, N equal to 36, and solve for PMT.
   
   Your payment is $298.93 per month.

B. To get your total interest paid, multiply your payment by 36 months. $298.92 * 36 = $10,761.44 – 9,000 = ?
   
   $1,761.44

C. To determine what percent of the car you paid in interest, divide interest by the car’s cost of $9,000 = $1,761.44 / 9,000 = 19.56%
   
   You paid nearly 1/5 the value of the car in interest. Why not save next time and buy a nicer car (or save some of that money)?

Case Study 4

Data

Bill is short on cash for a date this weekend. He found he can give a postdated check to a payday lender who will give him $100 now for a $125 check that the lender can cash in two weeks. The APR equals the total fees divided by the annual amount borrowed. The effective annual rate = [(1 + APR / periods) periods] - 1.

Calculations

A. What is the APR?
B. What is the effective annual interest rate?

Application

C. Should he take out the loan?

Case Study 4 Answers

A. The APR is the amount paid on an annual basis divided by the average amount you borrow.
   
   APR = ($25 * 26 two-week periods) / $100 = $650 / $100 = 650%

B. To solve for your effective annual interest rate, put it into the equation for determining the impact of compounding.

   The effective annual interest rate is
   
   (1 + [6.5 / 26 periods])^26 periods – 1 = 32,987%
   
   This is a very expensive loan.

C. No. It is just too expensive.
Case Study 5

Data
Wayne is concerned about his variable-rate mortgage. Assuming a period of rapidly rising interest rates, how much could his rate increase over the next four years if he had a 6-percent variable-rate mortgage with a 2-percent annual cap (that he hits each year) and a 6-percent lifetime cap?

Application
How would this affect his monthly payments?

Case Study 5 Answers

Assuming rates increased by the maximum 2 percent each year, at the end of the four years it could have reached its cap of 6 percent, giving a 12 percent rate. Nearly doubling the interest rate would significantly increase Wayne’s monthly payment.

Case Study 6

Data
Anne is looking at the mortgage cost of a traditional 6.0 percent 30-year amortizing loan versus a 7.0 percent 30-year/10-year interest-only home mortgage of $300,000.

Calculations
A. What are Anne’s monthly payments for each loan for the first 10 years?
B. What is the new monthly payment beginning in year 11 after the interest-only period ends?

Application
C. How much did Anne’s monthly payment rise in year 11 in percentage terms?

Case Study 6 Answers

A. Anne’s monthly payments are
Traditional: The amortizing loan payment is:
\[ PV = -300,000, \ I = 6.0\%, \ P/Y = 12, \ N = 360, \ PMT = ? \]
\[ PMT = $1,798.65 \]
Interest-only: The payment would be \[ $300,000 \times 7.0\% / 12 = $1,750.00 \]

B. After the 10-year interest-only period, her new payment would be (she would have to amortize the 30-year loan over 20 years):
\[ PV = -300,000, \ I = 7.0\%, \ P/Y = 12, \ N = 240, \ PMT = ? \]
\[ PMT = $2,325.89 \]
Chapter 7. Consumer and Mortgage Loans

C. The new payment is a 33% increase over the interest-only period in year 10.

**Case Study 7**

Data

Jon took out a $300,000 30-year Option ARM mortgage for purchasing his home, which had a 7 percent mortgage. Each month he could make a minimum payment of $1,317 (which did not even cover the interest payment), an interest-only payment of $1,750, a payment of $1,996 that included both principal and interest, or an additional amount. The loan had a negative-amortization maximum of 125 percent of the value of the loan. Jon was not very financially savvy, and for the first 10 years made the minimum payment only. As a result, at the end of year 10, he was notified that he had hit the negative-amortization maximum and that his loan had reset.

Calculations

A. What is Jon’s new monthly payment beginning in year 11 after he hit the negative amortization limit?
B. How much did Jon’s monthly payment rise over the minimum payment he was paying previously?

**Case Study 7 Answers**

A. After the negative-amortization limit is hit, he must now amortize the loan over 20 years instead of 30. His new loan amount is not $300,000, but $375,000 (300,000 * 125 percent) due to the fact he did not pay enough to even cover interest payments:

\[ PV = -375,000, I = 7.0\%, P/Y = 12, N = 240, PMT = ? \]

\[ PMT = \$2,907.37 \]

B. His minimum payment was $1,317, and his new payment is $2,907.

It is a 121-percent increase over the minimum payment period.

Notes

Other good sources of information on mortgages are available at:

- [www.mtgprofessor.com](http://www.mtgprofessor.com)
- [www.bankrate.com](http://www.bankrate.com)

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1 *Ensign*, Nov. 1998, 52–54
2 Proverbs 29:18.
3 J. Reuben Clark Jr., *Improvement Era*, Jun. 1938, 328
8. Understanding Debt: Be Free

Introduction

Attitudes toward debt have fluctuated dramatically over the last 50 years. Many who lived through the 1930s vowed never to go into debt again. Yet gradually people grew to see debt as a tool to obtain what they wanted now. In the late nineties in particular, the stock market’s upward trend encouraged consumers to acquire significant additional debt. Then, when the economy faltered, people realized once again we live in a time of great economic uncertainty. The decline in the stock market and the slowing economy during those years led to a major increase in bankruptcies throughout the United States.

Advertising has been instrumental in promoting the view of debt as a tool: “Get what you want,” the advertisements say. “Get it now, and pay only $80 a month!” “Buy a car with zero down and make no payments for the next 12 months!” Get what you want now and pay it off over the next 15 years. Will Rogers summarized the current condition of our nation by saying: “We’ll show the world we are prosperous, even if we have to go broke to do it.”

Objectives

Once you have completed this chapter, you should be able to do the following:

1. Understand the principles of using debt wisely
2. Understand the debt cycle and why people go into debt
3. Understand how to develop and use personal debt-reduction strategies
4. Know where to get help if you are too far in debt

Understand the Principles of Using Debt Wisely

Debt can be a form of bondage, limiting both temporal and spiritual freedom. To help people avoid this bondage, Joseph F. Smith advised: “Get out of debt and keep out of debt, and then you will be financially as well as spiritually free.”

While some might argue that their financial situation has nothing to do with their spirituality, Marion G. Romney pointed out that self-reliance is essential for spiritual growth to continue:

Independence and self-reliance are critical keys to our spiritual growth. Whenever we get into a situation which threatens our self-reliance, we will find our freedom threatened as well. If we increase our dependence, we will find an immediate decrease in our freedom to act.
When we are in debt, our freedom to act and our ability to grow spiritually are reduced. Staying out of debt is not just a temporal commandment, as some suppose; it is also a spiritual commandment as well.

**Is There Reasonable Debt?**

Debt is necessary at times when people may need to borrow for some goals that might otherwise be impossible to achieve. Such goals may include gaining an education and purchasing a modest home; purchasing a second car or a new wardrobe on credit, however, may not be appropriate. Gordon B. Hinckley counseled: “Reasonable debt for the purchase of an affordable home and perhaps for a few other necessary things is acceptable. But from where I sit, I see in a very vivid way the terrible tragedies of many who have unwisely borrowed for things they really do not need.”

When going into debt for a home or an education, you should use prayer and wisdom to make good decisions about the amount of money you borrow and the type of loans you take out. If you do go into debt, you should pay your debt off as soon as you can.

Another type of debt that may be necessary is business debt. While we will not cover this in detail, we include some cautions from N. Eldon Tanner regarding business debt:

> Investment debt should be fully secured so as to not encumber a family’s security. Don’t invest in speculative ventures. The spirit of speculation can become intoxicating. Many fortunes have been wiped out by the uncontrolled appetite to accumulate more and more. Let us learn from the sorrow of the past and avoid enslaving our time, energy, and general health to a gluttonous appetite to acquire increased material goods.

It is acceptable to incur debt to undertake a business endeavor if (1) the debt does not jeopardize the personal or family finances of the business owners or managers and (2) the debt is used for a valid business purpose or investment opportunity. Speculative ventures and consumption under the guise of investment should be avoided. Using debt to finance a speculative venture magnifies the risk of the investment and is simply leverage. Finally, business debt must be incurred with full commitment to repay the money. Failure to repay any debt—including business debt—is a form of dishonesty. Keeping these principles in mind will help us determine when debt may or may not be appropriate for a business investment.

There are a few important principles of effective loan use. These include:

1. **Know yourself.** This includes your values, vision and goals. What is important to you, not just now, but in the future? What do you want to accomplish with your life? What is the vision of what you want you and your family to become? The key is to have the vision of your bigger “yes” in the future so you can say no to the current temptations to spend. “Where there is no vision, the people perish.”
Chapter 8. Debt and Debt Reduction

2. **Know where you are, your spending and your income.** If married, do not hide any liabilities or assets from each other. How much do you owe, and what are your assets? In order to be able to get where you want to go, you must know where you are now. Have a realistic idea of your income, spending, debt and investment progress. Get on your budget and plan for the things you want to accomplish.

3. **Set your priorities.** Decide now the things you will do and what you will not do? Make those decisions now, so you won’t have to re-decide time after time. Strive to learn from your experiences, the experiences of your family, and others. Thankfully, we have the teachings of leaders and scriptures who have given us counsel. Resolve to not go into debt except for a modest home and modest education. Be wise in your expenditures.

4. **Finally, pay as you go.** You cannot spend yourself into financial security. Live within your means, and do not spend that which you do not have, and follow your goals and decisions.

If you are in debt add, let me add a few points which will be discussed in the next chapter.

5. **Prioritize your debts.** Which are the most important? Give priority to secured debts for house or car. If the time comes that you cannot pay all your debts, determine which are most important, such as a roof over your head and food and transportation.

6. **Develop a debt repayment plan.** Automate it and follow it closely. A debt repayment plan is how you will pay back your debts. You must be able to continue to meet your current needs for yourself and your family, and have sufficient to repay the debt when it comes due.

7. **Do not take on any new debt.** Debt stops growth, both physically and spiritually. Do not add to your debt burden as you strive to pay off your debts.

**Understand the Debt Cycle and the Reasons People Go into Debt**

To understand the nature of debt, it is important to understand the debt cycle. The debt cycle starts when you begin to spend more than you earn. You know it’s wrong, but you do it anyway, telling yourself, “It’s just this once,” and “I’ll pay it back next month.”

When you are not living within your means, you must borrow to maintain your standard of living. At first, this may mean adding a little more debt to your credit card because it is easily accessible. Although you intend to pay this debt off soon, you may find yourself continuing to spend more than you earn in order to support your lifestyle. Soon you may find that you have borrowed to the available limit on your credit card, so you get a second credit card, and your spending continues. You dig yourself deeper and deeper into debt each month.
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The situation keeps growing worse. You obtain more credit cards, and soon you may find that you have as many as five—all of them used to their maximum limit. You may be able to get another card, but the interest rate is now over 20 percent. Interest costs on your current cards are high too, and you are paying only the minimum balances on everything. In fact, most of your payments are for interest costs. With so much of your income going toward interest costs, you find yourself limited financially and unable to maintain your current standard of living.

This debt cycle can continue for only so long. Eventually you can’t get any more credit, and the interest alone becomes more than you can pay each month. You have lost your money, your sense of self-worth, and your good credit history.

Some people are already so deep in debt that it will take a long time for them to get back out; others are just beginning the cycle. When I have talked with people who have been in debt, some have described the debt cycle and its results as “chains of hell.” The debt cycle starts ever so slowly, but over time the chains become as unbreakable as steel and may cause you to do things you never would have thought possible.

While there are many reasons why people accumulate debt, there are five key trends:

**Ignorance**: Some people don’t understand interest and its costs. They may even, consciously or subconsciously, avoid learning about these things because they know they would have to change their spending habits, and change is difficult.

**Carelessness**: Some people understand interest but get a little careless in their spending. They think, “If I spend a little more this one time, it’s OK—it won’t hurt this once.” But it does hurt—even this once.

**Compulsiveness**: Others lack the self-control and discipline to control their spending. That is why spending, to some professionals, is considered an addiction, just like alcohol, drugs, or pornography.

**Pride**: Some people worry more about how they look to their neighbors than about how they look to God. Ezra Taft Benson counseled: “Pride . . . is manifest in so many ways, such as faultfinding, gossiping, backbiting, murmuring, [and] living beyond our means.” Some people are more interested in “keeping up with the Joneses” than in living within their means. They may overspend on brand-name clothes and other goods in order to impress others with their lifestyle, all while maxing out their credit cards and getting deeper and deeper into debt.

**Necessity**: Finally, some people go into debt in order to feed their families and provide for other basic needs. These people need help, and help is available. However, instead of going into debt to deal with a difficult situation, they should counsel with their church leaders to seek other solutions. Necessity should rarely be the reason people go into debt.
It is necessary to combat these trends and habits both in order to avoid debt and as part of the road to getting out of debt. As we learn, grow, and develop our financial skills, we become more self-reliant. As you humbly receive help from those who are able to give it, and as you gain knowledge, exactness, discipline, and humility, the Lord will be able to turn your weaknesses into strengths. He has promised:

And if men come unto me I will show unto them their weakness. I give unto men weakness that they may be humble; and my grace is sufficient for all men that humble themselves before me; for if they humble themselves before me, and have faith in me, then will I make weak things become strong unto them.9

When you are in need, God can help you understand what you should do, show you what changes you need to make, and direct you to the knowledge you need to make those changes. As you follow His guidance, you are changed from the inside out. In the process, you become both spiritually and financially self-reliant. The Lord takes you from where you are to where you need to be. Rather than having burdensome debt, you can train yourself to replace the following vices with virtues:

_ignorance can be replaced by wisdom._ Wisdom is a necessary tool for combating ignorance and may be gained as you learn about the dangers of debt, the costs of interest, and how improper debt management prevents you from achieving your goals. You must learn to understand debt, understand why we go into debt, and understand how to properly manage it. You will have to change your spending habits and possibly even your very lifestyle in order to spend money responsibly and get out of the debt you have accumulated.

_Carelessness can be replaced by exactness._ Exactness in your finances is essential for combating careless spending. As you learn about the dangers of the debt cycle, you will realize that once you enter the debt cycle, it is difficult to get out of it. If you are not in debt, you can set a goal now to never enter this cycle and to be exact and circumspect in financial matters in order to avoid the debt cycle. If you are already caught in the debt cycle, you can prepare a detailed plan to get out of debt and stay out.

_Comulsiveness can be replaced by diligence._ You can develop the self-control you need to be diligent in your financial matters. You can plan a budget and spend only on the things that are important. You can set personal financial goals and work toward them, budgeting and spending responsibly so that you can eventually reach those goals.

_Pride can be replaced by humility._ You can humble yourself as you recognize that your wealth isn’t yours. When you see yourself as a steward of your wealth, you realize that it doesn’t matter what others think about you—it only matters what God thinks of you and what you think about yourself. As you strive to do what God would have you do, pride gives way to humility.

_Necessity can be replaced by self-reliance._ When you are in need, God can help you understand what you should do, show you what changes you need to make, and direct you to the knowledge
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you need to make those changes. As you follow His guidance, you are changed from the inside out, and in the process, you become both spiritually and financially self-reliant.

**Understand How to Develop and Use Personal Debt-Reduction Strategies**

What if you are already in debt? Is there a process that can help you get out? The good news is that there is. The following process is essential for debt-reduction:

1. Recognize and accept that you have a debt problem.
2. Stop incurring debt. Don’t buy anything else on credit. Be especially careful about using home equity to pay down debts until you have your spending under control. Will Rogers commented, “If you find yourself in a hole, stop digging.”
3. Make a list of all your bills.
4. Look for many different ways of reducing debt, not just one. Examples might include consolidating balances to a lower interest rate credit card, having a yard sale to earn money to pay down debt, or using savings to reduce debt.
5. Organize a repayment or debt-reduction strategy and follow it.

There are three basic types of debt-reduction strategies:

**Personal strategies:** These are strategies you can use on your own; they include the use of spreadsheets and financial management software, such as Quicken, Mint.com, or Mvelopes, or other programs to help you organize your financial situation so you can make payments to get out of debt.

**Counseling strategies:** These strategies require outside help and include debt consolidation and debt negotiation strategies from credit counseling agencies.

**Legal strategies:** These strategies require professional legal help and may consist of declaring bankruptcy.

**Personal Strategies**

In this chapter, we will focus on personal strategies to help those in debt organize a plan to get out of debt. Even if you are not in debt, it is still helpful to learn these debt-reduction strategies because you will probably know someone who would benefit from these suggestions.

**1. Debt-elimination calendar: Most expensive debt first.** In his article “One for the Money,” Marvin J. Ashton discusses his debt-elimination strategy. His logic is that you should organize your debts and pay off your most expensive ones first.

He recommends that you set up a spreadsheet or ledger with a row for every month you will be making payments on your debts and a column for each creditor (see Table 1). You start by
paying off the debt with the highest interest rate; this way you are paying off your most expensive debt first, which will save you the most money. Once your most expensive debt is paid off, continue applying the same total amount of money to other lines of credit until all of your debts are paid off. This is the critical point. After you have paid off one debt, you must keep paying the same amount of money but use that additional money to pay off the next most important debt. Then, once you have paid off your all your debts, you can continue paying yourself consistent with your personal and family goals.

Counseling Strategies

Regarding counseling strategies, you may be able to get help from either nonprofit credit counseling agencies (CCAs), which can help you reduce your monthly interest charges, or for-profit agencies, which can help you consolidate and negotiate your debt. Regardless of your choice, check out the company you select with the Better Business Bureau before you spend any money.

Nonprofit credit counseling agencies are set up specifically to help people reduce their credit card debt. These nonprofit agencies have arrangements with many credit card companies, and by working with those credit card companies, you can have your interest payments reduced or even eliminated with specific creditors. The creditors give these nonprofit agencies a rebate that comes from what the creditors are able to collect from you. Creditors are generally willing to work with credit counseling agencies because they would rather get some money back than none at all.

Using these services will cost you about $15 to $20 for setup and about $12 per month after that. If you work with a credit counseling agency, realize that it will likely show up on your credit reports. However, your goal is to reduce your debt—not to increase it through paying high fees. If you successfully complete the program, your success may be noted on your credit reports as well.

Nonprofit credit counseling agencies can be found by calling the National Foundation for Credit Counseling (1-800-388-2227). The following are a few questions you should ask nonprofit credit counseling agencies before you sign up to work with them:

- Is the agency licensed? (To verify their answer, ask for their tax ID.)
- Is the agency a member of the National Foundation of Consumer Credit (NFCC)?
- Is the agency accredited through the Council on Accreditation?
- Are the agency’s counselors certified by the NFCC?
- What is the agency’s monthly management fee? Is it tax-deductible?
- How long would I be in the program? (It should rarely be longer than five years.)
- How much would I be paying on my debts each month? (Payments are usually taken directly from a checking or savings account.)
- Will I talk with the same person every time or with many different people?
For-profit credit counseling agencies make money by helping people get out of debt. There are two main methods through which they work: debt consolidation and debt negotiation.

**Debt consolidation:** The goal of this strategy is to consolidate debt into a single loan with a lower interest rate. For-profit agencies make money on loan-origination charges and other loan fees as they help homeowners take out an interest-only home loan and use the excess cash that would have gone to pay down principal to pay off debt. Borrowers should realize, however, that interest-only mortgages have an interest-only option for a specific period, i.e., one to seven years. After the interest-only period, the loan becomes fully amortizing and the loan principal must be repaid in a shorter amount of time, increasing monthly payments.

**Debt negotiation:** Debt negotiators work with creditors to reduce the interest rate and principal on certain types of loans, especially credit card loans. Initially, the consumer makes monthly payments to the debt management company, which may hold those payments until the consumer’s accounts are long overdue. At this point, the debt management company attempts to negotiate with the creditors to reduce the consumer’s interest rate and principal. They are sometimes able to significantly reduce the amount owed; however, help from these companies is not cheap. They typically charge a two-month retainer fee up front to work with your creditors. In addition, should this strategy backfire, you may have many months of nonpayment history on your credit report even though you made monthly payments as required to the for-profit credit counseling agency.

Before you begin working with a for-profit credit counseling agency, be sure you understand how the agency makes money. If it doesn’t make sense to you, go with another company. The following are a few questions you should ask for-profit credit counseling agencies before you sign up to work with them:

- What types of loans will the agency help consolidate or negotiate?
- How much will the agency’s services cost?
- How does the agency get paid? Who pays the agency?
- When does the agency get paid?
- What is the monthly fee? Is it tax deductible?
- How long would I be in their program? (It should never be longer than five years.)
- How much would I be paying on my debts each month? (Payments are usually taken directly from a checking or savings account.)
- Will I talk with the same person every time or with many different people?

There are benefits to using these types of programs. First, these companies may be able to significantly reduce the interest charges and even the principal of some types of debt. Second, they may be able to help you out of extreme debt if you follow through with them.

There are also drawbacks to working with these organizations. Most importantly, they are very expensive, and there is no guarantee they will be able to help. In addition, these organizations are
established mainly to make money, which means you will pay much more for their help than you will pay for the help of nonprofit credit counseling agencies. Remember, these companies stop making payments before they begin to negotiate, so working with them may have a significant negative impact on your credit reports. Watch for the following warning signs, and go elsewhere for help if you notice any of them:

- High, up-front or “voluntary” fees
- Vague contracts that do not explain fees
- Promises that sound too good to be true (for example, a promise that creditors will cut the principal owed by 50 percent)
- Fees for just distributing payments to creditors
- Pressure to sign up for debt-repayment services immediately before fees are disclosed
- Fees for phone consultations

Remember, you are working with your money. Use it wisely, and find a program that can help you resolve your debt issues in a consistent, logical way and within a reasonable time frame.

2. Debt-elimination calendar: Smallest debt first. Others, such as Dave Ramsey, have recommended that those in debt pay off their smallest debt first. In this manner, borrowers see debts being eliminated, which shows success, and gives motivation for further debt repayment. While the “most expensive debt first” framework is better from a “total cost” point of view, both methods have the same objective and both can be helpful in eliminating debt. Learning Tool 20: Debt Elimination Spreadsheet with Accelerator on this website is a useful tool for determining which method will repay debts the quickest. With this tool, you have the option to pay down either the highest interest rate or smallest principal first. Most times, the difference is not significant and either method will accomplish the same objective. The key is to act now.

3. Home equity loans. You have probably heard radio and TV advertisements for debt consolidation loans. Debt consolidation loans are home equity loans, or loans against the equity in your home. Home equity loans have some benefits: because they are secured loans (credit cards are unsecured loans), they have lower interest rates, which reduces the monthly payment on your debt. In addition, the interest on home equity loans may be tax deductible.

However, there are two drawbacks to this type of loan. First, by taking out a home equity loan, you may not be addressing your real problem: the bad habit of spending money you do not have and living beyond your means. If your spending habits have not changed, your spending will continue even after you take out the home equity loan.

Second, if you take out a home equity loan and do not pay it off, you run the risk of losing not only your credit score but your home as well. Home equity loans put your home at risk because your home is used as collateral for the loan. Experience has shown that over 80 percent of those who take out a home equity loan to pay credit card debt have the same amount of debt they had at the time they took out the loan within three years. No spending changes have occurred, and the
people soon find themselves back in debt. As their spending continues, they may now suffer both reductions in their credit ratings and the loss of their homes.

Should you take out a home equity loan to consolidate and pay off your debts? The answer is not straightforward. It’s likely that you will get into the same problem again in the near future if you have not changed your spending habits. If you have already addressed the spending problem that got you into debt in the first place, a home equity loan may be a useful option.

If you find yourself too far in debt for personal strategies to work successfully, you have a few choices:

**Legal Strategies—Bankruptcy**

Legal help should be your last resort; however, if there is no possible way that you can repay your debts, you may want to consider this option. There are two major types of bankruptcy: Chapter 7 and Chapter 13. If you declare *Chapter 7 bankruptcy*, your assets will be liquidated and used to pay creditors according to procedures outlined in the Bankruptcy Code. This is the quickest, simplest, and most frequently selected type of bankruptcy. Under Chapter 7 bankruptcy, certain debts cannot be waived, including child support, student loans, and drunk driving fines.

If you declare *Chapter 13 bankruptcy*, a repayment plan is set up in which the court binds both you and your creditors to set terms of repayment. You retain your property and make regular payments with future income to a trustee, who pays creditors slowly over the life of the bankruptcy plan.

Research on bankruptcy has shown some interesting trends. The majority of bankruptcies are caused by divorce, death, or separation; unpaid medical expenses; and loss of the primary source of employment. You can substantially reduce your risk of these events by further developing your relationships, obtaining life and health insurance and continuing your education.

Unfortunately, some have come to see bankruptcy as a way of getting out of paying the obligations they can honestly pay on their own. If you are considering bankruptcy, ask yourself the following questions:

- Is it honest, or is it just a way to get out of debt legally? Remember, things that are legal may not necessarily be honest.
- Is your integrity worth more than money?
- Is it really necessary to declare bankruptcy?
## Table 1: Debt-Elimination Calendar

<table>
<thead>
<tr>
<th>Interest Rate</th>
<th>Credit Card</th>
<th>Consumer Loan</th>
<th>Piano Loan</th>
<th>Auto Loan</th>
<th>Student Loan</th>
<th>Total Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Owed</td>
<td>$215.68</td>
<td>$533.66</td>
<td>$613.61</td>
<td>$1,399.94</td>
<td>$10,006.37</td>
<td>$7,002.64</td>
</tr>
<tr>
<td>Min. Payment</td>
<td>110</td>
<td>70</td>
<td>50</td>
<td>75</td>
<td>235</td>
<td>120</td>
</tr>
</tbody>
</table>

- **March 2003:**
  - Total Payments: 660
- **April:**
  - Total Payments: 660
- **May:**
  - Total Payments: 660
- **June:**
  - Total Payments: 660
- **July:**
  - Total Payments: 660
- **August:**
  - Total Payments: 660
- **September:**
  - Total Payments: 660
- **October:**
  - Total Payments: 660
- **November:**
  - Total Payments: 660
- **December:**
  - Total Payments: 660
- **January 2004:**
  - Total Payments: 660
- **February:**
  - Total Payments: 660
- **March 2004:**
  - Total Payments: 660
- **April:**
  - Total Payments: 660
- **May:**
  - Total Payments: 660
- **June:**
  - Total Payments: 660
- **July:**
  - Total Payments: 660
- **August:**
  - Total Payments: 660
- **September:**
  - Total Payments: 660
- **October:**
  - Total Payments: 660
- **November:**
  - Total Payments: 660
- **December:**
  - Total Payments: 660
- **January:**
  - Total Payments: 660
- **February:**
  - Total Payments: 660
- **March 2005:**
  - Total Payments: 660
- **April:**
  - Total Payments: 660
- **May:**
  - Total Payments: 660
- **June:**
  - Total Payments: 660
- **July:**
  - Total Payments: 245
A bankruptcy filing will remain on your credit reports for up to 10 years after you make your last payment. This will hurt your chances of getting the credit necessary to purchase a home or a business. Filing bankruptcy should not be taken lightly; it should be your last resort.

Summary

You have studied what the scriptures and other leaders have said concerning debt. Avoiding debt is important for both our temporal and spiritual well-being.

You have learned about the debt cycle and the reasons why people go into debt: ignorance, carelessness, compulsiveness, pride, and necessity. You have learned that once you begin the debt cycle, it is very difficult to stop. However, you have also learned the characteristics that will help stop the debt cycle: knowledge, exactness, discipline, humility, and self-reliance. Once you do overcome the debt cycle, you can help others obtain the same financial self-reliance.

We discussed different personal strategies for debt-reduction as well as counseling and legal strategies for debt-reduction. Personal strategies include using debt-reduction spreadsheets and payoff accelerators. We talked about counseling strategies in terms of both nonprofit and for-profit credit counseling agencies. Finally, we talked about the legal strategy of bankruptcy, and why it should be filed only as a last resort.

Assignments

Financial Plan Assignments

If you are in debt, or know others in debt, think through the reasons for that debt. Are there things that could have been done differently or things you could have done without that would have reduced the need for debt?

Review any debt you may have, including consumer debt, mortgage debt, and student loans. Write out your debt situation for each debt, including the following: creditor, phone number, reason for the loan, principal owed, interest rate, minimum payment, additional costs, fees, and the date by which you expect to have the loan paid off. Once you have written down all your debts, plan how to reduce your debt.

Finally, write down your views on how you will use debt in the future. Will you use it? What type of debt is acceptable? What are your thoughts and what are the reasons you feel the way you do toward both acceptable and unacceptable debt?

Learning Tools

The following Learning Tools may also be helpful as you prepare your Personal Financial Plan:
Chapter 8. Debt and Debt Reduction

20. Debt-Elimination Spreadsheet with Accelerator
   This Excel spreadsheet gives a framework for paying off debt; it encourages you to pay off your debts in order of expense until you have paid off all your debts.

9. Debt Amortization and Prepayment Spreadsheet
   This Excel spreadsheet gives a debt amortization and prepayment schedule to help you as you reduce and eliminate your debt.

18. Credit Card Repayment Spreadsheet
   This Excel spreadsheet gives information on how long it will take to pay off credit cards and other debt.

Review Materials

Terminology Review

**Average Daily Balance (ADB):** A common way of calculating interest to charge. Computed by adding each day’s balance for a billing cycle and then dividing by the number of days in the cycle.

**Cash Advance:** Using a credit card to obtain cash, such as through an ATM or over the counter at a bank. This is an extremely expensive way to borrow, and carries several pricy fees.

**Credit Bureau:** Private organizations which maintain credit information on individuals, which it allows subscribers to access for a fee. The three major credit bureaus to know are: Equifax, Experian, and Trans Union.

**Credit Card:** A financial instrument that allows the holder to make purchases through an open line of credit.

**Credit Limit:** The maximum amount that one can borrow on a single credit card. This amount is often influenced by one’s credit score.

**Credit Report:** Information collected by credit bureaus from subscribers, creditors, public court records, and the consumer.

**Credit Score:** A numerical evaluation of your credit based on specific criteria determined by the credit scoring company.

**Debit Card:** Unlike credit cards, debit cards act like a personal check. When used, money is taken straight from the connected account to pay for the purchased item.

**FICO Score:** This is the most commonly used credit score. It ranges from 300 to 850.
Grace Period: The amount of time given by a credit card company to pay a due balance before interest starts to accrue. Normally 20 to 25 days, excluding cash advances. It does not apply if the card already carries a balance.

Secured Credit Card: Similar to a standard credit card, but is tied to a checking or savings account. The card cannot be used once the money in the account is gone, until more funds are added. Useful for building credit.

Smart Card: Similar to a debit card, but rather than being connected to a certain bank account, they magnetically store a certain amount of money linked to the card itself.

Teaser Rates: Very low introductory interest rates used to attract new customers to a certain credit card. They increase soon after the card is in the user’s hands.

Review Questions
1. What are two debts that, according to leaders, are okay to incur?
2. What are five reasons people go into debt? How may these reasons be combated in order to get back out of debt?
3. What is the first signal that you are entering the debt cycle?

Case Studies

Case Study 1

Data
A family friend has asked you to help one of his children, who is having some financial problems. The son gave you the following information: They have four children, ages three months to 18 years. Their bills include a mortgage of $150,000 at 6 percent, a second mortgage of $20,000 at 7.5 percent (because they were too far in credit card debt), debts to various financial institutions of $10,000 at between 12 percent and 28 percent (she lost her job due to the latest pregnancy), a lease on a new truck of $18,000, a loan on her car for $5,000, and miscellaneous Christmas bills totaling $3,000. After some work using Learning Tool 20: Debt-Elimination Spreadsheet with Accelerator, you determine that debt payments represent 83 percent of their income for living expenses.

Application
What suggestions do you have to help them get out of debt?

Case Study 1 Answers
The above was a real case that occurred a few years ago. I have included below my suggested process to help (there are likely other ways to help as well).
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1. Help them determine what is important to them—their personal goals.
   - I helped them think through the process of setting effective goals, and then they wrote down their goals so they would be working for the right things.
   - I didn’t spend a lot of time together on this area, but I did emphasize its importance and had them do it on their own.

2. Help them realize where they are financially.
   - I helped them develop a balance sheet for the family.
   - We worked together to determine what assets were available and how much was owed. We developed an income statement.
   - We worked at finding out where the money was going so we could put it to the best use.
   - We put them on a very strict budget.

3. Help them understand why they went into debt in the first place.
   - I shared with them the reasons people go into debt so they could understand why they got into this problem in the first place.
   - I talked about the spiritual reasons behind not going into debt. I told them they needed to get their spiritual house in order so that God would help them get their temporal house in order.

4. Determine individual ways of reducing debt, the more the better.
   - I had them fill out their income taxes quickly so they could receive their income tax return.
   - They borrowed money against their cash-value insurance policy to reduce their debt.
   - I had them sell assets that they could do without (i.e., truck, old vehicles, etc.).

5. Help them determine a course of action and commit them to that course.
   - We worked together to make a plan, and then we all worked together to follow that plan.
   - I held them accountable for their plan.
   - I enlisted other people as part of a team approach to help them with talking to creditors and paying off their debts.

Now, four years later, they are still in debt, but their debts have become much more manageable and they are working to pay them off. Has it been easy? No. Is it worthwhile? Yes. The wife commented recently, “I just didn’t realize that it would be so hard for so long. You run into debt, but you crawl out of it.”

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1 Will Rogers Legacy, California Department of Parks and Recreation at [http://www.parks.ca.gov/?page_id=23998](http://www.parks.ca.gov/?page_id=23998).
Chapter 8. Debt and Debt Reduction

2 Conference Report, Oct. 1903, 5
4 “I Believe,” Ensign, Aug. 1992, 6
5 “Constancy Amid Change,” Ensign, Nov. 1979, 80
6 Proverbs 29:18.
7 Alma 5:7
9 Ether 12:27
Chapter 9. Time Value of Money 1: Present and Future Value

9. Time Value of Money 1: Understanding Present and Future Value

Introduction

The language of finance has unique terms and concepts that are based on mathematics. It is critical that you understand this language, because it can help you develop, analyze, and monitor your personal financial goals and objectives so you can get your personal financial house in order.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the term investment
2. Understand the importance of compound interest and time
3. Grasp basic financial terminology (the language of finance)
4. Solve problems related to present value (PV) and future value (FV)

I strongly recommend that you borrow or purchase a financial calculator to help you complete this chapter. Although you can do many of the calculations discussed in this chapter on a standard calculator, the calculations are much easier to do on a financial calculator. Calculators like the Texas Instruments (TI) Business Analyst II, TI 35 Solar, or Hewlett-Packard 10BII can be purchased for under $35. The functions you will need for calculations are also available in many spreadsheet programs, such as Microsoft Excel. If you have a computer with Excel, you can use Learning Tool 12: Excel Financial Calculator, which is a spreadsheet-based financial calculator available on the website.

Understand the Term Investment

An investment is a current commitment of money or other resources with the expectation of reaping future benefits.

For the most part, we will be working with financial investments in this course—stocks (or equities), bonds, mutual funds, cash, treasury bills and notes, options, futures, and so on. However, we will make reference to other important investments such as education and relationships. It is important that we have a broader view of what an investment is so that we recognize those investments that are of most worth—those that bring true joy in this life and in the life to come. You should have priorities when it comes to investments, and the most important investments you will make involve your family, your religion, and your relationship with God. The Book of Mormon prophet Jacob wisely counseled: “Therefore, do not spend money for that which is of no worth, nor your labor for that which cannot satisfy.”1
Understand the Importance of Compound Interest and Time

{XE “Compound Interest”} Time is the only tool that everyone has an equal amount of each day. However, you must have the discipline and foresight to use time to your advantage by investing early and not stopping for “diversions” in your spending and your goals.

Interest is similar to rent. Just as tenants pay rent to landlords in exchange for the use of an apartment or house, people will pay you interest in exchange for the use of your money. You can either invest your money yourself or you can lend it to others who will then invest your money and pay you an agreed upon rate.

The key investing principle states that a dollar in hand is worth more than a dollar received in the future. This principle is true because you can invest that dollar today and begin earning interest on it. The sooner your money can earn interest, the faster your interest can earn interest, and the more money you will have.

Grasp Basic Financial Terminology (i.e., the Language of Finance)

For you to understand the language of finance, you must understand thirteen key terms:

- **Amortized loan**: A loan paid off in equal installments composed of both principal and interest. It may also be called an installment loan.

- **Annuity**: A series of equal payments; these payments are made at the end of a specific time period for a specified number of time periods (generally months or years).

- **Compound annuity**: An investment that involves depositing the same amount of money at the end of each year for a certain number of years.

- **Compounding (annually, quarterly, daily, etc.)**: The number of periods during the year where interest is calculated. Compound interest is where interest is paid on previously earned interest as well as on the principal. The shorter the compounding period, the higher the effective annual rate of interest.

- **Effective interest rate**: The actual rate (as opposed to the stated or nominal rate) that is received after the effects of compounding are taken into account.

- **Future value (FV)**: The value of an investment at some point in the future.

- **Interest or discount rate**: The stated rate you will receive for investing at a specified compounding period for a specified period of time.

- **Nominal return**: The return on your investment before the impact of inflation and taxes is taken into account.
Present value (PV): The current value (today’s value) of a future sum of money.

Principal: The money you have available to invest or save, or the stated amount on a bond or deposit instrument.

Real return: The rate of return on an investment after the impact of inflation is accounted for. The formula for approximating the real return is the nominal return minus inflation. The exact formula for the real return is $(1 + \text{nominal return}) / (1 + \text{inflation}) - 1$.

Tax-adjusted (or after-tax) return: The return on your investment after the impact of federal and state taxes has been taken into account.

Compounding

How will different compounding periods impact your investment and investment returns?

Compounding periods refer to the frequency with which interest is applied to your investment. Interest may be compounded daily, weekly, monthly, semiannually, or annually. A key relationship exists between time and interest rate. The shorter the compounding period, the higher the effective annual interest rate (the actual rate you are earning on your investment after taking the effect of compounding into account). For example, if interest is compounded daily, the investment will grow faster than if the interest is compounded monthly or annually.

The formula for calculating the effective interest rate (EIR) is as follows:

$$\text{EIR} = [(1 + \text{nominal return or APR} / \text{periods})]^\text{periods} - 1$$

Problem 1: Impact of Compounding

Let’s illustrate the effect of compounding and the effective interest rate. The following are examples of four investments with four different nominal returns. Which of these investments would you rather own?

- Investment A earns 12.0 percent annually
- Investment B earns 11.9 percent semiannually
- Investment C earns 11.8 percent quarterly
- Investment D earns 11.7 percent daily

To figure out which investment is best for you, you must determine the effective interest rate of each investment.

For Investment A, the effective rate would be $(1 + .12 / 1)^1 - 1$, or 12.00 percent.
For Investment B, the effective rate would be $(1 + .119 / 2)^2 - 1$, or 12.25 percent.
For Investment C, the effective rate would be \((1 + .118 / 4)^4 - 1\), or 12.33 percent. For Investment D, the effective rate would be \((1 + .117 / 365)^{365} - 1\), or 12.41 percent.

Even though Investment D has the lowest nominal return, because of compounding, it has the highest effective interest rate. Investment D would be the best vehicle, assuming you were lending money at this rate. Compounding makes an important difference!

Solve Problems Related to Present Value (PV) and Future Value (FV)

Present Value (PV)

Let’s suppose you want to determine the current value of the ultimate earnings on an investment. This question could be restated in the following manner: What is the present value of my investment that will mature in N years at I percent interest (or discount rate)?

To solve this problem, you will need to know the future value of your investment, how many years are required for the investment to reach maturity, and what interest or discount rate your investment has. The result of the equation will be a dollar amount that is smaller than the future amount of principal and interest you will have earned; it is the amount the investment is worth at the present time.

The present value (PV) equation is as follows:

\[
PV = \frac{FV}{(1 + I)^N}
\]

The key inputs in the PV equation are as follows:

- **FV** = the future value of the investment at the end of N years
- **N** = the number of years in the future
- **I** = the interest rate, or the annual interest rate or discount rate
- **PV** = the present value, in today’s dollars, of a sum of money you have invested or plan to invest

After you find these inputs, you can solve for the present value (PV).

Problem 2: Determining Present Value

Let’s suppose your rich uncle promises to give you $500,000 in 40 years. Assuming a six percent interest rate, what is the present value of the amount your uncle is promising to give you in 40 years?

To solve this problem, use the equation given above, which would appear as follows: \(PV = 500,000 / (1 + .06)^{40}\), or $48,611. You can also use a financial calculator. Set your calculator to end mode, meaning payments are at the end of each period, and clear the memory registers to make sure you have no old data in the calculator memories. Set $500,000 as your future value.
(FV), 40 as your number of years (N), and 6 as your interest rate (I); then solve for the present value (PV). You should get the same result as you did when you used the PV equation.

**Future Value (FV)**

Let’s suppose you want to determine what an investment will be worth at some point in the future, i.e., what will the value of my investment be in N years if my interest rate is I percent?

You will need to know how many years it will be until you have the investment, the interest rate, and the amount of the investment (the present value of the investment).

The result of the equation will be a dollar amount that is larger than the original investment, since your money will earn interest and will then earn interest on that interest. For an approximation, remember the rule of 72, which states that an investment will double approximately each time you multiply the number of years of investment by the interest rate (in percentage terms) and get a number that is greater than 72. For example, if your investment is earning 8 percent interest, it will take nine years for it to double (72 divided by 8 = 9).

The future value (FV) equation is as follows:

\[ FV_N = PV \times (1 + I)^N \]

The key inputs in the FV equation are as follows:

- **FV** = future value of the investment at the end of N periods (years)
- **N** = number of years in the future
- **I** = interest rate, or the annual interest (or discount) rate
- **PV** = present value, in today’s dollars, of a sum of money you have already invested or plan to invest

**Problem 3: Determining Future Value**

Let’s look at two similar problems:

A. Calculate the future value (in 15 years) of $5,000 that is earning 10 percent; assume an annual compounding period.

B. Calculate the future value (in 15 years) of $5,000 that is earning 10 percent; assume simple interest (the interest earned does not earn interest).

C. How much did interest on interest earn in the first problem?

A. To solve this problem, we must consider compound interest. On your calculator, clear your registers and your memory. Set –$5,000 as the present value (PV), 10 percent as the interest rate
(1), and 15 as the number of years in the future (N); then solve for the future value (FV), which is $20,886. With a standard calculator, the result is 5,000 * (1 +.10)^15, or the same sum of $20,886.

B. To solve for simple interest, which does not accrue interest on interest, it is easiest to use a standard calculator. First, calculate your annual interest, which is $5,000 times 10 percent (5,000 * .10), or $500. Multiply $500 by 15 years; the result should be $7,500. Then add the amount of the original investment of $5,000 to get $12,500.

C. The difference between $20,886 and $12,500 is $8,386, which is the amount of interest that your interest has earned. This concept is the key to financial success—earn interest on your interest.

Summary

In this chapter, we have become familiar with the language of finance. The language of finance comprises many different concepts and terms, and understanding these concepts and terms is can help you to develop, analyze, and monitor your personal and financial goals successfully.

An investment is the current commitment of money or other resources with the expectation of reaping future benefits. We make investments in many areas of our lives; key investments can involve education and skills, knowledge and friendships, food storage and emergency funds, and finances.

Compounding is an important principle to understand. Compounding periods are the frequency with which interest is applied to your investment. Interest may be compounded daily, weekly, monthly, semiannually, or annually. The sooner your money can earn interest, the faster your interest can earn interest, and the more money you will have.

Present value (PV) is another key term. The present value of an investment refers to the current value of a future sum of money. You must remember, however, that money you will earn in the future is less valuable to you than money you have right now; you cannot use future money to earn interest today. You can only earn interest on money you have in hand.

Future value (FV) is the value an investment will have at some point in the future. The result of a future value equation will be a dollar amount that is larger than the original investment (assuming a positive rate of interest or return) because your money will earn interest and earn interest on that interest.
Financial Plan Assignments

As you read through this chapter, think about the purpose of each financial concept. Use either a calculator or the Excel financial calculator from the Learning Tools chapter to make sure you understand how to solve problems of present value and future value.

Learning Tools

The following Learning Tools may also be helpful as you prepare your Personal Financial Plan:

3. Financial Calculator Tutorial

This document is a financial calculator tutorial about most of the major financial calculators. It also includes the financial formulas if you would prefer to program your own calculator.

12. Excel Financial Calculator

This Excel spreadsheet is a simple financial calculator for those who prefer to use spreadsheets. This tool can perform most of the functions of a financial calculator, including present value, future value, payments, interest rates, and number of periods.

Review Materials

Terminology Review

Compounding (annually, quarterly, daily, etc.): The number of periods during the year where interest is calculated. Compound interest is where interest is paid on previously earned interest as well as on the principal. The shorter the compounding period, the higher the effective annual rate of interest.

Effective interest rate. The actual rate (as opposed to the stated or nominal rate) that is received after the effects of compounding are taken into account.

Inflation. An increase in the volume of available money in relation to the volume of available goods and services; inflation results in a continual rise in the price of various goods and services. In other words, because of increased inflation, your money can buy fewer goods and services today than it could have bought in the past.

Minimum Payment. The minimum amount of payment required by credit card companies each month. The credit card companies purposefully keep these as low as possible, in order to maximize the amount that they earn in interest.
Chapter 9. Time Value of Money 1: Present and Future Value

Review Questions

1. What is compound interest?

2. What are the four variables of the present value equation?

3. What are the 13 financial terms mentioned in the chapter? What do they mean?

4. What is the relationship between the compounding period and the effective interest rate?

Case Studies

Case Study 1

Data

Brian has a goal to have $500,000 saved by the time he turns 65, which is 40 years from now.

Calculation

Assuming he can make 6 percent on his money, what is the value of that money now (this indicates present value)? The math formula is as follows:

\[ PV = \frac{FV}{(1 + I)^N} \]

Case Study 1 Answer

The formula is \( PV = \frac{FV}{(1 + I)^N} \), or \( PV = \frac{500,000}{(1.06)^{40}} \), or $48,611.10. This formula shows you how this equation would be calculated on a standard calculator. Using a financial calculator, you would clear the memories and then enter the following information:

- $500,000 = FV
- 6% = I, which is the interest rate (the annual interest, or discount, rate)
- 40 = N, or the number of years

You would then solve for PV:

\( PV = \) the present value, in today’s dollars, of a sum of money you have invested or plan to invest. If you use a financial calculator for this equation, the present value should come out as $48,611.10.

Case Study 2

Data

Ron has $2,500 saved.

Calculation

If his investment earns 8 percent per year for 20 years, how much will his investment be worth in 20 years (the investment’s future value)? The formula is as follows:
FV = PV (1 + I)^N

**Case Study 2 Answer**

The equation would be $FV = 2,500 \times (1 + 0.08)^{20}$ or $11,652.39$

If you were using a financial calculator, you would clear the memories and then enter the following:

- $2,500 = PV$
- $8\% = I$, which is the interest rate (the annual interest, or discount, rate)
- $40 = N$, or the number of years

You would then solve for FV:

$FV = 11,652.3$

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1. 2 Nephi 9:51
10. Time Value of Money 2: Understanding Inflation, Real Returns, Annuities, and Amortized Loans

Introduction

This chapter continues the discussion on the time value of money. In this chapter, you will learn how inflation impacts your investments; you will also learn how to calculate real returns after inflation as well as annuities and payments on amortized loans.

Objectives

Once you have completed this chapter, you should be able to do the following:

1. Explain how inflation impacts your investments
2. Understand how to calculate real returns (returns after inflation)
3. Solve problems related to annuities
4. Solve problems related to amortized loans

Explain How Inflation Impacts Your Investments

Inflation is an increase in the volume of available money in relation to the volume of available goods and services; inflation results in a continual rise in the price of various goods and services. In other words, because of increased inflation, your money can buy fewer goods and services today than it could have bought in the past.

Inflation negatively impacts your investments. Although the amount of money you are saving now will be the same amount in the future, you will not be able to buy as much with that money in the future (the purchasing power of your money erodes). Inflation makes it necessary to save more because your currency will be worth less in the future.

Problem 1: Inflation

Forty years ago, gum cost five cents a pack. Today it costs 99 cents a pack. Assume that the increase in the price of gum is completely related to inflation and not to other factors. At what rate has inflation increased over the last 40 years?

Before solving this problem, clear your calculator’s memory, and set your calculator to one annual payment. Then input the following information to solve this problem:

\[ PV = -0.05 \text{ (the price of gum forty years ago)} \]
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FV = $0.99 (the price of gum today)
N = 40 (The cost has increased every year for forty years.)
I = ?

The formula is: \((FV/PF)^{(1/N)}-1\)

On average, the inflation rate has been 7.75 percent each year for the last 40 years. So, the average price of gum has increased by 7.75 percent each year for the last 40 years.

**Problem 2: Inflation—The Future Value of a Wedding**

I have six daughters and one son. It is estimated that an average wedding cost $23,000. Assuming four-percent inflation, what would it cost me to pay for all six of my daughters’ weddings in 15 years? (Hopefully not all six weddings will take place in the same year.)

Before you begin, clear your calculator’s memory and set your calculator to one annual payment. Input the following information to solve for the cost of a single wedding in 15 years:

\[PV = \$23,000\] (Assume that on average a wedding still costs $23,000.)
\[N = 15\] (The cost will increase every year for 15 years.)
\[I = 4\] (The inflation rate is four percent.)
\[FV = ?\]

The formula is: \(PV*((1+I)^{(N)})\)

In 15 years, the value of a single wedding will be $41,422. This means six weddings will cost $248,530. Inflation will raise my costs by 80 percent \(((41,422 / 23,000) – 1)\) over the next 15 years, so I need to plan now.

**Understand How to Calculate Real Returns**

A real return is the rate of return you receive after the impact of inflation. As discussed earlier, inflation has a negative impact on your investments because your money will buy less in the future. For example, 40 years ago a gallon of gas cost 25 cents per gallon; currently, gas costs $4.00 per gallon. While the gas itself hasn’t changed (much), the price has increased. To keep your real return constant (in other words, to maintain your buying power), you must actually earn more money in nominal (not inflation adjusted) terms.

Traditionally, investors have calculated the real return \((r_r)\) as simply the nominal return \((r_n)\), or the return you receive, minus the inflation rate \((\pi)\). This method is incorrect. It is preferable to use the following formula:

\[(1 + \text{nominal return } (r_n)) = (1 + \text{real return } (r_r)) * (1 + \text{inflation } (\pi))\]
To solve for the real return, divide both sides of the equation by \((1 + \text{inflation} \,(\pi))\). Once you’ve divided, the equation looks like this:

\[
(1 + \text{nominal return} \,(r_n)) / (1 + \text{inflation} \,(\pi)) = (1 + \text{real return} \,(r_r))
\]

Then, subtract one from both sides and reverse the equation to get the following:

\[
\text{Real return} \,(r_r) = \left[\left(\frac{1 + \text{nominal return} \,(r_n)}{1 + \text{inflation} \,(\pi)}\right) - 1\right]
\]

**Problem 3: Real Return (i.e., the Return after Inflation)**

Paul just graduated from college and landed a job that pays $23,000 per year. Assume that inflation averages 1.96 percent per year.

A. What nominal rate will Paul need to earn in the future to maintain a 2-percent real return rate?

B. In nominal terms, what will Paul’s salary be in 10 years? Assume that his salary keeps up with inflation and that inflation averages the same 1.96 percent per year.

a. To determine the nominal rate of return, remember the formula for real return: \(r_r = \frac{(1 + r_n)}{(1 + \pi)} - 1\). Now plug in the values you know: \(0.02 = \frac{(1 + x)}{(1 + 0.0196)} - 1\). Solving for \(x\) results in a nominal return of 4.00 percent. Thus, Paul’s nominal return must be 4.00 percent in the future to maintain a real return of 2 percent. The formula for the nominal rate of return is \(NR = (1 + RR) * (1+I) - 1\).

b. To maintain his current purchasing power 10 years from now, Paul will have to make $27,927.12 in real terms.

This problem is very similar to the Future Value we have already discussed. Use the following values to solve this problem:

\[
\begin{align*}
\text{PV} &= -$23,000 \text{ (This is Paul’s current salary.)} \\
I &= 2 \text{ (Interest is replaced by inflation.)} \\
N &= 10 \text{ (This is the number of years in the future.)} \\
FV &= ?
\end{align*}
\]

The formula is \(FV = PV \times (1+I)^N\)

**Understand How to Solve Problems Related to Annuities**

An annuity is a series of equal payments that a financial institution makes to an investor; these payments are made at the end of each period (usually a month or a year) for a specific number of
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years. To set up an annuity, an investor and a financial institution (for example, an insurance company) sign a contract in which the investor agrees to transfer a specific amount of money to the financial institution, and the financial institution, in turn, agrees to pay the investor a set amount of money at the end of each period for a specific number of years.

To determine the set amount of each equal payment for a certain investment, you must know the amount of the investment (PV), the interest rate (I), and the number of years the annuity will last (N).

**Problem 4: Annuities**

When you retire at age 60, you have $750,000 in your retirement fund. The financial institution you have invested your money with will pay you an interest rate of 7 percent. Assuming you live to age 90, you will need to receive payments for 30 years after you retire. How much can you expect to receive each year for your $750,000 investment with a 7 percent interest rate?

To solve this problem, input the following information into your financial calculator:

- Set –$750,000 as your present value (PV). Your present value is negative because it is considered an outflow. You pay this amount to the financial institution, and the financial institution pays you back with annual payments.
- Set 30 as the number of years (N).
- Set 7 percent as your interest rate (I). Remember that you may need to convert this percentage to the decimal 0.07 in some calculators.

Now solve for the payment (PMT). The present value of this annuity is $60,439.80. This means you should receive 30 annual payments of $60,439.80 each.

Without a financial calculator, solving this problem is a bit trickier. The formula is as follows:

\[
PMT = \frac{PV_{N,1}}{(1 - (1 / (1 + I)^N)) / I}
\]

\[
PMT = \frac{750,000}{((1 - (1 / (1.07)^{30})) / 0.07) = 60,439.80.
\]

The key is to start saving for retirement as soon as you can. Starting to save early will make a big difference in what you are able to retire with.

**Problem 5: Compound Annuities**

With a compound annuity, you deposit a set sum of money into an investment vehicle at the end of each year; you deposit this amount for a specific number of years and allow that money to grow.
Suppose you are looking to buy a new four-wheeler to remove snow from your driveway. Instead of borrowing the $7,000 you would need to pay for the four-wheeler, you want to save for the purchase. You need to ask yourself two questions:

A. How much will I need to save each month if I want to buy the four-wheeler in 50 months if I can earn 7 percent interest on my investment?

B. How much will I have to save each month if I want to buy the four-wheeler in 24 months if I can earn 7 percent interest on my investment?

Note: The method you use to calculate the monthly payments will depend on the type of financial calculator you have. Some calculators require you to set the number of payments to 12 (for monthly payments) and also divide the interest rate by 12 months. Other calculators only require you to set the number of payments to 12. Determine what your calculator requires before solving problems requiring monthly data.

Before solving for the monthly payment, follow these steps: (1) clear your calculator’s memory, (2) set your number of payments to 12 so that your calculator will calculate monthly payments instead of annual payments, and (3) make sure your calculator is operating in “end mode,” since the payments are received at the end of each period.

To solve the first question, input the following information:

\[
\begin{align*}
\text{FV} &= -$7,000 \\
\text{N} &= 50 \\
\text{I} &= 7 \\
\text{PMT} &= ? \\
\end{align*}
\]

If you earn 7 percent interest on your investment, you will need to save $120.98 each month to save $7,000 in 50 months. If you do not have a financial calculator, use the following to solve this problem:

The formula is

\[
\text{PMT} = \frac{\text{FV}_{N,I}}{(((1 + (I/12))^N) - 1) / (I/12)}
\]

\[
\text{PMT} = \frac{7,000}{(((1 + (0.07/12))^{50}) - 1) / (0.07/12)} = 120.98
\]

To solve the second question, input the following information:

\[
\begin{align*}
\text{FV} &= -$7,000 \\
\text{N} &= 24 \\
\text{I} &= 7 \\
\text{PMT} &= ? \\
\end{align*}
\]
After solving for the payment, you will discover that you need to save $272.57 each month to save $7,000 in 24 months. If you do not have a financial calculator, use the following to solve this problem:

\[
PMT = \frac{7,000}{\left(\left(1 + \left(\frac{0.07}{12}\right)^{24}\right) - 1\right) / \left(\frac{0.07}{12}\right)} = \$272.57
\]

As a general rule, it is better to save for a purchase than to borrow money for it because when you borrow you will have to pay interest instead of earning interest.

**Problem 6: Present Value of Annuities**

Let’s try another sample problem using annuities; this time, we will be calculating the present value instead of the set payment amount.

There are two people who each want to buy your house. The first person offers you $200,000 today, while the second person offers you 25 annual payments of $15,000. Assume a 5 percent interest or discount rate. What is the present value of each offer? If you could take either offer, which person would you sell your house to?

First offer: The present value of this offer is $200,000 because the buyer can pay you all of the money today.

Second offer: This offer is a little different because you will not receive all of the money today; therefore, you must calculate the present value.

To calculate the present value of the first offer using a financial calculator, clear your calculator’s memory, set the number of payments to one annual payment, and make sure your calculator is set to “end mode.” Then, input the following information:

\[
PMT = -\$15,000
data types of N = 25
data types of I = 5
\]

The present value of the second offer is $211,409. If you do not have a financial calculator, use the following formula to solve for the present value:

\[
PV_{N,1} = PMT \times \left(1 - \left(\frac{1}{1 + I}\right)^N\right) / I
\]

\[
PV_{N,1} = 15,000 \times \left[1 - \left(\frac{1}{1.05}\right)^{25}\right] / 0.05 = \$211,409
\]

Which is the better offer? The second offer has a higher present value: if we can assume that you don’t need the money right away and that you are willing to wait for payments and confident the buyer will pay you on schedule, you should accept the second offer. As you can see from this example, it is very important that you know how to evaluate different cash flows.
Problem 7: Future Value of Annuities

Just as it is possible to calculate the present value of an annuity, it is also possible to calculate the future value of an annuity.

Josephine, age 22, started working full time and plans to deposit $3,000 annually into an IRA that earns 6 percent interest. How much will be in her IRA in 20 years? 30 years? 40 years?

To solve this problem, clear your calculator’s memory and set the number of payments to one (for an annual payment). Set I equal to six and the PMT equal to $3,000. The formula is: $\text{PMT} \times \frac{((1 + I)^N) - 1}{I}$.

- For 20 years: Set N equal to 20 and solve for FV. $FV = 110,357$
- For 30 years: Set N equal to 30 and solve for FV. $FV = 237,175$
- For 40 years: Set N equal to 40 and solve for FV. $FV = 464,286$

If Josephine increased her return rate to 10 percent, how much money would she have after each of the three time periods? How does this interest rate compare to the 6 percent interest rate over time?

Do the previous problems at 10 percent interest. Begin by clearing the calculator’s memory. Set I equal to 10 and the PMT equal to $3,000.

- For 20 years: Set N equal to 20 and solve for FV. $FV = 171,825$ ($61,468 more than she would earn at the 6 percent interest rate)
- For 30 years: Set N equal to 30 and solve for FV. $FV = 493,482.07$ ($256,307.51 more than at the 6 percent rate)
- For 40 years: Set N equal to 40 and solve for FV. $FV = 1,327,777.67$ ($863,491.77 more than at the 6 percent rate)

Your rate of return and the length of time you invest make a big difference when you retire.

Solve Problems Related to Amortized Loans

An amortized loan is paid off in equal installments (payments) made up of both principal and interest. With an amortized loan, the interest payments decrease as your outstanding principal decreases; therefore, with each payment a greater amount of money goes toward the principal of the loan. Examples of amortized loans include car loans and home mortgages.

To determine the amount of a payment, you must know the amount borrowed (PV), the number of periods during the life of the loan (N), and the interest rate on the loan (I).
Problem 8: Buying a Car

You take out a loan for $36,000 to purchase a new car. If the interest rate on this loan is 15 percent, and you want to repay the loan in four annual payments, how much will each annual payment be? How much interest will you have paid for the car loan at the end of four years?

Before solving this problem, clear your calculator’s memory and set your calculator to one annual payment. Input the following information into your financial calculator:

\[
\begin{align*}
PV &= -$36,000 \\
N &= 4 \\
I &= 15 \\
PMT &= ?
\end{align*}
\]

Solve for your PMT to get $12,609.55.

The formula is:

\[
PMT = \frac{PV \times N \times I}{(1 - (1 / (1 + I)^N)) / I}
\]

The amount of interest you will have paid after four years is equal to the total amount of the payments ($12,609.55 * 4 = $50,438.20) minus the cost of your automobile ($36,000); the total comes to $14,438.21. That is one expensive loan! In fact, the interest alone is more than the cost of another less-expensive car. If you want to buy this car, go ahead, but don’t buy it on credit—save for it!

Problem 9: Buying a House

What are the monthly payments on each of the following mortgage loans? Which loan is the best option for a homeowner who can afford payments of $875 per month? What is the total amount that will be paid for each loan? Assume each mortgage is $100,000.

Loan A: 30-year loan with a fixed interest rate of 8.5 percent
Loan B: 15-year loan with a fixed interest rate of 7.75 percent
Loan C: 20-year loan with a fixed interest rate of 8.125 percent

Loan A. To determine the monthly payment for a 30-year loan with an 8.5-percent fixed interest rate, clear your calculator’s memory, then set your calculator to 12 monthly payments and “end mode.” Input the following to solve this equation:

\[
\begin{align*}
PV &= -$100,000 \\
N &= 360 \text{ (Calculate the number of monthly periods by multiplying the length of the loan by the number of months in a year: } 30 \times 12 = 360.) \\
I &= 8.5/12 \\
PMT &= ?
\end{align*}
\]
Your monthly payment for this loan would be $768.91, and the total amount of all payments would be $768.91 * 360, or $276,807.60.

The formula is: \( PV/((1-(1/(1+(I/P))^N*P)))/(I/P)) \)

**Loan B.** For a 15-year loan at 7.75 percent interest, follow the same steps explained above. This time, input the information listed below:

\[ \begin{align*}
PV &= -$100,000 \\
N &= 15 \times 12 = 180 \\
I &= 7.75 \\
PMT &= ?
\end{align*} \]

The monthly payment for this loan would be $941.28, and the total amount of all payments would be $941.28 * 180, or $169,430.40.

**Loan C.** For a 20-year loan at 8.125 percent interest, the calculations are still the same. Input the following in your financial calculator:

\[ \begin{align*}
PV &= -$100,000 \\
N &= 20 \times 12 = 240 \\
I &= 8.125 \\
PMT &= ?
\end{align*} \]

The monthly payment for this loan would be $844.24, and the total amount of all payments would be $844.24 * 240, or $202,617.60.

Considering the mortgage payment the homeowner can afford, the best financial option is Loan C—the 20-year fixed-rate mortgage at 8.125 percent interest. This loan would allow the homeowner to pay off the home in 10 fewer years than if he or she had the 30-year loan and to pay $74,190 less.

**Problem 10: Becoming a Millionaire**

Your friend thinks becoming millionaire is totally beyond her earning abilities. You, financial wizard that you are, plan to show her otherwise. Assuming your friend is 25 years old and will retire at age 65, and assuming a 6 percent interest rate, how much will she have to save each month to reach her goal of becoming a millionaire when she retires? How much each month if she earns 9 percent on her investments?

Clear your memory and set payments to monthly. \( FV = 1,000,000 \) \( N = (40 \times 12) \) \( I = 6\% \), Solve for Payment (PMT)
Chapter 10. Time Value of Money 2: Inflation, Real Returns, Annuities, and Amortized Loans

PMT = $502.14. She will need to save $502 per month.

The formula is: \( FV/(((1+(I/P))^{(N*P)} -1)/(I/P)) \)

At 9 percent interest:

Clear your memory and set payments to monthly. \( FV = 1,000,000, N = (40 * 12), I = 9\% \), Solve for Payment (PMT)
\( PMT = $213.62 \). She will need to save only $214 per month.

It’s not that hard to become a millionaire if you invest a specific amount every month and can earn a modest interest rate.

Summary

The major goal of this chapter was to help you better understand the time value of money. This chapter also helped you understand how inflation impacts your investments.

Real return is the rate of return you receive after the impact of inflation. As discussed earlier, inflation has a negative impact on your investments because you will not be able to buy as much with your money in the future. Traditionally, investors have calculated real returns with the approximation method by simply using the nominal return minus the inflation rate. Although the approximation method is fairly accurate, it can give incorrect answers when it is used for precise financial calculations. Because of the possibility of error, it is preferable to use the exact formula: \( (1 + \text{nominal return } (r_n)) = (1 + \text{real return } (r_r)) * (1 + \text{inflation } (\pi)) = (1 + \text{nominal return } (r_n)) / (1 + \text{inflation } (\pi)) – 1. \)

Inflation is an increase in the volume of available money in relation to the volume of available goods and services; inflation results in a continual rise in the price of various goods and services. Because of inflation, you can buy fewer goods and services with your money today than you could have bought in the past.

An amortized loan is paid off in equal installments (payments) that are made up of both principal and interest. With an amortized loan, the interest payments decrease as your outstanding principal decreases; therefore, with each payment, you pay a larger amount on the principal of the loan. Examples of amortized loans include car loans and home mortgages.

An annuity is a series of equal payments that a financial institution makes to an investor at the end of each period (usually a month or a year) for a specific number of years. A compound annuity is a type of investment in which a set sum of money is deposited into an investment vehicle at the end of each year for a specific number of years and allowed to grow. Annuities are important because they can help you prepare for retirement and allow you to receive a specific payment every period for a number of years.
Financial Plan Assignments

As you read through this chapter, think about the purpose of each new financial idea: annuities, present value of an annuity, and future value of an annuity. Also review the uses of amortized loans and the calculations that concern them. Using either your financial calculator or the Excel financial calculator from the Learning Tools section, make sure you understand how to solve problems of amortized loans and annuities, including the present and the future value of an annuity. It is also critical that you understand the impact of inflation on returns. Make sure you understand the correct method for calculating real returns (the return after the impact of inflation).

Learning Tools

The following Learning Tools may also be helpful as you prepare your Personal Financial Plan:

3. Financial Calculator Tutorial

This document is a tutorial for how to use most of the major financial calculators. It also includes the financial formulas for those who prefer to program their own calculators.

12. Excel Financial Calculator

This Excel spreadsheet is a simple financial calculator for those who prefer to use spreadsheets rather than financial calculators. It can perform most of the functions of a financial calculator, including the functions of present value, future value, payments, interest rates, and number of periods.

Review Materials

Terminology Review

Annual Percentage Rate (APR). The APR is a rate that is generated from a precise calculation specified in Regulation Z. It only takes into account the fees going into the loan and does not take into account the time value of money.

Balloon Mortgages. These are mortgage loans whose interest and principal payment won’t result in the loan being paid in full at the end of the term. The final payment, or balloon, can be significantly large. These loans are often used when the debtor expects to refinance the loan closer to maturity.
**Buyer’s broker.** This is a realtor that works specifically for the buyer and is paid by the buyer. The have a fiduciary responsibility to the buyer and not the seller which is different from the traditional buyer seller broker relationship.

**Conventional loans.** These are loans that are neither insured nor guaranteed. They are below the maximum amount set by Fannie Mae and Freddy Mac of $417,000 in 2016 (single family). They require Private Mortgage Insurance (PMI) if the down payment is less than 20%.

**Covenants, Conditions and Restrictions** (CCRs). These are legal documents that can affect what you can do with any potential homes. These can be quite restrictive as to what you can and cannot do with your home including exterior, landscaping, and other requirements. If you cannot live with the CCRs, don’t buy there.

**Debt Obligations or Back-end Ratio.** This housing affordability ratio calculates what percent of your income is used for housing expenses plus debt obligations. It should not exceed 36% of your monthly gross income. The formula is: Monthly PITI and other debt obligations/ monthly gross income < 36%. Debt obligations include mortgage payments, credit card, student loan, car, and other loan payments. PITI = Principal, interest, property taxes, and property insurance.

**Down payment.** This is the amount that you pay on the house to reduce the cost of the loan. Generally, lenders like a significant down payment as that indicates that the borrower is not likely to walk away from the loan. Different loans require different down payment amounts, i.e Conventional loans – 20% recommended (but you can get in with 5%), FHA loans – 3.5%, and VA loans – 0% down payment required.

**Effective Interest Rate.** This is the precise interest rate you are paying, after all costs and fees (regardless whether they are paid in the loan or out of the loan). The goal of a good loan is to have the lowest effective interest rate, which takes into account the time value of money.

**FHA Loans.** These are Federal Housing Administration (FHA) Insured Loans. The FHA does not originate any loans, but insures the loans issued by others based on income and other qualifications. There is lower PMI insurance, but it is required for the entire life of the loan (1.5% of the loan). While the required down payment is very low, the maximum amount that can be borrowed is also low.

**Fixed rate mortgages** (FRMs). These are mortgage loans with a fixed rate of interest for the life of the loan. These are the least risky from the borrower’s point of view, as the lender assumes the major interest rate risk above the loan rate. These are the most-recommended option for new home buyers.
Good Faith Estimates (GFE). This is an estimate from each lender (not just a Summary) of the likely costs you will likely pay as you complete the loan process. I recommend you get GFEs from each potential lender and compare them.

Home Inspection. This is a service, usually paid for by the buyer, to alert them to potential problems with the home. Many of these problems should be fixed by the seller prior to purchase and so these problems need to be discovered and disclosed. Don’t buy someone’s problems.

Housing Expenses or Front-end Ratio. This is a housing affordability ratio that calculates what percent of an your income is used to make mortgage payments. Housing expenses should be less than 28% of your monthly gross income. The formula is: monthly PITI*/monthly gross income <28%. PITI = mortgage principle, mortgage interest, property taxes, and property insurance.

Impound/escrow/reserve accounts. These accounts are that portion of a the monthly payments held by the lender or servicer to pay for: Taxes, Hazard insurance, Mortgage insurance, Lease payments, and Other items as they become due. These are for payments for items above which are over and above your monthly mortgage payments of principle and interest. These may or may not be required by your lender.

Interest only Option loans. These are FRMs or ARMs with an option that allows interest only payments for a certain number of years, and then payments are reset to amortize the entire loan over the remaining years. Some will take out an interest only loan to free up principal to pay down other more expensive debt. Once the interest-only period has passed, the payment amount resets, and the increase in payment can be substantial. These are generally not recommended.

Jumbo loans. These are loans in excess of the conventional loan limits and the maximum eligible for purchase by the two Federal Agencies, Fannie Mae and Freddy Mac, of $417,000 in 2016 (some areas have higher amounts). Some lenders also use the term to refer to programs for even larger loans, e.g., loans in excess of $500,000.

LDS Housing Ratios. As members of the Church, we have other important obligations that we also pay, i.e., tithing and paying ourselves, i.e., savings. As such, should have smaller houses (at least less expensive), because we pay the Lord first and ourselves second. For a spreadsheet that takes into account the fact that we pay the Lord first and ourselves second within this front-end and back-end ratio framework, see: Maximum Monthly Mortgage Payments for LDS Spreadsheet (from the website).

Loan term. This is the duration of the loan. It can be 10, 15, 20 or 30 years depending on your goals and your cash flow situation.
Negative Amortization Mortgages (NegAm). These are mortgage loans in which scheduled monthly payments are insufficient to amortize, or pay off the loan. Interest expense that has been incurred, but not paid is added to the principal amount, which increases the amount of the debt. Some NegAm loans have a maximum negative amortization that is allowed. Once that limit is hit, rates adjust to make sure interest is sufficient to not exceed the maximum limit.

Option Adjustable Rate Mortgages (Option ARMs). This is an ARM where interest rate adjusts monthly, and payments annually, with “options” on the payment amount, and a minimum payment which may be less than the interest-only payment. The minimum payment option often results in a growing loan balance, termed negative amortization, which has a specific maximum for the loan. Once this maximum is reached, payments are automatically increased and the loan becomes fully amortizing after 5 or 10 years, regardless of increase in payment and must be repaid within the 30 year limit. These are not recommended.

Piggyback loans. These are two separate loans, one for 80% of the value of the home and one for 20%. The second loan has a higher interest rate due to its higher risk. The second loan is used to eliminate the need for PM Insurance. With a piggyback loan, PMI is not needed, but these are much harder to get now.

Points. Points are fees for a loan. 1 Point is one percent or one hundred basis points of the loan. This money is pre-paid interest, money paid to the mortgage broker (not the lender). It is deducted from the loan proceeds (you still must pay it back), and is essentially another fee for helping you arrange the loan (minimize points). Lenders charge points to recover costs associated with lending, to increase their profit, and provide for negotiating flexibility. You will like have to pay origination points, but buy-down points (to reduce the interest rate on the loan) are purely optional.

Pre-approval. Pre-approval is the process whereby lenders have pull your credit score, looked at your tax records and approve you for a specific amount of a loan. Get pre-approved for your loan by a number of lenders (with mortgage loans, you can have multiple loans requested within a 90 period and its counted as one loan request). You can borrow up to this pre-approved amount without a problem. Remember however that you do not need to borrow that amount. I recommend you borrow less than that amount.

Prepayment. Prepayment is the process where you repay the loan early, either through paying off the loan or selling the house and the new buying paying off the old loan.

Pre-qualified. Pre-qualified is a process where lenders estimate your credit based on information you tell them. I recommend you get pre-approved, not pre-qualified.

Realtor or Real Estate Broker. This is a person supposedly trained in the process of selling and buying real estate. You want a realtor that know the market in the area you
are looking at. Remember that realtors are paid by the seller, so remember that in your associations. Sellers divide the sales commission (usually 6-8%) between the listing realtor and the buying realtor.

**Reverse Mortgages.** These are mortgage loans whose proceeds are made available against the homeowner’s equity. Financial institutions in essence purchase the home and allow the seller the option to stay in the home until they die. Once they die, the home is sold and the loan repaid, generally with the proceeds. These are typically used by cash-poor but home-rich homeowners who need to access the equity in their homes to supplement their monthly income at retirement.

**Underwriting.** Underwriting is the process whereby the borrower fulfills the requirement of the lender and the lender funds the loan. It also includes the lender selling the loan and the loan being syndicated and sold to investors.

**Upfront costs.** These are cost due at the signing of the loan which include closing costs and points, down payment (3-20 percent of the loan amount), and other closing costs including points (3-7 percent).

**VA Loans.** These are Veterans Administration (VA) Guaranteed Loans. These loans are issued by others and guaranteed by the Veterans Administration. They are only for ex-servicemen and women as well as those on active duty. Loans may be for 100% of the home value.

**Variable or Adjustable Rate Mortgages (ARMs).** These are mortgage loans with a rate of interest that is pegged to a specific index that changes periodically, plus a margin that is set for the life of the loan. Generally the interest rate is lower compared to a fixed rate loan, as the borrower assumes more of the interest rate risk. The may have a fixed rate for a certain period of time, then afterwards adjust on a periodic basis.

**Learning Tools**

**Mortgage Payments for LDS Spreadsheet (LT 11) (from the website).** As members of the Church, we have other important obligations that we also pay in addition to normal expenses, i.e., tithing and paying ourselves, i.e., savings. As such, should have smaller houses (at least less expensive), because we pay the Lord first and ourselves second. This spreadsheet that takes into account the fact that we pay the Lord first and ourselves second within this front-end and back-end ratio framework.

**Home Loan Comparison with Prepayment and Refinancing (LT 10).** The purpose of this tool is to give an excel template for determining which of three different loans would be most attractive to you based on your estimates of closing costs, interest rates, points, and how long you will be in the home. These inputs are critical to calculating the
effective interest rate, which is the effective rate after all costs and fees are taken into account. It also offers help with the refinancing, buy down, and prepayment decisions.

Review Questions

1. What is an annuity?
2. How do you set up an annuity?
3. What is a compound annuity?
4. What is the relationship between interest rate and present value?
5. What is inflation? How does it impact investments?

Case Studies

Case Study 1

Data
Lee is 35 years old and makes a $4,000 payment every year into a Roth Individual Retirement Account (IRA) (this is an annuity) for 30 years.

Calculations
Assuming the discount, or interest, rate Lee will earn is 6 percent, what will be the value of his Roth IRA investment when he retires (this is future value)?

Note: The formula is a bit tricky. It is
\[ FV_{N,I} = \text{Payment} \times \left(\frac{(1 + I)^N - 1}{I}\right) \] (This is the future value of an annuity factor)

Case Study 1 Answer

There are two ways for Lee to solve the problem. Using the formula, the problem is solved this way:

\[ FV_{N,I} = \text{Payment} \times \left(\frac{(1 + I)^N - 1}{I}\right) = FV = \frac{4,000 \times [(1.06)^{30} - 1]}{.06} = $316,232.75 \]

If you are using a financial calculator, clear the calculator’s memory and solve:

1 = P/Y (payments per year)
4,000 = PMT (payment)
6 = I (interest rate)
30 = N (number of years)
Solve for FV = $316,232.75

Case Study 2

Data
Janice will make a yearly $2,000 payment for 40 years into a traditional IRA account.
Calculations
Given that the discount, or interest, rate is 6 percent, what is the current value of Janice’s investment in today’s dollars? The formula is:
\[ PV_{N,I} = \text{Payment} \times \left[ 1 - \left( \frac{1}{1 + I} \right)^N \right] / I \] (the present value of an annuity factor \( N,I \))

Case Study 2 Answer
Using the formula, the calculation is
\[ PV_{N,I} = \text{Payment} \times \left[ 1 - \left( \frac{1}{1 + I} \right)^N \right] / I = \text{PV} = 2,000 \times \left[ 1 - \left( \frac{1}{1.06} \right)^{40} \right] / .06 = \$30,092.59 \]

Using the financial calculator, the calculation is
Clear memories and use the following:
1 = P/Y
2,000 = PMT
6 = I
40 = N
Solve for PV = $30,092.59

Case Study 3
Data
Brady wants to borrow $20,000 dollars for a new car at 13 percent interest.

Calculations
He wants to repay the loan in five annual payments. How much will he have to pay each year (this indicates present value)? The formula is the same formula that was used in the previous problem:
\[ PV_N = \text{Payment} \times (PVIFA_{I,N}) \]

Case Study 3 Answer
Using the formula, put Brady’s borrowed amount into the equation and solve for your payment.
\[ PV_{N,1} = \text{Payment} \times \left[ 1 - \left( \frac{1}{1 + I} \right)^N \right] / I = \text{PV} = 20,000 = \text{Payment} \times \left[ 1 - \left( \frac{1}{1.13} \right)^5 \right] / .13 = \$5,686.29 \text{ per year.} \]

Using a financial calculator, clear the calculator’s memory and use the following:
1 = P/Y
20000 = PV
13 = I
5 = N
Solve for PMT = $5,686.29
Case Study 4

Data
Kaili has reviewed the impact of inflation in the late 1970s. She reviewed one of her parent’s investments during that time period and discovered that inflation was 20 percent and that her parent’s investment made a 30 percent return.

Calculations
What was her parent’s real return on this investment during that period?

Case Study 4 Answers

The traditional (and incorrect) method for calculating real returns is
Nominal return – inflation = real return. This formula would give you a real return of 10%: 30% – 20% = 10%.

The correct method is \( \frac{1 + \text{nominal return}}{1 + \text{inflation}} - 1 = \text{real return} \)
\[
\frac{1.30}{1.20} - 1 = 8.33\%.
\]

In this example, the traditional method overstates return by 20 percent \((10\% / 8.33\% - 1)\). Be very careful of inflation, especially high inflation!
11. Insurance 1: Understanding the Basics

Introduction

The purpose of insurance—and financial planning in general—is to make our lives more predictable from a financial standpoint. All people face the risk of certain types of loss every day: these risks pertain to our health, automobiles, homes, and many other aspects of our lives. Through the appropriate use of insurance products, you can make the risks of loss more manageable and predictable; managing your risks can bring you more peace of mind as you go about your daily activities and as you seek to achieve your personal and family goals.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand what leaders have said regarding insurance
2. Recognize the importance of insurance
3. Understand the key principles of insurance planning

Understand What Leaders Have Said Regarding Insurance

Acquiring insurance is an important step toward becoming financially self-reliant. We have been counseled by our leaders to live within our means, to put our lives in order, to provide for our future, and to obtain adequate insurance to meet our responsibilities as parents. We have also been commanded by the Lord to take care of our families.\(^1\) Marvin J. Ashton offered the following counsel on insurance:

It is most important to have sufficient medical, automobile, and homeowner’s insurance and an adequate life insurance program. Costs associated with illness, accident, and death may be so large that uninsured families can be financially burdened for many years.\(^2\)

N. Eldon Tanner also commented on this topic, saying “Every family should make provision for proper health and life insurance.”\(^3\)

Recognize the Importance of Insurance

Insurance is a legal contract between you and an insurance firm. The insurance firm agrees that if you pay a specified amount, known as a premium, the firm will compensate you for certain kinds of losses or events, such as death, sickness, accident, loss of ability to work, and legal expenses.
There are many types of insurance, and because of the different natures of various types of risk, we have divided our discussion of insurance into sections about life insurance, health insurance, auto insurance, homeowner’s/renter’s insurance, and liability insurance.

**The Importance of Insurance**

The concept of insurance was sparked by the idea of pooling risk. People with families and valuable property have always faced the possibility of loss; the possibility of such loss has caused individuals so much concern that they have pursued options for the replacement of their loss. Thus, the practice of insuring property for its replacement value evolved. Life insurance, the practice of replacing the economic value of a human life, has also grown out of this same thought process.

Insurance allows you to transfer the financial risk of certain types of losses to another entity, usually an insurance company, which is organized according to stringent federal and state regulations specifically for the purpose of protecting you against losses. By transferring the financial risk to such an entity and paying the required premiums, you can receive compensation for loss in the form of either a lump sum or an annual amount of money. This compensation can maintain or replace your income stream. In this way, insurance helps you and/or your family maintain financial stability if you get sick or become unable to work because of disability, injury, or death.

If you have insurance but do not incur a loss for which you had coverage, you lose only the premium you paid, although some insurance policies do have a return-of-premium feature. Even though a particular loss may not occur, you still receive value from the premium paid in the form of peace of mind and the knowledge that you are taking care of your family. If you do not have insurance and you are sued, get sick, or die, you and your family may suffer serious consequences: your family may have to rely on only one income or a reduced income to get by, and your children may not be able to achieve important goals. Insurance allows you to transfer the financial responsibility for risks like illness, disability, and death to an institution capable of handling these risks.

**Managing Risk**

An important part of determining the right level of insurance you should have is understanding risk. Risk, in terms of insurance, is uncertainty concerning the occurrence of a specified loss.

There is risk in all areas of life, including your lifestyle, your career, your environment, and so on. You can manage risk in four ways: you can avoid it, reduce it, assume it, or transfer it.

You can **avoid** some risks. For example, you can avoid some health risks by taking care of yourself, eating well, exercising, and avoiding high-risk activities where you might be hurt, such as skydiving. You can avoid some financial risks by diversifying your investments.
You can **reduce** some risks by adding fire extinguishers and burglar alarms to your home, adding airbags to your car, using seat belts, and getting regular medical checkups. By taking these precautions, you can reduce the potential damage of some risks.

You can **assume** some types of risk through self-insurance. For example, I used to own a 1973 Ford Pinto. Instead of carrying full-coverage insurance, which would have allowed me to get the car fixed if it were in an accident, I carried only liability insurance. If I had been in an accident, I would have had to pay to have the car fixed myself (in other words, I assumed the risk of repair and collision costs). If the costs are not too high, you can assume some risks by assuming the potential for additional costs, i.e., a higher deductible, and keeping a slightly larger emergency fund.

You can **transfer** risk to others by purchasing insurance and thus transfer financial responsibility for a specific risk—death, disability, liability, and so on—from yourself to an insurance company.

Once you understand how to manage risk, you can determine which risks you can avoid, reduce, or assume, and which risks you should transfer to an insurance company or other entity.

**The Key to Insurance**

The key to insurance is balancing the cost of reducing risk with the potential severity of a loss. Should you insure against all losses? While this may be possible for some people, it is not possible for most—the costs would be too high.

The key is to realize that some losses are not as critical as others. You should insure yourself against high-severity losses that rarely occur—those that would have a major impact on the financial condition of you and your family—such as death, illness, auto or home accidents, and accompanying liability issues. And you should avoid, reduce, or assume the other risks.

You can analyze and classify risk by looking at two important areas. The first area is the frequency of the potential loss: how often could the loss happen? Could it happen every month, every year, or just once in a lifetime? The second area is the severity of the loss: how severe would the implications be for you and your family if the loss occurred? These factors can be charted in Table 1.

**Understand the Key Principles of Insurance Planning**

Insurance should be an important part of your Personal Financial Plan. There are several different approaches to building an effective insurance plan. One approach is to focus on specific products; however, insurance products will and do change over time as new products are developed. A better method is a principles-based approach. While products may change over time, the principles regarding effective insurance planning do not change.
Table 1. Risk Matrix for Understanding Insurance

<table>
<thead>
<tr>
<th>Severity of Loss</th>
<th>Frequency of Loss</th>
</tr>
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<tbody>
<tr>
<td>High</td>
<td>High</td>
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<tr>
<td></td>
<td>Avoid</td>
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<tr>
<td></td>
<td>Reduce</td>
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<tr>
<td>Low</td>
<td>Transfer</td>
</tr>
<tr>
<td></td>
<td>Reduce</td>
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<tr>
<td></td>
<td>Assume</td>
</tr>
</tbody>
</table>

The key to insurance is to balance the cost of reducing risk with the severity of the potential loss. Insure against high-severity losses that rarely occur—that those events that could have a major impact on your financial situation. Reduce and avoid other risks to the extent that you can. Finally, self-insure against smaller risks that will have limited impact on your financial situation. Use insurance for what insurance does best. Be careful in using insurance products as an investment, or investment products as insurance.

So what are the key principles of insurance planning that we can apply to help us manage our various insurance products wisely? The following are a few ideas to help you understand the key principles of insurance planning:

1. **Know Yourself and Your Goals**

   Insurance is a tool that can help you plan for the future while living in the present. However, before you can develop an insurance plan, you must know what is important to you and what you want from life. Insurance is not an end in itself: it is a tool to help you achieve your personal goals. What are your goals? One goal may include replacing your salary should you die.

   Once you determine your goals, the challenge becomes figuring out which insurance products can help you reach your goals the fastest. You should understand each insurance product well. While it will take a significant amount of time to understand insurance products individually, your understanding of the main insurance products will increase with a general overview.

   Recognize that your insurance needs will change over time. Plan for the future, but live in the present.
2. Know Your Budget and How Much You Can Afford

Before you can determine which insurance products you need, you must set a budget. How much can you afford to spend on insurance needs? It is important to be cost-effective in your insurance planning. Insurance is a long-term product, and certain insurance products have higher premiums than others; it makes no sense to begin an insurance program you cannot continue. As you think about your goals and insurance needs, recognize the potential for change in your income—or even loss of income—and the possible impact of such changes on your budget.

However, you need insurance to help you face risks that are beyond your control. You will face financial responsibility if certain adverse events occur. In making insurance decisions it is important to purchase all insurance that is necessary to allow you to survive the foreseeable adverse events of life. If your current consumption does not leave enough money in your budget to purchase necessary insurance, then you may need to reevaluate your priorities.

3. Understand in Detail the Costs and Benefits of Each Insurance Product

Knowledge is power. If you are to make wise decisions in your insurance planning, it is critical for you to understand in detail the costs, benefits, and risks of insurance products and their providers. Do your homework early and you will better understand what various insurance products can and cannot do. Weigh the costs and benefits carefully before you purchase a particular insurance product. Many insurance products have high beginning or up-front expenses and are very expensive to modify or change after the policy is in force.

Also, compare products across companies, and make sure you understand the differences between competing products. Ask for help from your insurance agent or potential insurance agent if you don’t understand the differences.

4. Insure Against High-Cost, High-Severity Losses Only

Insure yourself against events that would have a major economic impact on you or your family. Self-insure against events that would have a smaller economic impact. Balance your need for insurance with the cost of the insurance. The goal is to use insurance to provide funds in those most adverse circumstances where your personal resources would not be sufficient.

5. Work Only with High-Quality Individuals and Institutions

Trust is a critical component of your insurance relationship. Since insurance is a long-term commitment, you want a relationship with an institution that will be willing and able to help you now and in the future. Work with individuals and institutions that make you comfortable. If you feel pressure in any way to purchase a product, find another insurance agent; you do not want an insurance agent who is there just for the sale. The key is to find an agent who will work in your best interests and help you achieve your goals, while at the same time finding an insurance agency that pays up when agreed so you don’t have to dispute every charge.
Know how insurance agents are paid. Minimize the potential for conflicts of interest by understanding the costs of insurance products and how insurance agents are paid for selling these products. For example, the commission paid on cash-value life insurance policies to insurance agents can be 10 to 20 times higher than commissions paid on term life insurance policies with the same face or policy amount. While the former are much more complex products and may have additional benefits over the alternatives, it is important to understand the potential for conflicts of interest.

Evaluate the insurance company carefully. You want to make sure that your insurance agent and the company will be around for a long time. Make sure the company is financially sound before you purchase their products. Getting your insurance products from the firm with the lowest prices will do you little good if the insurance company goes out of business. You can also evaluate the insurance company by checking the company’s rating with various insurance-rating firms.

6. Review Your Insurance Needs Annually

Remember, your insurance needs may change over time as your family situation, investment portfolio, and work situation change. Use wisdom in planning your insurance coverage and in making changes to your policies. Be especially careful of the costs of making changes—many insurance products have higher up-front or beginning costs. Be an informed consumer of insurance products.

Summary

The insurance industry is always changing, and it can be a challenge to understand the many insurance products available. Each of the many products the insurance industry offers has unique benefits and costs. Understanding what Church leaders have said regarding insurance will help you realize the importance of insurance as part of your Personal Financial Plan and your family’s financial plan. If you understand how insurance can help you, you will be better prepared for the challenges you may encounter in your life. Finally, by understanding and applying the principles of insurance planning as they are outlined in this chapter, you can make sure the products you choose are the products that will most likely help you achieve your personal goals.

Assignments

Financial Plan Assignments

As you learn about the different types of insurance in this course, think about the different ways to manage risk and the key principles of insurance planning. These principles are important because they provide a structure to help you evaluate the different types of insurance and the uses of different insurance products. Think about these principles as you read through the succeeding chapters on health insurance, life insurance, auto insurance, property insurance, and liability insurance. Think about how you can apply the principles of risk management and
insurance planning to the different types of insurance. You will incorporate these principles in the assignments for the succeeding chapters.

**Review Materials**

**Terminology Review**

**Earnings multiple approach.** This is one approach for determining the amount of life insurance required. The goal is earnings replacement. The earnings multiple approach seeks to replace the annual salary stream of a bread winner for X years, normally 10 – 15 times gross salary.

**Insurance.** Insurance is a tool help you achieve your personal and family goals. It is a product that transfers the risk of certain types of losses or events from an individual to another institution. By transferring risk, it can help the individuals achieve specific goals if they die, get sick or become unable to work. But it is a tool that needs to be understood and used wisely.

**Investment risk.** This is the risk of who takes responsibility for the investment outcome, the insurance company or the insured.

**Life insurance.** This is insurance that provides compensation to your beneficiaries should you die prematurely. It transfers the economic loss of death from an individual to a insurance company by way of a life insurance contract. It can help us take care of our own and extended families should we die.

**Mortality risk.** This is the risk that the insured dies outside the contract period and is therefore not covered by insurance.

**Needs Approach.** This is an approach for determining the amount of life insurance that is required. It determines the total needs of the beneficiaries which includes immediate, debt elimination, transitional, dependency, spousal life income, education, and retirement needs. It is the most detailed of the approaches.

**Permanent insurance.** Permanent insurance is an insurance contract that is purchased for the entire life of the policy holder with premiums divided between death protection and savings. Provides insurance that cannot be cancelled, may be used for estate retirement, and savings. It is complex, expensive, and not transparent, and unless premiums are paid, it can expire worthless. Please note that certain permanent products are not permanent, i.e. they can lose money.

**Risk pooling.** It is the process where individuals transfer or share their risks with others to reduce catastrophic losses from health problems, accidents, lawsuits, etc.
Term Insurance. Term insurance is insurance protection for the insured over a specific term or time period. They may be renewable or non-renewable policies. It is the least expensive form of insurance and the death benefit coverage is only for a specific term.

Review Questions

1. What is insurance?
2. What is the purpose of insurance?
3. In regard to insurance, what is risk? What are the four ways to manage risk?
4. In Table 1, what are the two ways in which you can analyze risk?
5. What is the key to insurance?

Case Studies

Case Study 1

Data
Bill is 25, married with one child, and does not have any life or health insurance. He has a friend that sells insurance. His friend wants to talk to him about his insurance needs.

Application
What questions should Bill ask as he considers whether to work with this friend for his insurance needs?

Case Study Answers

The answers for these questions are based on information from Arthur J. Keown’s Personal Finance, Turning Money into Wealth Student Workbook.

1. Are you a full-time insurance agent?
   Work with agents who work full-time as insurance agents. This gives greater assurance that your agent is knowledgeable about the products you need and the products he or she represents.

2. How long have you been a full-time insurance agent?
   Work with someone who is experienced and has been established for a number of years. While a new agent may be competent, an experienced agent will be more likely to be competent.

3. Which life insurance companies do you represent?
   Generally, it is better to work with someone who represents at least one company with a top rating from A.M. Best for 10 consecutive years (see www.ambest.com/ratings for information. You can register for free and view the financial strength and issuer credit ratings on the different insurance companies
you are considering). If the agent works with multiple companies, he or she may be able to offer more competitive products than captive agents, agents who only work for a single insurance company.

4. Are you a CLU (a Chartered Life Underwriter)?
   A CLU is preferred, especially if you are seeking advice or considering insurance other than term. Realize that an insurance agent is only able to sell things he or she is licensed to sell.

5. Will I be allowed to keep the insurance proposal you prepare for me?
   You should not consider an agent who won’t allow you to keep the insurance proposal. You should be able to take the proposal home and review it on your time.

6. Would you be willing to inform me of the commission you’ll receive on any policies you recommend?
   You want to make sure the agent is working on your behalf. Knowing the agent’s commission on various policies may help you avoid policies that benefit the agent more than you. If the agent is not willing to share the amount of his or her commission on each product with you, go with another agent who will.

7. Do you have any clients who are willing to recommend you?
   Your agent should either supply you with names of satisfied clients or share testimonial letters from others. You should not consider an agent without recommendations.

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1 1 Timothy 5:8
3 “Constancy Amid Change,” Ensign, Nov. 1979, 80
12. Insurance 2: Understanding Life Insurance

Introduction

Once you understand the basics of insurance, your understanding of the importance of life insurance increases greatly. Much of what is written on the subject of life insurance is confusing and difficult to grasp. The purpose of this chapter is to help you to more clearly understand the benefits and costs of the different types of life insurance.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the benefits of life insurance
2. Know the answers to the five key questions about life insurance
3. Understand the types of term life insurance
4. Understand the types of permanent life insurance
5. Determine which type of insurance is best for you and know the steps to buying life insurance

Understand the Benefits of Life Insurance

Life insurance provides your beneficiaries compensation in the event of your death. Death is a low-frequency (you can only die once) but high-severity risk. Life insurance is essentially contingent financing: it will help support your family in the event of your death. The financial loss due to death is significant. Life insurance can help us take care of our nuclear and extended families financially even beyond death.

Life insurance contracts are designed to help consumers achieve a variety of individual and family goals. Life insurance marketing may be confusing, and recommendations and policy language differ from company to company. It is critical to understand the benefits of life insurance so you can make wise choices regarding it.

Benefits of Life Insurance

The greatest benefit of life insurance is insuring your beneficiaries against the economic loss caused by death. While the payments can never replace the person lost, they can replace his or her ability to pay for living expenses, home mortgages and taxes, education expenses, and other costs. At a critical time, the payments may make it possible for the surviving spouse to remain in the home and concentrate on raising the surviving children. However, life insurance offers four
additional benefits that may be of interest to you as you develop your Personal Financial Plan: life insurance can benefit you with estate planning, insurability, retirement planning, and saving.

Life insurance proceeds may be used in estate planning to ensure that sufficient funds are available to pay estate settlement costs after death (debts, taxes, legal costs, burial expenses, etc.). Proceeds may help heirs receive as large a share of inheritance assets as legally possible. In addition, proceeds can be used to ensure that inheritance assets, such as businesses, do not have to be sold at discounted prices to raise funds for estate taxes or other liabilities.

Permanent life insurance products offer guaranteed insurability. Once you have a contract with the insurance company, your insurance contract cannot be canceled unless you fail to make payments. Once you have this contract, regardless of your medical condition, you cannot be denied the life insurance agreed upon.

Life insurance may also be used for retirement planning. When retirement income is taken from the cash value of an insurance policy, it can be received on a tax-favored basis. The cash-value portion of life insurance, after mortality costs and fees, may gain interest or capital gains that are exempt from taxes. This extra interest or capital gains may be saved for retirement. Life insurance also allows you to borrow against the cash-value portion of your policy and, in essence, receive a low-cost loan. Moreover, when you borrow against the cash-value portion of your policy, you don’t have to sell the permanent assets as you would with a normal investment account (resulting in capital gains or losses). Instead, the insurance company actually makes a loan to you against the cash-value portion of the policy.

Finally, life insurance can be a type of forced savings account. For those without the discipline to make monthly payments into a savings or investment program, life insurance can be a part of an overall savings strategy. The individual can purchase certain types of permanent life insurance products with low fees and mortality expenses, and can direct, to a degree, where the investment portion of the monthly premiums are invested. When needed, the individual can borrow against the cash value of the policy for a tax-free loan.

Remember, insurance is never your best investment, and investment is never your best insurance. The goal is to use insurance for what it does best and investment for what it does best. Be careful when combining the two.

**Know the Answers to the Five Key Questions about Life Insurance**

You should understand the following important terms as you learn about life insurance:

**Beneficiary:** The recipient of benefits in the event of the death of the insured.

**Cash value:** The total account value that is available to the policy owner while he or she is alive. Most policies have both guaranteed and non-guaranteed elements of the cash value. This means that some elements, such as a minimum return each year, may be
guaranteed, and other elements, such as may vary with the instrument in which the cash value is invested, may not be guaranteed. The cash value is reduced by any loans or applicable surrender charges.

**Face value:** The basic benefit the insurance company is to pay the beneficiaries; the face value is due upon the death of the insured. Total benefits may be higher if there have been policy additions.

**Insured:** The person whose life is covered by the insurance policy.

**Policy owner:** The individual or business that pays for and owns the insurance policy.

**Premium:** The payment for an insurance policy. Premiums can be paid monthly, quarterly, semiannually, or annually. Premiums may build cash value in certain insurance products; this cash value may be used to pay costs.

There are five important questions you should ask yourself about life insurance:

1. **Why Should You Have Life Insurance?**

   Life insurance provides financial compensation to your beneficiaries in the event of your death. This type of insurance can help you prepare for major catastrophes and accidents; life insurance also yields some living benefits, or benefits that are available before death. Paul wrote: “But if any provide not for his own, and especially for those of his own house, he hath denied the faith, and is worse than an infidel.”¹ Having adequate life insurance can help us fulfill this commandment even after we die.

2. **How Does Life Insurance Work?**

   Life insurance is an example of risk pooling, which means that individuals transfer or share their financial risks with others to reduce potential catastrophic losses due to death, accidents, or health problems. While everyone pays into this insurance pool, because there are several participants and hopefully few recipients, the cost per participant is small because expenses are shared among the large number of participants.

   There are two main risks that life insurance can share or transfer: mortality risk and investment risk. Mortality risk is the risk that the insured dies outside of the contract period and is therefore not covered by insurance. Some insurance contracts must be renewed each year and are therefore very risky because health problems or other concerns may make an individual unable to obtain coverage. Other products cannot be canceled by the insurance company (except in the case of nonpayment by the policy owner) and therefore ensure mortality coverage.

   Investment risk has to do with who takes responsibility for the investment outcome; with some policies it is the individual who takes responsibility and with others it is the insurance company.
3. Who Needs Life Insurance?

Any individual whose death would create financial hardship for his or her dependents or business should have life insurance. This includes the following types of individuals:

- Single or married parents with children or other dependents
- Married, single-income couples where the nonworking spouse has insufficient work skills or savings to survive should the breadwinner die
- Business owners who want the value of their businesses to be passed on to their heirs or who want to preserve the value of their businesses if a key person is lost
- Those whose estates exceed the tax-free transfer threshold for estates or who need additional liquidity at the time of death to avoid discount sales of estate assets

While life insurance may offer benefits for other people in addition to those listed above, those benefits are not necessary for every individual.

4. How Much Life Insurance Is Necessary?

The decision regarding how much life insurance you need should be made individually. An earlier edition of the *Handbook for Families* recommends,

> Insure the family’s breadwinner first, then others, if desired, as income permits. At a minimum, get enough life insurance to pay for such things as a funeral, taxes, mortgage on the home, car payments, and other debts. The next priority should be to get enough insurance that, supplemented by any government retirement benefits the surviving spouse may be entitled to, there will be sufficient to provide for the family and to make provisions for the children’s education and missions. ²

I like the framework that recommends minimum insurance first, then additional priorities. There are two different methods of determining how much life insurance you need: the earnings multiple approach and the needs approach.

With the **earnings multiple approach** the goal of having life insurance is earnings replacement. This approach has the goal of replacing the annual salary stream of a breadwinner for a certain number of years, or until the children are raised and the surviving spouse is financially stable and retired. Normally, an amount of 5 to 15 times your gross salary is recommended. Generally, most insurance companies will not insure an individual for more than 20 times his or her annual income. There is a three-step process for using the earnings multiple approach:

1. Adjust the pre-incident salary down to compensate for the reduction in household expenses. Generally, a family’s expenses decline in a predictable manner in the event of the death of an adult family member. The larger the family size, the less the percentage of total family expenses will drop (see Table 1).
Table 1. Percent Reduction in Living Expenses for Families

<table>
<thead>
<tr>
<th>Family members after death</th>
<th>Reduction in living expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30%</td>
</tr>
<tr>
<td>2</td>
<td>26%</td>
</tr>
<tr>
<td>3</td>
<td>22%</td>
</tr>
<tr>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>5</td>
<td>18%</td>
</tr>
</tbody>
</table>

2. Choose the appropriate interest rate to match the assumed after-tax and after-inflation earnings on a policy settlement. Interest rates affect insurance policies in that the higher the market interest rates, the more can be earned on investments, including money paid by an insurance company. If you think future market interest rates will be higher, your beneficiaries will not need as large an insurance settlement as would be necessary if market interest rates were lower.

To get an idea of how interest rates and the amount needed each year are related, see Table 2. If you needed $50,000 at the beginning of each year for the next 40 years and market interest rates were five percent, you would need to invest $857,954 in an annuity. If market interest rates were three percent, you would need to invest over $1 million in life insurance proceeds. Clearly, interest rates have an impact on insurance needs.

Table 2. Amount Needed for a $50,000 Annual Annuity

<table>
<thead>
<tr>
<th>Years in Retirement</th>
<th>3%</th>
<th>4%</th>
<th>5%</th>
<th>6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>$1,155,739</td>
<td>$989,639</td>
<td>$857,954</td>
<td>$752,315</td>
</tr>
<tr>
<td>30</td>
<td>$980,022</td>
<td>$864,602</td>
<td>$768,623</td>
<td>$688,242</td>
</tr>
<tr>
<td>20</td>
<td>$743,874</td>
<td>$679,516</td>
<td>$623,111</td>
<td>$573,496</td>
</tr>
<tr>
<td>10</td>
<td>$426,510</td>
<td>$405,545</td>
<td>$386,087</td>
<td>$368,004</td>
</tr>
</tbody>
</table>

This table shows the amounts you need to invest to obtain a $50,000 annual payment or annuity for the following years in retirement at the indicated market interest rates.

Once life insurance proceeds are paid to the beneficiaries, the proceeds should be invested with the goal of providing a specific amount of money each year, or an annuity, to meet the beneficiaries’ needs and expenses. Additionally, an annuity could be purchased or an annuity settlement option in the policy elected, which would guarantee a specific payment each period for a specific number of periods. Investing these funds will ensure that funds are available to pay expenses in a timely manner.

3. Determine the income stream replacement and annuity. The income stream replacement is how much money the beneficiaries will need each period or year and how long they will need that income stream. Once you have determined how much you need each period and for how long, you can calculate the amount of money needed to provide the required income stream.
The **needs approach** for determining the amount of life insurance needed has a different goal from that of the earnings multiple approach. The goal is to meet the total financial needs of the household after the death of a breadwinner, both at the time of death and in the future. To calculate the necessary amount of life insurance according to this approach, add up all of your funding needs to determine the total needs of your beneficiaries. Include immediate needs, debt elimination, transitional funds, dependency funds, spousal life income funds, spousal education funds, children’s education funds, and retirement income funds. Subtract current insurance coverage and other available assets from this total. There is a four-step process for calculating the needs approach:

1. **Add up all funding needs.** This inventory of funding needs is a very detailed description of the total needs of the family. The total needs of the beneficiaries include the following: immediate needs, such as needs for a funeral and other expenses; debt elimination needs, such as paying off credit card debts and mortgages; transitional needs, which include helping the spouse gain needed skills for better employment if necessary; dependency needs, such as taking care of and educating children; spousal life income needs, such as taking care of the spouse so he or she does not have to work; and education and retirement needs, such as taking care of the surviving spouse in retirement.

2. **Subtract current insurance coverage and other available assets.** The result gives you the amount of additional coverage you will need.

3. **Determine the income stream that would be needed to meet the family needs, and then calculate the amount of money required to provide the needed annuity (see Figure 2).** The difference between your total needs and your current coverage and available assets determines the amount of additional insurance coverage that will be necessary to meet the needs of dependents in the event that the breadwinner dies. Some couples find it essential to have two breadwinners, in which case couples should consider having life insurance for both spouses.

If your goal for having life insurance is income replacement, recognize that your income needs will change over time. Depending on your salary, the size of your family, and the growth of your investment assets, the amount of income that will need to be replaced varies throughout your life: it will increase significantly as children are born and raised and then decline as your children finish college. Therefore, instead of using a single product to meet all of your needs, it may be advantageous for you to utilize multiple products to give you maximum protection at the most cost-effective rate. These products should take into account your goals, budget, and growth in investment assets (see Chart 4).

Finally, you must determine the type of insurance you need. There are two main types of life insurance: term, or insurance for a specific period, and permanent (also known as endowment or cash-value insurance), which is term insurance with a savings component. The type of insurance you choose will depend on four factors: your priorities and preferences, the amount of insurance needed, your ability and willingness to pay premiums, and the duration of need.
5. What Type of Life Insurance?

Your priorities and preferences refer to your goals and objectives. What do you want the life insurance product to do? What are your personal goals? Your preferences are what you generally like to do. Do you prefer to “own” or “lease”? What are your “biases” for insurance? Are you willing to take the risk of re-insurability or not?

The amount of insurance needed is also an important consideration. Buy term insurance when there is no way to satisfy the financial needs should you die without it. The term protection may be converted to another form of protection at a later date, if available (i.e., convertible term). Buy a combination of term and permanent when you can cover the financial needs should you die and when you are able and willing to allocate additional dollars to appropriate permanent coverage.

Your ability and willingness to pay premiums should also be considered. Pay on installment basis (term, or low-outlay whole life) if your mortality risk is higher than average. Prepay coverage if you expect to live longer than average (vanishing premium or limited-payment whole life) or if you want payments to stop at a specific age. Purchase a yearly renewable term if you want minimal payments initially that increase year to year. Consider permanent coverage if your cash flows are sufficient to cover the higher premiums and you are committed to paying for it for the rest of your life.
Chapter 12. Insurance 2: Life Insurance

The duration of need is your final consideration. Buy a term policy if your need is 10 to 30 years. If the need will last longer than 20 years, buy a permanent policy or a guaranteed renewable term policy with your required duration (of 10, 20, or even 30 years). Finally, you should buy a permanent policy if the coverage will be continued beyond age 55 or if the policy will be used for estate taxes and charitable giving.

Understand the Types of Term Life Insurance

How Term Insurance Works

Term insurance provides life insurance protection that is valid over a specific term or time period. After the specified period of time is over, the life insurance company is not required to continue coverage. The main advantage of this type of insurance is that it is the least expensive coverage over the short term, since insurance costs rise with age. However, this type of insurance may be disadvantageous because it is valid only if the insured dies during the term of coverage. Another disadvantage is that the cost of the insurance will increase with each new contract period because term insurance is basically the pure cost of mortality insurance at a specific age. Older individuals typically pay more for life insurance because the probability of death increases with age. The insurance contract might not be renewed once the current term expires (at the insurance company’s discretion) unless it contains a guaranteed renewable feature.

Figure 4 shows an example of a term policy. Premium payments are made that cover mortality costs and other fees. There is no buildup of cash—all premiums go to pay the costs and fees. As long as you continue making payments, you are covered for the contracted amount of time.

There are many different types of term insurance, the most common being annual term, renewable term, and convertible term.

With annual term insurance, the face or death benefit amount is constant throughout the selected term of coverage. Premiums increase each time the contract is renewed, even though the face amount remains the same. Coverage terminates after the specified time period.

Renewable term insurance policies can be renewed for a specific number of years. Even if health problems become apparent after coverage has begun, you can continue the coverage until the end of the specified period. Premiums will increase considerably at each renewal period, unless you demonstrate to the company that your health and circumstances merit a continued favorable rate.

Convertible term insurance is a policy that can be exchanged for a permanent policy within a specific number of years after issuance, without evidence of insurability. Many term policies contain this specific guarantee. These convertible term insurance policies allow you to convert your term policy to a permanent one at your discretion, regardless of your medical history; you also do not have to get a medical exam to convert your policy.
Premiums on term policies are much lower than on permanent policies with similar death benefits for three main reasons. First, with term policies, you are only paying for insurance for a specific period, which means that the risk is priced one period at a time. Roughly 98 percent of all term policies lapse without payment. Second, term insurance is generally priced for shorter time periods, from one to 20 years. The longer the time period, the higher the fees the insurance companies must charge in the early years to offset the more expensive mortality charges and fees in the later years. Finally, term insurance policies are less complex than permanent products and are cheaper and easier to administer.

There are a number of important questions that should be answered before you purchase term insurance. These questions include the following:

- What is the premium?
- How long can I keep this policy?
- What are the renewal terms of the contract?
- When will my premiums increase?
- Can I convert my term policy to a permanent policy?
- Can I convert it without getting a medical exam? What are the details?
- How strong is the insurance company financially?
Understand the Types of Permanent Life Insurance

Permanent life insurance is a contract in which the premiums are divided between death protection and savings. A portion of the premium pays for the mortality or death benefit component, and a portion goes toward paying the insurance fees. The remainder of the premium is put into an account that earns tax-deferred interest, dividends, or investment gains. Permanent insurance is often called endowment or cash-value insurance. This type of insurance is intended to provide the policy holder benefits over a lifetime. However, the policy will not be permanent if it does not have enough cash value, if the insured is not able to keep paying the premiums, or if the investment value declines substantially.

Although permanent insurance is permanent under most circumstances, it is still possible to lose money with certain types of these products. The length of time in which payments must be made is sometimes a factor in permanent life insurance policies. You should determine if you can or want to pay premiums for the required length of time before you enter into a contract. If you do not wish to pay premiums throughout your entire life, fewer payment periods with fewer benefits can be arranged, or you may have an option of paying higher premiums over fewer payment periods.

How Permanent Insurance Works

There are three sources of cash that increase the value of a permanent life insurance policy. The first source is the premium payments you make on a regular basis. The second is the investment yield (also known as the dividend or investment earnings) from the cash-value portion of the policy. The third source of cash is available only on policies that allow you the option of receiving tax-free dividends from the insurance company as a legal return of premium. Dividends that exceed the premium are taxable, however. You can typically receive tax-free dividends on your insurance if you own insurance from a mutual company. This is because you own part of the company and receive a dividend as an inflow to your account each year based on your ownership of the company’s earnings. However, should insurance company profits decline, these dividends are likely to decline as well. If your insurance policy comes from a stock company, then you have no ownership; however, the credits and costs of your policy will still be affected by the company’s performance.

Permanent insurance cannot be canceled and therefore can be maintained for as long as you live. It provides a death benefit similar to that of term insurance as well as an opportunity to accumulate tax-deferred savings, which can be used for retirement and estate planning. Also, as the cash value of the insurance policy accumulates, it becomes a valuable asset that can be borrowed against—enabling you to get a loan that is very inexpensive and possibly tax-free. If you fail to pay back the loan, the face value of your policy is decreased by the value of the loan at payment to your beneficiaries.

Because permanent insurance is designed to maintain a constant premium throughout your life and to build cash value, the premium is naturally higher. To put this concept in perspective, the
premium for a permanent policy may be 5 to 10 times higher than the premium on the same amount of term insurance; the premium is much higher because a portion of your premium goes toward creating cash value. Unless you maintain the policy by continuing to pay insurance premiums to cover costs and build cash value, the policy can expire, and you may lose much of what you have already put into the policy. With some of the newer products, like variable life insurance, your investments could potentially lose money, which would likely increase the amount of money you would have to contribute each year. Also, depending on the type of permanent insurance you have, there may not be a guaranteed return each year.

Expenses are another important aspect of buying a life insurance policy. Expenses can be divided into two categories. The first type of expense is the mortality cost, or the cost of the insurance. The second type of expense is the fees that accompany the purchasing process. These fees include sales commissions (often substantial), state insurance costs, deferred acquisition taxes, administrative fees, and investment fees (if applicable). These costs vary depending on the type of contract you have, so you should ask your agent to disclose these issues to you during the decision-making process. For a representation of the process of understanding permanent insurance, see Figure 5.

After you have paid the premiums on your permanent insurance for many years, the investment yield and dividends on your insurance may be sufficient to fund the policy (after expenses); when this happens, you will no longer need to continue paying the premiums. However, there is a risk that you will have to continue paying the premiums depending on the type of account, the investments chosen, and the economic environment.

**Types of Permanent Insurance**

There are a number of different types of permanent life insurance products, and these products differ according to five investment criteria: mortality risk, investment risk, policy costs, investment choice (i.e., assets), and investment flexibility. For a comparison of various term and permanent life insurance policies, see Tables 7 and 8.

Mortality risk refers to the risk that the insured dies within the contract period and is covered by insurance.

Investment risk refers to who takes responsibility for the investment outcome.

Policy cost compares the costs of the policy to other life insurance products.

Investment choice refers to the types of vehicles or assets the insured chooses to use to build his or her tax-deferred savings.

Policy flexibility refers to the degree of flexibility the insured has regarding insurance products—for example, account options, flexibility to change the face amount or death benefit over time, and flexibility to change premium payments depending on the insured’s current
situation. In the following chart, account flexibility, premium flexibility, and face value flexibility refer to the flexibility to change the investments, premium payment amounts, and face amount during the life of the contract (see Table 7).

**Figure 5. Your Permanent Insurance Policy**

It is important to understand why you want permanent life insurance. Understand your needs. Understand the individual policies of competing life insurance companies, such as the charges and deductions of the insurance company and the fees and expenses of the mutual funds or assets invested in. Finally, select the policy that gives you maximum benefit at the lowest possible cost to you.

**Whole life insurance** gives lifelong coverage; this type of insurance has a fixed premium based on your age at the time of purchase. It is also called “straight life” or “ordinary life.” Although the risk of death increases with age, most insurance companies keep the premium and face amount of an insurance policy constant by charging more in the early years of your policy and less in the later years of your policy than you would be charged for term insurance. Whole life insurance is ideal for those who want and can afford permanent life insurance protection with a savings element. Mortality risk and investment risk are both eliminated with this product. This type of insurance provides a transition from income replacement goals to goals regarding
retirement and estate planning. This type of insurance may also be attractive for those who have low self-discipline or low tolerance for risk in saving and investing.

**Table 7. Term Insurance Policies**

<table>
<thead>
<tr>
<th>Type of Policy</th>
<th>Mortality Risk</th>
<th>Investment Risk/Control</th>
<th>Policy Cost</th>
<th>Investment Choice</th>
<th>Policy Flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Term</td>
<td>High</td>
<td>High</td>
<td>Lowest</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>May not be</td>
<td>Responsible for own</td>
<td>Low initial cost</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>renewed</td>
<td>investments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewable Term</td>
<td>Lower</td>
<td>High</td>
<td>Low</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>May be renewed</td>
<td>Responsible for own</td>
<td>Higher initial cost</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>for more periods</td>
<td>investments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convertible Term</td>
<td>Lowest</td>
<td>High</td>
<td>Low/higher</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>If converted,</td>
<td>Responsible for own</td>
<td>Lower initial cost, higher when converted</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>cannot be</td>
<td>until converted, then</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>cancelled</td>
<td>low risk/low control</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other advantages of whole life insurance include a fixed death benefit, a growing cash value, and potential growth from tax-deferred dividends. The disadvantages include the fact that it requires a much higher premium for the same amount of coverage. Moreover, the yield on the cash value portion of whole life insurance may not be competitive with yields on alternative investments because whole-life policies are generally invested in an insurance company’s long-term bonds and mortgages.

**Universal life insurance** is a type of permanent life insurance that is a mix between term insurance and savings. Mortality risk is eliminated. This type of insurance earns interest at current money market or bond rates, so when interest rates are high, this type of policy will typically earn a better return. Thus, investment risk, while not eliminated, is low. This type of insurance also has a guaranteed minimum interest rate that is set for the life of the insured. The policy deducts a monthly fee for insurance coverage: the fee includes the mortality cost and the cost of managing the policy. Contributed funds that do not go toward paying for mortality insurance and costs earn tax-deferred interest.

In a universal life policy, the premium and face amounts are flexible. You can pay premiums in excess of costs in order to build cash value that is subject to federal tax limits. You can change
the face amount of the policy and the amount and frequency of premium payments. Universal life insurance is ideal for those who want a flexible policy that combines term protection and tax-deferred savings; this type of insurance is also appropriate for those who have sufficient knowledge of financial matters and are somewhat flexible and self-directed.

An advantage of universal life insurance is that it provides permanent protection that is similar to that of whole life insurance, and it has flexible premiums and death benefits. The cash value earns tax-deferred interest and can be borrowed against if the need should arise. One disadvantage is that universal life insurance typically requires a much higher premium than term life insurance requires for the same amount of coverage. Also, the cash value of the policy fluctuates depending on the amount paid into the policy and the current market interest rates. The cash value can quickly be depleted by insurance charges if sufficient premiums are not paid. The newest form of universal life insurance is similar to whole life insurance in that it guarantees payment for the full face amount of the policy in exchange for a fixed premium.

**Variable life insurance** allows you to direct the investment portion of your premium into one or more separate investment accounts (such as stocks, bonds, or money market accounts). For this reason, investment risk for this type of product is substantial. Depending on company policy, you can change where the investment portion of your premium will go two to five times per year. While this type of policy gives added flexibility of investment, it is also risky because you, rather than the insurance company, decide where your money is invested; therefore, you assume the risk of the cash-value component. Variable life insurance often costs more in the long run than other types of permanent life insurance because of the added expenses and risks. This type of insurance is appropriate for those who want to take risks, manage their own investments, and have an opportunity (but no guarantee) for tax-deferred growth. If you need a tax shelter and are an experienced, risk-tolerant investor, variable life insurance may be a viable option.

Variable life insurance has the advantages of permanent protection and potential for building cash value. Returns are earned on a tax-deferred basis, and variable life insurance allows for either a fixed (straight variable) or flexible (variable universal) premium. Because you determine where the cash value will be invested, there is a potential for higher returns; these returns reflect the performance of the separate investment accounts. However, variable life insurance has the disadvantage of generally having higher costs. Premiums for variable life insurance are much higher than premiums for term life insurance and other permanent products with the same amount of coverage. This type of investment is also riskier than others because your investment can lose money, and, as in all permanent products, policies may lapse if you don’t make payments.

**Variable universal life insurance** combines the flexible features of universal life insurance with the investment options (and risks) of variable life insurance. You choose where to invest your premiums, and you assume all the investment risks associated with your choice, as with variable life insurance. Investment risk with this type of permanent insurance is substantial. You can raise or lower your premiums in a single policy, as with universal life insurance. The insurance company makes no guarantee on your cash value.
Table 8. Permanent Insurance Policies

<table>
<thead>
<tr>
<th>Type of Policy</th>
<th>Mortality Risk</th>
<th>Investment Control/Risk</th>
<th>Policy Cost</th>
<th>Investment Choice</th>
<th>Policy Flexibility</th>
<th>Face Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Life</td>
<td>Low Cannot be cancelled</td>
<td>None Investment risks assumed by insurance company</td>
<td>Lower Lower costs (but higher than term)</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Universal Life</td>
<td>Low Cannot be cancelled</td>
<td>Minimal Investment risks assumed by insurance company</td>
<td>Higher Higher costs</td>
<td>Minimal short-term money risk investments</td>
<td>None</td>
<td>Maximum</td>
</tr>
<tr>
<td>Variable Life</td>
<td>Low Cannot be cancelled</td>
<td>Higher Higher investment risk, higher control</td>
<td>Higher Higher costs</td>
<td>Maximum common stocks, money market, bonds, etc.</td>
<td>Maximum</td>
<td>None</td>
</tr>
<tr>
<td>Variable Universal Life</td>
<td>Low cannot be cancelled</td>
<td>Highest High investment risk due to sub-account choices</td>
<td>Higher Higher costs</td>
<td>Maximum common stocks, money market, bonds, etc.</td>
<td>Maximum</td>
<td>Maximum</td>
</tr>
<tr>
<td>Equity Indexed Universal Life</td>
<td>Low Cannot be cancelled</td>
<td>Higher Minimal investment risk, blended control</td>
<td>Higher Higher costs</td>
<td>Equity Indexed products and options</td>
<td>None</td>
<td>Maximum</td>
</tr>
</tbody>
</table>

When you change investment vehicles, no capital gains are acquired, and any investment gains are tax-deferred. You have great flexibility regarding the frequency and amount of premium payments, and you are able to make partial withdrawals in the form of loans. If you furnish proof of insurability, you can increase or reduce the amount of coverage. Variable universal life insurance may be the best life insurance option for you if you need a tax shelter and if you are comfortable with high-risk/high-reward investing.

The advantages of variable universal life insurance include permanent protection, returns that are earned on a tax-deferred basis, the choice of either a fixed premium (straight variable) or flexible (variable universal) premium, and the potential for higher returns on your cash value (based on the mutual fund’s performance). This type of insurance also gives you the ability to choose different types of investments and to change investment vehicles free of charge a certain number of times per year. The disadvantages include higher costs—variable universal premiums are higher than premiums for term insurance for the same coverage. This type of insurance is also much riskier because your investments can lose money.

**Equity indexed universal life insurance** combines the flexible features of universal life insurance with the investment options (and risks) of an equity index mutual fund which offers a
capped exposure to the major equity markets for the cash value portion of the policy. By using this product, you assume all the investment risks associated with options on the major equity market and index mutual funds. The major selling point of this product is you gain the capped upside of the equity markets should markets advance, and none of the downside risk of a negative equity return.

The advantages are they offer capped upside exposure to the equity markets, without the risk of losing principle should the equity markets decline below zero return. The downside is the huge commissions on these products—the fee structure is very high. There are caps on returns from the equity markets that limit your upside, usually to 4–8% per year maximum. Finally, because of the high fees on these products, unless they are aggressively funded, the cash value is often insufficient to keep the policy in force later in life due to the very high fees.

**Permanent Insurance Cautions**

Students who are looking at permanent insurance need to ask themselves several important questions:

**Can I commit to the premiums over the long-term?** Many students have no prospective job opportunities and will likely be in school for many more years. With permanent insurance, you are committing to make payments, regardless of whether you are in school and whether you have a job. Can you really commit to these payments now?

**Do I need the tax benefits now?** Once you get out of school, purchasing term insurance and investing the remainder (the difference between what you would have paid with a permanent product and what you pay with the term product) in a Roth IRA or 401(k) may be cheaper and better for you in the long run because you will not have to pay high insurance charges and you can therefore invest more for retirement. Qualified savings plans and retirement plans do not provide life insurance, but you may still want to consider putting your investment dollars into these plans before you get the more expensive life insurance products.

**Are the rates of return on these insurance products guaranteed?** Except for whole life, the answer is no. The rates they give on amounts they will pay are assumptions. In addition, be aware that the insurance companies can change the contracts after you have signed them, changing terms, conditions, and amounts paid. Because of this, be careful of people who are selling products they do not understand. Because the commissions on these products are very high, some people may be selling products they don’t understand to clients who don’t need them.

**Do I have a history of medical problems that would preclude my ability to get life insurance?** If this is the case, you might want to look into permanent insurance.

For most students, “buy term and invest the rest” is an appropriate insurance strategy. Most students would do well to buy a term policy that is level term for 10 to 20 years with a convertibility option to permanent insurance and take the additional money they might have
spent for permanent insurance and invest that in either a Roth or traditional IRA or a qualified retirement plan.

There is a place for permanent insurance for some individuals. However, think about this:

- **Commissions**: If permanent insurance is such a good product, why pay such high commissions for sales? First year commissions to agents can be 50-120% of first year sales, often with recurring commissions for each year the policy is in place.

- **Annual Sub-account fees/expenses**: Why must fees be so high on investment sub-accounts? These investments are not complex products, and are often just index funds. Why are the fees on these products so high compared to products not offered by insurance companies?

- **Assumptions**: Why can the company change the insurance contracts even after the product is sold? In addition, payments on cash value products (except whole life) are based on assumptions which the company can change any time even after the contract is sold.

- **Transparency**: Why is anecdotal return evidence so poor, which shows that 20 year returns on permanent products have generally been only slightly above inflation? Why is performance data so very difficult to find for these products?

**Typical Expenses for a Permanent Life Insurance Policy**

While permanent insurance has many benefits, it also has many more charges and deductions than term life insurance. This is because permanent contracts are designed to meet very specialized goals and needs. Because it would be impossible to describe every possible variation in detail, I will highlight a few of the main expenses of a variable universal life insurance policy (the most complex and flexible policy with the highest premium) as an example. These expenses may include the following:

**Investment Account–Level Fees**

- **Sales charges or front-end load**: These are deductions for salesman distribution expenses. These charges can consume anywhere from zero to 10 percent of new money or premiums invested in the policy.

- **State premium taxes**: These taxes vary by state and range from zero percent in Oregon to five percent in the Virgin Islands.\(^3\)

- **Deferred acquisition (DAC) taxes**: The DAC tax is a corporate federal income tax that is imposed on insurance companies. Previously, insurance companies wrote off all their acquisition expenses in the first year, thereby reducing taxable income. Now companies must spread out these acquisition expenses over the life of the acquisitions. This means that income is generated
in the early years and income taxes are incurred. These taxes on the insurance companies are passed on to the insured.

First-year expenses: First-year administration fees include the cost of setting up the policy.

Monthly administrative fees: These fees enable the insurance company to provide services such as mailing confirmation notices and providing periodic reports.

Mortality and expense charges: These fees compensate the insurance company for certain mortality and expense risks and can range from 0.4 to 1.3 percent annually.

Sub-Account Fees

Sub-account fees are fees paid to the managers of the mutual funds in which the cash value of life insurance policies are invested. These fees include management and 12b-1 fees.

Investment management fees: These are charged for the overall management of the investment accounts, or in other words, the fees paid for professional management. These fees are taken daily from the underlying net assets or value of the sub-accounts.

12b-1 fees: These are used to pay financial advisors and brokerage firms for marketing the account’s funds.

Overall expense ratio: This ratio finds the combined cost of all the asset-based charges discussed in this chapter. This is an important number that can be used to compare the costs of managing your money both inside and outside of a life insurance contract.

**Figure 6. Charges for Permanent Insurance**

<table>
<thead>
<tr>
<th>Account-level expenses:</th>
<th>Minimum</th>
<th>Average</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales charges</td>
<td>0.0%</td>
<td>8.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>State premium taxes</td>
<td>0.75%</td>
<td>2.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>DAC tax</td>
<td>0.0%</td>
<td>1.5%</td>
<td>2.0%</td>
</tr>
<tr>
<td>First-year expense</td>
<td>$200</td>
<td>$350</td>
<td>$700</td>
</tr>
<tr>
<td>Administration fees/month</td>
<td>$4</td>
<td>$6</td>
<td>$15</td>
</tr>
<tr>
<td>Policy loans as % contract surrender value, Interest spread</td>
<td>75%, 4%</td>
<td>90%, 2%</td>
<td>100%, 0%</td>
</tr>
<tr>
<td>Asset charges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality and expense</td>
<td>0.4%</td>
<td>0.7%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Sub-account fees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment management</td>
<td>0.4%</td>
<td>0.8%</td>
<td>2.8%</td>
</tr>
<tr>
<td>12b-1 fees</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Overall expense ratio</td>
<td>1.0%</td>
<td>1.5%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Other charges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surrender charges (these can be significant)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other Fees

**Policy loans:** A major benefit of permanent insurance is the ability to borrow money against the contract’s surrender value (the value the policy would have if you decided to take the cash rather than the death benefit). If you die before the policy loan is paid back, the beneficiary of the loan will receive the face value of the contract minus what is still owed.

**Surrender charges:** Surrender charges, back-end loads, and contingent deferred sales charges refer to the amount of the policy’s account value that you forfeit if you cancel or terminate your policy within a specified period. These fees reimburse the insurance company for expenses that have not yet been recovered. Surrender charges can be significant.

**Other fees:** There are a number of other fees and expenses that should also be taken into account. These include partial withdrawal processing fees, which are assessed for taking money out of the insurance policy; transfer charges, which are assessed for making asset transfers that are over the limit specified in your policy; and other charges that may be assessed for additional annual reports, increases in principal sums, additional riders, and so on. Not all companies assess all of these charges; be sure that all charges are disclosed when you are in the process of deciding what type of insurance to purchase.

When the charges, fees, and expenses are totaled, it is not uncommon for the total to be between 5 and 15 percent of every dollar you put into permanent insurance. Because of this, the cash-value portion of this type of insurance will grow more slowly than the cash value of a less expensive term policy. However, the term life policy requires you to pay income taxes (capital gains taxes) each year on your investment returns, which can reduce the advantage of a term life policy.

Permanent insurance is not for everyone. It is a very complex financial instrument and will help only those who need the specific benefits of this type of insurance. By understanding your needs and the different aspects of competing life insurance company policies—the charges, deductions, fees, and expenses of the invested assets—you can select a policy that will give you the maximum benefit at the lowest possible cost.

The following are some important questions to ask yourself about permanent insurance before you decide to invest:

- Are the premiums within my budget? Are the costs reasonable?
- Can I commit to these premiums on a long-term basis?
- On a variable life policy, what is the assumed interest rate in the example, or illustration, given you by the insurance agent?
- Is the classification shown in the illustration appropriate for me (i.e., smoker/nonsmoker, male/female)?
- Which figures are guaranteed and which are not?
- Will I be notified if the non-guaranteed amounts change?
• Is the death benefit guaranteed?
• Will the premiums always be the same, even if interest rates are lower than in the illustration?
• Is the illustrated premium sufficient to guarantee protection for my entire life?
• Is the “current rate” illustrated actually the rate paid recently? What was the current rate in each of the last five years?
• What assumptions have been used regarding company expenses, dividends, and policy lapse rates?
• Does all my cash value earn the current rate?
• Is the illustration based on the “cash surrender value” or “cash value”? (The cash surrender value is usually lower and reflects what will be paid if the policy is canceled.)

Determine Which Type of Life Insurance Is Best for You and Know the Steps to Buying Life Insurance

Determining which type of life insurance is right for you can be a challenge. For most people, especially students, convertible renewable term life insurance, which can be converted to a permanent policy and is renewable for up to 20 years, is the cheapest and best alternative. If your goal is income replacement, term insurance is relatively inexpensive and has the most affordable coverage when life insurance is needed the most; it is possible to carry the coverage only for the amount of time insurance is needed. Although term life insurance becomes more expensive with age, it may become less necessary as your other assets, such as your investment portfolio, grow, so your dependents would need fewer benefits from life insurance in the event of your death. However, if taxes or other liabilities are due at death or if one desires to leave an estate, insurance may still be necessary.

Permanent insurance may be the best choice if you meet very specific criteria. If your goal is medical insurability (that is, if you have a history of medical problems and you already have convertible term insurance), you can’t be denied life insurance should you decide to convert policies.

If the value of your assets is very great and you plan to leave an estate, and if you have estate-planning issues (i.e., you need to shield some of your assets), you should consider permanent insurance.

If your goal is retirement savings and you have already invested substantial amounts of money in your tax-deferred retirement accounts and have already invested the maximum in your tax-deferred accounts and annuities, you may want additional tax-deferred savings; consider permanent insurance as an additional investment vehicle.

If you are still unsure about what type of insurance is best for you, consider a renewable convertible term policy. This type of insurance provides the low cost of term insurance while
giving you the ability to convert to a cash policy in the future (within a specific number of years).

**Steps to Buying Life Insurance**

Selecting an insurance agent is your responsibility—choose wisely. You are not just buying insurance: you are building an insurance structure that will shelter you and your dependents for many years. Following are some important tips for buying insurance:

1. **Understand what you want.** Understand yourself, your goals, and your budget. Consider how much insurance you need versus how much insurance you want. What kind of insurance policy will best meet your needs given your current family situation and cash flow? How much money do you want to spend? Do you have any pre-existing health conditions? Do you need the insurance for your whole life, or only for a specific period? Can you accept the significantly higher costs of permanent policies?

2. **Compare the costs of competing policies.** Do your homework and shop around, not just based on price but also based on benefits, coverage, and exclusions. Some possible ways of comparing policies are listed as follows:
   - What are the annual premiums versus the amount of the coverage?
   - Is the policy renewable, and for how many years?
   - Do I have to get a new medical to renew the policy?
   - Is the policy convertible? Into what type of policy?
   - Is the insurance policy participating (offers tax-free dividends) or nonparticipating?
   - If participating, what is the five-year dividend history?
   - If participating, what is this year’s expected dividend?
   - What is the total premium cost over the next 10 years (excluding dividends)?
   - In 10 years, what will your cash value be?
   - What will the total premium cost be over 20 years?
   - At what interest rate can you borrow against the policy? Is the spread guaranteed?

3. **Select only a high-quality insurance company; base your choice on company ratings.** Price is not the only criteria you should look at when selecting an insurance company. You also want the company to be around to pay the benefits years down the road. Remember, you are looking for a long-term insurance relationship. Check with A.M. Best at [www.ambest.com](http://www.ambest.com) or Standard & Poor’s at [www.standardandpoors.com](http://www.standardandpoors.com) for ratings of your company.

4. **Select an insurance agent with whom you feel comfortable and who does not pressure you.** Study the agent’s recommendations and ask for a point-by-point explanation if there are items you don’t understand. If the agent can’t explain all the costs and benefits, go to someone who can. While it is not necessary to have an insurance agent, it can be helpful because an agent
can explain the many options and details of the life insurance contract. Remember to ask about the insurance agent’s commission on any recommended product.

5. **Use wisdom in your decisions.** Make sure you check out the insurance company; read your policy when you receive it to ensure it is correct. Consider alternative approaches to finding life insurance: use the Internet or an advisor to help you. Make sure you feel good about the decision before you sign anything or send any money.

Before you purchase life insurance, consider a few final thoughts:

- Be careful if your only source of life insurance is from your company. Consider having part of your insurance from outside your company’s plan. Realize that if you get sick and lose your job, your insurance may terminate with your employment. It will be difficult to get new life insurance if you are very sick.

- Don’t rush into a decision just because you are feeling pressured. Wait a few days and then decide. This is not a short-term decision. Take your time and choose wisely—but choose!

- Make your check payable to the insurance company, not the agent. The insurance company will pay the agent. Be sure the insurance agent gives you a receipt for all payments. Make sure there is an adequate paper trail in case there are questions or problems later on.

- Read your policy carefully during your “free-look” period. You are given a specific amount of time in which you have the option to cancel the policy. Make sure you understand your policy completely at the beginning and then review your policy annually. Your life situation may change, so make sure your policy is sufficient to meet your needs as they change.

- If you are changing policies, make sure you clearly understand the consequences. Surrendering one insurance policy to buy another insurance policy could be very, very, very (get the hint?) costly. Understand all the costs of making a change before you make it.

- Finally, if you have a complaint, contact your insurance agent first. If you don’t get an adequate response from your agent, contact your state insurance department; they can help.

**Summary**

Getting life insurance is an important step toward becoming financially self-reliant. We would be wise to have an appropriate amount of it.
Life insurance products vary widely, and they can be challenging to understand. It is critical to understand the major principles of life insurance and how life insurance can help you reach your specific personal and family goals.

In this chapter, we answered the five key questions about life insurance: 1. Why should you have life insurance? 2. How does it work? 3. Who needs life insurance? 4. How much should you have? and 5. What kind should you have?

Term insurance provides life insurance protection that is valid over a specific term, or time period. The major advantage of this type of insurance is that, in the short term, it is the least expensive death benefit coverage. However, this insurance is disadvantageous because it is valid only if the insured dies during the term of coverage.

Permanent life insurance is a contract in which premiums go toward both death protection and savings. Cash-value insurance is often called permanent insurance and is intended to provide benefits over a lifetime. However, the policy will not be permanent if there is not enough cash value, if the insured is not able to continue paying the premiums, or if the investments decline substantially.

Determining which type of life insurance is right for you can be a challenge. For most people, especially students, renewable convertible term life insurance is the cheapest and best alternative. If your goal is income replacement, term insurance is relatively inexpensive and has the most affordable coverage when life insurance is needed the most; it is possible to carry the coverage for only the amount of time insurance is needed.

The five steps to purchasing life insurance are as follows:

1. Understand what you want.
2. Compare costs of competing policies.
3. Select only a high-quality insurance company; base your choice on company ratings.
4. Select an insurance agent with whom you feel comfortable and who does not pressure you.
5. Use wisdom in your decisions.

Assignments

Financial Plan Assignments

Your assignment is fourfold. First, determine whether you need life insurance. Second, determine your goal for having it. Deciding on your goal for insurance is a critical part of evaluating the different types of life insurance products.

Third, determine how much insurance you need based on the framework laid out in this chapter. Remember, as interest rates decline, the size of the assets you will need increases. I encourage
you to use **Learning Tool 29: Calculating Life Insurance Needs** to determine how much insurance you need.

Fourth, determine how much insurance you can afford based on your budget. This is a critical step. Take into account the potential for job loss or changes in lifestyle caused by children, teenagers, and so on when you are considering your budget.

Finally, evaluate the different insurance companies and the different products available. Using the criteria discussed, evaluate the different insurance companies for stability; look for signs that they will be around when benefits need to be paid. Determine the type of product you should have, evaluate the different alternatives, and include your findings in your financial plan.

**Learning Tools**

**29. Calculating Life Insurance Needs**

This Excel spreadsheet gives a framework for calculating life insurance needs. It gives estimates using multiples of salary, various rules of thumb, and a needs approach.

**Review Materials**

**Terminology Review**

**Annual term insurance.** This is a type of term insurance. The face or death benefit amount is constant through the selected term of coverage. Premiums increase each time the contract is renewed, even though the face amount remains the same due to the increasing age of the beneficiary.

**Convertible term life insurance.** This is a term policy that can be changed to permanent insurance within a specific number of years without evidence of insurability. Typically, it gives a contractual right to convert to some form of permanent insurance, typically whole life, within a certain number of years or before the policy holder reaches a certain age. Conversion allows the policy holder to lock-in the premiums, although at a higher rate, and avoid the ever increasing term premiums.

**Earnings multiple approach.** This is one approach for determining the amount of life insurance required. The goal is earnings replacement. The earnings multiple approach seeks to replace the annual salary stream of a bread winner for X years, normally 10 – 15 times gross salary.

**Equity Indexed Universal Life Insurance.** Equity indexed universal life offers some of the upside of the equity market returns with the downside of insurance protection should the market returns be negative. It allocates assets to a stock market index, generally with
options (and has a limited upside) but with a minimum guaranteed rate of return. It gives some (limited) upside in equity returns, and gives downside protection in down equity markets. It has huge commissions to salesmen for selling these products (up to 150% of first year commissions), a very high fee structure, large surrender charges, and is not transparent. Market returns are generally lower than historic market returns, and are capped with limited upside of 4-12%.

**Insurance.** Insurance is a tool help you achieve your personal and family goals. It is a product that transfers the risk of certain types of losses or events from an individual to another institution. By transferring risk, it can help the individuals achieve specific goals if they die, get sick or become unable to work. But it is a tool that needs to be understood and used wisely.

**Investment risk.** This is the risk of who takes responsibility for the investment outcome, the insurance company or the insured.

**Life insurance.** This is insurance that provides compensation to your beneficiaries should you die prematurely. It transfers the economic loss of death from an individual to an insurance company by way of a life insurance contract. It can help us take care of our own and extended families should we die.

**Mortality risk.** This is the risk that the insured dies outside the contract period and is therefore not covered by insurance.

**Needs Approach.** This is an approach for determining the amount of life insurance that is required. It determines the total needs of the beneficiaries which includes immediate, debt elimination, transitional, dependency, spousal life income, education, and retirement needs. It is the most detailed of the approaches.

**Permanent insurance.** Permanent insurance is an insurance contract that is purchased for the entire life of the policy holder with premiums divided between death protection and savings. Provides insurance that cannot be cancelled, may be used for estate retirement, and savings. It is complex, expensive, and not transparent, and unless premiums are paid, it can expire worthless. Please note that certain permanent products are not permanent, i.e. they can lose money.

**Renewable term insurance.** This term policy allows the policy holder to unconditionally renew the policy for successive terms at higher premiums simply by paying the indicated premiums. Premiums increase with each renewal period, and can be renewed for a specific number of years.

**Risk pooling.** It is the process where individuals transfer or share their risks with others to reduce catastrophic losses from health problems, accidents, lawsuits, etc.
Chapter 12. Insurance 2: Life Insurance

**Term Insurance.** Term insurance is insurance protection for the insured over a specific term or time period. They may be renewable or non-renewable policies. It is the least expensive form of insurance and the death benefit coverage is only for a specific term.

**Universal Life Insurance.** Universal life is a type of whole life insurance, but the cash-value earns interest at current money market rates. Mortality risk is eliminated, and investment risk is low. It is a flexible policy that combines term protection and a tax-deferred savings element invested at current interest rates. Earnings will rise and decline with market interest rates. Its risks are the same with most permanent insurance: it is complex, expensive, with high surrender costs, and commissions to the salesmen are very high.

**Variable Life Insurance.** Variable life gives life-long insurance coverage with the ability to direct where the cash-value is invested. Mortality risk is eliminated, but investment risk is substantial. Policy holders are responsible for the investment outcome with their chosen investments. It allows for either a fixed (straight variable) or flexible (variable universal) premium, with fluctuating cash-value, reflecting the investment performance. It is complex, expensive, with high surrender costs, and commissions to the salesmen are very high.

**Variable Universal Life Insurance.** Variable universal life mixes the investment flexibility of variable life with the premium and face amount flexibility of universal life. Policy holders are responsible for the investment outcome with the chosen investment. It offers term protection with full policy flexibility and which can be managed by the account owner (within available options). It is complex, expensive, with high surrender costs, and commissions to the salesmen are very high.

**Whole Life Insurance.** Whole life insurance gives life-long insurance coverage for a fixed premium. Mortality risk and investment risk is eliminated. It is essentially term protection with a savings element provided by insurance company bonds and mortgages. Premiums are based on when you buy the policy. The earlier you purchase the product, the less your costs will be generally. It is also called “Straight Life” or “Ordinary Life” insurance. It is complex, expensive, with high surrender costs, and commissions to the salesmen are very high.

**Review Questions**

1. What is life insurance? Why should you have it?
2. What are the two different methods for determining how much life insurance an individual will need?
3. What is term insurance? What are the three types of term insurance?
4. What is permanent life insurance? What are the five major types of permanent life insurance?
Case Studies

Case Study 1

Data
Bill and Diana are concerned about their family’s welfare should Bill die. He is currently making $80,000 per year and has two children, and his company gives him $50,000 in life insurance coverage as a benefit. If Bill were to die, Diana is sure she could invest the insurance settlement and make five percent after taxes and inflation for 20 years until the kids finish school. She is in the 30-percent marginal tax bracket.

Calculations
What is the process for determining needs? (Assume a 22-percent drop in living expenses after death.)

How much insurance should Bill have?

Case Study 1 Answers

1. Adjust salary downward:
   Generally, family living expenses fall by 30 percent with the loss of an adult. The larger the size of the surviving family, the less living expenses drop.
   Since Bill’s family would go from four to three, his target replacement is $80,000 * (1 – .22) or $62,400

2. Choose the appropriate interest rate:
   Estimated after-tax and after-inflation rate is given at five percent.

3. Determine the income stream replacement.
   Number of years to replace income \( N = 20 \text{ years} \)
   Estimated after-tax and inflation rate \( I = 5\% \)
   Target \$80,000 * (1 – .22) or \( \text{PMT} = \$62,400 \)
   Solve for the Present Value. Since Bill wants the payments at the beginning of each year, put your calculator in “begin” mode.
   Bill needs \$816,524.

4. Subtract out current insurance available of \$50,000:
   \$816,524 – 50,000 = \$766,524
   The multiple of salary is:
   \( 766,524 / 80,000 = 9.6x \)
   Bill should have 9.6 times his salary, or \$766,524.

Case Study 2
Data
Bill is concerned that Diana’s estimated ability to earn a five-percent after-tax after-inflation return may be a bit high. Based on the information from the previous case study, he asks two questions.

Calculations
How much is needed if Diana earns only 3 percent after taxes and inflation?
A 3-percent after-taxes and after-inflation rate is what before tax and inflation rate, assuming 2 percent inflation?

Case Study 2 Answers
To determine what is needed, calculate the income stream replacement:

Number of years to replace income \( N = 20 \) years
Estimated after-tax and inflation rate \( I = 3\% \)
Target \( $80,000 \times (1 - .22) \) or \( \text{PMT} = $62,400 \)

At a 3-percent after-tax and inflation rate, and using begin mode, the need becomes \( $956,205 - 50,000 \) for the existing insurance, or \( $906,205 \).

This is 11.3 times his annual salary.
Remember, the lower the after-tax and after-inflation rate, the higher salary multiple \((5 - 15x)\) Bill will need.
A 3-percent after-tax and after-inflation return is (on a nominal basis):

To find the nominal (before-inflation) rate:

\[
(1 + r_{\text{nominal}}) / (1 + r_{\text{inflation}}) - 1 = r_{\text{real}}
\]
\[
(1 + r_{\text{nominal}}) / (1 + .02) - 1 = .03 \text{ (add 1, multiply both sides by 1.02)}
\]
\[
(r_{\text{nominal}}) = (1 + .03) * (1 + .02) - 1 = 5.06\%
\]

To find the before-tax rate:

\[
r_{\text{before-tax}} * (1 - \text{tax rate}) = r_{\text{after-tax}}
\]
\[
r_{\text{before-tax}} * (1 - .30) = .0506 \text{ (divide both sides by } (1 - .30))
\]
\[
r_{\text{before-tax}} = .0506 / (1 - .30)
\]
Diana’s 3-percent before-tax before-inflation return is a 7.23 percent nominal return.

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1 1 Timothy 5:8
3 Ibid., p. 113
13. Insurance 3: Understanding Health, Long-Term Care, and Disability Insurance

Introduction

Having adequate health insurance is crucial; health insurance ensures that you and your loved ones will receive necessary medical treatment throughout the course of your lives. Because of the importance of health insurance, it is extremely important for you to learn how this type of insurance fits into your Personal Financial Plan.

Health insurance is costly, largely because there is a lack of incentive to reduce costs. Rising insurance costs have gotten the attention of corporate managements. Companies are passing on a greater percentage of insurance costs to their employees. This shift is affecting many individuals’ financial situations; as medical costs rise, individuals become less able to pay for medical care costs out of their own pockets. Therefore, the number of people who are uninsured and underinsured continues to rise. Health insurance is important and could be a major detraction from attaining your goals if health-related problems arise and you do not have appropriate health insurance to cover your costs.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand how health insurance relates to your Personal Financial Plan
2. Understand Obamacare and basic health insurance coverage and health insurance plans
3. Understand the key areas of disability insurance
4. Understand the key areas of long-term care insurance
5. Understand how to control your health-care costs
6. Understand what to look for when buying insurance

Understand How Health Insurance Relates to Your Personal Financial Plan

Health insurance protects you and your dependents from suffering a financial catastrophe caused by high medical expenses. Paying out of pocket for a hospital stay, even if short, can be very expensive. Health insurance offers peace of mind and eliminates the financial risk of having to make large payments to health-care providers for injury or illness.

Concerning the need for adequate insurance, N. Eldon Tanner remarked:
Nothing seems so certain as the unexpected in our lives. With rising medical costs, health insurance is the only way most families can meet serious accident, illness, or maternity costs, particularly those for premature births . . . Every family should make provision for proper health and life insurance.¹

**Understand Obamacare and Basic Health Insurance Coverage and Provisions**

Obamacare (the Affordable Health Care Act) brought many changes to the health care industry. The main changes were:

- Obamacare doesn’t create health insurance; rather, it regulates the industry.
- Many people who have health insurance can keep their coverage (but not all people).
- Young adults can stay on their parents’ plan till age 26.
- If you don’t have coverage, you can use the Health Insurance Marketplace during the open period.

Other features of Obamacare include:

- You can obtain private health insurance during each year’s annual enrollment period.
- If you don’t have insurance, you are taxed.
- The cost of your insurance is on a sliding scale.
- You cannot be denied coverage based on health status, and there are no pre-existing coverage limitations and no lifetime coverage limits on your policy.

Getting healthcare through Obamacare, you have many options. You can continue to get health insurance through your work if it is provided. You can obtain healthcare coverage outside or inside of the marketplace during open enrollment. During open enrollment, you can purchase federally regulated and subsidized health insurance through private providers. You can also purchase private health plans through a broker or directly from the provider.

**Major Types of Health Insurance Coverage**

There are four major types of health insurance coverage:

- Basic health insurance
- Major medical expense insurance
- Dental and eye insurance
- Dread disease and accident insurance
Basic health insurance describes most health insurance policies that cover hospital, surgical, and physician expenses. Hospital insurance covers hospitalization expenses, including room, board, nursing, and prescription fees. Surgical insurance covers only the direct costs of surgery, including the equipment costs and surgeon fees. Finally, physician expense insurance covers physicians’ fees, including fees for office visits, lab tests, X-rays, and other necessary tests.

Major medical expense insurance covers medical costs that are in excess of those covered by basic health insurance. This type of insurance normally requires you to pay a co-payment and/or a deductible and has an overall limit.

A co-payment is an amount of money you pay to help cover medical costs. A co-payment may be a flat amount, such as a $15 payment each time you visit a doctor’s office, or it may be a percentage of the total cost of a surgical procedure, such as a payment that covers 20 percent of the surgical fee. The insurance company pays the remaining balance of the medical cost—for example, the insurance company pays $50 for the office visit to supplement your $15 co-payment and 80 percent of the surgical fee to supplement your 20 percent co-payment.

A deductible is the amount you pay in full before you receive any benefits from an insurance company. For example, if your medical bill were $1,000, and you had to pay a $200 deductible on your insurance plan, then you would pay the first $200 and your insurance company would pay the remaining $800 of the bill.

Major medical insurance usually includes both a stop-loss provision and a lifetime cap. The stop-loss provision limits your total out-of-pocket expenses to a specific dollar amount. The lifetime cap limits the total amount the insurance company is required to pay over the life of a policy.

Dental and eye insurance pays for the costs of dental work, dentures, eye exams, glasses, and contact lenses. You should know which expenses your plan covers before you go to the dentist or eye doctor. Normally, this type of insurance covers only a portion of the costs and requires you to pay the rest. Dental and eye care insurance plans are often expensive unless they are provided as part of an employee insurance plan.

Dread disease and accident insurance is a unique type of insurance that covers specific diseases and accidents. If your illness is not on the list given by the insurance company, it won’t be covered. This type of insurance provides a set dollar amount that is available for reimbursement. If your expenses exceed this amount, you must pay the difference. It is generally best to avoid dread disease and accident insurance unless it is included in your company’s total health plan. Instead, you should concentrate on finding health insurance coverage that is as comprehensive as possible so that you will be protected against the widest variety of diseases and accidents that could occur.

Health-Care Plans

The three major types of health-care plans are as follows:
Private Health-care
- Non-group coverage
- Government-sponsored health-care

**Private Health-Care Plans**

Private health-care plans are sold by private insurance companies to individuals and employers as part of a benefits package. These plans include two types: fee-for-service plans and plans provided by managed health-care providers.

**Fee-for-service plans**, also called traditional indemnity plans, are private health-care plans in which doctors bill patients directly; the insurance company then reimburses a specific percentage or set amount of the bill to the patient. The advantages of these plans are that they provide patients with the greatest flexibility in choosing doctors and hospitals, and that individuals can go to whatever doctor or hospital they choose and still be reimbursed. Another advantage of these plans is that they define what percentage of each claim the policy will cover and what percentage the patient must cover. Finally, these plans clearly define how much the patient must pay before a claim is eligible for reimbursement. The disadvantages to these plans include that they are usually expensive for those insured and providers, and they require more paperwork than other types of insurance plans.

**Plans provided by managed health-care providers** offer prepaid health-care plans for employers and individuals. There are four main types of managed health-care providers: health maintenance organizations (HMOs), preferred provider organizations (PPOs), point-of-service plans (POSs), and exclusive provider organizations (EPOs). One of the advantages of managed health-care providers is that these organizations pay for and provide health-care services to policyholders, including preventive health-care. Also, managed health-care providers generally pay bills more efficiently than other providers because they do not require you to pay your doctor’s bills and hospital bills first (with the exception of the nominal co-payment for visiting a doctor’s office).

However, one disadvantage of working with managed health-care providers is that they limit the number of doctors and hospitals that participate in their program, thereby limiting your choices. Like fee-for-service plans, plans provided by managed health-care providers require you to pay a monthly premium and to share the cost of care; however, these costs are traditionally less than the costs of fee-for-service health care.

HMOs provide prepaid insurance plans that entitle individuals to the services of specific doctors, hospitals, and clinics. These plans are the most popular form of managed health care because of their low costs, which are roughly 60-percent less than the costs of fee-for-service plans. HMOs provide a system of doctors and hospitals for a flat fee, and they emphasize preventive medicine and efficiency, which are advantages. The disadvantage of HMOs is that they provide limited choices of doctors and hospitals. Because of these limited choices, the quality of service may suffer, and referrals to other specialist doctors are sometimes difficult to get.
Preferred provider organizations (PPOs) provide insurance plans that are essentially a cross between traditional fee-for-service plans and HMO plans. PPOs negotiate with a group of doctors and hospitals, and these doctors and hospitals provide care to PPO participants at reduced rates. PPOs then give individuals the option of choosing either “plan” or “non-plan” doctors. One advantage of PPOs is that they provide health care for less than the cost of fee-for-service plans while still allowing members to choose their doctor or hospital. Because PPOs provide a group of doctors who work at reduced rates for PPO participants, PPOs assess an additional fee if the participant uses a non-plan doctor or medical center. PPOs are generally more expensive than HMOs.

Point-of-service plans (POSs) have many of the attributes of HMOs, PPOs, and fee-for-service plans. For example, these plans generally have a network of contracted doctors, hospitals, and clinics. If you use these preferred providers, the fees are less. But you also have the option to go outside the network for other medical specialists if you are willing to pay a larger out-of-pocket fee. These plans may have a gatekeeper (a physician or other authority) that must be notified before participants are allowed to receive services.

Exclusive provider organizations (EPOs) are similar to HMOs, but they operate through an insurance company. These organizations are funded through an insurance company, and health care is provided by contracted providers. Only care received from contracted providers is covered, unless there is an emergency situation.

**Non-Group Coverage Plans**

Non-group coverage plans (also called individual health-care plans) insure individuals independently. These plans are often used by people who are self-employed or between jobs; they are also used by people whose companies do not offer group insurance. An advantage of these plans is that they provide a custom insurance policy. There are also several disadvantages to non-group coverage plans. These plans are expensive—they are usually 15 to 60 percent more expensive than group plans. Non-group coverage plans may also require subscribers to pass a medical exam prior to enrolling in the program; at a minimum, they require subscribers to submit a personal health history.

Before you sign up for a non-group coverage plan, check the insurance company’s ratings and its claim service. It is best to avoid a company that raises premiums when claims are made or reserves the right to cancel policies at any time.

Instead of using a non-group coverage plan when you are between jobs, use COBRA, if possible. COBRA, which stands for the Consolidated Omnibus Reconciliation Act, requires companies with more than 20 employees to continue providing group health care to former employees, retirees, spouses, and dependents for a specific length of time. This length of time is based on the employee’s reason for leaving the company and is usually about 18 months. If COBRA is used, the former employer must provide the insurance, but the discharged employee must cover the entire cost of the health insurance.
Government-Sponsored Health-Care Plans

Government-sponsored health-care plans are sponsored by either the state or the federal government. These plans fall under four headings: (1) workers’ compensation, (2) Medicare, (3) Medigap, and (4) Medicaid.

**Workers’ compensation** is a state-sponsored insurance program that insures employees who have suffered work-related accidents or illness. An advantage of workers’ compensation is that it provides insurance for workers injured on the job whether they have health insurance or not. A disadvantage is that it covers only work-related accidents and illnesses. Moreover, coverage is determined by state law and varies from state to state.

**Medicare** provides medical benefits to people who are disabled or are of age 65 and older and covered by Social Security. The costs of this federally sponsored program are covered by Social Security taxes.

The cost of private insurance for people who are disabled or are over age 65 is often unaffordable. Medicare provides a way for these individuals to get affordable health care. A disadvantage of Medicare is that it does not cover all the costs of care and treatment.

Medicare is divided into Part A and Part B. Medicare Part A is compulsory and covers all hospital-related expenses, including costs for hospitalization, skilled nursing-care facilities, home health care, hospice care, and prescription drugs furnished by the hospital.

Medicare Part B is voluntary and carries a monthly fee for services. Part B covers doctors’ fees and other medical services, including clinical lab services, health care provided in the home, and outpatient hospital treatment.

Medicare does not cover the total costs of all services. Those insured by Medicare must still pay a portion of their medical costs in order to receive coverage. There are also limitations; for example, out-of-hospital prescription drugs are not covered, and the number of days a person can spend in a skilled nursing-care facility are limited.

**Medigap** is sold by private companies and covers the gaps between the two parts of Medicare. In all but three states, federal law has limited Medigap insurance provided by private companies to 10 set or standardized contracts, each with different options and costs. Another advantage of Medigap is that a person can’t be rejected for health reasons if he or she enrolls in Medigap within six months of enrolling in Medicare Part B. A disadvantage of Medigap is that this type of insurance is expensive; however, consumers should shop around—costs can vary.

**Medicaid** is a medical assistance program that is jointly operated by states and the federal government through the Social Security program. It provides health-care coverage to persons who have a low income, to those who are blind or aged, and to needy families with dependent children. An advantage of Medicaid is that an individual’s payments can be used to offset the
monthly premiums, deductibles, and co-payments incurred with Medicare. A disadvantage is that there is no guarantee Medicaid will still exist in its present form in the future.

**Understand the Key Areas of Disability Insurance**

Disability insurance provides payments to insured individuals in the event that regular income is interrupted by illness or an accident. Disability is similar to life insurance but is really earning-power insurance. An advantage of disability insurance is that it may provide you with between 50 and 80 percent of your after-tax income if you are disabled by a long-term illness or injury. Anyone who depends on earned income should at least look into disability coverage. The risk of disability is even higher than the risk of premature death.

**Table 1. Different Types of Disability Insurance**

<table>
<thead>
<tr>
<th>Individual Disability Income</th>
<th>For personal protection, to provide income to individuals in the event of a disability.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Disability Income</td>
<td>For businesses to provide the owners and employees short-term and/or long-term benefits in the event of a disability.</td>
</tr>
<tr>
<td>Social Security Disability Income</td>
<td>Provides benefits to individuals covered under the Social Security system.</td>
</tr>
<tr>
<td>Workers’ Compensation</td>
<td>Provides benefits to employees who incurred a job-related disability.</td>
</tr>
<tr>
<td>Disability Overhead Expense</td>
<td>Provides a monthly benefit for covered overhead expenses when a business owner is totally or partially disabled.</td>
</tr>
<tr>
<td>Key-Person Disability</td>
<td>Provides a benefit to the business in the event the key person is disabled.</td>
</tr>
</tbody>
</table>

The major sources of disability insurance are employers, the government, and private providers. Workers’ compensation coverage is determined by individual states, with wide variability between states. Social Security benefits vary depending on your salary, how many years you have paid into the system, and how long the disability is expected to last.

The key question is how much coverage you should have. Generally, you should have enough coverage to maintain your living standard should you no longer be able to work. Your investment income will not stop with a disability, but your income from working will stop. If you have sufficient savings, you may not need much insurance, perhaps only 30 percent of after-tax income, depending on your investment portfolio. If you have little savings, you may need more,
perhaps 80 percent. Once a person has accumulated sufficient assets, it may be possible to self-insure fully or partially. If a person could stop receiving earned income and live comfortably for the rest of his or her life, then there would be no need for that person to insure his or her income.

**Providers of Disability Insurance**

Common providers of income in the event of a disability are the government, employers, and private providers.

**Government**

Disability income benefits may be provided by the government through the Social Security program. Benefits from this program are dependent upon income and time paid into the Social Security system. The Social Security website states:\(^2\)

The definition of disability under Social Security is different than other programs. Social Security pays only for total disability. **No benefits are payable for partial disability or for short-term disability.**

“Disability” under Social Security is based on your inability to work. We consider you disabled under Social Security rules if:

- You cannot do work that you did before;
- We decide that you cannot adjust to other work because of your medical condition(s); **and**
- Your disability has lasted or is expected to last for at least one year or to result in death.

This is a strict definition of disability. Social Security program rules assume that working families have access to other resources to provide support during periods of short-term disabilities, including workers’ compensation, insurance, savings and investments.

**Employers**

Employers may offer two types of protection: workers’ compensation and group disability insurance. The former is mandatory, and the latter is optional. Workers’ compensation is state-specific and provides benefits only for job-related injuries or illnesses, while group disability insurance provides benefits for injuries or illnesses wherever or whenever they occur.

Group disability insurance is an optional benefit an employer may offer to its employees. The employer may implement or retract this benefit at any time for any reason. Typically a group disability plan will cover 50 to 70 percent of income, and most plans only cover base salary and do not cover bonuses or retirement contributions. The benefits are taxable when the insurance policy is paid for by the employer; sometimes the policy or a portion of the policy may be paid
for by the employee on an after-tax basis, which can result in tax-free benefits. Short-term disability and long-term disability benefits may be offered by group plans. Short-term disability can pay for the first few months of a disability, while long-term disability will start at the expiration of the short-term disability and typically pays out until normal Social Security retirement age. Frequently the definition of disability is constructed to change after 24 months of benefits and goes from an “own occupation” to an “any occupation” definition. An “own occupation” definition states that a person is disabled if he or she cannot perform the material duties of his or her current occupation. An “any occupation” definition requires the worker not be able to perform the material duties of any occupation that he or she may be physically, mentally, or educationally qualified to perform. Most group plans are also offset by any benefits received by Social Security, and group benefits typically do not increase with inflation.

Private Providers

Disability income insurance can be obtained most comprehensively through private providers. Individual disability income insurance policies are typically paid for with after-tax dollars, and the benefits are tax-free. The policies can stand alone or be used to supplement a group disability plan. Unlike group plans, individual plans typically do not change the definition of disability, are not offset by Social Security benefits, and may have benefits that increase with inflation. Individual disability income plans have many choices and factors. It is very important to choose wisely when selecting a company and a policy, as not all disability insurances are equal.

Key Areas of Disability Insurance

There are eight key areas of disability insurance:

1. Definition of Disability.

Needs differ, which is why there are many different definitions of disability. It is important to understand the various ways disability is defined. What exactly does the policy consider a disability? Stick with a policy that defines disability as an inability to perform your normal job. A combination definition may include, “if you can’t perform your normal job for the first two years, and afterward any occupation for which you are reasonably suited” and may be acceptable. The latter definition will have lower cost.

2. Partial Disability Benefits

Some policies offer partial disability payments that allow workers to return to work part-time. These payments make up the difference in earnings between part-time and full-time work.

3. Benefit Duration
Policies state how long the benefits will continue. Most policies provide benefits for a maximum period or until the disability ends (or the disabled reaches age 65 or 70). Short-term disability policies, which are more expensive, generally provide benefits from six months to two years.

4. Waiting or Elimination Period

Policies determine the waiting period before the benefits begin. Short-term disability policies, which are more expensive, have a waiting or elimination period of 8 to 20 days. Longer-term policies have waiting periods of between one and six months. Generally the longer the waiting period, the less expensive the policy. Generally, a long-term policy makes more sense as your emergency fund protects you in the short-term.

5. Waiver of Premium

This option waives the premium payments if you become disabled.

6. Non-Cancelable Option

A policy may be purchased as either a non-cancelable and guaranteed renewable policy or as a guaranteed renewable policy. A non-cancelable policy cannot be changed unilaterally by the company. The premiums and provisions are guaranteed once the contract is issued. A guaranteed renewable policy cannot be canceled nor have its terms, other than premiums, changed by the company if timely payments of premiums have been paid. Make sure you have a policy that cannot be canceled. This protects you and guarantees your policy is renewable.

7. Rehabilitation Coverage

Rehabilitation coverage provides for vocational rehabilitation, allowing the policyholder to be retrained for employment through job-training and employment-related educational programs.

8. Cost-of-Living Rider

This provides for inflation adjustments to protect you from the impact of inflation.

Disability insurance is expensive. Generally, the annual premium will be around one to two percent of the income replaced. For example, a policy replacing $50,000 per year of annual salary would cost about $1,000 per year. However, it is something you should evaluate based upon your goals and objectives for you and your family.

Understand the Key Areas of Long-Term Care Insurance

Long-term care (LTC) insurance covers the costs of nursing-home facilities and long-term home health care. This type of insurance provides a daily dollar benefit—for example, $100 per day for the cost of long-term care. It may help families with a history of long-term diseases or disability
to plan for the future. Two disadvantages of this type of insurance are that it is expensive and that it has many exceptions and conditions for coverage.

There are four basic ways of paying for long-term care: self-insurance, Medicaid, Medicare, and long-term care insurance. Self-insuring means having enough money set aside through saving and investing to pay for future care. Medicaid will provide coverage for long-term care if your income and assets are low and you have exhausted your own assets. Medicare is the federal medical insurance program for those 65 or older or disabled. It will pay the costs of certain benefits but generally will not cover personal or custodial care. Finally, long-term care insurance covers the costs of nursing-home facilities and the costs of long-term home health care.

Key provisions that control your qualification for benefits include the type of care covered, the benefit period, waiting period, inflation adjustment provision, waiver of premium provision, and non-cancelability provision.

There are five key areas of long-term care insurance:

- Comprehensive or facilities-only plans
- Daily benefit amount
- Benefit period
- Elimination period
- Inflation adjustments

1. Comprehensive or Facilities-Only Plans

Comprehensive plans help pay for care received at home as well as care received in long term care (LTC) facilities. Facilities-only plans require care at LTC facilities, which include nursing homes, assisted living facilities, and hospice and respite care facilities. These plans are generally cheaper.

2. Daily Benefit Amount

This amount is either the maximum amount or the actual amount the insurance will pay per day for covered services. Some plans offer benefits on a monthly or weekly basis. Understand the rules for any policy you may be considering.

3. Benefit Period

This is the amount of time that you wish to receive the daily benefit amount. The period can range from 2 to 10 years or for an unlimited amount of time. Your total lifetime benefit is your daily benefit multiplied by your benefit period. For example, if your benefit amount is $110 per day * 1,825 days (five years), your lifetime benefit is $200,750.

3. Elimination or Waiting Period
Your elimination period is a period of time during which you are ineligible for benefits (this is the time before the insurance company begins paying claims). Policies with short or no elimination period are more expensive than those with longer elimination periods.

4. Inflation Protection

There are a number of options to help you protect yourself against the increased costs of care in the future. You can add options for automatic compound inflation, simple inflation, periodic inflation, or future purchases.

Understand How to Control Your Health-Care Costs

Controlling health-care costs is critical for you to achieve your personal and financial goals. Group health-care plans are usually more desirable than individual plans for three reasons. First, participants can generally get group coverage at lower rates. Second, employers often provide group coverage as an employee benefit. And third, people with existing health problems may find it easier to obtain group coverage because this type of coverage is offered based on the group as a whole rather than on the individual.

There are four important things you can do to control your health-care costs:

1. Live a healthy lifestyle.
2. Use a medical reimbursement account or health savings account.
3. Consider COBRA when changing jobs.
4. Opt out of a company insurance plan if you are already covered through a spouse’s plan.

1. Live a Healthy Lifestyle

Living a healthy lifestyle is the most important part of controlling health-care costs. Take care of your body. Scriptures teach us that our bodies are temples (1 Corinthians 3:17). We must therefore learn to treat our bodies as the temples they are.

Learn to live in healthy mode. Get adequate exercise and adequate sleep. Going to bed early and rising early is wise counsel that dates back to Moses’ time. Don’t put anything into your body that would harm it.

Finally, maintain good relationships with family and friends. In times of trouble, family and friends can help and truly make a difference in our lives.

2. Use a Medical Reimbursement Account or Health Savings Account

A medical reimbursement account (sometimes called a flexible spending account or a medical savings account) is an optional employer-established savings plan that allows you to save pre-tax dollars for non-reimbursable medical expenses. Each year, you set aside a specific amount of
money in this account on a before-tax basis; as you pay for medical bills out of pocket, you are reimbursed from this account.

An advantage of a medical reimbursement account is that it provides a way for you to pay for non-reimbursable medical expenses with pre-tax dollars. This savings plan is very flexible and covers many items that may not be covered by insurance plans, such as braces, contact lenses, glasses, and other miscellaneous medical expenses. Disadvantages of this type of account include a lot of paperwork and some expenses that are not eligible for coverage. There is a chance that you may lose the money you set aside in this account; if you do not use all the money you set aside by the end of the year, you lose it.

A health savings account (HSA) is a new option to help people pay medical expenses. For 2016, almost anyone with a qualified high-deductible health plan (which is a plan with a minimum deductible of $1,300 for self and $2,600 for a family) can also have an HSA. Contributions can be made by an individual or an employer ($3,350 self, $6,650 family, with catch-up limits for those over 55 of $1,000). Individuals contribute each year into an account that grows tax-free to pay for future qualified medical and retiree health expenses.

One advantage of HSAs is that you are paying for “qualified medical expenses” on a tax-free basis. It can be used to pay for medical expenses before you reach your deductible limits. Earnings grow tax-free and carry over from year to year, and distributions may be used for medical expenses for your spouse or children.

One of its disadvantages is that deductible amounts are high. Moreover, if a distribution is not for qualified expenses, then the distribution is included in income and is subject to a 10-percent penalty (no penalty if taken after age 65).

Table 2. High Deductible Health Plan Contributions, Deductibles and Limits

| High Deductible Health Plan Limits |
| Contributions: | Self | Family | Catch-Up * |
| 2012 | $3,100 | $6,250 | $1,000 |
| 2013 | $3,250 | $6,450 | $1,000 |
| 2014 | $3,300 | $6,550 | $1,000 |
| 2015 | $3,350 | $6,650 | $1,000 |
| 2016 | $3,350 | $6,750 | $1,000 |

| Deductibles | Self | Family |
| 2012 | $1,200 | $2,400 |
| 2013 | $1,250 | $2,500 |
| 2014 | $1,250 | $2,500 |
| 2015 | $1,300 | $2,600 |
| 2016 | $1,300 | $2,600 |
Out-of-Pocket Expenses:

<table>
<thead>
<tr>
<th>Year</th>
<th>Medical Expenses</th>
<th>Total Expenses</th>
</tr>
</thead>
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<td>2012</td>
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<td>$12,100</td>
</tr>
<tr>
<td>2013</td>
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<tr>
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</tr>
<tr>
<td>2015</td>
<td>$6,650</td>
<td>$12,900</td>
</tr>
<tr>
<td>2016</td>
<td>$6,750</td>
<td>$13,100</td>
</tr>
</tbody>
</table>

* If you turn 55 before the close of the tax year, you may also contribute an additional Catch Up amount.

### 3. Consider COBRA When Changing Jobs

If you use COBRA in between jobs, you are still able to have health insurance without getting individual coverage. However, a disadvantage of using COBRA is that you must pay the full cost of the insurance, and the cost may be substantially higher than it was before you left the company. Another disadvantage is that you must notify the company within 60 days of leaving that you are going to use COBRA.

### 4. Opt Out of a Company Insurance Plan If You Are Already Covered through a Spouse’s Plan

Companies will sometimes offer you a cash incentive for refusing insurance coverage for yourself and your family. If you already have insurance through a spouse’s (or parent’s) company, and you are sure you will not lose coverage, opting out is an option.

If you opt out of insurance just to save money and you do not have other insurance, you may be giving up future financial security for additional cash now. This is a very dangerous situation; it is never recommended that you opt out unless you already have another form of insurance.

### Know What to Look for When Buying Insurance

Selecting health insurance coverage may be the most important decision you make in regard to your financial plan. Medical problems are a leading cause of personal bankruptcy in the United States.

Health insurance is a technical and challenging issue; however, you can come to understand the different aspects of health insurance and use them to your advantage. Learn about the options for health insurance that are available to you and pick the options that will best help you achieve your personal goals. The following are some general tips to help you select the best option for health insurance.

1. **Always compare ratings.** As you look for health insurance, consider only high-quality insurance companies. Check with A.M. Best at [http://www.ambest.com](http://www.ambest.com) or Standard & Poor’s at [www.standardandpoors.com](http://www.standardandpoors.com) to review ratings on insurance companies. Look for strong companies with the least expensive, yet most comprehensive, plans.
2. **Protect yourself from catastrophic illnesses and accidents.** Know what you are buying. Read through the policies and avoid those with major exclusions or exemptions. Make sure you get needed coverage before you get optional coverage.

3. **Buy an individual policy if you are not covered at work.** If you are changing companies, consider using COBRA while you are between jobs. If your COBRA insurance has run out, consider joining a PPO or an HMO to reduce your medical costs. Group plans are generally less expensive than individual plans.

4. **Consider higher deductibles to reduce premiums.** By taking on some of the risk, you can reduce your monthly payments.

5. **Look for policies with a guaranteed renewal.** Avoid policies that are not guaranteed to be renewable. The last thing you want is to do is purchase a policy and then have it canceled after one period or year.

Lisa Collier Cool, in the April 2006 Reader’s Digest, recommends that you ask the following questions to protect your health and your financial plan:

1. **What is the real bottom line?** Determine the total costs of your health insurance. Total costs include not just the annual costs but any deductibles for lab work, emergency care, and other coverage. Make sure the deductible is annual, and not for every time you visit the doctor. Also understand what it takes to reach the family deductible. In addition, weigh co-payments for lab tests, hospital care, emergency room visits, and so on. Finally, make sure you know your annual out-of-pocket maximum, or the maximum you will have to spend each year before the health plan pays 100 percent of all additional costs.

2. **How well protected are you from catastrophic costs?** Check your plan to determine the limits the insurance company will pay over you or a member of your family’s lifetime. A low cap, such as $100,000, would leave you exposed to additional costs over that amount from a major accident or disease.

3. **Will you be able to use your regular doctors?** Check the list of available doctors and hospitals for any plan you are considering. Since many doctors may accept a range of plans, discuss with your current doctor which plans they accept and if they would consider working with your “prospective” new health plan.

4. **How complicated is it to see a specialist?** With most of these plans, there generally is a medical “gatekeeper” you must work through to see a specialist. This gatekeeper decides whether or not the referral is necessary. Depending on your type of plan, it could be harder to see specific specialists. Make sure you understand what you are getting into before you commit.
5. Do you have a choice of hospitals? Most insurance plans are associated with specific hospitals and doctors. Check to make sure the plan covers your doctors and the hospitals they are affiliated with, as well as any nearby hospitals where you may be treated in an emergency. Also determine how your care would be handled if you were sick or hurt while traveling.

6. Are your prescriptions covered? If your plan includes prescription coverage, ask for its “formulary” or the list of prescription drugs it covers. Some plans have tiered coverage, where coverage is grouped into different groups. Some drugs may not be covered at all if the insurance company considers that group of drugs experimental.

7. What other benefits are included? In addition to health care, some policies may also cover additional areas, such as dental and vision care, hearing aids, and other items. In addition, many also include services to keep you healthy, including discounts on gym memberships, weight-loss programs, and smoking-cessation programs.

Summary

Having adequate health insurance is crucial; health insurance ensures that you and your loved ones will receive the necessary medical treatment throughout the course of your lives. Health insurance offers you peace of mind and eliminates the financial risk of having to make large payments to health-care providers for injury or illness.

There are four major types of health insurance coverage: basic health insurance, major medical expense insurance, dental and eye insurance, and dread disease and accident insurance.

The three major providers of health insurance are private health-care plans, non-group coverage plans, and government-sponsored health-care plans. There are two types of private health-care plans: fee-for-service plans and plans provided by managed health-care providers. There are four main types of managed care providers: health maintenance organizations (HMOs), preferred provider organizations (PPOs), point-of-service plans (POSs), and exclusive provider organizations (EPOs).

Non-group coverage plans (also called individual health-care plans) are health insurance plans that cover individuals on a case-by-case basis. Finally, government-sponsored health-care plans are insurance plans that are sponsored by either the state or the federal government. Government-sponsored health-care plans fall under four headings: workers’ compensation, Medicare, Medigap, and Medicaid.

There are four important things you can do to control your health-care costs:

1. Live a healthy lifestyle
2. Use a medical reimbursement account or health savings account
3. Take advantage of COBRA when changing jobs
4. Opt out of a company insurance plan if you are already covered through a spouse’s or parent’s plan

Assignments

Financial Plan Assignments

Health insurance is an important part of every family’s financial plan. While it is not necessary (or cost-effective, perhaps) to have every type of health insurance, it is important to have basic coverage should catastrophic accident or illness strike.

Your assignment is to get a copy of your health insurance plan if you have one. Who is the plan’s provider? What kind of coverage do you have? Which of the major types of health insurance coverage do you have?

Get a copy of your health insurance manual. Go through the manual and review the different types of coverage you have, the co-payments, where you can go for service, the available doctors and clinics, and so on. Plan now so you know where you can go to get coverage.

Keep a copy of your insurance company’s summary pages in your financial plan. In case of accident or illness, you can go to that summary page to find all the necessary phone numbers and addresses. By having this information readily available, you will also minimize the problems that might arise from misunderstanding your available benefits.

Review Materials

Terminology Review

**Basic Health Insurance.** This is basic health coverage which covers hospital, surgical and physician expense insurance. It covers hospital insurance, which is hospitalization expenses including room, board, nursing, and drug fees; surgical insurance, which is the direct costs of surgery including the surgeon’s and equipment fees; and physician expense insurance, which covers physicians’ fees including office, lab, X-ray, and fees for other needed tests.

**Dental and Eye Insurance.** This is insurance which covers only dental work and expenses relating to the eyes and teeth. Generally, it is only partial costs of eye exams, glasses, contact lenses, dental work, and dentures. Know your coverage, as the amount covered varies by plan provider. These plans are generally expensive, unless they are provided as part of an employer plan.

**Dread Disease and Accident Insurance.** This is a special insurance to cover a specific type of disease or accident. Generally it provides only for ‘specific’ illnesses or accidents on the “covered” list, and it provides a set maximum dollar amount of reimbursement.
This insurance is generally expensive, unless included in your company’s total health plan. Generally, concentrate on making your health coverage as comprehensive as possible.

**Exclusive Provider Organization** (EPO). These are similar to an HMO, but operates through an insurance company. It is funded through an insurance company, with health care provided by contracted providers. Only care received from contracted providers is covered (unless in an emergency situation).

**Fee for-service** (or traditional indemnity plans). These are health care plans where the doctor bills the patient directly, and the patient is reimbursed, to a specific percentage, by the insurance company. They provide the greatest flexibility for choosing doctors and hospitals, they define the percent of each claim the policy will cover, and they define the amount the insured must pay before a claim is eligible for reimbursement. Generally these plans are more expensive and require more paperwork.

**Government-Sponsored Health Care Plans.** Government-sponsored health care plans are insurance plans which are sponsored either by the state or the federal government. These plans fall under three headings: Workers’ Compensation, Medicare, and Medicaid.

**Health Care Coverage.** Health Care Coverage is divided into four areas: basic health insurance, major medical expense insurance, dental and eye insurance, and dread disease and accident insurance.

**Health Care Providers.** These are the major providers of health care. They fall into three types: Private health care plans, which are either fee-for-service (or traditional indemnity plans) or managed health care (HMO, PPO); Non-group (individual) health care plans, or Government-sponsored health care plans.

**Health Maintenance Organizations** (HMOs). HMOs are prepaid insurance plans which entitle members to the services of specific doctors, hospitals and clinics. They are the most popular form of managed health care, due to their costs, which are roughly 60% of fee-for-service plans. They provide a system of doctors and hospitals for a flat fee, and emphasize preventive medicine and efficiency, and subscribers pay a relatively small co-pay for services rendered. They provide little choice of doctors and hospitals. As such, service may be less than at other facilities and referrals sometimes difficult to get.

**Insurance.** Insurance is tool or product that transfers the risk of certain types of losses or events from an individual to another institution. By transferring risk, it can help the individuals achieve specific goals if they die, get sick or become unable to work.

**Liability Coverage.** Liability is the financial responsibility one person has to another in a specific situation. Liability results from the failure of one person to exercise the necessary care to protect others from harm. Personal liability coverage protects the
policyholder from the financial costs of legal liability or negligence. There are two major forms of liability insurance: the liability portions of homeowners and auto insurance and an umbrella liability coverage.

**Major Medical Insurance.** This is major coverage of medical costs over and above the basic health insurance coverage. It covers medical costs beyond the basic plan. These normally require a co-payment and/or a deductible. There is a stop-loss provision, which limits the total out-of-pocket expenses incurred by the insured to a specific dollar amount and a life-time cap for the insurance company, which limits the total amount the insurance company will pay over the life of a policy.

**Managed health care providers.** These are insurance companies which provide pre-paid health care plans to employers and individuals. There are four main types of managed care: i. Health maintenance organizations (HMOs), Preferred provider organizations (PPOs), POS Plans (POS), and Exclusive Provider organization (EPOs). They pay for and provide health care services to policy holders and they provide the most efficient payment of bills. However, they limit choices to the doctors and hospitals that participate and they require policy holders to pay a monthly premium and share the cost of care.

**Medicaid.** Medicaid is a medical assistance program, operated jointly by the states and federal government, to provide health care coverage to low income, blind, or aged persons. Medicaid payments may be used to offset the premiums, deductibles, and co-payments incurred with Medicare. There is no guarantee that this plan will be around in its present form.

**Medicare.** Medicare insurance provides medical benefits to the disabled and to those 65 and older who are covered by Social Security. Its cost is covered through Social Security taxes. Individuals can get insurance through Medicare that would be prohibitively expensive through other channels, however, it doesn’t cover all the costs and expenses and individuals must pay certain amounts. In addition, there are limitations to the coverage, such as out-of-hospital prescription drugs and limitations to the number of days in skilled nursing facilities. Medicare is Divided into three parts: A, B, C.

- Medicare Part A is compulsory and covers all hospital related expenses, such as bed and board, operating room costs, and lab tests. Patient pays a deductible and coinsurance payment.
- Medicare Part B is voluntary, with a monthly charge. It covers doctors’ fees and other outpatient treatment. Patient pays a premium, deductible, and 20% of approved charges.
- Medicare Part C (Medicare Advantage) provides three program alternatives: coordinated care plans, private fee-for-service Medicare, and health savings accounts (HSAs) .
Chapter 13. Insurance 3: Health, Long-term Care, and Disability Insurance

Non-group Coverage Plans. These are health insurance plans which cover individuals on a case-by-case basis and are traditionally the most expensive type of coverage. They provide a custom insurance policy to the purchaser. They are expensive, usually 15% - 60% more expensive than a group policy and may require subscribers to pass a medical exam.

Point of Service Plans (POS). These plans have attributes of HMOs, PPOs, and indemnity plans. The point at which benefits are received determines the amounts of benefits paid. POS may include HMO, PPO, and indemnity type programs, and the POS may also have a gatekeeper.

Preferred Provider Organizations (PPOs). PPOs are insurance plans which are essentially a cross between the traditional fee-for-service and an HMO. PPOs are organizations where in-plan provider’s fees are covered, and out-of-plan providers results in higher fees. Insurers negotiate with a group of doctors and hospitals to provide care at reduced rates, while giving insurers the ability to go to non-plan doctors. PPOs provides health care at a discount to fee-for-service plans. They provide a group of doctors which work at reduced costs to the participants, while assessing an additional fee if the participant uses a non-member doctor or center. PPOs are more expensive than HMOs and use of non-PPO providers results in higher out-of-pocket costs.

Private Health Care Plans. These are health care plans sold by private insurance companies to individuals and employers as part of a benefits package.

Workers’ Compensation. Workers compensation is state insurance program that insures against work-related accidents and illness. Workers’ Compensation provides insurance to workers injured on the job, regardless of whether they have other health insurance or not. It only covers work-related accidents and illnesses, and coverage is determined by state law and varies state by state.

Review Questions

1. What is currently a major concern in the health-care industry? Why is the cost rising?
2. What are the four major types of health insurance coverage?
3. What is a co-payment? Is there a deductible?
4. What are the three major types of health-care plans?
5. What are four important things you can do to control your health-care costs?
Case Studies

Case Study 1

Data

Steven has a major medical policy for $1 million. The policy has a $500 deductible, an 80 percent co-insurance provision, and a $5,000 stop-loss limit. He recently incurred $10,500 worth of covered medical expenses.

Calculations

What amount will the insurer pay in this situation? What amount of these covered medical expenses will Steven pay?

Case Study 1 Answers

The insured pays the deductible first ($500), then the insurance company and the insured split the remainder (80 percent / 20 percent), up to the stop-loss limit of the insured ($5,000). The breakdown of payments for covered medical expenses are as follows:

<table>
<thead>
<tr>
<th>Total Expenses</th>
<th>$10,500</th>
<th>Insurer Pays</th>
<th>Steven Pays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deductible</td>
<td>$500</td>
<td>$0</td>
<td>$500</td>
</tr>
<tr>
<td>Remaining</td>
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</tr>
<tr>
<td>Total Payments</td>
<td>$10,500</td>
<td>$8,000</td>
<td>$2,500</td>
</tr>
</tbody>
</table>

1 “Constancy Amid Change,” Ensign, Nov. 1979, 80
2 http://www.ssa.gov/dibplan/dqualify4.htm
3 “7 Key Questions to Ask,” Reader’s Digest, Apr. 2006, pp. 102–103
Introduction

In addition to life insurance and health insurance, you should own and understand three other important types of insurance: auto insurance, homeowner’s/renter’s insurance, and liability insurance.

These types of insurance are valuable assets for any family working toward financial security. They ensure that when the unexpected happens, you will not lose the things you have worked for all your life because you do not have the necessary funds to pay for damages.

As with all types of insurance, the amount of insurance and the type of coverage you carry should be updated annually. Your insurance policies should also be updated when you acquire additional personal property or when inflation increases the value of your home or other assets.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Explain the basics of auto insurance and know how to reduce your costs
2. Explain the basics of homeowner’s insurance and know how to reduce your costs
3. Explain the basics of personal liability insurance

Explain the Basics of Auto Insurance and Know How to Reduce Your Costs

“There are 30 million accidents in the United States annually, which equals about 1 accident for every five licensed drivers. These accidents result in over $100 billion in economic losses, 2 million injuries, and 40,000 deaths.”1

There are many steps you can take to reduce the probability of an accident. You can drive defensively, obey all traffic rules, avoid high-traffic areas, and use good judgment when driving. However, although you can control how you drive, you cannot control how others drive; therefore, your risk of being in an automobile accident remains high. Auto insurance is a necessity for all drivers.

Basic Parts of Auto Insurance

Auto insurance is a contract between you and the insurance company in which you agree to pay a monthly premium, and the insurance company agrees to pay a specified amount for any losses
defined in your policy. Losses that exceed your policy’s limit are your liabilities, so it is important that you have adequate coverage.

To legally drive your car, you are required by law to carry a minimum level of auto insurance. However, most experts agree that the minimum coverage required by law is insufficient. There are four basic parts of automobile coverage:

- **Part A: Liability coverage**
- **Part B: Medical payment**
- **Part C: Uninsured/underinsured motorist coverage**
- **Part D: Comprehensive physical damage coverage**

**Part A: Liability coverage** pays for losses related to bodily injury, property damage, lawsuits, and defense costs. Bodily injury refers to expenses related to deaths or injuries resulting from an accident. Property damage refers to costs for damage to the car or cars involved in an accident, as well as damages to other property (such as lampposts or fire hydrants). Lawsuit coverage refers to losses related to any lawsuit resulting from an accident; in addition to the maximum amount of expenses your policy covers for a lawsuit, your policy may also cover your defense costs if the case goes to trial.

Liability coverage may be listed on your policy as a combined limit or as a split limit, depending on the type of insurance you have. Combined-limit insurance lists one maximum amount the insurance company will pay to cover all types of liabilities. Split-limit insurance lists the maximum amount the insurance company will pay for each of the specific types of liability. For example, if you have a 100/300/50 split-limit insurance policy, it means your limits are $100,000 per person for bodily injury liability coverage, $300,000 per accident for bodily injury liability coverage, and $50,000 per accident for property damage coverage. These dollar amounts are the maximum amounts your insurance company will pay per person or per accident. Should the costs of the accident exceed these limits, you will be responsible for paying the difference. My recommended split-limit minimum liability coverage limits are $100,000 per person and $300,000 per accident with $50,000 property damage. My combined-limit recommended liability coverage limits are a minimum of $300,000 per accident with $50,000 property damage.

**Part B: Medical payment coverage** pays for accident-related medical costs and funeral expenses incurred by you or your family members within three years of an accident. It also covers the insured while walking, even though he is not in a vehicle. My recommended minimum medical payment coverage is $50,000.

Medical payment coverage does not cover all medical expenses, however. For example, it does not cover your medical expenses if you are injured by a vehicle that is not designed for public streets, such as an unlicensed three- or four-wheel all-terrain vehicle. Be sure you know what types of injuries are excluded from your policy.
Part C: Uninsured or underinsured motorist coverage covers your costs if you are injured by an uninsured motorist or if you are injured in a hit-and-run accident. It also covers your costs if the other driver’s insurance is insufficient to pay for your expenses (in other words, if the other driver is underinsured). The other driver must be at fault for you to collect on this coverage. I recommend that you keep your uninsured/underinsured insurance coverage the same as your liability coverage.

Part D: Comprehensive physical damage coverage (also called collision coverage) pays for damage resulting from any collision, regardless of who is at fault. If the other driver is at fault and has liability insurance, your insurance company should be able to recover losses from the other driver’s insurance company. If the accident does not involve a collision with another car, comprehensive physical damage coverage pays for damage to your vehicle.

Standard Exclusions

Exclusions are clauses in your contract that limit the insurance company’s liability to pay for specific claims. For example, your insurance company may not pay on a claim if the following situations apply:

- You intentionally cause damage or injury
- You drive the vehicle without permission
- Your vehicle has fewer than four wheels
- You drive someone else’s vehicle on a regular basis
- Your automobile is not listed on your policy
- You are carrying passengers for a fee
- You are driving in a race or speed contest

You should be aware of and avoid any circumstances where exclusions to your insurance would apply.

No-Fault Insurance

No-fault insurance is coverage that pays for the driver’s injuries, regardless of who causes the accident. Such policies are designed to promote faster reimbursement and reduce the amount of litigation necessary. No-fault policies vary from state to state and are available only in “no-fault” states. There are many advantages to having no-fault insurance. It is easier to deal with because your insurance pays for your injuries, and the other driver’s insurance pays for his or her injuries—there are no legal battles. Claims are processed faster because you are guaranteed immediate compensation for your losses.

However, there are disadvantages to having no-fault insurance as well. Damages from pain, suffering, and emotional distress are not usually covered by no-fault insurance; other disadvantages include lower dollar limits on medical expenses and lost income, and losses above your established limits are not covered. Vehicle damage is not covered: to repair your vehicle,
you must rely on your collision coverage or the other driver’s. No-fault insurance also has liability thresholds that may restrict your ability to pursue a liability lawsuit.

**Keeping Costs for Automobile Insurance Down**

The cost of your auto insurance is determined by the type of car you drive, how much and how far you drive the car each day, and your driving characteristics. These driving characteristics include your driving record, where you live, and any discounts for which you qualify. Insurance companies also use your credit score to determine the cost of your insurance. The following are some tips for keeping your automobile insurance costs down:

1. **Shop comparatively.** Know what different insurance companies in your area are charging for similar coverage. Determine the amount and type of insurance you need and then shop comparatively.

2. **Consider only high-quality insurance companies.** Review insurance ratings from different companies such as A.M. Best (look for a rating of A and higher) at [www.ambest.com](http://www.ambest.com), Standard & Poor’s (AA and higher) at [www.standardandpoors.com](http://www.standardandpoors.com), Fitch (AA and higher), and Moody’s (Aa2 and higher). Make sure the company you have chosen is sound. Find examples of others who have made claims with the company and determine how well the company handled those claims. Having cheap insurance is worthless if the company fails to pay on claims.

3. **Make use of all available discounts.** Apply for all discounts you think you or your family members would qualify for, such as non-smoking, non-drinking, good grades, and multiple vehicles. In addition, consider buying auto insurance from the same company with which you have your homeowners’ insurance or life insurance because you should get a multiple-policy discount. Always ask your insurance agent, “Are you sure you can’t do better than that?” and “Are you sure there are no other discounts?”

4. **Buy vehicles that are inexpensive to insure.** Ask your insurance company about the costs of insuring specific vehicles before you purchase a new car. Buying a car that is a favorite of thieves is likely to raise your insurance costs. However, buying a car with extra safety features and antitheft devices may reduce your insurance costs.

5. **Drive defensively.** Driving defensively is critical to reducing your insurance costs. Keep your driving record clear of tickets and accidents. If you or someone in your family gets a ticket, go to traffic school to keep the ticket off your record whenever possible.

6. **Raise your deductibles.** If you want to cut monthly insurance costs, raise your deductibles. Moreover, consider dropping collision coverage completely once the value of your car drops below $2,000; it may be more cost effective for you to pay repair costs out of your own pocket if the car is in a collision.
7. **Keep adequate liability insurance.** Never reduce your liability limits to reduce your insurance costs! Liability insurance is fairly inexpensive, but it is very important: keep your limits high.

8. **Be cautious of allowing others to drive your car.** Remember that if a friend causes an accident in your car, and you gave your friend permission to drive the car, you (and your insurance company) will likely have to pay the bill, and your insurance costs may go up.

9. **Improve your credit score.** Take the steps necessary to improve your credit score; insurance companies believe that those with high credit scores are less of an insurance risk than those with lower credit scores. Review your credit score and credit reports every few years and make sure they are correct.

10. **Review your insurance coverage on a regular basis.** Review your insurance costs, coverage, liability limits, and discounts on a regular basis—at least annually. Make sure all your vehicles are included in your policy. Review your CLUE (Comprehensive Liability Underwrites Exchange) report at [www.choicetrust.com](http://www.choicetrust.com) and make sure it is correct.

**Filing a Claim on Your Auto Insurance**

If you are in an accident, the following tips may be helpful.

First, use wisdom in your actions: If there is an accident, call the police immediately and cooperate with them when they arrive. Move the vehicles out of traffic or put up flares. (I recommend that you keep flares in your vehicle’s emergency kit.) Get help for anyone who has been injured. Write down the names and contact information of any witnesses to the accident. Insist that all drivers be tested for alcohol consumption if you are concerned that alcohol may have been a factor in the accident. Before leaving the scene of the accident, get the police case number for your records.

Second, keep calm and stay in control. Write down your memories of the events leading up to and following the accident. Don’t sign anything or admit guilt. Remember to be firm on your views about what happened when you speak with the police officers. Don’t be afraid to speak up and give pertinent information about the accident—even if that information contradicts the other driver’s story.

Third, follow up on the accident properly and promptly. Get the name of the other driver’s insurance company and call your insurance company as soon as possible. Cooperate with your agent and your claims adjuster, the person assigned by your insurance agent to determine the amount of the loss. Obtain a copy of the police report and keep records of all accident-related expenses. Review the settlement steps in your policy and follow these steps exactly.

Finally, if you are dissatisfied with the settlement the insurance company offers, request a meeting with your agent and your claims adjuster. If you are still not satisfied after this meeting,
contact your insurance company’s consumer affairs office or the state insurance commissioner and explain your concerns.

**Explain the Basics of Homeowner’s Insurance and Know How to Reduce Your Costs**

Your home is likely one of the largest purchases you will ever make. Because your home is such an important purchase, it needs to be protected. The purpose of homeowner’s insurance is to cover the costs of repairing or replacing your home in the event it is damaged by specific disasters, such as fire, theft, or storms. Know which risks you want homeowner’s insurance to cover, and make sure you get the type of that covers those risks.

**Basic Types of Homeowner’s Insurance**

There are six basic types of homeowner’s insurance:

1. **HO-2** is a general form of homeowner’s insurance and the least expensive type; it covers only named perils. These perils may be fire, lightning, hail, explosions, and so on. If a peril is not listed, it is not covered by the insurance.

2. **HO-3** includes open perils protection. Open perils protection covers all direct physical losses to your home and lists specific exclusions. All forms of homeowner’s insurance exclude certain types of damage, including damage caused by law (problems caused by a lack of proper permits), earth movement (earthquakes), water damage (floods), power failure, neglect, war, nuclear accidents, and intentional loss. Although HO-3 excludes these perils as a general rule, coverage for some of these specific perils may be added separately to the policy. HO-3 coverage is generally recommended as a minimum level of homeowner’s insurance.

3. **HO-4** is renters’ and tenants’ insurance. Because this coverage is available only to renters and tenants, it covers damage or loss of personal property rather than loss or damage to the structure itself. HO-4 provides liability coverage in case of an accident, but it does not cover structural damage. The personal property coverage provided by HO-4 is similar to the coverage provided by HO-2. All-risk coverage is available for HO-4 insurance and is recommended. All-risk coverage includes coverage for all risks except those excluded from homeowners coverage.

4. **HO-5** is a new, unique form of homeowner’s insurance that covers open perils and includes a rider (HO-15) that allows open perils coverage on personal property in addition to other coverage. HO-5 covers all direct physical losses to your home, or open perils protection. HO-5 has the same exceptions as HO-3.

5. **HO-6** is condominium owners’ insurance. HO-6 is similar to HO-4 coverage, but it is available only to co-op or condominium owners. Besides covering personal property, this
insurance also covers improvements you have made to the dwelling. All-risk coverage is available as an option and is recommended.

6. **HO-8** is modified coverage for older homes. HO-8 is similar to HO-1 coverage, or insurance against named perils. It insures the dwelling for the repair cost or market value instead of the replacement value. All-risk coverage is available as an option and is recommended.

### Basic Parts of Homeowner’s Insurance

Homeowner’s insurance covers four key components: the main dwelling, other structures, personal property, and loss of use.

**Coverage A: Main dwelling** coverage protects the home and any attachments to the home. It does not cover any damage to the land.

**Coverage B: Other structures** coverage protects buildings on the property that are not attached to the main dwelling, as well as landscaping; however, it does not protect land or structures used for business purposes. Coverage of other structures is limited to 10 percent of the value of the home’s coverage.

**Coverage C: Personal property** coverage pays for all personal property that is owned or used by the policyholder. It covers personal property regardless of the property’s location. For example, loss to contents in your personal vehicle at work would be covered by the personal property component of your homeowner’s insurance. Personal property coverage also covers property of guests in your home. It is limited to 50 percent of the home’s coverage. For example, if your home is covered for $250,000, you can have up to $125,000 coverage for personal property. In addition, there is a $200 limit on cash, gold, and silver; a $1,000 limit on securities, tickets, and stamps; and a $2,500 limit on silverware. Note that birds, fish, and other animals are not considered personal property.

**Coverage D: Loss of use** coverage pays for losses that are incurred if your home becomes uninhabitable. It is limited to 20 percent of the home’s coverage. Benefits of this type of coverage cover living expenses that are incurred if you need to relocate temporarily until your home is repaired. This type of coverage also covers fair rental value of any structure in which a renter was leasing part of the home. Finally, this type of coverage covers losses in the case that a civil authority prohibits you from using the structure.

If you need additional coverage, a homeowner’s policy can be supplemented in a number of ways through endorsements or additions to your policy. Examples of endorsements include inflation, floaters, and specific risk coverage. An inflation endorsement allows insurance protection to increase parallel to the increase of repair and rebuilding costs. A floater policy endorsement insures valuable personal property for an amount that is higher than your existing
homeowner’s policy limits. Flood insurance, earthquake insurance, and terrorism insurance provide protection in case of specific types of loss as well.

**Keeping Costs for Homeowner’s Insurance Down**

Three basic factors determine how much a policy costs: location of structure, type of structure, and level of coverage. There are eight major areas you should consider when looking to reduce your homeowner's insurance costs:

**Table 1. Homeowner’s Insurance Coverage**

<table>
<thead>
<tr>
<th>Policy</th>
<th>Coverage A: Dwelling</th>
<th>Coverage B: Other Structures</th>
<th>Coverage C: Personal Property</th>
<th>Coverage D: Loss of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 02: Basic Insurance Coverage</td>
<td>Broad form $15,000 min</td>
<td>Broad form 10% of A</td>
<td>Broad form 50% of A</td>
<td>Broad form 20% of A</td>
</tr>
<tr>
<td>HO 03: Broader form, includes open perils</td>
<td>Open Peril $20,000 min</td>
<td>Open Peril 10% of A</td>
<td>Broad form 50% of A</td>
<td>Open Peril 20% of A</td>
</tr>
<tr>
<td>HO 04: Renters, or Tenant's Insurance</td>
<td>Not covered</td>
<td>Not covered</td>
<td>Broad form $6,000 min</td>
<td>Broad form 20% of C</td>
</tr>
<tr>
<td>HO 05: Broader form, incl. open perils coverage on Per. Property</td>
<td>Open Peril $20,000 min</td>
<td>Open Peril 10% of A</td>
<td>Open Peril 70% of A</td>
<td>Open Peril 30% of A</td>
</tr>
<tr>
<td>HO 06: Condominium Insurance</td>
<td>$1,000</td>
<td>Included in A</td>
<td>Broad form $6,000 min</td>
<td>Broad form 40% of C</td>
</tr>
<tr>
<td>HO 08: Modified coverage for Older Homes</td>
<td>Basic $15,000</td>
<td>Basic 10% of A</td>
<td>Basic 50% of A</td>
<td>Basic 10% of A</td>
</tr>
</tbody>
</table>

**Section 1: Property**

- **Broad form**: Covers only named specific perils. If not noted, it is not included. **Open Peril**: Covers all direct physical losses to your home, i.e. open perils protection. It lists specific exclusions. In general, all forms exclude law, earth movement, water damage, power failure, neglect, war, nuclear accidents, and intentional loss.

**Section 2: Liability**

1. **Know your needs.** Know what you want out of your homeowner's insurance. Remember to insure against the high-risk, high-severity items and self-insure against the low-severity, low-risk events.

   It may be wise to buy guaranteed full-replacement cost coverage for your home in case the home is damaged beyond repair. If you have this type of coverage, your home will be
replaced without cost to you, regardless of what you paid for the home. Also, determine whether other structures or landscaping on your property have adequate coverage. Purchase additional insurance if part of your home is used as an office. You can also purchase extra coverage for unique situations if you have specific concerns that are not included in a policy; for example, if you live on a flood plain, you may want to add flood insurance to your policy. Finally, consider extra coverage, or floater policies, for valuables such as paintings, jewelry, or collections.

1. **Don’t underinsure.** The 80-percent rule states that a dwelling should be insured within 80 percent of its replacement cost. If you do not carry adequate insurance on your home, co-insurance requires you to pay for a portion of your home’s loss. If your home is not insured for at least 80 percent of its replacement cost, your settlement will be the greater of two amounts: either the settlement will be the cash value of the damaged or lost portion of the home or the settlement will be the amount of your insurance coverage divided by 80 percent of the replacement cost multiplied by the value of the loss. For example, if your home was insured for $300,000 but its replacement cost was $400,000, you are underinsured. You should have had a minimum insurance amount of $320,000, or 80 percent of $400,000. If you had a loss of $250,000, the company would pay $300,000 (your insured amount) divided by $320,000 (80 percent of the replacement value), times $250,000—or $234,375 (not including deductibles). You would be personally responsible for $15,625.

2. **Select a financially sound insurance company with comparatively low costs, and stick with them.** Shop around for homeowner’s insurance—knowledge is your most important asset. Remember, the more types of insurance you have with a single insurance company, the lower your costs on specific types of insurance will be (multiple-policy discounts can be substantial). Once you have decided on an insurer, check with [www.ambest.com](http://www.ambest.com) to review your insurer’s ratings and financial health. Pick a good insurer that is not likely to go out of business. Different companies have different discounts for different areas; talk with your agent and get as many discounts as you possibly can.

3. **Get a CLUE (Comprehensive Loss Underwriting Exchange) report for both your home and your automobiles.** A CLUE report is similar to a credit report. It gives a list of all payments made by the insurance company on your behalf. Review this report—this is what potential insurance companies will see when they are considering you as a client. You can get one copy a year from [www.choicetrust.com](http://www.choicetrust.com). Be careful that inquiries are not listed as actual payments.

4. **Reduce the insurance company’s risk.** There are a number of ways to do this. First, you may want to consider paying your premiums annually instead of monthly; paying your premiums annually lowers administrative costs for your insurer and usually lowers your costs as well. In addition, some companies will give you a 5 to 10 percent reduction in costs if you allow them to deduct your insurance costs monthly through electronic funds
transfers (EFTs). Second, increase your deductible. The higher your deductible, the lower your premium costs; by raising your deductible you are self-insuring a greater part of your risk.

Third, make your home more disaster-resistant and safer. Companies may give discounts if you make your home more disaster-resistant, for example, by adding storm shutters or buying strong roofing materials. Contact your insurance company to find out about possible discounts. Insurance companies may also give a 5 to 10 percent discount if you add fire extinguishers and burglar alarms that are connected to police monitoring. Because of the high cost of home security systems, contact your insurance agent to see what the agent recommends and how much savings would be before you purchase these systems.

5. **Know your coverage restrictions.** You should read and understand your policy completely. Remember, the amount paid by the insurance company will never exceed the limit listed on your policy. An important restriction you should be aware of stipulates that in order to receive full insurance benefits, you must rebuild in the same location. If you don’t rebuild in the same location, your insurance company will give you only the cash value of the home and not the replacement value.

6. **Make your coverage work.** Create an inventory of everything you insure, preferably on videotape, to establish proof of ownership. Keep the inventory in a safe place away from the house and update it yearly. Videotape the exterior of your home to document the value of landscaping and the condition of the house and update this record yearly as well. Make a list of the value of your assets. These records will be invaluable if your home or assets are damaged.

7. **Keep your credit score high.** Having a solid credit history can reduce your insurance costs. Monitor your credit report annually, check your credit score every two years, and keep your credit score high.

**Filing a Claim on Your Homeowner’s Insurance**

If you have to make a claim on your homeowner’s insurance, there are a number of steps you should take to protect yourself and speed the insurance process.

First, notify the police immediately of any theft or loss. Get copies of all police reports. Call your insurance company and notify the company of the loss as well. In some circumstances, you will need to follow up your call with a written claim.

Second, make a list of damaged, stolen, and destroyed items. If the loss required you to live outside the home, submit receipts for any additional living expenses to your insurance company as needed. Provide information requested by your claims adjuster, and accommodate the insurance company as much as possible.
Finally, review the steps of settlement explained in your policy and follow these steps exactly. If you are dissatisfied with the settlement offer, request a meeting with your insurance agent and claims adjuster. If you are not satisfied after this meeting, contact your insurance company’s consumer affairs office or the state insurance commissioner and explain your concerns.

**Explain the Basics of Personal Liability Insurance**

A liability is the financial responsibility one person has to another person in certain situations. Liability results from negligence or the failure of one person to exercise the necessary care to protect other people from harm.

The cost of liabilities can be substantial. Every year, thousands of people are sued for more than one million accidents caused by or related to cars or homes. The purpose of personal liability insurance is to protect you from the financial costs of legal liability and negligence.

There are the two major forms of liability insurance: (1) the liability portions of homeowner’s and automobile insurance and (2) an umbrella liability policy.

An umbrella liability policy is an insurance policy that adds additional protection to the protection provided by your homeowner’s and automotive policies. An umbrella policy becomes effective only after the limits of your homeowner’s or automotive policy have been reached. Therefore, many companies require specific coverage limits on homeowner’s and automotive policies. For example, an insurance company may require you to have 250/500/100 insurance on all vehicles and $300,000 on all homes before they will write an umbrella policy.

**Summary**

Auto insurance is a contract between you and the insurance company in which you agree to pay a monthly premium, and the insurance company agrees to pay a specified amount for any losses defined in your policy. Losses that exceed your policy’s limit are your liabilities, so it is important that you have adequate coverage.

Your home is likely one of the largest single purchases you will ever make; it is important for you to protect this important purchase. The purpose of homeowner’s insurance is to repair or replace your home in the event it is damaged by specific disasters. Know which risks you want homeowner’s insurance to cover, and make sure the policy you choose covers those risks.

An umbrella liability policy is an insurance policy that adds additional protection to the protection provided by your homeowner’s and automotive policies. This policy becomes effective only after the limits of your homeowner’s policy or automotive policy have been reached.
Assignments

Financial Plan Assignments

There are several different assignments for this chapter. Having auto insurance is a critical part of owning and driving a car; in fact, it is illegal to drive a car unless you have insurance. Your assignment is to get a copy of your auto insurance and include it in your financial plan.

Look at your credit score if it is reported on your policy. The credit score shown on your policy should be consistent with the credit score you received from the credit-scoring agencies for an earlier assignment. Improving your credit score can lower the cost of your auto insurance.

Look at the discounts on your policy, such as discounts for good students, good drivers, multiple cars, and so on. Call your insurance provider and find out if there are any other discounts you qualify for. Discounts can reduce the cost of your insurance policy.

Review each of the four basic parts of your insurance: liability coverage, medical coverage, uninsured/underinsured coverage, and comprehensive physical damage coverage. What are your liability limits? If you have split coverage, how is the coverage split? Remember that most state requirements for liability insurance were set more than 30 years ago; these requirements are generally insufficient, given the rising costs of medical and automobile repair. If you must reduce your insurance costs, increase your deductible rather than reducing your liability limits.

If you own a home or a condo, get a copy of your homeowner’s policy and review it carefully. Which type of homeowner’s insurance do you have? Is your homeowner’s insurance sufficient for your needs? Does it cover the current value of your home? What could you do to improve your coverage?

Do you have a need for umbrella coverage? As the size of your assets increases, umbrella insurance may be something to look into.

As an optional activity, you can find out what insurance companies see when they look at your insurance reports. Under the FACT Act of 2003 (Fair and Accurate Credit Transactions Act) you can obtain a free copy of the following reports each year from the Comprehensive Liability Underwriting Exchange, or CLUE:

- CLUE Auto: A five-year loss-history report is generated if a loss is filed against your automobile insurance policy and the insurance company reports the information to CLUE.

- CLUE Personal Property: A five-year loss-history report is generated if a loss is filed against your homeowner’s insurance policy and the insurance company provides this information to CLUE.
To get both CLUE reports, go to www.choicetrust.com, click on CLUE Reports, click on CLUE reports again, then order options, then both reports, then new member. Fill out the information for new members, including Social Security number, driver’s license number, and address. Then verify the information and obtain the reports. If claims that the insurance company has paid are shown on these reports, copy the reports and include them in your Personal Financial Plan. You can also dispute the information if it is not correct or if you are planning on switching insurance companies.

Review Materials

Terminology Review

Auto insurance. Insurance against financial loss due to an auto accident. It is a contract where you agree to pay the premium and the insurance company agrees to pay up to a specified amount for any policy defined losses. Losses in excess of policy limits are your responsibility.

Auto split-coverage insurance limits. These limits have reference to your coverage amounts which includes bodily injury liability per person, bodily injury liability per accident, and property damage liability per accident. These are the maximum amounts your insurance company will pay per person or per accident. Should the cost of the accident exceed the stated limits, you are personally responsible for any amounts exceeding these limits.

Exclusions. Exclusions are contract clauses which limit the insurance company’s liability in specific situations or events. Your insurance may not pay up if: there is intentional injury or damage, there was use of the vehicle without permission, the vehicle has less than four wheels, someone else’s vehicle was provided on a regular basis, its your automobile, but not listed on your policy, you were carrying passengers for a fee, or you were driving in a race or speed contest.

Homeowners Insurance. Homeowners insurance repairs or replaces your home from specific perils or accidents including: Fire, theft, storms; faulty household systems or appliances; and riot, volcanoes, vehicles, aircraft. Three key areas of homeowners insurance are: Dwelling: direct and consequential loss resulting from damage to the dwelling itself; Personal Property: loss or damage to personal property, and Liability: liability for unintentional actions arising out of the non-business, non-automobile activities of the insured and the insured’s family. It is sold in six basic versions.

Homeowners Insurance Coverage. Homeowners insurance is divided into six areas:

- **Coverage A: Dwelling.** This protects the dwelling and any attachments. It does not cover any damage to the land.
- **Coverage B: Other Structures.** This protects other, unattached, dwellings on property. It also covers landscaping as well as buildings, but not the land. It also does not cover other structures used for business purposes. It is limited to 10% of the home’s coverage.
• **Coverage C: Personal Property.** This covers all personal property owned or used by the policyholder up to policy limits, and covers it regardless of location. It also covers property of guests in your home as well. It is limited to 50% of the home’s coverage, with a $200 limit on cash, gold, and silver; $1,000 limit on securities, tickets, and stamps; and $2,500 limit on silverware. Animals, birds, and fish are excluded.

• **Coverage D: Loss of Use.** This covers losses incurred as a result of your home being uninhabitable or un-useable. It is limited to 20% of the amount of coverage on the home. There are three benefits of coverage: additional living expenses should to need to relocate temporarily; fair rental value, and prohibited use.

• **Coverage E: Personal Liability.** The insurer will pay, to the limit of liability in the contract, all amounts due to bodily injury or property damage.

• **Coverage F: Medical Payments.** The insurer will pay all reasonable medical payments to others, claims, expenses, and damage to the property of others to the limits of the policy. Other coverage includes claims expenses, first aid expenses, damage to the property of others, and loss assessment coverage.

**Homeowners Insurance Types.** Homeowners insurance comes in various forms.

• **HO-2.** It is a broad form homeowner’s insurance, and covers only named specific named perils. These perils may be fire, lightning, hail, explosions, etc. If the peril is not named, it is not covered by the policy. In general, all forms of coverage exclude law, earth movement, water damage, power failure, neglect, war, nuclear accidents, and intentional loss.

• **HO-3.** It is a special form of homeowner’s insurance that includes open perils. This is generally recommended at a minimum. It covers all direct physical losses to your home, i.e. open perils protection. It lists specific exclusions to the policy for perils not covered.

• **HO-4.** It is Renter’s or tenant’s insurance. It is equivalent to HO-2 perils for personal property, but only for renters and tenants. It covers personal property rather than the dwelling, and provides liability coverage in case an accident, but does not cover causing damage to the structure. All-risk coverage available as an option (this is recommended).

• **HO-5.** It is a newer special form homeowner’s insurance that includes open perils and includes a rider (HO-15) that allows open perils coverage on personal property in addition to other coverage. It covers all direct physical losses to your home, i.e. open perils protection. The listed exceptions are the same as HO-3.

• **HO-6.** It is condominium owner’s insurance. It is similar to HO-4 coverage, has the same named perils for personal property as HO-2, but is available to co-op or condominium owners. It also covers improvements you’ve made. All-risk coverage is available as an option (recommended).

• **HO-8.** It is modified coverage for older homes. It insures the dwelling for the repair cost or market value, instead of the replacement value and is designed specifically for older homes. All-risk coverage available as an option (recommended).
Homeowners Policy Riders. Should you need to add additional coverage, a homeowners policy can be supplemented in a number of ways through specific endorsements or riders including: Inflation: This allows protection to increase with the increase in repair and rebuilding costs; Floater Policies: These are policies that provide protection for valuable personal property over and above existing policy limits; and Flood, Earthquake and Terrorism Insurance: This provides protection in the event of a flood, earthquake, or terrorist activity.

No Fault Insurance. No-Fault Insurance is insurance coverage that pays for each driver’s own injuries, regardless of who caused the accident. No-fault varies from state to state. Such policies are designed to promote faster reimbursement and to reduce litigation, and is only available in “no-fault” states (including Utah). The advantages of no-fault insurance are its easier and faster as your insurance pays for your losses and their insurance pays for their losses. However, generally damages from pain, suffering, emotional distress are not covered and there are dollar limits on medical expenses and lost income and vehicle damage is not covered.

Other than collision, it covers comprehensive physical damages.

Personal Automobile Policy. This includes the four key areas of automobile coverage: A. Liability, Part B: Medical Payment, Part C: Uninsured/Underinsured Motorist’s Protection, and Part D: Damage to Your Car.

- **Liability Coverage** (Part A). Liability coverage is payment for losses due to: Bodily injury: Death or injury for all those involved in the accident; Property damage: All damage to the car or cars and any property damage; and Losses due to lawsuits: Losses from lawsuits resulting from the accident. Liability coverage may be a combined single limit or a split-limit coverage.

- **Medical Payment Coverage** (Part B). Medical payments covers all reasonable medical costs and funeral expenses incurred, by the insured or the insured’s family members within 3 years of an accident. It also includes coverage for the insured when walking. It does not cover medical expenses if the insured is injured by a vehicle not designed for public streets, such as an unlicensed 3 or 4 wheeler (quad, four wheeler or go cart).

- **Uninsured/Underinsured Motorist’s Coverage** (Part C). Uninsured/underinsured insurance covers costs if injured by an uninsured motorist or a hit-and-run driver. The other driver must be at fault to collect on this coverage. It also covers costs in excess of the other driver’s liability coverage (i.e., under-insurance), if it is inadequate to pay for your losses.

- Comprehensive Physical (Part D). Comprehensive covers collision loss regardless of who is at fault. If the other driver was at fault and has liability insurance, your insurance company should be able to recover losses without collision coverage from the other driver’s insurance company.
Renters Insurance. Renters insurance repairs or replaces your rental property’s contents from specific perils or accidents including fire, theft, storms, water damage, etc. It also provides liability insurance against accidents caused by you or a member of your family. Your landlord has insurance only for the rented property and building. You are responsible for your contents and the liability risks you and your family bring. Renters insurance is relatively cheap and protects your property regardless of location.

Umbrella liability coverage (or umbrella policy). It is an insurance policy that adds protection over and above the insured’s homeowners and auto policies, i.e., the policy becomes effective only after the limits of the homeowner’s and automotive policies have been reached. As such, many companies require specific coverage limits, i.e., 250/500/100 insurance on all vehicles and $300,000 on the home before they will write an umbrella coverage.

Review Questions

1. What is auto insurance? Homeowner’s insurance? Liability insurance? Why have them?
2. What are the four basic parts of an auto insurance policy?
3. What are “exclusions”? What is an example?
4. What are the four basic components of a homeowner’s insurance policy?
5. What is an umbrella policy? When does it become effective?

Case Studies

Case Study 1

Data
Larry has a split-limit 100/300/50 automobile liability insurance policy. Several months ago Larry was in an accident in which he was found to be at fault. Four passengers were injured in the accident and were awarded $100,000 each because of Larry’s negligence.

Application
How much of this will Larry’s insurance policy cover? What amount will Larry have to pay out of pocket? Note: Larry’s coverage is (A/B/D) 100/300/50: A = Liability: bodily injury liability per person, B = Medical: coverage per accident, D = Damage: collision or comprehensive coverage.

Case Study 1 Answers
Larry’s maximum liability limit is $300,000 per accident. This amount must cover payments to all persons involved in the accident.
Unfortunately, it is not enough, because the four liability claims total $400,000. The remaining $100,000 awarded in the settlement will not be covered by Larry’s insurance, and Larry must pay this expense out of his own pocket.

**Case Study 2**

**Data**

Janet currently insures her home for 100 percent of its replacement value with an HO-2 policy. For Janet, dwelling coverage (A) comes to $280,000.

**Calculations**

What are the maximum-dollar coverage amounts for parts B, C, and D of her homeowners policy?

**Case Study 2 Answers**

To determine the base amount of coverage on B, C, and D, use the $280,000 of the dwelling coverage (A) as a starting point. Coverage B (other structures) is limited to 10 percent of the dwelling coverage and is calculated as $(280,000 \times 10\%) = $28,000. Coverage C (personal property) is limited to 50 percent of the home’s coverage and is calculated as $(280,000 \times 50\%) = $140,000. And coverage D (loss of use) is limited to 20 percent of the home’s coverage and is calculated as $(280,000 \times 20\%) = $56,000.

**Case Study 3**

**Data**

Kelly has personal property coverage with a $250 limit on currency; a $1,000 limit on jewelry; and a $2,500 limit on gold, silver, and pewter. She does not have a personal property floater. Her deductible is $250.

**Calculations**

A. If $500 in cash, $2,500 of jewelry, and $1,500 of pewter ware were stolen from Kelly’s home, how much of the loss would be covered by her homeowner’s policy?

B. How much will she pay (or lose) on the claim?

**Case Study 3 Answers**

Kelly’s policy would pay as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount Insurance Pays</th>
<th>Amount Kelly Pays</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$250</td>
<td>$250</td>
<td>$500</td>
</tr>
<tr>
<td>Jewelry</td>
<td>1,000</td>
<td>1,500</td>
<td>2,500</td>
</tr>
<tr>
<td>Pewter</td>
<td>1,500</td>
<td>0</td>
<td>1,500</td>
</tr>
<tr>
<td>Totals</td>
<td>2,750</td>
<td>1,750</td>
<td>4,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deductible</th>
<th>250</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Amount Paid</td>
<td>$2,500</td>
<td>$2,000</td>
</tr>
</tbody>
</table>

The insurance company would pay $2,500, and Kelly would pay $2,000.

**Case Study 4**

**Data**

Catherine called her insurance agent to learn how she could reduce her $1,000 annual homeowners insurance premium. The agent suggested increasing the $250 deductible on her policy to $500: this would result in a 10 percent premium savings. Her agent also indicated that if Catherine were to increase her deductible to $1,000, she would save 18 percent, and if she were to increase her deductible to $2,500, she would save 25 percent.

**Calculations**

A. How much will Catherine save per year in premiums if she increases her deductible to $500, $1,000, or $2,500?

B. What are the advantages and disadvantages of increasing Catherine’s policy deductible? What should be the key factor in her decision?

**Case Study 4 Answers**

A. Her current policy is $1,000 per year. Annual savings would be as follows:

- $500 deductible = 10 percent savings, or $100
- $1,000 deductible = 18 percent savings, or $180
- $2,500 deductible = 25 percent savings, or $250

B. The advisability of increasing homeowner’s insurance deductibles depends on the adequacy of her emergency fund or her capacity to cover a loss from current earnings. Catherine would save $250 on her annual premium by increasing her deductible from $250 to $2,500. On the other hand, she would be responsible for the first $2,500 of losses. Catherine would need about 10 claim-free years ($2,500/$250) to break even. Her decision should be based primarily on her emergency fund.

**Case Study 5**

**Data**

Paul is confused about his umbrella policy. His insurance agent requires him to have 250/500/100 split insurance on each of his automobiles before they can be put under his umbrella policy. He also has to have similar liability coverage for his home.

**Application**

What is the purpose of an umbrella policy? Does it pay before or after Paul’s home or auto coverage?
Case Study 5 Answers

Paul’s umbrella policy provides protection against lawsuits and judgments. It doesn’t go into effect until after he has exhausted his homeowner’s and automobile liability coverage. For that reason, the insurance company requires high liability coverage on his home and automobiles.

15. The Home Decision: Plan Well

Introduction

Once you understand the principles for using wealth, have your priorities in order, decide what you want to accomplish in life, and learn to live on a budget, one of your next goals may be to own a house. I like how some have defined the word *house*: “A house is a hole in the middle of land that you pour money into.”

How true that statement is. There are very different connotations of the word “home” and the word “house,” as illustrated by the following story:

A while back a house caught fire and burned down. A local journalist went to cover the story. Upon arriving at the site, the reporter found a little boy. The child was standing in the midst of ashes and ruins. The reporter asked the boy what his family would do without a home. “Oh, we still have a home, we just don’t have a house to put it in” the child replied.¹

It is important to remember the difference between a home and a house as you look for and eventually purchase a house. A house is what you live in while a home is what you bring to the house. The purpose of this chapter is to help you avoid some of the pitfalls of buying a house for the first time. For the remainder of this chapter, I will use the words “home” and “house” interchangeably.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the principles of home buying and ownership
2. Understand how a house fits into your financial plan and what leaders have counseled concerning buying a home
3. Understand your options in the housing decision
4. Understand the process of buying a home
5. Understand how to compare different types of loans with different fees and points

Principles of Home Buying and Ownership

Buying a home is not easy. The purchase of a home will likely be one of the largest financial commitments you will ever make. As such, you should not rush into this commitment. If you use wisdom and judgment in trying to decide what you want, what you can afford, and where you
want to live, and if you will listen to and obey the promptings of the Holy Ghost, you will make correct decisions regarding your housing needs.

There are risks in home ownership—not just the risks of owning the home but the risks of owning the wrong home. What happens if you buy a house you can’t afford? Your most important financial goals will likely be downgraded to goals of minor importance because you will not have sufficient funds to meet them. Individuals who own a house they can’t afford are referred to as being “house poor.”

What if you buy a “fixer-upper,” but you don’t have the necessary skills or time to do the fixing up? Your new home will likely remain a fixer-upper.

What if you buy the wrong type of house for your lifestyle? For example, if you are a condo person in a family neighborhood, you will likely want to pay others to keep up the landscaping and other exterior elements.

Or what if you buy a house without obtaining the necessary inspections? You could pay dearly for the problems the previous owners left behind and should have fixed before your purchase.

Finally, what if you get too far in debt, and you lose your job? Quite simply, you could damage your credit score, lose your house, and lose your self-respect as well.

**Principles of Home Ownership**

The decision to buy a house, since it is one of the most expensive purchase you will make in your lifetime, should be done in wisdom and order. You should do significant research as to yourself, your budget, your needs, the market, the mortgage process, and how to get the best mortgage you can. It is important that you understand the key principles of home ownership. Following are four key principles that are important to the housing decision.

1. **Understand yourself, your goals, and your current and future housing needs.**
   Understand yourself. What needs does your home fulfill? What are your family needs now and in the future? What are your goals? What are the things you want to accomplish in life? A good start is to determine your needs. What are your housing needs that you have? What different options do you have for those needs? Whatever you choose, make sure it is the right type of house and right time for your lifestyle and budget.

2. **Be wise in your finances.** Spend your money wisely and carefully. Be wise in your budget and in your spending. Make your house fit your budget, not your budget fit your house. Use the recommended 25-40% of take-home for housing expenses (which will be discussed later). Going beyond these limits will put significant financial burdens on you and your family. Get the necessary inspections (even if it’s new). Finance it wisely and try to pay it off before retirement or sooner.
3. **Understand the process of finding, buying, and funding a home.** Know the process of how mortgages are marketed and sold, so you know how to get the best deal on your mortgage. You have received the best deal on your mortgage when you have the lowest Effective Interest Rate (EIR) calculation that includes all your points and fees (to be discussed later).

4. **Be a good steward over all your blessings.** Don’t just live in it—keep it up. Plan 1-2% of the cost per year for upkeep and maintenance on your home.

Gordon B. Hinckley shared other principles of home ownership when he shared what his father told him regarding a home:

> When I was a young man, my father counseled me to build a modest home, sufficient for the needs of my family, and make it beautiful and attractive and pleasant and secure. He counseled me to pay off the mortgage as quickly as I could so that, come what may, there would be a roof over the heads of my wife and children. I was reared on that kind of doctrine.²

Based on this counsel, we can see that our challenge is to determine what a modest home is. The *Handbook for Families* recommends:

> Avoid spending more than 25 to 40 percent of your take-home pay for the total house payment, including insurance, taxes, and maintenance costs.³

That advice gives us a good start as we begin our study of home-buying.

**Understand Your Options in the Housing Decision**

Some individuals will be making decisions about buying a house soon because of graduation, marriage, or prospective job offers. Should you buy a house immediately, or should you rent for a while? Are you interested in building or renovating? Decisions about housing are challenging but inevitable. As you understand yourself, your goals, and your job, you will be equipped with valuable information that will help you as you make the home decision. There are four major options for the home decision: renting, buying, building, and renovating.

**Renting**

Renting has many advantages, including mobility. When you rent, it is relatively easy and relatively inexpensive to move from one place to another if your job or life situation changes. There are no costs for repairs or maintenance: for example, you don’t have to worry about the cost of replacing the water heater or other household appliances if they break down. Another advantage is that financial commitments are lower with renting than with buying: rent costs are relatively low, there are fewer initial costs associated with moving in, and there are none of the
legal headaches that often accompany buying a home. Finally, rent is easy to budget. You generally have only one bill—rent—to worry about.

Nevertheless, renting also has its disadvantages, such as a lack of stability and lack of the pride that comes from ownership. You can’t modify your rental house as you would be able to modify a home. Although you can put up pictures, you can’t paint walls, put up wallpaper, or renovate the kitchen. Another disadvantage is that rent may increase unexpectedly. Someone else makes major financial decisions that affect you; these decisions can have a huge impact on your budget and pocketbook. There may also be restrictions on where you can rent: zoning laws make some locations unavailable. Tax benefits are also missing when you rent. Since you pay no interest as part of your rent, you cannot deduct interest costs from your taxable income. Finally, there is no potential for property appreciation with renting.

**Buying**

Many of the disadvantages of renting are advantages to buying a home. With buying, there is permanence and a pride of ownership. You can change the paint color, the kitchen, the landscaping, the garage, and so on. Generally, the monthly payment is fixed. The decision on how you pay for the house is between you and the bank, and once you decide, you won’t have to worry about payment fluctuations. Buying allows you to use leverage, which means you can own the house using borrowed money, up to 95 percent in some cases. Another advantage to buying is that you get Uncle Sam’s help. The interest payments you make to the bank or mortgage company on your house can be deducted on your itemized tax forms from your adjusted gross income, or AGI. Finally, you can borrow against the equity in your home. Equity is the difference between what your house is worth and how much you have borrowed to buy it. In emergencies, you can borrow money from the bank against your home’s equity to meet your specific goals and needs.

However, buying also comes with disadvantages. Mobility is low, since houses are not liquid assets. It would likely be a challenge to sell the house quickly, and it is generally expensive to sell illiquid assets. Other disadvantages to buying include significant up-front costs, such as the down payment, points, title, and title insurance. Also, it generally costs more to own and operate a home than to rent. Costs for utilities, repairs, water, landscaping, painting, and so on are avoided when you rent but must be paid when you own. Finally, buying a home is a large financial commitment. Owning a home is a costly investment—in terms of dollars, time, and energy. And because a home is a large financial commitment, you need to remember that the home’s value could decrease, that its mortgage could default, or that it could need repairs.

**Building**

There are many advantages to building. You can build exactly what you want because you design the house. Sometimes it is even cheaper to build than to buy, depending on market conditions. With building, you get new appliances and housing systems, so repairs in the first
few years are generally less. And you can pick the location of where you want to build, assuming lots are available.

However, building also has disadvantages. It may be difficult to interpret building plans, such as the size of rooms, if you are unfamiliar with these plans. Building, like renovating, often exceeds the budget and has delays if not done correctly by competent labor. Building also necessitates additional expenses for a yard and fencing. There are also expenses for construction-loan interest and rental costs that are incurred while you are waiting for the home to be built. Most importantly, there are high monitoring costs, in terms of time and money; high stress tolls, as you make the myriad decisions about the house; and high risk that the project may become more expensive than planned.

**Renovating**

The advantages of renovating include that you can often accomplish your housing goals faster than with building because the outside structure of the house is already in place. Another advantage is that you can generally see the house you are getting. It may be cheaper to buy and renovate than to build, particularly if you can do much of the work yourself (i.e., sweat equity). Renovating may be preferable if there are no available lots in a desired area, but there are existing homes for sale.

The disadvantages of renovating include that it may be more expensive to renovate than to build. Renovations often go over budget and have delays because of the uncertainty about what will actually need to be renovated. The rule of thumb for renovating, and sometimes building, is that you should double your budget and then double the resulting amount again. Moreover, you should be aware that you may have unanticipated additional expenses for a yard and fencing, depending on what was renovated. Also, the same construction-loan interest costs and rental expenses may be applicable, depending on how extensive the renovation is. During the renovation process, you may encounter other costly problems that were not noted before. Most importantly, just like in building, there are high monitoring costs, high stress tolls, and high risk that the project may become more expensive than planned.

**Understand the Process of Buying a Home**

There is a process to buying a home, which, if followed, will help you make wise decisions and may help you reduce some of the problems people face when they do not understand this process. It is a four-step process:

**Step 1. Understand Your Limits**

Understand yourself and your limits in the following areas:

**Know your budget.** The first part of understanding your limits is to check whether or not you have developed and are living on a budget. We have already talked about many important topics
related to budgeting in Chapter 3: Budgeting and Measuring Your Financial Health. If you have questions about budgeting, please review that chapter.

**Know your credit history and score.** If you don’t have good credit or a satisfactory credit score, you may find that no one is willing to lend you money.

We have already talked about many important topics concerning credit in Chapter 6: Understanding Credit. If you have questions concerning credit, please review Chapter 6. As we have discussed previously, your credit history can play an important role in your opportunity to buy a home. When you request credit, financial institutions will pull your credit history to determine how likely it is that you will pay back the loan. If you have made timely payments in the past, creditors assume it is likely you will continue to make payments in the future. Because your credit history can have a big impact on how much you pay for your loans and whether or not you get a loan in the first place, you need to periodically examine your credit reports from all three major reporting agencies. Make sure the reports are correct.

**Know your affordability ratios.** The third topic you should understand is mortgage lending. We have already talked about the different types of mortgage loans in Chapter 7: Consumer and Mortgage Loans. Review this chapter if you need to.

It is critical that you know your affordability ratios, or how much debt the bank thinks you can take on. There are two main ratios: the housing-expense ratio (or front-end ratio) and the debt-obligations ratio (or back-end ratio).

You should know how to calculate your housing-expense ratio, or front-end ratio. It is your monthly payment of principal, interest, property taxes, and insurance (PITI) divided by your monthly gross income. Banks have determined that if this ratio is 28 percent or less, there is much greater chance you will be able to pay back your loan.

The back-end ratio is your monthly payment of principal, interest, property taxes, and insurance (PITI) plus any other long-term debt (including any debt older than 12 months, i.e., car payments, student loans, alimony payments) divided by your monthly gross income. Banks have determined that if this ratio is 36 percent or less, it is an indicator that you have much more flexibility in your finances and are more likely to pay back your loan.

Know your affordability ratios before you get your loan. Don’t use all the money the bank will lend, and don’t buy the most expensive house on the block. Know how much you can afford.

**Calculate your affordability ratios taking into account payment of tithes and offerings.** Before you calculate affordability, take into account the amount you should be saving. Look at your budget realistically. I recommend you set aside 10 percent for tithing, plus an additional amount for other offerings. Set aside 10 to 20 percent more for paying yourself, for money you are saving for retirement and other goals. Since you pay the Lord first with tithes (10 percent of your increase) and offerings and since you pay yourself each month as well, you should really
adjust these affordability ratios downward to take your donations and savings into account. I would encourage you not to borrow too much money for your home. To help you review your situation, please see Learning Tool 11: Maximum Monthly Mortgage Spreadsheet for LDS, which is found in the Learning Tools section of the website. This spreadsheet takes the front- and back-end ratios, as well as the fact that you pay tithing and savings, into consideration when it calculates the amount a bank will likely lend you.

Choose your preferred loan type and term. The best type of loan takes into account your goals, budget, income stream, down payment, and view on risk. There are a number of different types of mortgage loans available. These include:

- **Fixed rate (FRMs):** I generally recommend this type of loan. The lender takes the interest rate risk, and you make constant payments throughout the life of the loan. This makes planning and budgeting easier.

- **Variable or adjustable rate (ARMs):** You take the interest-rate risk, so the lender may accept a lower rate of interest. However, there is the risk that interest rates will rise in the future.

- **Interest-only options, variable or fixed interest:** This is an option on a fixed or ARM loan. However, once the interest-only period is over, for example, 3 to 10 years, the loan resets so the principal and interest is paid over the life of the loan, generally 30 years. There can be substantial payment shock when the loan resets. This is not like a minimum payment on a credit card.

There are also special loans, if you can qualify for them. They include Federal Housing Assistance loans for lower-income borrowers or Veterans Assistance loans, which are guaranteed by the U.S. Department of Veterans Affairs for those in the military.

Choose your loan term. Generally, I recommend a 30-year fixed-rate loan, which may give you flexibility in case financial concerns arise in the future. However, I recommend you make additional payments on principal to pay off the loan sooner if possible.

**Determine down payment and up-front costs.** Before you buy, remember that the down payment on a loan may be from 3 to 20 percent of the cost of the home, and the closing costs may be an additional 2 to 5 percent. Be aware that these costs are significant; given that these costs are paid up front, they must be planned for before you purchase the house.

Points are one percent of the loan value, or 100 basis points of the loan. Lenders charge points to recover costs associated with lending, to increase the effective interest rate they are receiving, to provide for negotiating flexibility in a market where interest rates fluctuate, and to adjust for differences in risk between loans. Points are deducted directly from the loan amount at closing. In other words, if you have a $200,000 loan with two points (2 * $2,000), you will only receive
$196,000 at closing—the mortgage broker will keep $4,000. However, you will have to pay back the full $200,000.

Other up-front costs include title insurance, attorney fees, property survey fees, recording fees, lender’s origination fees, appraisals, credit reports, termite/mold inspections, escrow payments, and the home inspection report.

Your impound account (or escrow, or reserve account) is the portion of your monthly loan payments that is held by the lender or servicer to pay for specific costs. These costs include property taxes, hazard insurance, mortgage insurance, and other items as they become due. These payments are made in addition to your monthly mortgage payments of principal and interest. An impound account may or may not be required for a loan, depending on your lender.

**Have copies of two years of tax returns.** Lenders want confirmation that you can pay back the loan. As such, they generally want to see two years of tax records for documentation. If you are a recent college graduate, you might share a confirmed job letter with salary.

**Get pre-approved—not pre-qualified.** Know that you should get pre-approved for a mortgage, not just pre-qualified. In addition, know your affordability ratios that the bank uses to determine credit worthiness. Pre-approved means the financial institution has done all the necessary analyses to qualify you for a loan, including checking your credit report and approving you for a specific amount. Pre-qualified, on the other hand, means that the financial institution has essentially said that you will roughly qualify for some undetermined amount on a mortgage loan. Many times people have thought that they were pre-approved for a loan when they were only pre-qualified. When it comes time for these people to close on a house, they may discover they can’t get all the money they need. Not only do they lose the house but they may lose their earnest money as well. (Earnest money is given by a buyer to a seller to show their good faith.) Should the deal fall through, the earnest money may be forfeited.

**Step 2: Establish a Sound Plan and Find Your Home**

Plan what you want, and then work your plan. First, make your plan for buying a house. Determine what is important to you: how much of a commute are you willing to endure? How important is it that your house is close to schools? Do you need a yard for your kids? Do you want a flat lot or a lot on a hill? Write down which qualities you will and will not do without; articulate what you want regarding your desired location, type of home, future plans, and so on.

Once you have made your plan, you can start looking for a house. Look for a home in earnest, but keep to your plan. There is nothing worse than getting so wrapped up in buying a home that you find out that the house you end up buying wasn’t really what you wanted.

You may be in the house you buy for a long time. Therefore, be patient and take your time in deciding which house to purchase. Luke 21:19 offers wonderful advice for life (and buying a house, for that matter): “In your patience possess ye your souls.”
Chapter 15. The Home Decision

Estimate the amount of time you will be in the house. If it is less than three to five years, consider renting. Remember, you will have to make at least seven percent on the selling price when you sell your house to break even from realtor’s fees alone; you must also consider how much you paid for other up-front fees. Buying a house will likely be the largest financial commitment you will make for a long time, so be wise.

I recommend that recent college graduates should generally plan to rent a nice apartment for at least 6 to 12 months before they buy a house. This gives them the time they need to search thoroughly, figure out what they want, decide on the area where they want to live, and determine which amenities they want in a house and location.

**Do your homework—and footwork.** Buying a house is not easy. It takes time, thought, and effort. Find a good realtor to help you. Realtors most often work for the seller instead of for you, the buyer: the seller pays the realtor’s fees. It may be wise to hire a buyer’s realtor, who works for you. This buyer’s realtor should be someone who knows the ins and outs of the neighborhoods you are interested in.

Take matters into your own hands. Talk to friends, neighbors, and others about buying a house. We bought our first house from a friend in Arlington, Virginia, where we were renting. Use the Internet and any other available resources to help you as well. When we were looking for a house in Provo, Utah, we checked the Internet every other week to see which new houses had been added to the market. We would then give our realtor a list of the houses we were interested in when we came in for our appointment.

Stay true to your plan and have patience. You need to be flexible in case unexpected problems or opportunities arise.

**Use a team approach.** Get others to help you in the process of buying a home. Remember, you can’t, and shouldn’t, do everything by yourself. Get a good appraiser who can help you make sure you don’t pay too much for a house. Get a good lawyer who can help you make sure you fill out the correct forms. Most importantly, get a good home inspector. The last thing you want to do is buy someone else’s problems. Use multiple home inspections if necessary. Don’t become emotionally attached to a potential house. The best thing you can do in many cases is to just walk away.

**Step 3: Negotiate Your Home (Understand the Lending Process)**

The process you will go through as you purchase a home is similar for most individuals who borrow to purchase a home. It utilizes the services of a number of different professionals, including realtors, lenders, title insurance professionals, and escrow professionals (see Chart 1).

The key players in this process are the realtors and mortgage brokers. Realtors, or real estate brokers, are individuals or companies who act as intermediaries between sellers and buyers of real estate. Unless stated otherwise, they represent the seller and the seller’s interests and are paid by the seller. Generally, sellers pay a commission to the realtor for selling the property,
which is split between the listing realtor (the realtor who listed the property), and the selling realtor (the realtor who brought the buyer of the property to the seller). The commission is generally a percentage of the value of the property and may range from five to seven percent or more.

Mortgage brokers are individuals or companies that arrange loans between the lenders (those who have money to lend for mortgage loans) and borrowers. Traditionally, banks and other lending institutions sold their own products. However, as the markets for mortgages became more competitive, the mortgage brokerage industry evolved and broadened beyond banks.

**Chart 1. The Lending Process**

1. You’ve found a home that suits your lifestyle and budget, using a Realtor or other resources.
2. The Realtor recommends a mortgage broker to you.
3. The Mortgage Broker pulls your credit, determines your needs, and tries to find lenders among the competition to meet those needs.
4. Each Lender has unique programs. Lender and Mortgage Broker negotiate points, rates, fees, PPP, and other features of the loan.
5. Mortgage Broker recommends the best loan to you, reviewing the features agreed upon. You make the final decision as to which loan to choose.
6. Lender agrees to the loan package, structures the loan and conditions, and requests any additional information they need to close the deal.
7. Mortgage Broker, Title, Eserow, and Lender work to fill all conditions.
8. Lender sends out the documents to Eserow for signing.
9. Lender audits the documents, verifies all conditions are filled, and funds the loan!

Mortgage brokers make money three ways: origination fees, discount points, and back-end bonuses. Origination fees are the costs and profits on making the loan. Discount points are payments by the borrower to lower the loan interest rate. Finally, back-end bonuses are bonuses paid to the mortgage broker by the lender if they get a higher interest rate than the lender requires.

There is a relationship between discount points you pay and the broker’s back-end bonus. The objective in borrowing for a home is to minimize three areas: the interest rate you pay, the points you pay (origination and discount points), and the mortgage broker’s back-end bonus. How do you minimize these three areas? Following are a few ideas:
1. Talk with multiple mortgage brokers. Make this a competitive process. Remember that multiple institutions requesting your credit report and score within a specific period of time are only counted as a single request on your credit score. Get multiple bids.

2. Compare rates and points across different brokers from different companies. This will give you a general idea of rates and points, which can be very helpful.

3. Look at the minimum interest rate they will let you buy down to. Perhaps it is close to the lender’s required rate. Once you have a feel for that rate, it may give you an indication of what the mortgage broker’s back-end bonus would be.

4. Once you find the best rate and points from the multiple mortgage brokers you checked on, go to your favorite broker and agree to go with him or her if he or she can beat the best offer by $\frac{1}{4}$ percent.

Title insurance protects the buyers of property against loss due to title defects, liens, or other matters. Title insurance is required by lenders and borrowers to ensure there are no risks due to title concerns.

Historically, banks lent money to borrowers to purchase homes and kept these loans on their books till maturity. However, with the further development of the U.S. financial system, an increasing number of different financial institutions and lenders have come into existence, which has increased competitiveness in this area and has helped reduce borrowing costs.

**Step 4: Enjoy Home Ownership**

If you have completed the home-buying process well, you will enjoy the fruits of your labors for many years. Maintain your home well. If you take care of your purchase, it will take care of you. For example, having your home professionally cleaned a few times a year can help retain your home’s value. For budgeting purposes, realize that maintaining your home will generally require roughly one percent of the home’s value each year, so add that amount to your budget. This amount should be an included expense you will likely pay each year.

**Understand How to Compare Different Types of Loans with Different Fees**

Once you determine what you want and find a house you like, the next step is to determine how much you can afford. Don’t buy the most expensive house in the neighborhood—use wisdom in your purchases. Remember, statistics indicate that most people are likely to move within seven years.

It is critical that you understand all fees and expenses before you close on a house—there are many expenses. One of the largest expenses is your mortgage. With so many different options available for a mortgage, it is critical that you understand how to calculate a comparable rate on loans with different points and fee structures. Understanding the different expenses involved in
buying a house and how to compare different loans with different points and fees will save you a lot of money overall. Critical to this ability to compare is an understanding of points, effective interest rates, how to calculate effective interest rates, and prepayment.

**Points**

Points are one percent of the loan, or 100 basis points of the loan. Some lenders offer mortgage loans with high contract interest rates and low points, while others offer the opposite. The borrower’s challenge is to choose the mortgage contract that minimizes the effective cost of borrowing. How do you differentiate between loans with different interest rates, different points, and different costs? One way is to calculate the effective interest rate (EIR) for each of your loan options; you will then be able to choose the loan that minimizes the effective interest rate.

**Effective Interest Rates**

The effective interest rate (EIR) is the precise interest rate the borrower pays after all fees and costs have been taken into account. The EIR is different from the annual percentage rate, or APR. The APR is generated from a precise calculation specified in Regulation Z of the Truth in Lending Act. The difference between the APR and the EIR is that the EIR takes into account the costs of points and fees. If the loan has no prepayment, points, or other fees, then the EIR is the same as the APR.

The EIR is important because it allows you to quickly compare rates from various lenders with various schedules and costs; the EIR allows you to choose the rate that gives you the lowest cost. To calculate the EIR, you must make a major simplifying assumption. Many of the fees associated with home-buying are paid out of pocket, meaning that they do not come out of the loan. Other fees (like points) do come out of the loan. The assumption necessary for this calculation is that all fees come out of the loan. This is not an unreasonable assumption, especially if you assume you will pay back all out-of-pocket expenses with proceeds from the loan. Remember, the lender will retain the amount of the loan attributable to points when distributing loan proceeds, but the monthly payment will be based on the entire loan amount.

**Calculating Effective Interest Rates**

The three-step process for calculating the EIR is:

1. Calculate the payments on the total amount you will be repaying (the amount borrowed). Using your financial calculator, set \( N \) = your number of years, \( I \) = your interest rate, \( PV \) = minus the loan amount, and solve for your payment, or \( PMT \).

2. Calculate the amount of money you actually received (the total loan minus all costs). Again, assume that all costs for the home come out of the loan. This amount becomes your present value (with a minus sign).
3. Set your payment (PMT) to your annual/monthly payment. PV = minus what you actually received, N = your years, and solve for your interest rate. This is the rate you are actually getting based on the costs you are paying.

If you are borrowing $200,000 at six percent for 30 years, and you agree to pay two points and $1,500 in fees, the following is your process:

1. Your monthly mortgage payment will be $1,199. (PV = –200,000, I = 6%, N = 30 * 12, and solve for your PMT).

2. Two points and $1,500 in fees will be $5,500, resulting in a net to your amount of $194,500 ($200,000 – 5,500).

3. Inputting these figures into the equation, your PMT = $1,199, PV = –194,500, N = 30 * 12. Solve for your effective interest rate, and you get a rate of 6.26 percent.

**Prepayment**

Prepayment is the process of paying down the loan early by increasing principal payments or by selling the home. On average, most homeowners in the United States move every five to seven years. You should know how to calculate your effective interest rate when you plan to prepay the loan (or sell the house) before maturity.

The EIR with prepayment is calculated in a similar manner to the EIR, except you must make an additional calculation for the balloon payment you will make when you pay off the loan:

1. Calculate the payments on the total amount you will be repaying (the amount borrowed). Using your financial calculator, set N = your number of years, I = your interest rate, PV = the loan amount, and solve for your payment, or PMT.

2. Calculate the amount of money you actually received for your loan (the total loan minus all costs). Again, assume that all costs for the home come out of the loan. This amount becomes your present value (with a minus sign).

3. Calculate the balance that will remain after you prepay; in other words, calculate your balloon payment. This is the amount you will need to pay off the remainder of the loan. To calculate the balloon payment, set N to the number of years or periods you will pay off the loan early. If you have a 30-year loan, and you pay the loan off after 12 years, you want to know the present value of 18 years of payments. Set I to your interest rate and PMT to your monthly or annual payments, then solve for the present value. This balloon payment is the amount of principal you will still owe after you prepay your loan. This amount becomes your future value.

4. Finally, set the number of years before prepayment as N (12 years in the above example), the balloon payment or balance remaining as FV, the PMT as monthly or annual
payments, and the PV as negative the amount you received after paying points and fees, then solve for I to find your effective interest rate.

For example, assume from the previous problem that you want to know the effective interest rate should you pay off the loan after seven years. The first two steps are the same.

1. Your monthly mortgage payment will be $1,199. (PV = \(-200,000\), I = 6%, N = 30 * 12, and solve for your PMT).

2. Two points and $1,500 in fees will be $5,500, resulting in a net to your amount of $194,500 ($200,000 – 5,500).

3. Your final payment at the end of year seven will be $179,279. This is calculated at PMT = $1,199, N = (30 – 7) * 12, I = 6.0%, and solve for your present value.

4. Finally, put these figures into the equation—your PMT = $1,199, PV = \(-194,500\), N = 84 (7 years * 12 months), FV = 179,279—and solve for your effective interest rate. You will get a rate of 6.51 percent.

Summary

Buying a home is not easy. The purchase of a home will likely be the largest financial commitment you ever make. As such, you should not rush into this commitment. If you use wisdom and judgment in trying to decide what you want, what you can afford, and where you want to live, and if you will listen to and obey the promptings of the Holy Ghost, you will make correct decisions regarding your housing needs.

Understanding the key principles of home ownership are critical. These include:

- Understand yourself and your current and future housing needs.
- Be wise in your finances.
- Understand the process of finding, buying, and funding a home, and
- Be a good steward over all your blessings.

There are four major options for the home decision: renting, buying, building, and renovating. Each of these options has specific advantages and disadvantages.

There is a process to buying a home, which, if followed, will help you make wise decisions in buying a home. The process is the following.

- Understand your limits.
- Establish a plan and find your home.
- Negotiate your loan.
- Enjoy home ownership.
One of the largest expenses is your mortgage. With so many different options available for a mortgage, it is critical that you understand how to calculate a comparable rate on loans with different points and fee structures. Understanding the different expenses involved in buying a house and how to compare different loans with different points and fees will save you a lot of money overall. Critical to this ability to compare is an understanding of points, effective interest rates, how to calculate effective interest rates, and prepayments.

There is much to learn and remember when buying a home. Keep your goal of buying a home in the perspective of your overall goals and objectives. Buying a home is an important goal—but it is not the only one. In spite of the challenges associated with buying a home, having a home may bring many blessings and opportunities.

Assignments

Financial Plan Assignment

This is an optional assignment for those interested in the process of buying or refinancing a home. If you are thinking about buying a home, what is your credit score (you should know this from the previous chapter)? Your credit score is an important tool you should understand if you are planning on borrowing for a mortgage. If you already have a home and a mortgage, what are the costs of your current loan in terms of mortgage payment, private mortgage insurance (if applicable), and any other costs or fees? If interest rates have declined, would it be a good time to think about refinancing your home or moving from a variable-rate loan to a fixed-rate loan? You might even consider reducing the maturity of your mortgage.

Finally, if you are looking for a new loan or thinking about refinancing your home, it is important for you to be able to determine the effective interest rates of different fixed-maturity loans. The effective interest rate takes into account all the fees and expenses of buying a home. Learning Tool 19: Home Loan Comparison with Prepayment and Financing allows you to evaluate different loans with different fees and points. It also allows you to evaluate how many months of payments you would save by making additional prepayments of principal each month.

Learning Tools

The following Learning Tools may be helpful as you prepare your Personal Financial Plan:

11. Maximum Monthly Payment for LDS

This Excel spreadsheet will help you determine the maximum amounts that financial institutions will generally lend; the spreadsheet uses traditional front-end and back-end ratios. However, traditional banking ratios do not take into account the fact that Latter-day Saints pay tithes and other offerings and save a certain percentage of their earnings. This spreadsheet allows you to take these other
factors into account and illustrates that you should be borrowing less for a home
than those who do not pay tithes and offerings.

19. Home Loan Comparison with Prepayment and Financing

This Excel spreadsheet helps you determine the effective interest rate for multiple
home loans; it takes into account the loan amount, interest rate, compounding
periods, points, and other fees. In addition, it also calculates the rate, assuming
prepayment, after a certain number of years. The spreadsheet also helps you
determine how much time and money you will save if you prepay a specific
amount of principal each period over the life of your loan.

Review Materials

Terminology Review

Backend bonus: These are bonuses paid to the mortgage broker by the lender if they get a
higher interest rate on your loan than what the lender requires. Your goal should be to minimize
this bonus and keep more money for yourself and your goals.

Breakeven Analysis. This is a form of loan analysis that does not take into account the time
value of money, but is simple to calculate. You calculate all new costs and fees for the new loan,
and savings in principle and interest over the old loan. You then divide all new costs by monthly
savings which will give you your breakeven point in months. If your breakeven point is less than
4 years, it may be a good idea, 5-7 years, it might be considered, or greater than 7 years, be
careful. You may likely move before 7 years.

Discount Points: These are payments made by the lender to reduce the interest rate on the loan.
They are somewhat similar to prepaid interest. You pay more upfront in points but you will pay
less on interest costs in the future. Your challenge is to minimize your overall interest costs, i.e.,
your effective interest rate.

Internal Rate of Return (IRR). This is a form of loan analysis to determine whether you should
refinance or not. The process is to calculate all costs and fees for the loan, calculate the monthly
savings, determine the number of months of savings, and set the number of months on the new
loan equal to the number of months remaining on the old loan so you are not extending the loan!
If your IRR is greater than your risk-free rate, then refinance.

Origination fees: These are the costs and profits made by the mortgage broker for originating
the loan.

Prepayment Penalties. These are penalties enforced by the lender for prepaying a loan too
soon. Prepayment penalties have a stated period of time, i.e., 1, 2, or 3 years the prepayment
penalty is in effect, a maximum pay down percentage (MPP), i.e., 6% of the principal per year,
and a prepayment penalty if you sell it before, i.e., 6 months interest. With a soft prepayment you cannot within the stated period of time without penalty, refinance at all, sell the loan to family members, or pay down more than your MPP each year. The only way to get out of a soft prepayment penalty is to sell the property to an unrelated party. With a hard prepayment, you cannot within the stated period of time without penalty refinance at all, sell the loan to anyone, or pay down more than your MPP each year. There is no way to get out of a hard prepayment penalty before the defined period without paying the penalty.

**Private Mortgage Insurance.** Insurance paid for by the borrower to ensure that the lender is made whole should the borrower default. If equity in the home is greater than 20%, PMI is not required for conventional loans or VA loans (but is required by FHA loans for the life of the loan).

**Refinance.** The process of getting another mortgage loan on your home and repaying the old loan with a goal to reducing your interest and other costs overall.

**Short-sell.** A short-sell is where a lender allows a property to be sold for less than the amount owed on a mortgage and takes a loss. A short sell allows the borrower to avoid foreclosure, which involves hefty fees for the bank and poorer credit outcome for the borrower, and the lender to make “less” of a loss on the property and to not enter foreclosure. A short sell does not necessarily release the borrower from the obligation to pay the remaining balance of the loan.

**Total Costs Analysis.** This is a form of loan analysis that does not take into account the time value of money, but is simple to calculate. To do this, calculate your total new costs and fees from the loan until it is paid off, your total current monthly principal and interest costs remaining without refinancing, your total refinance monthly principal and interest costs. If you will be paying less overall, think about it, if it is equal or less, it likely does not make finance sense.

**Learning Tools**

**Home Loan Comparison with Prepayment and Refinancing** (LT 10). The purpose of this tool is to give an excel template for determining which of three different loans would be most attractive to you based on your estimates of closing costs, interest rates, points, and how long you will be in the home. These inputs are critical to calculating the effective interest rate, which is the effective rate after all costs and fees are taken into account. It also offers help with the refinancing, buy down, and prepayment decisions discussed today.

**Review Questions**

1. We have been counseled us to stay out of debt with the exception of what two things?
2. What are the four options in regards to the home decision?
3. According to the *Handbook for Families*, how much of our take-home pay should we spend on our total house payment, including taxes, insurance, and maintenance costs?
4. In regard to a home mortgage, what are “points”? Why do lenders charge points?
Chapter 15. The Home Decision

5. What is the best measure of the total cost of a loan?

Case Studies

Case Study 1

Data
Bill and Brenda make $60,000 per year. They decided that they have outgrown their small house and found the house they wanted for $225,000. They have agreed to a 30-year loan and estimate property taxes and insurance costs will be $200 per month. They estimate they can get a fixed-rate mortgage loan for 6.5 percent. They have a car loan of $270 per month and a student loan of $50 per month.

Calculations
Calculate Bill and Brenda’s front-end ratio and back-end ratio (28 percent and 36 percent, respectively).

Application
What is the amount most banks will lend them (remember that most banks will lend to the lower of the two ratios)?

Case Study 1 Answers

1. Front-End Ratio Calculations at 6.5%
   PITI / Gross Income
   Monthly Income ($60,000 / 12) $5,000
   $5,000 * 0.28% 1,400
   Real Estate Tax (T) and Insurance Payments (I)
   –200
   Maximum Monthly Mortgage Payment of Principal (P) and Interest (I) 1,200
   Set 6.5% = I, PMT = 1200, N = 30 * 12, PV
   Maximum Amount Bank Will Lend = $189,853

2. Back-End Ratio Calculations at 6.5%
   (PITI + Debt Expenses) / Gross Income
   Monthly Income $5,000
   $5,000 * 0.36% 1,800
   Real Estate Tax and Insurance Payments (I) 200
   Monthly Debt Payments: Car Payment 270
   Student Loan 50
   Maximum Monthly Principal and Interest 1,280
   Set 6.5% = I, PMT = 1280, N = 30 * 12, PV
Maximum Amount Bank Will Lend  $202,510

Application
Since the bank will generally lend the lesser of the two ratios, they would likely be allowed $189,852.98

Case Study 2

Data
You have decided on your dream house (well, at least your first house). In discussions with your mortgage broker, you have the choice between two loans, both of which are amortized over 30 years. Loan A is for $200,000 at 6.0 percent with no points or loan-origination fees, and Loan B is for $203,535 at 5.75 percent with a $1,500 loan fee and one point (both loans will receive $200,000 after the stated fees). In the problem we assumed you use the money from the loan to pay for the points and fees.

Calculations
Assuming you plan to stay in the house for 30 years, which loan is more advantageous based on the effective interest rate (EIR) and assuming annual payments?
Loan A: $200,000 at 6.0 percent, no points, no fees, 30 years
Loan B: $203,535 at 5.75 percent, 1 point, $1,500 fees, 30 years

Case Study 2 Answers

Notes:
  a. Loan A has an EIR of six percent, as there are no fees and points. In that case, your EIR = your APR.
  b. To get the amount borrowed after fees to equal the same amount for Loans A and B, I used Teaching Tool 19 and used Excel Goal Seek and set Amount Received After Fees to the total loan amount for Loan A.

1. Calculate payment for Loan B.
   \[ N = 30, I = 5.75\%, PV = -203,535, PMT = ? \]
   \[ PMT = 14,393.25 \]

2. Calculate the amount you received after all fees.
   \[ 203,535 - 1 \text{ point} \times 2,000 - 1,500 = ? \]
   \[ 200,000 \]

3. Calculate your effective interest rate.
   Set your \[ PMT = 14,393.25, N = 30, PV = -200,000 \], Solve for I.
   \[ I = 5.91\% \]
   Loan B is cheaper.
Case Study 3

Data
Your spouse suggests that you will likely only be in the home for six years, although you estimate a longer time frame because current job looks very positive. You compromise and estimate that you will be in the home for 12 years. Review your choice between the two loans, both of which are amortized over 30 years but which will be paid back in 12 years with a balloon payment at year 12. Loan A is for the same $200,000 at 6.0 percent with no points or fees, and Loan B is for $203,535 at 5.75 percent with a $1,500 loan fee and one point.

Calculations
Calculate the EIR for both loans, assuming a balloon prepayment after 12 years and annual payments.

Application
Which loan is more advantageous with prepayment using the EIR?

Case Study 3 Answers

1. Calculate payment for Loan B.
   \[ N = 30, I = 5.75\%, \ PV = -203,535, \ PMT = 14,393.25 \]

2. Set PV = to the amount you receive after all costs.
   \[ 203,535 - 1 \text{ point} (2,000 * 1) - 1,500 = 200,000 \]

3. Solve for your balloon payment at year 12.
   \[ N = 18, \ PMT = 14,393.25, \ I = 5.75, \ PV = 158,812.56 \]

4. Solve for your effective rate.
   \[ PMT = 14,393.25, \ PV = -200,000, \ N = 12, \ FV = 158,812.56, \ \text{solve for} \ I. \]
   \[ I = 5.97\% \]
   Loan B is still cheaper (barely).

Case Study 4

Data
Your broker has said that for one more “buy down” point (a total of two points with the same $1,500 fees), he can give you Loan C with an interest rate of 5.50 percent. Because of the additional point, the new loan amount is $205,612.

Calculations
Calculate the EIR for Loan C of $205,612 at 5.5%. How much did that extra point save you in terms of your effective interest rate over Loan A and Loan B?

Application
Assuming the same 12-year prepayment plan, which loan should you take?

**Case Study 4 Answers**

1. Calculate payment for Loan C.
   \[ N = 30, I = 5.5\%, PV = -205,612, PMT = 14,147.21 \]

2. Calculate amount received after all fees (two points).
   \[ 205,612 - 2 \text{ points} (2,000 \times 2) - 1,500 = 200,000 \]

3. Calculate the balance owed after 12 years (18 years remaining). The PV of 18 years of the PMT is:
   \[ N = 18, I = 5.5\%, PMT = -14,147.21, PV = 159,100.62 \]

4. Calculate effective interest rate to lender.
   Set your FV at year 12 to = $159,100.62, PMT = $14,147.21, N = 12, PV = $200,000, solve for I = ?
   \[ I = 5.85\% \]
   Loan C saves 0.15% and 0.13% over Loans A and B, but because of the increase in points, the amounts of the loans increases to give the same $200,000 needed.

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1 All Things Cherished Blog, [http://allthingscherished.blogspot.com/2008_05_04_archive.html](http://allthingscherished.blogspot.com/2008_05_04_archive.html)
2 “The Times in Which We Live,” *Ensign*, Nov. 2001, 72
Introduction

One of the challenges consumers face is making wise large-ticket purchases. Besides the decision to purchase a home, one of the next largest financial decisions for many is buying a car. Therefore, you should ask yourself how you can become a wiser steward and make the best automotive decision for yourself and your family. This chapter covers a few ideas you may find helpful regarding the automobile decision.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the principles of car ownership
2. Understand key issues of auto ownership
3. Understand how to buy or lease a new car and understand the lease versus buy decision
4. Understand the challenges of buying a used vehicle
5. Understand the special challenges of leasing

Determine the Principles of Auto Ownership

The most important reason for having a car is convenient transportation. Less important reasons for having a car include that cars are fun, they can make a statement about your lifestyle, and they just look cool. If a car fits into your budget and you are achieving your other financial goals, then it may be appropriate for you to have a car for any one of these reasons.

Keep in mind that buying a car can hurt your financial goals if you must borrow money to pay for it. When you borrow money for a car, you must use your money to pay interest, which means it can’t be used to earn interest or build wealth. If you have not considered car expenses in your budget and you purchase a car, it can take the place of more important goals. In addition, if you spend more than you had planned for the car, making payments can become a financial burden and can limit your ability to achieve other goals. Before ever purchasing a vehicle, determine if the purchase fits into your financial plan and if the costs fit into your budget.

There are five key principles of effective car ownership:

1. Understand its purpose. Ideally, the purpose of car ownership should be to provide safe, dependable transportation in a cost effective manner. Realize that a car is a tool to achieve your other goals, not necessarily a goal in itself.
Chapter 16. The Auto Decision

2. Develop a plan. Set goals for auto ownerships and follow them. Make your car fit your budget, not your budget fit your car. Goals could include to always pay cash for your car. If you borrow or lease a vehicle, you might set a goal to never sell or turn in a vehicle if you are “underwater”, i.e., you owe more than the auto is worth. You could also set goals for how long you will keep your cars, either in mileage or in years. Develop your action plan for your auto decision and follow it.

3. Understand and minimize your costs. These costs include the basic purchase price, gas, oil, and insurance. However, it also includes other costs such as scheduled maintenance, repair, taxes (which includes sales tax, registration, licensing, documentation, and in many places, property tax), depreciation, and resale value. Be wise in your choice of vehicle to minimize these costs.

4. Be a wise steward over your resources. In terms of your car, this means to minimize all costs over the car’s effective life. This means that you do the necessary repairs, maintenance, and other activities to ensure the car will last for many years. While skipping a scheduled maintenance may save you money short-term, in the long run it may result in higher maintenance and repair costs.

If you think about a car with correct perspective, as a tool to help you achieve other more important goals, you will make better decisions when purchasing your car.

Understand Key Issues of Auto Ownership

There are a number of important topics you must understand before you buy or lease a new or used vehicle, including the following: choosing a vehicle, steps to take before you go looking, and steps to take after you have found the vehicle.

1. Choosing a Vehicle

There are four steps to choosing a vehicle:

Know your goals and budget. What is important to you? Have you written down your goals? Are you living on a budget? It makes no sense to purchase a vehicle on which you cannot afford to make payments. It is important that the money you spend on a vehicle does not take away your ability to achieve your other important goals. Make sure you can afford the vehicle by knowing your goals and budget.

If you are planning to finance the vehicle (which I do not recommend), are there sufficient funds to cover the costs of the vehicle and still attain your other personal goals? In addition, are you putting aside money each month to fund the purchase of another vehicle once it is no longer cost effective to run your current vehicle?
Evaluate vehicle ratings and safety. As you are making decisions about an automobile, remember to pick a vehicle that is safe for your family. There are a number of good websites that evaluate vehicle safety records. A good place to start is the National Highway Traffic Safety Administration site at [www.nhtsa.gov](http://www.nhtsa.gov). Other sites include Safer Car at [www.safercar.gov](http://www.safercar.gov) and the Insurance Institute for Highway Safety at [www.iihs.org](http://www.iihs.org). Each of these sites offers information on safety ratings, crash tests, and other important information about specific vehicles.

Examine total automobile costs. In addition to looking for a strong safety record, look at overall costs of the vehicle, including maintenance and repair. Repair records can be found on in reviews of the various automobiles. How many miles per gallon does the vehicle get on the highway and around town? With gas prices constantly on the rise, having a fuel-efficient vehicle makes a lot of sense.

Mileage and repair information can be found at a number of different websites, including Consumer Reports at [www.consumerreports.org](http://www.consumerreports.org). Consumer Reports gives relatively unbiased information on mileage and repair histories, so you can determine which vehicles have the best track records on repairs and which vehicles will be less costly to operate.

Evaluate insurance costs. Pick a vehicle that is inexpensive to insure and drive. The Insurance Services Office (ISO) rates each vehicle on its loss history, a study on how much it costs to repair the vehicle, using a number between 3 and 27. Generally, the higher the number, the more expensive the vehicle is to repair and the more expensive the coverage. Sports cars, high-performance cars, and SUVs are more expensive to insure. Work with your insurance agent when you are considering purchasing a new or used automobile.

2. Steps to Take Before You Go Looking

Once you have determined which vehicle you want, there are a few more key issues you should be aware of. These issues include new and used vehicle prices, holdbacks, warranties, service contracts, and lemon laws.

New and used vehicle prices: There are a number of automobile websites that provide reliable estimates of what a dealership paid the manufacturer for a particular car. There are a number of different prices you should be aware of. The MSRP (manufacturer’s suggested retail price) is the amount the dealership hopes to get for the vehicle. This amount is a recommended price only. The dealer invoice is the reported amount the dealership actually paid to the manufacturer for the vehicle. This price is often called the invoice price. Some of the websites that can help you determine the dealer invoice price include [www.edmunds.com](http://www.edmunds.com), [www.autosite.com](http://www.autosite.com), and [www.kellybluebook.com](http://www.kellybluebook.com). It is important to know the dealer invoice price because you should use the invoice price rather than the MSRP as the beginning point when you are negotiating for a vehicle.
You can find pricing information for used cars in the same manner you find pricing for new cars, although the final price of a used car depends on how well the car has been taken care of. Key sources those previously mentioned as well as www.nada.com and www.vehix.com.

**Holdback:** A holdback is a rebate the manufacturer gives the dealership as compensation for holding the vehicle on the dealer’s lot. It is important for you to realize that even when the dealership sells a vehicle at a low cost, or even below invoice, the dealership still makes money because the dealer’s profit includes the holdback. The holdback money is not usually negotiable, but it is important to understand. Different manufacturers have different holdback amounts for dealers.

**Warranties:** Companies offer warranties to guarantee a product has the features and capabilities promised at the time of purchase. Warranties guarantee that any problems that arise after the purchase is completed will be resolved within a reasonable period of time.

Full warranties are contracts that promise the following: (1) the product will be fixed at no cost to the buyer within a reasonable time frame after the buyer makes a formal complaint, (2) the buyer will not have to perform an unreasonable task to bring the product back for repair, and (3) if the product cannot be repaired, the defective product will be replaced with a new product, or the buyer’s money will be returned.

**Service contracts:** Service contracts are agreements between the contract seller (the dealership, the manufacturer, or an independent company) and the buyer in which the contract seller agrees to provide specific services on the vehicle. These contracts may specify that the contract seller must provide free or discounted repair services or that the contract seller must cover components of the car for a specified length of time or mileage (for example, five years or 70,000 miles) after the original warranties expire. When purchasing a service contract, you should be concerned about what components are covered, the length of the coverage, and the number of miles covered. Generally, service contracts that come from the manufacturer are better because you can get service nationwide, rather than from a single dealer.

**Lemon laws:** Lemon laws protect the consumer if the vehicle he or she purchased is a “lemon.” According to these laws, your car is defined as a lemon if you make at least four attempts to fix a problem and if the car is out of service for at least 30 days during the first 12 months or 12,000 miles following your purchase. These laws give a consumer the right to return a car and request a replacement or a full refund if the circumstances meet the criteria of the lemon law.

### 3. Steps to Take after You Have Found the Vehicle

After you have found a vehicle you are interested in buying, look at a printout of the vehicle’s history, have the vehicle checked by a good mechanic, and look at the vehicle’s service records.

**Vehicle history:** Before you purchase a vehicle, get a printout of its history. The vehicle history is a record of every time a different owner has registered the vehicle with the state; it lists all past
owners and their locations. You can get a copy of a vehicle’s history for a fee by going to www.carfax.com and typing in the vehicle identification number (VIN). This record is important because you can see where and when a vehicle was registered, the type of title the vehicle has (i.e., was it salvaged or not), and the mileage listed on previous registrations. Generally, the more times a vehicle has been sold, the more likely it is that one or more of its owners has not done the maintenance required to keep the vehicle in good operating condition.

**Inspection by a good mechanic:** After you have found the vehicle you think you may want, get the vehicle checked by a qualified mechanic, preferably one from a dealer; the mechanic will do a major checkup to make sure there are no hidden problems. While it may cost between $80 and $250, the expense will be worth it if the mechanic finds problems you may not have discovered otherwise.

**Service records:** After you have found a vehicle you are interested in, ask the seller for a copy of the vehicle’s service records. Sellers should have kept a record of all services performed, including repairs, oil changes, tire rotation, etc. It is likely that vehicles with good service records were better taken care of than vehicles without such records.

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### Understand How to Buy or Lease a New Car and Understand the Lease versus Buy Decision

Buying or leasing a new car can be both exciting and frightening—you are looking forward to driving a new car, but you want to make sure you get the best deal possible. The information in this chapter can help guide you through the process of buying or leasing a new car.

Buying means you are purchasing the vehicle outright. The advantages of buying include that you are protected against losing your vehicle in case of job loss or change of employment, if you pay cash for the vehicle. If you buy, you can drive unlimited miles each year, and if you pay cash for the vehicle, you have no monthly payments. The vehicle can be used for any purpose, and you can modify the vehicle as you like (e.g., changing the color, rims, or tires).

The main disadvantage of buying is that there are higher up-front costs. Buying is also expensive if you want to have a new car every few years.

The advantages of leasing include that the payments are usually lower because you pay for only a portion of the car you are using. When you lease, you pay a depreciation fee and sales tax on a monthly basis instead of making a payment on the total cost of the vehicle. As a result, leasing can be economical if you want to have a new car every two or three years.
The disadvantages of leasing are many. When you lease, you do not have the flexibility to move to another location because of mileage limits, so if you are attending a university or living somewhere temporarily, leasing is probably not a good idea. At the end of your contract, you do not own the car, so your car is not an asset. There are many extra fees for leasing, such as acquisition and termination fees. There is also a fixed-mileage allotment, and you are required to pay a penalty charge for every mile you drive over your predetermined mileage allotment, which may be substantial. Another disadvantage of leasing is that, because leases are generally short-term, dealerships make a lot of money by leasing new cars to buyers every few years. Their profits are often hidden because of the complexity of leasing, especially for those who do not understand the process. Finally, there are other risks with leasing. Should you opt for a longer lease than the car warranty or should the vehicle have problems, you will be required to fix these problems at your expense before you can return the vehicle.

Be sure to find a closed-end lease, not an open-end one. With a closed-end lease, you simply pay the monthly payments and various fees and then return the car when the lease is over. If you have an open-end lease and the dealer is not able to sell the car for what he or she originally estimated, then you must pay the difference. Open-end leases are generally not a good idea due to the risks involved.

Before you buy or lease, there are five general guidelines you should know about the buying and leasing process:

1. **Know the Terminology**

   Knowing the terminology associated with buying and leasing a car is very important. The following terms are critical to both leasing and buying:

   - **MSRP** is the price a manufacturer hopes to get for a vehicle. Remember that it is acceptable and expected that you will negotiate for most vehicles. Those who negotiate generally pay less for their vehicles than those who do not.

   - **Capitalized cost** is the agreed-upon or negotiated cost. This amount is often significantly different from the MSRP.

   - **Capitalized cost reduction** is the capitalized cost that has been reduced by any rebates, incentives, and/or a trade-in vehicle.

   - **Net capitalized cost** is the agreed-upon or negotiated cost minus the capitalized cost reduction.

   - **Residual value** is the bank-determined expected value of the vehicle at term end. The actual value at term end may be either higher or lower than the residual value. This value is expressed as a percent of MSRP, such as 55 percent, meaning that the residual value at the end of the term would be 55 percent of the MSRP.
Chapter 16. The Auto Decision

Lease term is the number of months the vehicle is leased.

There are three parts to lease costs:

Part 1. Usage or depreciation charge: Usage is the amount of the value of the vehicle that is used over the lease life. This charge is the difference between your net capitalized cost and your residual value. This is the amount you will be charged for the depreciation on the vehicle over the life of the lease.

Part 2. Interest (or finance costs): This is your monthly interest cost for leasing the vehicle. It is calculated as your net capitalized cost plus the residual value multiplied by the money factor.

The money factor is another way of expressing your monthly interest rate and is used to calculate your monthly interest costs on a lease. The money factor is the APR in decimal form divided by 24. Your monthly interest expense is found by multiplying your average amount borrowed by your average interest rate; the result is your monthly interest expense, or your monthly finance charge, on the lease.

In a lease, you agree to a specific price for the vehicle, and you agree on a specific price that the vehicle will be worth at the end of the lease. To determine the average amount borrowed over the lease term, use the following calculation:

\[
\frac{\text{capitalized cost} + \text{residual value}}{2}
\]

If you leased a $20,000 vehicle with a $10,000 residual value (i.e., the bank-determined value of the vehicle at term end), the average amount borrowed would be $20,000 + $10,000 divided by two, or $15,000.

The average monthly interest rate is easier to determine than the average amount borrowed. The calculation is simply your annual percentage rate (APR) in decimal form divided by 12, or \(\text{APR} / 12\).

To find your monthly finance charge, multiply your average amount borrowed by your average monthly interest rate. Note that your capitalized cost plus the residual is your average amount borrowed, multiplied by your APR divided by 24, which is your money factor. Multiplied together, this will give you your monthly finance charge.

Part 3. Taxes (or government costs): In addition to paying taxes on the down payment of a lease, you must also pay taxes on your usage or depreciation charge and your interest or finance charge. Taxes are calculated as your usage and interest costs multiplied by your tax rate.

2. Narrow Your Choices and Select Your Vehicle

When choosing an automobile, it is critical that you comparison shop. You should compare prices, features, and quality to find out exactly what you want. Be informed. Check the library
and the Internet, and look at the alternatives. As you look at different cars, determine what is available in your price range and budget.

After you have looked at what is available, the next step is to choose your vehicle. As you narrow the choices, test-drive the exact vehicles you are considering. Do not buy any car without test-driving it first.

As you make your final decision, it is critical that you remember to make your car fit your budget. Don’t make your budget fit your car. If you must finance your car, determine exactly how much you can afford to spend each month and select a vehicle with a payment plan that fits within that limit. Do not spend more on a car than you can afford.

3. Determine Your Total Price and Negotiate for This Price

Once you know which car you want to buy and how much you can spend from your budget, you are ready to begin negotiations. Do your homework to find out how much the dealer paid for the car (the dealer invoice), the rebates that are available, how much the holdback from the manufacturer is, the amounts of the total markup, and the MSRP.

Start your negotiations at the dealer invoice. If the company you are working with won’t share the dealer invoice, go someplace that will. Most car dealerships will share this information with you. Often you can buy a car for invoice plus $100–$500, and sometimes you can negotiate for even less.

The dealer’s inventory often impacts how much of a difference there is between the invoice price and the price for which the dealer will sell the vehicle. The fewer the number of available cars and the more people who want those cars, the more the dealership will charge—this follows the basic principle of supply and demand. The calendar date may also affect how willing the dealer is to work with you on price. The end of a month or year is a particularly good time to buy because salespeople are trying to reach their quotas and are therefore more willing to negotiate.

Remember that no matter what price you negotiate, there are many other fees you will be expected to pay on top of the sale price. For example, if you and the dealer agree on a price of $30,000 and a trade-in credit of $5,000, the difference is $25,000. But in addition to that $25,000, you will need to pay for state tax and documentation, registration, and licensing fees. You will either pay for these costs in cash or finance them along with the price of your vehicle. In addition, if you lease a vehicle, you may also have to pay an acquisition and termination fee. Know that most of these fees—except for title, documentation, and licensing fees—are negotiable before you purchase or lease the vehicle.

4. Finance the Purchase (If You Must) and Determine Your Costs

**Buying:** If you must finance your automobile purchase (which is not recommended), remember that banks and credit unions will charge different interest rates than the dealer will charge.
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Usually, financing provided through the dealership is the most expensive type of financing, so compare interest rates on auto loans from multiple institutions before you purchase a car.

When comparing different loans, look at the term of the loan, the interest rate, and the fees. Financial institutions will typically finance newer vehicles for longer periods of time than they will finance older vehicles. Your credit score will have a major impact on the interest rate you will pay on your auto loan, so keep your credit score high. For more information on this topic, refer to Chapter 6: Understanding and Managing Credit and Chapter 7: Consumer and Mortgage Loans.

Calculate the overall costs of the purchase, including down payment, fees, taxes, license, documentation, and any dealer options. Know your total cost for the vehicle before you sign any sales documents so you will know how much you are paying. Realize that many of the dealer-installed options, such as rust coating, leather treatment, special rims and tires, and so on, are not required for the sale, even though the dealer may have done the work beforehand. Also, realize that nearly all costs are negotiable.

**Leasing:** If you decide to lease, realize that each leasing organization has different rates and programs, depending on your credit worthiness. Keep your credit score high and find the cheapest source of financing for your vehicle.

Determine your lease term. Generally, most vehicles depreciate more in the early years of a lease than in the later years. As such, you will pay more for newer vehicles than you will pay for older vehicles. Lease terms can be as short as 24 months and as long as 72 months. Remember that if you choose a lease term that is longer than your new vehicle’s warranty (generally three years or 36,000 miles) you will be responsible for any repairs beyond the new vehicle’s warranty period. If you are looking at a longer lease, it may be wise to get an extended warranty or a service contract to minimize the risk of additional costly repairs.

Calculate the amount of your residual value, usage or depreciation charges, interest or finance charges, taxes, and all the fees you will be paying. It is a good idea to compare the cost of leasing versus the cost of buying over the life of the lease. For an example of how to compare the costs of leasing versus buying, see Learning Tool 22: Lease Versus Buy Analysis in the Learning Tools directory of the website.

**5. Enjoy Your Purchase and Keep It Well Maintained**

Once you have made your purchase, read the owner’s manual carefully and follow the suggested maintenance schedule. One of the best things you can do for your car is to change the oil every 3,000 miles. Don’t ignore warning signals when your car doesn’t work as it should. When problems arise, get them fixed. Find a good garage with well-trained and experienced mechanics, and let the mechanics take good care of your new vehicle.
Understand the Challenges of Buying a Used Vehicle

There are many questions you should ask yourself before you buy a used car, such as:

- Can I afford this car?
- Will this car fit into my monthly budget?
- Is this car a want or a need?
- Does this car meet my current driving needs?
- What type of driving do I do?

Make sure you are shopping for a car that will meet not only your current needs but also your future driving needs. Consider how you will feel about this car a year from now or several years from now. Will your family be growing or shrinking? What extra features do you want your car to have? What about gas mileage? Do you want two doors or four doors? What safety features are important to you?

While the process of shopping for a used car is similar to the process of buying or leasing a new car, this next chapter will address additional aspects of purchasing a used vehicle: locating, evaluating, negotiating, and financing the vehicle.

Locating Used Cars

Good sources of used cars include private owners, new- and used-car dealerships, rental car companies, auctions, and auto brokers.

Private owners: Many used cars are sold by private parties. Often, these cars are the most reasonably priced, but they don’t have warranties. Do your research. Ask friends, neighbors, and relatives about used cars they know are for sale. If you buy from people you know, you should be able to find out more about a vehicle’s history. Watch for cars with “for sale” signs in the windows. Look at newspapers, classified ads, and bulletin boards. Keep in mind that cars that are closer to your geographical location are generally easier to inspect and evaluate. Use Internet sites, such as www.autotrader.com, www.classifieds2000.com, and www.usedcars.com to help you. Follow the procedures for buying a new car listed above, including getting a Carfax report on vehicles you are thinking of buying.

New- and used-car dealerships: New-car dealerships may also be a source of used cars. Dealerships often keep trade-in vehicles on their lots if they think they can resell them. Dealerships may be an attractive option for buying a used car because they sometimes offer special deals or warranties that are not available from private sellers.

Rental car companies: Other used-car lots are run by rental companies that are trying to sell vehicles that have just come off leases. Some of the cars sold on these lots may be backed by warranties as well. For newer used cars, part of the manufacturer’s warranty may still be in effect.
Auctions and auto brokers: For those who know how to evaluate vehicles, auto auctions are options for purchasing vehicles for a reasonable amount. The risk with auto auctions and auto brokers is that once a vehicle is purchased, there is no warranty or guarantee. The rule of thumb is caveat emptor, or “Buyer beware.”

You may also want to look into purchasing a used car through auto brokers, who for a fee (usually around $500) will find the make, model, and year of car you are looking for and purchase it at an auto auction.

Evaluating Used Cars

Contacting the seller: Call the seller before you go to see a car. Create a list of questions before calling and then use those questions to decide whether you want to see the car. Ask for the price, because it may have been lowered since the date of the advertisement. Ask about the mileage, the number of previous owners, and how often the oil has been changed. Before you buy, ask to see receipts for oil changes and other major services. If the car doesn’t fit your criteria or the seller seems uneasy answering questions, skip the visit and keep looking for other vehicles.

Verifying the vehicle history: Ask for and verify information about previous owners. With a $30 two-month subscription to Carfax (www.carfax.com), you can determine how many previous owners a particular car has had and where each owner was located. To obtain this information, you must input the vehicle’s VIN number on the site. Carfax will then give you a detailed vehicle history, including mileage listed on the odometer and a title check, to make sure the vehicle was not stolen. Check out the vehicle history of every potential purchase.

Determining a fair price: Know the blue book price, or recommended price, for the car you are calling about (pay attention to the specific year and the specific options you want). If possible, come to an agreement with the seller on the quality of the vehicle (fair, good, or excellent) before you go see the car. Coming to this agreement will allow you to determine a fair price beforehand.

Examining the vehicle: When you see the car, note your first impressions. Does the car appear to be well cared for? Although you are probably not a mechanic, you should look for potential problems anyway. The following is a list of some of the things you should look at as you evaluate a used vehicle:

Exterior:

- Look for rust.
- Examine the paint. New paint may be a cover-up for serious damage.
- Look for dents, mismatched paint areas, or poorly fitting parts.
- Check for ripples in door panels. Ripples may indicate previous accidents.
- Check for body filler, which is a plastic used to fix dents. It can be painted over, so use a refrigerator magnet to test suspicious spots.
• Check the underside of the car for evidence of fluid leaks. Coolant is a greenish color, oil is black, transmission fluid is pink, and gasoline is clear and can be identified by its smell.
• Wipe the inner surface of the tail pipe with a rag—white or gray dust is normal. A thick greasy film means the car burns a lot of oil, which can be a serious problem.
• Check the shock absorbers. Bounce the car up and down at each corner of the car. When you release the car, you should not feel the car bounce back more than twice.
• Examine the tire treads. A tread that is unevenly worn may indicate poor alignment or balance. All tires should be the same size, especially on a four-wheel-drive vehicle.
• Check the CV joint boots on the ends of the front axles. CV joint boots are expensive to replace.
• Push the top of one rear tire toward the car. If it moves too much, there may be bearing problems.

Under the Hood:

• Check for mismatched bolts or offset paint. These mismatches may indicate a front-end accident.
• Look at the underside of the hood. A black film on the underside usually means there is an oil leak.
• Check the levels of oil, brake fluid, and transmission fluid. Levels should be adequate, but if it looks like all the fluids have just been changed, this may indicate there is a problem with the car. A low oil level may indicate either a leak or that the owner didn’t have the oil changed regularly.
• Take out the transmission dipstick and smell the fluid. Does the fluid smell burned? With a well-maintained transmission, the fluid should not have a burnt smell.

Interior:

• Look inside the car for wear and tear on the seats and pedals. Make sure the amount of wear looks consistent with the mileage on the odometer.
• Start the car: it should start right away. Listen for any unusual noises.
• Verify that all gauges report information accurately.
• Examine the emergency lights. Make sure no emergency lights are on when the engine is running.
• Test all lights—brake lights, headlights, reverse lights, turn signals, and so on.
• Check for play in the steering wheel, clutch, and brakes. Play is the amount a part can move before it engages.
• Hold the brake pedal down as far as possible for 45 seconds. If the pedal doesn’t hold firm, there may be a leak in the brake fluid. There should be very little play in the pedal.
• Look for a jack and lug wrench in the trunk. If they aren’t there, ask the seller to provide them with the vehicle.
Test drive:

- Test-drive the vehicle personally. Notice how the vehicle feels and fits you.
- Evaluate how quickly the car accelerates from a complete stop. Does the car hesitate, or does it accelerate as it should?
- Listen to the engine while accelerating. Is it smooth or rough?
- Check for hill-climbing power, braking power, cornering, suspension, and seat comfort.
- Check for rattles and squeaks from interior controls.
- Play the radio and CD player.

Qualified mechanic inspection: If you are interested in buying the car, take it to a qualified mechanic for a more complete inspection. Choose a mechanic who regularly works on the type of car you are considering; such a mechanic can generally be found at a dealership that sells that particular make and model. Mechanics that do not specialize in the specific vehicle you wish to buy may be only guessing about potential problems. Dealers may also have the car’s history on their computers, which is also helpful.

Have the mechanic do an engine compression check and look for oil leaks and other fluid leaks. For cars with automatic transmission, take the car to a transmission specialist to have the transmission examined.

Negotiating for Used Cars

Once you are comfortable with the idea of buying a vehicle, negotiate a deal. If you plan to pay in cash, let the seller know this. Cash can do wonders for an agreement.

Know the fair value of the car beforehand. Negotiate politely. If you think the price is too high, make a persuasive case to support your argument. For example, you could point out that the vehicle needs some work, that the body or paint doesn’t justify the price, or that you have seen lower prices elsewhere. If you want to test the price, you can explain that the car isn’t exactly what you’re looking for, but at a lower price, you might be interested. You can also let the seller know that the car is worth the price but that you can only afford a lower price because of budgetary constraints. Make an opening offer that is low but in the ballpark of the seller’s asking price—do not be unrealistic. Expect to spend about an hour negotiating. Don’t be afraid to walk away if you’re not getting anywhere: you don’t have to buy the car.

Only enter into negotiations with a salesperson who makes you feel comfortable and who can make a deal. Before you go to see the vehicle, decide how much you can spend and walk out if the seller cannot meet this price. Leave if you get tired or hungry or if you feel pressured. Don’t be hurried into a decision. Don’t be distracted by pitches for related items. Expect the salesman to try to improve the deal before you reach a final price.
Close the deal at the dealership. At a dealership, the person who deals with financing and insurance will probably try to sell you a number of additional products, including service warranties and other dealer-installed options. Most, if not all, of these products are unnecessary. Review the contract thoroughly before signing. Ask questions about anything that dramatically increases the price. You will be asked to provide proof of insurance before you drive away in your car. Finally, you should inspect the car before you take possession of it. If any work is required or any repairs have been promised by the dealer, get the promise in writing in the form of a due bill—a written acknowledgement that the dealer will provide service at a future date.

Close the deal with a private owner. Before any money changes hands, make sure you will be able to register the car in your name. No registration means no deal. Request the title, sometimes called the pink slip, and have it signed over to you. No title also means no deal.

If the seller has not paid for the car in full, the lender still owns the title to the car. One way to deal with a seller who still owes money on the car is to close the sale at the office of the lender, where the title is held. Once all of the paperwork is complete, relax and begin enjoying your new purchase—a good used car.

Financing Used Cars

If you must finance your used car (I don’t recommend doing this), get your financing approved before you look for cars. There are several different lenders who can provide funding for a used-car loan. Banks and credit unions usually offer lower rates than dealerships do, so don’t use in-house financing unless you get a special deal or unless the in-house interest rate is very competitive. Also, make sure your credit is approved before you leave the dealership. Banks and credit unions will usually finance a car only if it is less than five years old; however, auto dealerships will finance basically any car.

When looking for a lender, it is important to consider the maximum length of the loan. The good news is that most banks offer 60-month programs for late used car models, or cars that are less than five years old. However, the older the vehicle, the less likely it is to run without problems for the full 60 months. In general, banks offer shorter length loans for older vehicles because older vehicles are not good collateral for loans.

Regardless of which lender you choose, make sure you understand exactly what you are getting into before you sign a loan contract. Once you have signed, you have committed yourself. Once again, you should know your credit score before you attempt to get a loan. If you know whether or not you have a good credit score, a dealer will not be able to insist that you need a higher interest rate because of your poor credit. Knowing your credit score will give you greater freedom to choose a lender that offers a lower interest rate.
Final Thoughts on Used Cars

Even if you follow the pattern explained above when buying a used car, there is still a good chance you will have to make some repairs you did not anticipate. Repairs are one of the risks of buying a used car. However, the more closely you adhere to the process outlined in this chapter, the less likely it is that you will have major problems with your vehicle.

Understand the Special Challenges of Leasing

Leasing has become a popular way for many people to have a car. In fact, you may have noticed that an increasing number of car ads give prices in terms of leasing rather than buying. If you determine that a lease is the best choice for you, the information in this chapter will help you make a wise decision. Some challenges of leasing include negotiating, calculating the costs, and understanding warranties.

Negotiating a Lease

Never walk into a dealership and announce that you want to lease a car. It isn’t a good idea to talk about payments right away either. You should not do these things because any competent dealer can find a way to make a car fit your budget while maximizing his profits if he knows how much you are willing to spend. You don’t want to spend the maximum amount; you want to negotiate the best lease terms you can.

You can prepare to negotiate by knowing which car you want, how much you can afford to pay for the car, and the car’s invoice price. You can further prepare to negotiate by selecting the lease term for your vehicle and learning the vehicle’s depreciation schedule. The vehicle’s depreciation schedule shows how much the vehicle is estimated to be worth after specific periods of time. Below is an example (see Figure 1).

Figure 1. Sample Depreciation Schedule of a Typical Vehicle

<table>
<thead>
<tr>
<th>Period</th>
<th>Depreciation Percentage</th>
<th>Residual Value</th>
<th>Loss in Most Recent Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 months</td>
<td>25%</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>24 months</td>
<td>38%</td>
<td>62%</td>
<td>13%</td>
</tr>
<tr>
<td>36 months</td>
<td>43%</td>
<td>57%</td>
<td>5%</td>
</tr>
<tr>
<td>48 months</td>
<td>50%</td>
<td>50%</td>
<td>7%</td>
</tr>
<tr>
<td>60 months</td>
<td>62%</td>
<td>38%</td>
<td>12%</td>
</tr>
<tr>
<td>72 months</td>
<td>77%</td>
<td>23%</td>
<td>15%</td>
</tr>
</tbody>
</table>

As Figure 16.1 shows, the vehicle depreciates 25 percent in the first 12 months. After 24 months, the vehicle depreciates another 13 percent, for a total of 38 percent depreciation. After 36 months, the vehicle depreciates another 5 percent, for a total of 43 percent depreciation. The percentages on the right-hand side of the chart represent the residual value, or how much the
vehicle will likely be worth at the end of each lease period. Know the depreciation schedule for the car you want to buy so you can determine the residual value at the end of the lease.

There are a number of residual guides, such as the Kelly Blue Book Edmunds, you can refer to determine what a vehicle’s residual value will be at the end of a lease. When you are looking up a residual guide, the relevant information is the year of the vehicle, the make, the model, and the terms of the lease.

Summary

Besides the decision to purchase a home, the largest financial decision for many individuals is the decision to buy a vehicle. While it is important to have a car for convenient transportation, having a car can become a significant financial burden if you must borrow money to pay for the purchase, if a car is not in your budget, or if the car costs more than you planned.

There are a number of important topics you must understand before you buy or lease a new or used vehicle. Know your budget and understand safety reports, automobile reports, and insurance. Before you look for a vehicle, understand the pricing on new and used vehicles, holdbacks, warranties, service contracts, and lemon laws. After you have found the vehicle you want to buy, be sure you look at vehicle reports, have the vehicle checked by a mechanic, and review the vehicle’s service or maintenance records.

Before you begin the process of buying a vehicle, you should understand five general guidelines for the buying or leasing process:

1. Know the terminology.
2. Narrow your choices and choose your vehicle.
3. Determine the dealer invoice and use it to calculate the vehicle’s total price.
4. Finance the vehicle.
5. Enjoy your purchase and keep it well maintained.

While the process of buying a used car is similar to the process of buying or leasing a new car, there are additional challenges to purchasing a used car that are important to consider, including locating, evaluating, negotiating, and financing the used car.

Leasing has become a popular way for many people to have a car because the up-front costs of leasing are lower than the up-front costs of buying. Additional challenges of leasing include negotiating, calculating the costs, and understanding lease warranties.
Assignments

Financial Plan Assignment

This is an optional assignment for students who are interested in buying a new vehicle. First, review your budget and determine how much you can save each month. Review your bank accounts to determine how much you have saved already. It is generally better to pay cash for a vehicle than to make payments. Use wisdom in your purchases.

Next, identify the types of vehicles you are interested in. What are the key components that are important to you? What do the different auto reviewers think of the vehicles that interest you? How safe are the vehicles? Choose your vehicle and decide on the options you want. Go to the major automobile websites, such as www.kellybluebook.com or www.edmunds.com, and look up the price of the vehicle that has your desired options. In addition, determine the dealer holdback for the vehicle. Once you know the invoice price and holdback, use these amounts as your beginning bargaining point. Work with different dealerships to get the best price for the vehicle.

If you are interested in buying a used vehicle, the assignment is different. Again, review your budget and determine how much you can save each month for a vehicle. Determine how much you have saved so far, and try not to go into debt for a vehicle.

Identify the types of vehicles you are interested in. What are the key features that are important to you? What do the different auto reviewers think of the vehicles you are interested in? How safe are the vehicles? After you have done this research, choose your vehicle.

Visit the major automobile websites, like www.kellybluebook.com or www.nada.com, and price the vehicle you are looking at by entering information such as the year of the vehicle, the desired options, and the quality of the vehicle. Find the price range for the vehicle. Once you know the recommended price, use it as your starting point. Now you are ready to look for potential vehicles. Look in the newspaper, on the Internet, and at local dealerships; remember, friends and neighbors can also be resources for finding used vehicles.

Once you have found a vehicle you are interested in buying, follow the steps for buying a used car that are discussed in this chapter. I strongly encourage you to use programs such as www.carfax.com to verify the vehicle’s history. Most used-car dealerships will have the information found on this website available. It would also be wise for you to have the vehicle checked out by a reputable mechanic. This investment in time and money can help you find a well-maintained vehicle.

Once you have decided on a potential vehicle to purchase, negotiate the price of the vehicle based on your research. Again, I strongly recommend you save for the vehicle, but if you must finance the vehicle, finance it at the lowest interest rate possible.
If you are considering leasing a vehicle, use Learning Tool 22: Lease versus Buy Analysis to compare the cost of leasing versus buying a vehicle.

Learning Tools

The following Learning Tool may be helpful:

22. Lease versus Buy Analysis

This spreadsheet closely approximates the costs of buying a vehicle versus leasing a vehicle.

Review Materials

Terminology Review

Average Amount Borrowed. This is the average amount borrowed over the life of the loan. In leasing, it is the (Net capitalized cost + residual)/2.

Average Monthly Interest Rates. This is the Annual Percentage Rate (APR) divided by 12.

Capitalized cost reduction: Any reductions in capitalized cost, such as rebates, down payment, dealer incentives, trade-in, etc.

Capitalized cost: The cost to which you agree or negotiate when purchasing a vehicle.

Interest or finance costs. This is the average amount borrowed times the monthly interest rate. In calculation form, it is the (Net capitalized cost + residual value) / 2 times your average interest rates which is the APR/12.

Lease cost: The total cost of a vehicle’s lease. It has three parts:

1. Usage (also called depreciation): The amount of the value of the vehicle that is used over the lease life. (Net capitalized cost – residual value).
2. Interest (also called finance costs): The average amount borrowed times the monthly interest rate. (Net capitalized cost + residual value) / 2*average interest rates : APR/12.
3. Taxes (also called government costs): (Usage + Interest)*tax rate.

Lease term: The number of months the vehicle is leased.

 Lease: A contractual arrangement calling for the lessee (user) to pay the lessor (owner) for the use of an asset.
**Money factor**: A way of expressing interest rates, calculated by taking the APR and dividing it by 24.

**MSRP**: The price the manufacturer hopes to get for the sale of a product.

**Net capitalized cost** (also called **adjusted capitalized cost**): The final amount paid. Found by taking the capitalized cost and subtracting capitalized cost reduction.

**Residual value**: Expected value of a vehicle at term end. Often used as purchase price after a lease has ended.

**Taxes** (also called government costs). It is the tax on the usage and interest in a lease. It is calculated as (Usage + Interest) times your tax rate.

**Usage** (also called depreciation). This is the amount of the value of the vehicle that is used over the lease life. It is calculated at the Net capitalized cost – residual value.
17. Investments 1: What to do Before You Invest

Introduction

The previous chapters have helped you put personal financial management into perspective. These chapters have taught you about living on a budget, keeping track of where your resources are going, managing your cash and cash equivalents, protecting yourself from loss by owning insurance, and making big-ticket purchases wisely. Now we will begin a discussion on long-term investing.

Please be aware that this course approaches the subject of investments differently than do other textbooks. Most books take an asset-based approach—they talk about stocks, bonds, mutual funds, and other assets. Such assets change over time as new assets are developed and sold. Instead, I take a principle-based approach to discussing investments because the principles will not change over time.

The most critical part of investing is having a plan—an Investment Plan. These chapters in this course on investing all relate to putting together an Investment Plan, often called an investment policy statement. This Investment Plan describes what kind of an investor you are, what your risk and return requirements are, how you will invest, where you will invest, how you will get money to invest, and how you will evaluate your investments. These are all critical areas of the investment process.

Learning about investments is really learning how to answer six important questions:

1. **What are financial markets and how do they operate?** It is important that you learn the basics of financial markets and financial market operations before you begin investing.

2. **What are the major financial instruments or assets, and what are their advantages and disadvantages, i.e., risks?** Learning about financial assets is important since that is what you will be investing in.

3. **What are the asset classes and why are they important?** Asset classes (i.e., stocks, bonds, cash, etc.) have different risk and return characteristics. Understanding asset classes is critical since investment returns are largely the result of an investor’s asset allocation, or the allocation of resources between the different asset classes.

4. **What is your asset allocation and how will it change over time?** Your asset allocation is the way you allocate your investment dollars to different asset classes.
5. **What is your Investment Plan and how will you invest?** Your Investment Plan should include clear objectives, guidelines, and constraints. These factors will influence both how and where you invest and will help you become a better investor.

6. **How will you build your portfolio and how will you monitor it?** Once you invest, you will follow this process to build, monitor, evaluate, and rebalance your portfolio.

I have divided this course on investments into nine different chapters. **Investments 1: Before You Invest** discusses principles of successful investing and gives a basic history of asset-class performance over the last 80 years. It will also help you develop your preliminary asset-allocation targets. **Investments 2** discusses investment objectives, constraints, and policies needed to prepare an Investment Plan or an Investment Policy Statement. **Investments 3** discusses financial markets and how they operate. **Investments 4, Investments 5,** and **Investments 6** delve into a deeper discussion on the major asset classes and financial assets. **Investments 7** and **Investments 8** discuss how you build your portfolio and how to choose financial assets. Finally, **Investments 9** discusses how to monitor and rebalance your portfolio.

**Objectives**

When you have completed this chapter, you should be able to do the following:

1. Know the steps to take before you invest
2. Recognize the 10 principles of successful investing
3. Understand the risks and benefits of the major asset classes
4. Understand the risks and return history of the major asset classes

Properly prepare yourself to invest and understand what you will be investing in before you begin your investment program; these are important keys to success.

**Know the Steps to Take Before You Invest**

The following are important questions to ask yourself before you start investing:

- Is there a priority to paying your bills? Do you consider some of your bills more important than others? Which bill do you consider more important?
- Are there certain products or services you feel you should never do without? Should you have health and life insurance before you begin investing?
- Is there a better use for your money than investing? Are there bills or debts you should pay before beginning your investment program? What should you do about high-interest items such as credit cards and consumer loans? Does it really make sense to earn 8 percent annually on an investment when you are paying 24 percent annually for credit cards and other forms of debt?
• How does investing fit in with your personal goals and budget? Do you have a plan for investing?

As I have worked with families and students, I have developed a helpful framework for teaching investing. I call this framework “the investment hourglass.” This tool helps relate priorities and risks to the goals you want to accomplish.

The investment hourglass is divided into two parts: the top of the hourglass, which represents questions you should consider before you invest, and the bottom of the hourglass, which represents how you should invest. This chapter will focus on the top of the investment hourglass. The hourglass is designed to help you prioritize. Since investing is a means to an end—and not an end in itself—you should base your investment decisions on your priorities and personal goals. If you can agree with each of the statements listed in the top of the hourglass, you are ready to invest (see Chart 1). If you cannot agree with any of these statements, you have important steps to take before you begin investing.

Chart 1. Top of the Investment Hourglass—Before You Invest

1. Are your priorities in order and are you “square” with the Lord?
2. Do you have adequate health and life insurance?
3. Are you out of high-interest credit card and consumer debt?
4. Have you written down your personal goals, do you live on a budget, and do you have a well-written investment plan?

Before you even think about investing, you should be sure you’ve paid your bills. First and foremost, your most important priority is being “square” with the Lord, who is your most important creditor. Before you invest, ask yourself if you have paid your tithing, a generous fast offering, and other contributions as you feel inclined.
Your second priority is your family. If something were to go wrong with your health, or if you were to die, who would take care of your family? Make sure you have adequate life insurance and health insurance in place before you begin investing. Disability or death is not a valid excuse to stop providing for the needs of your family.

Your third priority is yourself. Personal responsibility has two parts: the first involves getting out of credit card and consumer debt. When there is no guarantee that you will make a return on your investments in the stock market, it does not make sense to pay 24 percent interest on credit cards. The second part of personal responsibility involves living by your budget, knowing your personal and family goals, and having an Investment Plan. Figuratively speaking, before you drive to a new location, you must understand where you are, where you want to be, and how to get there. Your budget represents where you are, your goals represent where you want to be, and your Investment Plan represents how to get there.

If you can answer yes to each of the statements from the top of the investment hourglass, you are ready to invest. This hourglass can help you keep your priorities in order: God first, family second, and personal responsibility third.

Recognize the 10 Principles of Successful Investing

Once you are ready to invest, you must recognize that there is not just one right way to invest. There are multiple methods of investing, depending on your budget, your personal goals, and your Investment Plan. The key to successful investing is to know yourself and what you are trying to accomplish.

To understand how most equity investors have done in investing, you must compare their returns to their benchmarks. Each year, DALBAR puts out an annual survey called *Quantitative Analysis of Investor Behavior* (www.dalbar.com), which discusses how the average investor in equities, fixed income, and asset allocation funds has done compared to his or her benchmarks over the past 20 years. Interestingly, most investors have not had very high returns in comparison to their benchmarks (see Tables 1–3).

As the saying goes, “If you do what everyone else does, you will get what everyone else gets.” Based on the DALBAR study, it seems that whatever people are doing regarding investing is not working well for equity investors (see Table 1), fixed income investors (see Table 2), or investors using asset allocation (see Table 3). Is there a better way to help investors achieve higher returns than what they have in the past, perhaps returns closer to the benchmarks? I believe so. Is there one right way to invest? I think not. Likewise, there is not just one right way to teach investing.

I believe the best way to teach investing is to first teach the principles of wise investing. While assets may change, the principles should not. Joseph Smith’s admonition, “I teach them correct principles and they govern themselves,”\(^1\) applies today in this area as well.
If you understand the “correct principles” that relate to successful investing, you will be able to “govern,” or manage, your investment portfolio well. Dallin H. Oaks said:

We live in a complex society, where even the simplest principle can be exquisitely difficult to apply. I admire investors who are determined not to obtain income or investment profits from transactions that add to the sum total of sin and misery in the world. But they will have difficulty finding investments that meet this high standard. Such complexities make it difficult to prescribe firm rules. We must rely on teaching correct principles, which each member should personally apply to govern his or her own circumstances.

Table 1. Historical Analysis of Equity Investor’s Return

<table>
<thead>
<tr>
<th>Year</th>
<th>Investor Period</th>
<th>Investor Returns</th>
<th>Benchmark Returns</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1991–2010</td>
<td>3.8%</td>
<td>9.1%</td>
<td>-5.3%</td>
</tr>
<tr>
<td>2012</td>
<td>1992–2011</td>
<td>3.5%</td>
<td>7.8%</td>
<td>-4.3%</td>
</tr>
<tr>
<td>2013</td>
<td>1993–2012</td>
<td>4.3%</td>
<td>8.2%</td>
<td>-3.9%</td>
</tr>
<tr>
<td>2014</td>
<td>1994–2013</td>
<td>3.7%</td>
<td>11.1%</td>
<td>-7.4%</td>
</tr>
<tr>
<td>2015</td>
<td>1995–2014</td>
<td>5.2%</td>
<td>9.9%</td>
<td>-4.7%</td>
</tr>
<tr>
<td>2016</td>
<td>1996–2015</td>
<td>4.7%</td>
<td>8.2%</td>
<td>-3.5%</td>
</tr>
</tbody>
</table>

* DALBAR 2011–2016

Table 2. Historical Analysis of Fixed Income Investor’s Return

<table>
<thead>
<tr>
<th>Year</th>
<th>Investor Period</th>
<th>Investor* Returns</th>
<th>Benchmark Returns</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1991–2010</td>
<td>1.0%</td>
<td>6.9%</td>
<td>-5.9%</td>
</tr>
<tr>
<td>2012</td>
<td>1992–2011</td>
<td>0.9%</td>
<td>6.5%</td>
<td>-5.6%</td>
</tr>
<tr>
<td>2013</td>
<td>1993–2012</td>
<td>1.0%</td>
<td>6.3%</td>
<td>-5.3%</td>
</tr>
<tr>
<td>2014</td>
<td>1994–2013</td>
<td>0.7%</td>
<td>7.7%</td>
<td>-7.0%</td>
</tr>
<tr>
<td>2015</td>
<td>1995–2014</td>
<td>0.8%</td>
<td>6.2%</td>
<td>-5.4%</td>
</tr>
<tr>
<td>2016</td>
<td>1996–2015</td>
<td>0.5%</td>
<td>5.3%</td>
<td>-4.8%</td>
</tr>
</tbody>
</table>

* DALBAR 2011–2016

Table 3. Historical Analysis of Asset Allocation Investor’s Return

<table>
<thead>
<tr>
<th>Year</th>
<th>Investor Period</th>
<th>Investor* Returns</th>
<th>Benchmark Returns**</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1991–2010</td>
<td>2.6%</td>
<td>8.2%</td>
<td>-5.7%</td>
</tr>
<tr>
<td>2012</td>
<td>1992–2011</td>
<td>4.4%</td>
<td>7.3%</td>
<td>-2.9%</td>
</tr>
<tr>
<td>2013</td>
<td>1993–2012</td>
<td>2.9%</td>
<td>7.5%</td>
<td>-4.5%</td>
</tr>
<tr>
<td>2014</td>
<td>1994–2013</td>
<td>1.9%</td>
<td>9.7%</td>
<td>-7.8%</td>
</tr>
<tr>
<td>2015</td>
<td>1995–2014</td>
<td>2.5%</td>
<td>8.4%</td>
<td>-5.9%</td>
</tr>
<tr>
<td>2016</td>
<td>1996–2015</td>
<td>2.1%</td>
<td>7.0%</td>
<td>-4.9%</td>
</tr>
</tbody>
</table>

* DALBAR 2011–2016 ** Estimate of 60% equity and 40% fixed income
Whatever you decide to invest in, and whatever phase of investment you are in, it is critical that you adhere to the following ten principles. If you build your portfolio according to these principles, you will be most likely to have a successful portfolio.

**Principle 1: Know Yourself**

Investing is not an end in itself; rather, it is a means of reaching your personal and family goals. Consequently, you need to know yourself as an investor. You should have well-written and well-thought-out goals; goals are critical because they help you determine what you want to accomplish with your investment program.

You also need to know your budget. A critical part of successful investing is having a well-planned budget; a percentage of your income should be earmarked for savings and investment. You cannot invest without funds, and you should not invest with borrowed money.

You also need to understand your ability to tolerate risk. You want to develop a “sleep-well portfolio”—a portfolio that is planned so that even when investments go wrong, as they often do, you can still sleep well at night.

Beware of overconfidence in your portfolio. One sign of overconfidence is frequent trading. A study found that men trade 45 percent more often than women trade and that men’s annual returns were, on average, 2.7 percent lower than women’s annual returns. The study also found that single men trade 60 percent more often than single women trade and that single men’s annual returns were 1.4 percent lower than single women’s annual returns. 3

You must be wary of having overconfidence when trading online as well. The same study showed that the same group of investors beat the market by 1.9 percent before online trading. However, when the same group of investors switched to online trading, the group underperformed by 3.6 percent. 4 While online trading may appear to give you more control, it can result in lower overall returns if it leads to more frequent, overconfident trading.

**Principle 2: Understand Risk**

Risk is inherent in all investment activities. Some risks include inflation, business, interest-rate, financial, market, political and regulatory, exchange-rate, call, and liquidity risks. The key to managing risk is to understand the different types and to invest at a risk level that is comfortable for you. Often, taking a risk tolerance test will help you discover the level of risk that is right for you. One such test is included in the Learning Tools section of the website in **Learning Tool 16: Risk Tolerance Test.**

**Principle 3: Stay Diversified**

Diversification is your best defense against risk. Diversification does not mean simply investing in 10 different banks; rather, to be properly diversified, you should invest in different companies,
industries, and perhaps even countries that won’t be subject to the same economic factors or risks. Make sure you understand the risks of each of your investments.

Many people review the portfolio returns from various asset classes over the last 10, 20, or 50 years to get an idea of an asset class’s performance history. However, these people often invest in only one or two single assets instead of in a portfolio of 500 or more stocks and are often disappointed when they do not get the asset class returns they expected. Remember, the returns from asset classes are from portfolios of hundreds of assets—not from individual assets. To see the effects of diversification, see Learning Tool 23: Return Simulation for Asset Classes in the Learning Tools directory of the website.

**Principle 4: Make Low-Cost and Tax-Efficient Investments**

Watch your investment costs carefully, including costs for transaction fees, management fees, and taxes. Remember that when investing, a dollar saved is worth more than a dollar earned—you have to pay taxes on every new dollar you earn, but every dollar you save is already taxed and can earn interest on income. Be aware that frequent trading incurs significant transaction and tax costs; avoiding this will help you keep your costs low.

Defer or eliminate taxes as much as possible. Mutual funds are required by law to distribute 90 percent of all capital gains, dividends, and interest to their shareholders each year. That means you must pay taxes on the distributions from your mutual funds each tax season, even though you may not have sold a single share. Mutual funds are pass-through accounts for tax purposes, which means that the tax consequences of the mutual fund are paid by the investor, not the mutual fund. The portfolio manager’s decisions can have a significant impact on your taxes.

**Principle 5: Invest for the Long Run**

Invest for the long run; this is how you will achieve your goals. There are no “get-rich-quick” schemes that work, and short-term investing is expensive in terms of time, transaction costs, and taxes.

Avoid short-term trading. Short-term trading is expensive and incurs transaction costs and taxes. Be sure to keep at least part of your funds in the market for the long run—taking money out of the market may not only slow your progress but could stop it altogether. A recent study found that those who traded more often, using the turnover ratio as a proxy for trading, had lower returns than those who traded less often and used a buy-and-hold strategy.5

**Principle 6: Use Caution If You Are Investing in Individual Assets**

If you must invest in individual assets (which is not necessary for a successful portfolio), do your homework and know what you are investing in and who you are investing with. Learn about the company, its financial statements, its management, its short- and long-term strategies, its domestic and global industry, and its competition. It takes many hours of diligent, careful
research to investigate a company thoroughly. Do not take another’s word for it: do the research yourself. Of course, finding a great company is not enough—the stock must also be priced right. A great company whose stock is overpriced can still be a lousy investment.

If you do not have time to research individual companies, invest in mutual or index funds that contain many individual assets. If your mutual fund has 10 stocks, you need to know those 10 stocks well. However, if your mutual fund has 500 or more stocks, you do not need to know those 500 stocks as well because each stock has such a small impact on your total portfolio.

Make sure you invest with mutual fund companies that have a tradition of meeting the needs of their investors. Work with good companies that offer good products. Be careful with your money and invest it wisely.

**Principle 7: Monitor Portfolio Performance against Benchmarks**

Thomas S. Monson stated, “Where performance is measured, performance improves. Where performance is measured and reported, the rate of improvement accelerates.”  

How can you know if your investments are doing well if you do not monitor their performance? To understand the performance of your investments, you will need to learn how to use benchmarks. Benchmarks are passively managed portfolios of financial assets that indicate how well your financial assets are performing. Set your own portfolio benchmarks and then monitor your portfolio performance on a monthly, quarterly, and annual basis.

If you choose to invest in actively managed mutual funds, compare the assets’ performance against the benchmarks you have set (after taxes). If the return on these assets is consistently lower than the benchmarks, consider investing in no-load (no sales charge), low-fee (low expense ratios) index funds, which are discussed later in this course. The returns on index funds generally match the performance of selected benchmarks more consistently than actively managed funds.

**Principle 8: Do Not Waste Too Much Time and Energy Trying to Beat the Market**

It is difficult, expensive, and time-consuming to try to beat the market gaining returns in excess of the returns on the major asset classes. While it may be possible on a short-term basis, it is difficult to consistently beat the market on a long-term basis. You are competing against hundreds of thousands of professional money managers with much more time and money and access to more databases than you have.

If you want to try to beat the market, try for a short period of time and compare your returns after taxes to your benchmarks. Do not waste too much time and energy because you will be able to match the market return with little or no effort through no-load, low-fee index mutual funds or exchange traded funds (ETFs).
If you feel you must trade actively, try to trade efficiently in terms of taxes. Trade in tax-deferred or tax-eliminated retirement accounts such as a 401(k), Roth IRA, or traditional IRA accounts so your taxes are deferred or eliminated when you take the money out at retirement.

**Principle 9: Invest Only with High-Quality, Licensed, Reputable People and Institutions**

When you need help, do not be afraid to ask for it. However, be sure to get help from good people whose actions and beliefs are consistent with the principles discussed in this chapter. Good help from qualified, licensed, and experienced financial planners, financial advisors, and brokers may help you with your Investment Plan.

Use the best resources available to help you invest, but be aware of how you pay to use those resources. In addition, make sure your advisors are licensed to counsel you on the broad range of investment assets you are (or should be) considering. Work only with licensed and registered advisors. In some circumstances, fee-only financial planners or advisors may be a better choice than financial planners or advisors that are paid on commission.
**Principle 10: Develop a Good Investment Plan and Follow It Closely**

Develop a good Investment Plan that is consistent with your goals, your budget, and the principles discussed in this chapter. Follow this plan closely. An Investment Plan is a detailed road map of your investment risk and return, constraints, investment strategy, and reporting and evaluation methodology. For an example of an Investment Plan, see Learning Tool 5: Investment Plan Example in the Learning Tools directory of the website.

Your Investment Plan should outline the amount of return you are seeking and the risk level you are comfortable with for investments. This plan documents constraints—such as taxes, liquidity, and time horizon—that affect your portfolio. It details which asset classes you will or will not invest in and includes your view on active versus passive management. It lays out your plan for the percentage of gross income you will invest each month, the amount you will invest in each of your chosen asset classes, the maximum percentage of your assets that you will invest in any single new investment, and the ways your strategy will change as you get older. Finally, your Investment Plan details how often you will rebalance your portfolio and how often you will report the portfolio performance to others.

Think of your Investment Plan as a road map to successful investing. Your plan should be consistent with the principles discussed in this course. If you plan wisely and invest accordingly, you will save yourself from heartache and problems in the future, and you will likely achieve your personal and family goals.

**Understand the Major Asset Classes**

Investment is similar to an amusement park. At an amusement park, people go on rides that appeal to them; likewise, in the area of investment, people invest in areas that suit them. High-risk investments are similar to a roller-coaster ride—they require a stronger stomach, but the thrill and returns are generally much greater than with other investments. Low-risk investments are similar to the merry-go-round—while fun, they may be too sedate for some investors. The key is to find out which investment “rides” you like based on your age, your goals, your budget, and, for some, your medical history.

Asset classes are broad categories of investments with specific and similar risk and return characteristics. Asset classes are distinguished by the unique characteristics of particular groups of securities, including the type of financial instrument, market capitalization, maturity, and geographic location. There are three major asset classes most investors should include in their portfolios: cash and cash equivalents, fixed-income investments (bonds), and equities (stocks). Each asset class has its own risks and benefits—the more familiar you become with each type of asset class, the stronger your overall investment portfolio will become.
Cash and Cash Equivalents

The main goal of cash and cash-equivalent investments is to preserve capital. Cash investments include certificates of deposit, money market funds, Treasury bills, and short-maturity commercial papers (see Chapter 5, Cash Management). Cash investments offer a fixed rate of return, most checking and savings accounts are insured by the Federal Deposit Insurance Corporation (FDIC), and Treasury securities are backed by the taxing ability of the U.S. government. Short-term, interest-bearing investments include Treasury bills, U.S. savings bonds (loans to the U.S. government), and commercial paper (loans to corporations).

Some of the benefits of cash and cash-equivalent investments include their liquidity and their generally stable principal. These investments are low-risk because the borrowers have good credit and the loans are for short periods of time. They are especially good investments for money you plan to use in less than five years or money or for your emergency fund.

However, the risk of cash investments is that they are unlikely to keep up with inflation and taxes. This makes them less attractive options for medium-term or long-term investments (longer than five years). Use cash investments for the purpose of your emergency fund, to maintain liquidity and to diversify your portfolio, but realize that this asset class will do little to improve your portfolio’s overall performance.

Fixed-Income Investments (Bonds)

The main goal of fixed-income investments is to provide income and to earn returns in excess of inflation. There are two main categories of fixed-income assets: taxable bonds and tax-free bonds. Taxable bonds include U.S. Treasury bonds, corporate bonds, and U.S. government agency issues such as Fannie Mae (Federal National Mortgage Association or FNMA) and Freddie Mac (Federal Home Loan Mortgage Corporation or FHLMC). Tax-free bonds include revenue bonds or general-obligation bonds and may be issued by state or local governments. Such bonds are generally exempt from federal taxes and may be exempt from state taxes as well. Bond mutual funds which hold these assets enjoy the same tax advantages.

There are several different types of fixed-income investment assets, including short-term bond funds, intermediate bond funds, and bond mutual funds.

Short-term bond funds invest in bonds that mature in less than five years, making them less vulnerable to interest-rate risk than long-term bonds. Although the return on these investments is not as attractive, they are generally considered to be appropriate for anyone who needs a dependable stream of income from interest or dividends.

Intermediate-term bond funds have an average maturity of 3 to 10 years; another option is long-term bond funds, which have an average maturity of 10 or more years. These long-term bonds are much more vulnerable to interest-rate volatility because the principal is at risk for a longer period of time.
**Bond mutual funds** allow you to buy and sell bonds before they mature; therefore, there are tax implications for investors (see Chapter 20: Bond Basics). Investing in a bond fund means you are buying a share of many different bonds in a changing portfolio rather than purchasing a single bond.

Income from fixed-income bond funds fluctuates as mutual fund investors buy and sell bonds. The market value of the fixed-income bond funds changes depending on whether investors are selling bonds at a loss or a gain, and length of maturity also affects the income. Looking at the average maturity of the bonds in your bond fund will provide a clearer picture of the volatility of that fund regarding interest-rate fluctuations. The longer the average maturity of the bonds, the more dramatically the principal will gain or lose value as the interest rates change.

The benefit of fixed-income assets is that they offer a greater potential return than cash investments, though they do involve greater risk. Fixed-income assets are a good diversification tool for a long-term stock portfolio because bonds generally behave differently than stocks do. Other risks of fixed-income assets are that the returns have historically been lower than the returns on stocks and that fixed-income assets are susceptible to interest-rate changes and other risks.

Generally, fixed-income assets often do not provide enough growth to beat inflation over long periods of time—therefore, they are not good long-term investments by themselves but should be part of an overall diversified portfolio.

**Stocks or Equities**

The main goal of stock investment is to provide growth and to earn returns in excess of inflation. Historically, the stock market has been the only investment that has consistently outpaced inflation. For the past 85 years, large-capitalization stocks have earned slightly less than 10% per year, while small-capitalization stocks have earned slightly more (see Table 4). When you buy a share of stock, you are buying ownership in a business’s earnings and assets. You therefore receive a proportionate share of the profits through dividends and benefits that stem from increases in the company’s share price. Mature companies are typically a better source of dividends, since rapidly growing companies often prefer to invest profits.

Equity asset classes are mainly classified by three factors: market capitalization, type of company, and geographic location.

**Market capitalization** is one way of measuring the size of a company. It is calculated by multiplying the market price of the stock by the number of shares or the number of ownership pieces outstanding. Market capitalization is used to separate companies into specific ranges of company size and to determine certain classes of companies, including large-capitalization (large-cap) companies, middle-capitalization (mid-cap) companies, and small-capitalization (small-cap) companies.
Large-cap stocks are generally defined as stocks from companies with a market capitalization that is greater than U.S. $10 billion (this amount is smaller for international companies). Large-cap stocks generally come from large, well-established companies that have a history of good sales and earnings as well as a notable market share. Although large-cap stocks have traditionally been synonymous with dividend-paying companies, this classification is no longer standard. Nevertheless, large-cap stocks do generally entail mature corporations with long track records and a steady growth of dividends.

Companies that offer mid-cap stocks have a capitalization that is roughly between U.S. $2 billion and U.S. $10 billion. These stocks tend to grow faster than large-cap stocks and are generally less volatile than small-cap stocks. Mid-cap stocks generally perform in a similar manner to the small-cap asset classes. For asset allocation purposes, mid-cap stocks are not generally considered a major asset class.

Companies that offer small-cap stocks generally have a market capitalization of less than U.S. $2 billion. They are small (or sometimes newer) U.S. and global companies that are still developing, so they have a smaller market share than their large-cap counterparts. Small-cap companies are subject to greater volatility in stock price and tend to fail more frequently than larger companies; however, they are generally expected to grow faster than larger companies.

**Type of company:** Within the large-, mid-, and small-capitalization stock categories, there are two separate types of stocks, growth stocks and value stocks. Growth stocks are offered by companies whose earnings are expected to grow much more rapidly than the market. Value stocks are inexpensive stocks, at least in terms of low price earnings and low price-to-book value ratios when compared to their peers. These terms are explained in Chapter 21. Stock Basics of this course.

**Location:** International stocks are stocks whose primary listing is outside the United States. Global stocks are stocks that are either international or in the United States. Regional stocks are stocks from a specific region, such as Europe or Asia. Emerging market stocks are stocks from countries that are not considered developed. International investments involve additional risk, such as differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets.

Stock mutual funds are funds that own stock in specific groups or types of companies. When you invest in a stock mutual fund, you are investing in multiple companies; this group of companies changes over time, depending on the fund manager. You are responsible for paying taxes on all distributions from the mutual fund, and these distributions are taxed at your level, not at the fund level. Mutual funds are generally delineated by investment objective and may include any of the asset classes discussed earlier.

The benefit of stocks is that they offer the highest potential return of any of the major asset classes. Growth stocks and value stocks tend to perform well in alternating cycles, so it makes
sense to own some of both. Stocks are good for long-term investing: as mentioned earlier, this is the only major asset class that has consistently beaten inflation over the long term.

The risks of investing with stocks are that they offer less stability of principal than other asset classes and that they are subject to short-term price fluctuations. These factors make stocks a big risk for short-term investments. If you are investing for less than five years, only invest a small portion of your money, if any, in stocks.

Stocks consistently yield the highest return of any asset class over long periods, but they also have the highest risk. Nevertheless, even though stocks can be volatile in the short-term, they continue to deliver returns that far surpass taxes and inflation over time. Through broad diversification, you can reduce some of the risks of this asset class and still receive the benefits of stock investment.

**Understand the Risks and Benefits of the Major Asset Classes**

Investing entails risk, which means different things to different investors. Risk could mean the possibility of losing all your money. It could also mean the possibility of losing principal. Risk could also entail the possibility of not achieving a specific holding-period return.

Risk is measured in many different ways. In the past, the main risk of investing was considered “default risk,” or the risk that a company would not be able to pay back an investment due to default or bankruptcy. Government securities were considered risk-free investments because investors knew the government could always print money.

In more recent years, analysts began to use variance, or standard deviation, to better measure risk; using this measurement, they found that even government securities are risky. This measure of risk is not concerned with the possibility of default but with the volatility of the investments—the risk that the investment’s return may be lower than expected. Currently, investors also use a metric known as “beta,” which measures the way a specific stock moves in relation to a specific market or benchmark.

Generally, most investors prefer to use variance or beta to measure risk. Both are measures of how volatile a stock is—how much it moves both up and down. In the case of beta, risk is also measured by how much the stock moves in comparison to a specific benchmark. A lower variance indicates that the price does not move very much. A higher variance indicates that the price moves a lot in comparison to the benchmark. A beta higher than one indicates that the stock is more volatile than the market; a beta less than one indicates that the stock is less volatile than the market; a beta of exactly one indicates that a stock moves with the market. When you look at a stock’s returns, you should always look at the variance of the stock as well. Generally, higher returns carry higher risks because investors must be compensated for taking on additional risk.

There are a few important concepts you should understand related to risk:
Chapter 17. Investments 1: Before You Invest

- Investment risk is the probability of not achieving some specific return objective.
- The risk-free rate is the rate of return that will definitely be obtained.
- The risk premium is the difference between the expected return and the risk-free rate.
- Risk aversion is the reluctance of an investor to accept risk.

Note that there is a difference between investing and gambling. Investors are willing to assume risk because they expect to earn a risk premium when they invest; in other words, the odds are in the investor’s favor because there is a favorable risk-return trade-off. Gamblers are different from investors in that they are willing to assume risk even when there is no prospect of a risk premium—in other words, the odds are not in the gambler’s favor because there is no favorable risk-return trade-off.

**Return on Investment**

The return on an investment is the change in value of a financial asset or portfolio over a specific period of time; the return includes any interest, dividends, or distributions that were added to the asset or portfolio during that period of time.

The return on an investment measures how much your asset or portfolio has grown over a specific holding period. Once you have calculated your return, you can compare your asset or portfolio’s performance to benchmarks. If you do not calculate your return for each of your assets, you will not be able to tell how well you are doing in your investing.

To calculate your investment return, subtract the investment’s beginning price from the investment’s ending price and then add the resulting amount to any dividends or distributions you received. Divide this amount by your beginning price. Calculating your return is important because your return is a measure of how much your asset or portfolio is worth. Your holding period return (HPR) is calculated as follows:

\[
\text{HPR} = \frac{(\text{ending price} - \text{beginning price} + \text{dividends} + \text{distributions})}{\text{beginning price}}
\]

In this calculation, include all dividends and distributions received, including dividends and distributions that were reinvested into the portfolio. This “holding-period return” can be annualized to reflect the total amount of return over a year, depending on the holding period of the asset.

To calculate after-tax returns, you would deduct the taxes to be paid from your dividend and distribution amounts; you would include in your calculation only the amount of dividends you would get to keep after taxes.

**History of Asset Class Returns**

It is important to understand how the various asset classes have performed historically. Remember that an asset class is a group of financial assets with similar risk and return
characteristics. From a historical analysis, we can learn much about a particular asset class (see Chart 2).

I believe it is important to study history, including the history of investments and investment returns. Some have questioned the importance of learning an asset class’s performance history because they reason that the future will not be like the past. Gordon B. Hinckley stated the following regarding this notion: “All of us need to be reminded of the past. It is from history that we gain knowledge which can save us from repeating mistakes and on which we can build for the future.”

What have been the characteristics of risk and return historically? Chart 4 and Table 4 show that from 1926 to 2015, large-cap stocks (as represented by the S&P 500) have yielded a return of about 10.0 percent per year and have a standard deviation of 18.8 percent. Small-cap stocks have yielded a return of about 12.0 percent per year and have a standard deviation of approximately 28.5 percent. T-bonds have yielded a return of 5.6 percent per year and have a standard deviation of 8.4 percent. T-bills have yielded a return of 3.4 percent per year and have a standard deviation of about 0.9 percent. As a reference point, inflation over this same period has been 2.9% per year with a standard deviation of 1.8%. Note that while different asset classes have different risk and return relationships, there is generally a positive relationship between risk and return (see Chart 3).

Chart 5, which shows the S&P 500 annual return since 1925, shows that the annual return appears to be very volatile—there are many years of high returns and many years of negative returns. However, looking at the return in terms of 5-year periods instead of 1-year periods shows that there are only a few major periods of time that show a negative return (see Chart 6). If you follow the return trend over a 10-year period, you will likewise see that there have been very few times when the 10-year return was not positive (see Chart 7).

We will now look at risk, or standard deviation. Table 4 shows the geometric return and the standard deviation for each of the major asset classes. As you look at the large-cap return and risk, note that over 5, 10, 25, 50, 75, and 90 years, the return was volatile, yet over longer periods has been around 9 to 10 percent. The standard deviation has ranged from approximately 15 percent to 19 percent.
If you look at small-cap returns over the same periods of time, you will see that same volatility, particularly in recent years. Though over longer periods the return has been between 10 to 13 percent, notice that the risk levels of small-cap returns (the standard deviation) are between 20 percent and 30 percent.
If you look at fixed-income investments (T-bonds), you will see that they have, on average over longer periods, yielded a return ranging from 5 percent to 9 percent; the variance for T-bonds during this time period was between 8 percent and 12 percent.

**Chart 5. S&P 500 1 Year Annual Returns**

If you look at T-bills on the chart, you will see that they have yielded a range of approximately 0.1 to 5 percent interest over the various periods of time; T-bills have had a standard deviation of between 0.1 and 0.9 percent.

Inflation (as measured by the CPI) has been between 1.5 and 4.1 percent with a standard deviation of between 0.5 and 1.9 percent.

**Summary**

There are several steps you should take before you invest. Remember the top half of the investment hourglass: God comes first, then family, then personal responsibility and accountability, and then investments. There is no better way to start investing than to have your priorities in order.

This principles-based approach to investing will not change over time because the principles of good investing do not change. These important investing principles, if followed, will result in a quality Investment Plan and lead to a successful investment portfolio. The principles are the following:
Chapter 17. Investments 1: Before You Invest

Chart 6. Five-Year Annual Returns

Chart 7. 10-Year Annual Returns
1. Know yourself.
2. Understand risk.
4. Make low-cost and tax-efficient investments.
5. Invest for the long run.
6. Use caution if you must invest in individual assets.
7. Monitor portfolio performance against benchmarks.
8. Don’t waste too much time and energy trying to beat the market.
9. Invest only with people and institutions that are high-quality, licensed, and reputable.
10. Develop a good Investment Plan and follow it closely.

In order to invest successfully, you must understand the risks and benefits of each of the major asset classes.

Asset classes broadly categorize investments with specific and similar risk and return characteristics. Asset classes are categorized by the characteristics that are unique to particular groups of securities, such as type of financial instrument, market capitalization, maturity, and geographic location. The major asset classes are cash and cash equivalents, fixed-income investments (bonds), and equities (stocks).

From Table 4, we note several important aspects of successful investing. First, each asset class has different return and risk characteristics, which should be accounted for when building your portfolio. As a general rule, the higher the return, the higher the risk. When you build your portfolio, you are not just trying to plan for a higher return but for a lower risk as well. Third, while stocks are volatile on a monthly basis, over time the bad periods are offset by the good periods. Generally, the longer the time period, the greater the likelihood of positive returns. Finally, if you want your portfolio to grow faster than taxes and inflation, you should consider making stocks an important part of your portfolio.

**Assignments**

**Financial Plan Assignments**

Understanding yourself is a critical part of investing. It is important that you understand both your personal view of investing as well as your family view of investing—how you were brought up.

Review **Learning Tool 21: Key Questions on Money and Relationships**. What are the major experiences you had that influenced your views on money and investing? What were you taught about money and investing when you were growing up?

Review the top of the investment hourglass. Where are you on the top of the hourglass? Determine where you are and determine the steps you must take before you begin investing.
Table 4. Geometric Return and Risk over Specific Time Periods (Ending 2015)

<table>
<thead>
<tr>
<th></th>
<th>1 Year</th>
<th>5 Years</th>
<th>10 Years</th>
<th>25 Years</th>
<th>50 Years</th>
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<tr>
<td>Compound Return</td>
<td>1.2%</td>
<td>12.5%</td>
<td>7.3%</td>
<td>9.8%</td>
<td>9.7%</td>
<td>11.2%</td>
<td>10.0%</td>
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<td>13.2%</td>
<td>11.9%</td>
<td>15.0%</td>
<td>14.4%</td>
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<td>14.4%</td>
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<tr>
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<td>6.7%</td>
<td>12.8%</td>
<td>12.5%</td>
<td>14.7%</td>
<td>12.0%</td>
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<tr>
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<td>16.3%</td>
<td>20.3%</td>
<td>20.0%</td>
<td>21.5%</td>
<td>20.6%</td>
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<td><strong>T-bond</strong></td>
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<tr>
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<td>-1.8%</td>
<td>7.9%</td>
<td>6.7%</td>
<td>8.3%</td>
<td>7.6%</td>
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<tr>
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<td>12.1%</td>
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<tr>
<td>Compound Return</td>
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<td>2.9%</td>
<td>5.2%</td>
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<tr>
<td>Standard Deviation</td>
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<tr>
<td>Compound Return</td>
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<td>Compound Return</td>
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<tr>
<td>Standard Deviation</td>
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<tr>
<td>Compound Return</td>
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<td>1.5%</td>
<td>1.8%</td>
<td>2.3%</td>
<td>4.1%</td>
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<tr>
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<td>1.2%</td>
<td>1.3%</td>
<td>1.6%</td>
<td>1.8%</td>
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</table>


When you have answered these questions, you are ready to start creating your Investment Plan.

First, copy the sample plan found in Learning Tool 5A: Investment Plan Example. While you do not need to know the entire plan today, it is important that you read through it. For this course, you will complete this entire Plan.

Second, complete the introduction to the Investment Plan and add the information on yourself and your spouse if you are married, including your names and ages.
Third, complete the introductions to each of the four sections. In the introduction to Section I, add the different accounts you will use. It is acceptable to include all the listed accounts as you may use many of them during your lifetime. In addition, you must determine two separate time stages for this Investment Plan. Generally, these time stages equate to your time before retirement as Stage 1 and time in retirement as Stage 2. Add this information.

Fourth, take a risk-tolerance test (see Learning Tool 16: A Risk-Tolerance Test) or any number of tests available on the Internet. This will help you understand what kind of investor you are. After taking your risk-tolerance test, fill out the type of investor you are in Section I.B.

Fifth, using your risk-tolerance test results, develop equity targets, bond targets, and other targets for Stages 1 and 2 in Section III.C.1. and III.C.2. Start first with the general rule of thumb of your age in bonds, then use the results of your risk-tolerance test to adjust those allocations. If you have questions, consult the notes for adjustments to the general rule of thumb at the end of Learning Tool 16. Later, you will return to this section to determine your allocations within the stock and bond asset classes.

Learning Tools

The following Learning Tools may be helpful to you as you prepare your Personal Financial Plan:

16. A Risk-Tolerance Test

This document is a simple risk tolerance test to help you determine a suitable level of risk for your investments. It has eight questions, and it explains how each question can help you understand your tolerance for risk. It also gives a few recommendations for asset-allocation targets, based on your answers.

21. Key Questions on Money and Relationships

This document asks nine simple questions regarding how your views on money were shaped. The answers to these questions can help you gain important insights about the events that shaped your views on money.

Review Materials

Terminology Review

Asset allocation. This is the process of managing risk in your investment portfolio. Asset allocation is the process of allocating assets between various asset classes. It determines the risk of the portfolio and is the percentage allocated to each of the different
asset classes.

**Asset classes.** Asset classes are broad categories of investments with specific (and similar) risk and return characteristics. Asset classes are distinguished by characteristics specific to particular groups of securities, such as type of financial instrument, market capitalization, maturity, geographic location, etc. The major asset classes are cash and cash equivalents, fixed income, and equities.

**Blend stocks.** These are stock that are a part of both value and growth.

**Cash and Cash Equivalents.** Cash and cash equivalents is an asset class whose major goal is liquidity and to preserve capital. Cash includes CDs, money market funds, T-bills, and commercial paper, etc. It also includes short-term interest-bearing investments such as treasury bills and savings bonds, loans to the U.S. government, commercial paper, and loans to corporations. It is a good investment asset class for money you plan to use in less than 3-5 years and don’t want to take risks. It is less attractive as medium-to-long-term investments (> 5 years) as returns on cash and cash equivalents are unlikely to keep up with inflation.

**DALBAR.** DALBAR is a private company that does research on investor returns. It puts out an annual survey in a book titles “Quantitative Analysis of Investor Behavior.” It discusses how average equity fund investors have done versus benchmarks over the past 20 years in the equity, fixed income, and balanced categories.

**Day trading.** The process where someone with limited experience and minimal investment tools in the market trades on a daily basis with an expectation to outperform institutions with significant experience and tools. It is not investing, rather it is speculating.

**Diversification.** Diversification is the process of allocating your assets so they are not concentrated in a single asset class. It is “not putting all your eggs in one basket”. Having a diversified portfolio in many different asset classes is your key defense against risk.

**Emerging Market stocks and emerging market mutual funds.** These are stocks or mutual funds of companies that trade in the countries not considered develop by the IMF. These are often smaller companies in smaller markets. International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets.

**Equities (or Stocks).** Equities are an asset class that provides growth and earns returns in excess of inflation. Over longer periods of time, the stock market historically has been the only major asset class to consistently outpace inflation. Equity ownership is ownership in a businesses’ earnings and assets. Equity asset classes are delineated by
market capitalization (which is shares outstanding multiplied by the stock's current market price), type of company (growth versus value), and geographic area. The benchmarks for equity asset classes can be generally defined as capitalization: Large, mid, and small; type: Growth, blend, and value; or geographic area: US, international, global and emerging markets. Equities have offered the highest return of the major asset classes historically and have been a good investment for long-term investing—they have consistently beat inflation over the long-term. However, they offer less stability of principal than other asset classes, and subject to short-term price fluctuations (so very risky for short-term investments).

Financial assets/instruments. These are different types of securities that are sold in financial markets.

Financial markets. Markets in which financial securities or assets are bought and sold.

Fixed Income. Fixed income is an asset class that attempts to provide income and to earn returns in excess of inflation. There are two different types of fixed income assets: Taxable bonds. Taxable bonds include U.S. Treasuries, corporate bonds and agency issues (bonds issued by U.S. government agencies, like Ginnie Mae). Tax-free bonds include revenue or general obligation bonds issued by local or state governments and agencies. Such bonds are generally free from federal and state taxes. Fixed income includes short-term bonds/bond funds, intermediate-term bonds/bond funds, and long-term bonds/junk bonds/bond funds issued by governments or corporations. Fixed income offers greater returns than cash, but with greater risk. It offers good diversification tool when holding a long-term stock portfolio, as bonds move differently than stocks. However, returns have been historically lower than stocks, they are very susceptible to interest rate and other risks, and generally, fixed income assets alone are not good long-term investments because they don’t provide enough growth to beat inflation over long periods of time.

Global stocks and global stock mutual funds. These are stocks or mutual funds of companies that contain a mixture of U.S. and foreign or international holdings. International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets.

Growth stocks. These are fast-track companies whose earnings are expected to grow very rapidly. Frequently these are companies developing new technologies or new ways of doing things.

International stocks and international mutual funds. These are stocks or mutual funds of companies based entirely outside the U.S. These can be of any size (small-cap, large-cap), any type (value, growth) and from any part of the world outside the US. International investments involve additional risks, which include differences in financial
accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets.

**Large-cap (capitalization) stocks.** Large caps are stocks with a market capitalization greater than roughly $10 billion in the US, and smaller capitalizations for international companies. These are the generally the largest, most well established companies in the US, with a history of sales and earnings as well as notable market share. These are generally mature corporations with a long track record of steady growth and dividends.

**Market capitalization.** It is one measure of the size of a company. It is calculated by multiplying the market price of the stock by the number of shares (i.e. ownership pieces) outstanding. The greater the capitalization, the larger the company. Market capitalization is used to weight companies in various benchmarks and to determine certain classes of companies, i.e. large-cap, mid-cap, small-cap, etc.

**Mid-cap or mid-capitalization stocks.** These are stocks with capitalization between roughly $2 billion and $10 billion. These stocks tend to grow faster than big cap companies, and are generally less volatile than small cap companies. Mid-caps generally perform similar to the small-cap asset class. For asset-allocation purposes, mid-caps are generally not considered a major asset class.

**Risk.** Risk is the possibility of having a return different from what was expected, whether it is losing all your money, losing principle, or not achieving a specific rate of return. There are many different types of risk including: inflation, business, interest rate, financial, market, political and regulatory, exchange rate, call, and liquidity risk.

**Small-cap or small capitalization stocks.** Small-cap stocks are companies with a market capitalization less than $2 billion. These are smaller, sometimes newer, US and global companies that are still developing and may have a smaller market share than their large-cap counterparts.

**Taxable bonds.** Taxable bonds include U.S. Treasuries, corporate bonds and agency issues (bonds issued by U.S. government agencies, like Ginnie Mae).

**Tax-free bonds.** Tax-free bonds include revenue or general obligation bonds issued by local or state governments and agencies. Such bonds are generally free from federal and state taxes.

**Value stocks.** These are inexpensive (in terms of low PE and low P/BV ratios), companies that have potential for good long-term return through both appreciation and dividends.
Review Questions

1. What is the most critical part of investing?
2. What are the 10 principles of successful investing?
3. What are asset classes? What are the three major asset classes?
4. What is the difference between investors and gamblers?
5. What is the main goal of cash and cash-equivalent investments? Fixed-income investments? Equities?

Case Studies

Case Study 1

Data
Bill wants to know how much he will need to save at the end of each year to have $1 million in savings when he retires in 30 years.

Calculations
Assuming Bill can earn an 8.5 percent return on his investment, how much must he save each year?

Application
What assets would you recommend Bill use to save?

Case Study 1 Answers

Calculations
Set your calculator to 1 payment per year (annual).
N = 30, I = 8.5%, PV = 0, FV = $1,000,000
Solve for Bill’s annual payment.
Bill would need to save $8,050.58 annually to reach his goal.

Recommendations
Bill could use any number of investment assets, including stocks, bonds, cash, mutual funds, etc. Since Bill is just starting out, I would encourage him to consider the use of inexpensive, no-load mutual funds as investment assets.

Case Study 2

Data
Last year Kim purchased 100 shares of MSAM Corporation for $40 per share. Over the past 12 months, MSAM’s price has gone up to $45 per share, and she received a dividend of $1 per share.
Calculations
What was Kim’s total rate of return on her investment in the MSAM stock?

Case Study 2 Answer

Calculations
This can be solved either on a total portfolio basis or on a per share basis.
Total Portfolio
\[ \frac{((45 \times 100 - 40 \times 100) + 1 \times 100)}{40 \times 100} = ? \]
Kim’s total rate of return is 15%.
Per-share basis
\[ \frac{(45 - 40) + 1}{40} = ? \]
Kim’s total rate of return is 15%.

Case Study 3

Data
Kim’s investment in MSAM stock was so successful that she decided to hold it for five more years. Remember, she purchased 100 shares for $40 per share. Unfortunately, the price of MSAM stock has not risen any further—in fact, it is back to where it was when she purchased it. The good news is that she earned $1 per share for five years.

Calculations
What was Kim’s annualized total rate of return?

Application
Compared to a bank account earning 2.25% over this same period, how did Kim’s stock do?

Case Study 3 Answers

Calculations
Kim’s annualized rate of return is her return for the total period, annualized, or taking the geometric return.
Kim’s total return for the five-year period is:
\[ \frac{((40 \times 100 - 40 \times 100) + 5 \times 100)}{40 \times 100} = 12.5\% \]
Taking that return and annualizing for five years gives the following annual returns:
Geometric return = \( (1 + 0.125)^{\frac{1}{5}} = 2.38\% \)
Average return = \( \frac{12.5\%}{5} = 2.5\% \)
Using either method, Kim’s stock performed better than the bank account.
Case Study 4

Data
Sam recently purchased a bond with a 10-year maturity for $1,000, which pays annual interest of $100.

Calculations
What interest rate is Sam receiving?
If interest rates for 10-year bonds today are 5 percent, how much can Sam sell his bond for today?
How much could he sell the bond for tomorrow if interest rates move up to 12 percent?

Applications
Based on your calculations, what is the relationship between interest rates and the value between bonds?

Case Study 4 Answers

Calculations
The bond’s current yield is $100/$1000 = 10%.
At 5% Sam can sell his bond for:
N = 10, I = 5%, PMT = 100, FV = 1,000, solve PV?
$1,386.07
At 12% Sam can sell his bond for:
N = 10, I = 12%, PMT = 100, FV= 1,000, solve PV?
$887.00
This implies a negative relationship between bond prices and interest rates. In other words, as interest rates increase, bond prices fall, and when interest rates decrease, bond prices rise.

Case Study 5

Data
Ryan is 35 years old and took the Risk Tolerance Test from Learning Tool 16. He determined that he was “moderate” in terms of risk.

Application
Based on the rule of thumb for his age in bonds, which of the following most likely represents Ryan’s preferred asset allocation (assume his emergency fund is included in cash and bonds)?

- Portfolio A: 35% cash, 40% large-cap, 25% bonds
- Portfolio B: 25% cash, 35% large-cap, 25% small-cap, 15% international
- Portfolio C: 10% cash, 25% bonds, 50% large-cap, 15% small-cap
• Portfolio D: 15% bonds, 30% large-cap, 30% small-cap, 25% international

Case Study 5 Answer

Ryan’s preferred allocation would likely be Portfolio C. Portfolio A has too much exposure to cash and bonds. Portfolio B has too large an allocation to international and small-cap (40 percent), which involves much more than a moderate risk exposure. Portfolio C is more consistent with Ryan’s risk-tolerance level: 35 percent in bonds and cash and some (limited) exposure to small-caps. Portfolio D has too little exposure to bonds and cash and too much small-cap and international.

Case Study 6

Data

Assume the same information from Case Study 5 but change Ryan’s Risk Tolerance Test result to “aggressive.”

Application

A. Based on the same rule of thumb, which of the following most likely represents Ryan’s asset allocation?
   • Portfolio A: 35% cash, 40% large-cap, 25% bonds
   • Portfolio B: 25% cash, 35% large-cap, 25% small-cap, 15% international
   • Portfolio C: 10% cash, 25% bonds, 50% large-cap, 15% small-cap
   • Portfolio D: 15% bonds, 30% large-cap, 30% small-cap, 25% international

B. What would his allocation be if his results were “very aggressive”?

Case Study 6 Answer

A. The preferred allocation for “aggressive” would be Portfolio B. Portfolio A has too much exposure to cash for his risk level. Portfolio B is consistent with Ryan’s risk-tolerance level; it has a larger allocation to international and small-cap (40 percent) and a lesser allocation to bonds and cash. Portfolio C has too much (35 percent) in bonds and cash and likely not enough of the riskier assets. Portfolio D has too little exposure to bonds and cash, and likely too much small-cap and international.

B. The preferred allocation for “very aggressive” would be Portfolio D. Portfolio D has less exposure to bonds and cash and much more small-cap and international (55 percent), which is consistent with a “very aggressive” risk-taker.
1 In James R. Clark, comp., *Messages of the First Presidency of The Church of Jesus Christ of Latter-day Saints*, 6 vols., [1965–75], 3:54
5 Chart 2; Carla Fried, “The Problem with Your Investment Approach,” *Business 2.0*, Nov. 2003, 146
7 “Reach with a Rescuing Hand,” *New Era*, Jul. 1997, 4
18. Investments 2: Creating Your Personal Investment Plan

Introduction

Once you have put your finances in order, you are prepared to invest. Like a good road map, a good Investment Plan helps you know where you are and where you are headed. A good financial road map helps you know your goals, your budget, and your risk tolerance; it also helps you avoid hazardous detours, such as get-rich-quick schemes, which may delay or stop your progress. A good financial road map also helps you decide where you want to go in terms of your personal and family goals and helps you get there by helping you make wise choices regarding investment and savings programs. A good Investment Plan is key to achieving your financial goals. The purpose of this chapter is to help you write out your personal Investment Plan.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the importance of financial goals and know how to set them
2. Know how to prepare a personal Investment Plan and understand its importance
3. Identify and be aware of get-rich-quick schemes

Understand the Importance of Financial Goals and Know How to Set Them

Not every personal goal is a financial goal, but many personal goals require some money to be accomplished. Certain personal goals cannot be accomplished without meeting specific financial targets, such as saving for the down payment on a house or saving for a child’s education. If you do not calculate and plan for the costs of many of your personal goals, it is likely that you will not be able to accomplish them.

The processes for setting personal goals and setting financial goals are the same:

1. Identify your goals and write them down.
2. Prioritize your goals, and list them in order from most important to least important.
3. Calculate the financial costs of each goal that requires financing.
4. Set a completion date for each goal and record the total amount needed to complete the goal.
5. Determine how much you must save each month (and which accounts you will use to save that money) to meet your goals.
7. Periodically evaluate your progress toward achieving your goals.
There are several important questions you should ask yourself about each of your financial goals to see if you are really committed to attaining them.

First, how important is the goal to you? Another way to phrase this question is to ask how much you are willing to sacrifice to pursue the goal. Most goals require sacrifice to achieve. If you are not willing to make the sacrifices necessary to achieve a particular goal, you probably will not be able to achieve it.

Some of the goals on your list may really just be wishes—things you dream of having or achieving but are not really committed to working toward. So ask yourself, is this truly a goal, or is it just a wish? Wishes do not count—eliminate them from your list.

Second, how much money do you need to accomplish the goal? Once you have calculated the financial cost of each goal, determine whether the amount you need is before taxes or after taxes, and whether it is before inflation or after inflation. This is important to determine because the differences between these amounts may be substantial. Do not let inflation or taxes keep you from achieving your goals.

Finally, when do you need the money? Is the goal feasible with your current financial plan? Good financial plans require you to sacrifice—to stretch—but they are also reasonable for your individual financial situation.

Know How to Prepare a Personal Investment Plan and Understand Its Importance

The most important financial-planning document you will prepare, besides your list of personal and family goals, is your Investment Plan. In finance terms, your Investment Plan is also known as your investment policy statement. An Investment Plan is important because it creates a framework for every investment activity in which you will participate. It states what you will invest in, how you will invest, why you will invest, what percentage of your money you will invest, and so on. In short, your Investment Plan significantly affects your investment returns. Write this plan well and then follow it carefully. An example of a good Investment Plan is found in the Learning Tools directory of the website under Learning Tool 5A: Investment Plan Example.

Your Investment Plan is a detailed description of all the major components of your investment strategy. It will help you to do the following:

1. Represent yourself: It explains your personal investment characteristics, such as your risk tolerance and your personal constraints, and how those relate to your asset allocation and targets.

2. Articulate what you will and will not do: This plan clearly states what you will and will not invest in and how you will invest. It also includes investment guidelines that will help you invest your money wisely and achieve your goals.
3. Provide an investment framework and guidelines for making wise investment choices: If you clearly think through and plan how you will invest now that you have few assets (and are not influenced by fear and greed), you will have an investment framework and guidelines to help you reason through decisions that could have a major impact on future financial goals and retirement. If followed carefully, your plan will help you avoid poor investment decisions that could have major repercussions for your financial life. But you must write your Investment Plan carefully and then follow it.

Your Investment Plan is divided into four separate categories:

1. Risk and return objectives
2. Investment guidelines and constraints
3. Investment policy
4. Portfolio monitoring, reevaluation, and rebalancing

1. **Risk and Return Objectives**

This category describes your expectations for returns on your investments. These expectations will, to a large extent, determine your asset-allocation decisions. In other words, these expectations will determine how you will distribute your investments among different asset classes. This category also addresses your expectations for risk and outlines how much risk you are willing to accept.

**Expected returns:** You should not invest without specific goals in mind. For your first goal, you should decide what return you expect your total portfolio to make over a specific time period. You cannot know with certainty what the actual returns will be before you invest. However, you can estimate an expected return, or a goal you hope to achieve during a certain period of time (such as a week, a month, or a year). Be aware that your expected return will have a major impact on what your portfolio looks like.

- An expected annual return of 1 to 2 percent will likely be the result of a diversified, very low-risk portfolio.
- An expected annual return of 3 to 4 percent will likely be the result of a well-diversified, low-risk portfolio.
- An expected annual return of 5 to 6 percent will likely be the result of a well-diversified, moderate-risk portfolio.
- An expected annual return of 7 to 8 percent will likely be the result of a less-diversified, high-risk portfolio.
- An expected annual return greater than 9 percent will likely be the result of an undiversified, very high-risk portfolio that is heavily dependent on high-risk assets.
Note that you will determine your expected returns for two periods of time: before retirement and during retirement.

There are several ways to estimate your expected returns. To give you an idea of how to estimate your expected returns over a period of time longer than one year, it may be helpful to look at the long-term history of the asset classes you have selected. Look at Learning Tool 23: Historical Return Simulation for Asset Classes in the Learning Tools directory of the website to see the historical returns for various asset classes from 1926 to 2015.

**Expected risk:** Since a higher expected return requires you to accept more risk, it is important that you know your risk-tolerance level, or your willingness to accept risk. Where you are in your life, as represented by your age, will likely have a big impact on how much risk you are willing to take. In general, when people are younger, they are more willing to accept risk because their investments will have more time to grow and overcome losses. As people grow older, they usually become less willing to accept risk because they will need their investment funds sooner for retirement and other purposes. Investors that have a low tolerance for risk should typically devote the majority of their portfolios to bonds and cash because these investments are the least risky of all asset classes; however, these investments also have the lowest returns. Investors that are willing to accept more risk may allocate more of their portfolio to U.S. and international stocks versus investments in bonds and cash. The challenge of wise investing is to balance your risk and return expectations with your situation in life and your personal goals.

Defining risk in your portfolio is a challenge. Professional investors usually state an annual standard deviation as the acceptable risk level for their portfolios—for example, 12 percent. From a financial standpoint, this means that 66 percent of the time the investor’s risk will be within one standard deviation (plus or minus 12 percent) of his or her mean or average return. If an investor’s average return is 8 percent, this means there is a 66-percent chance that the investor’s returns will be between –4 percent (8 percent – 12 percent) and 20 percent (8 percent + 12 percent). While using a standard deviation to define risk may be helpful for some, this method will not work for everyone. I would like to propose a more simple way of defining risk: using investment benchmarks.

Instead of defining your risk-tolerance level in terms of a standard deviation, you can simply define it by deciding that you are willing to accept the risk of the benchmarks you have chosen for your portfolio. You can determine how risky a particular asset is by looking at your investment benchmark. If you have a small-capitalization stock mutual fund or asset that has had a return of 6.5 percent over the last 10 years and a standard deviation of 19.3 percent, you can compare this asset to an investment benchmark for small-cap stocks. From Table 4 in the previous chapter, note that small-cap stocks have yielded a 7.8 percent return over the past 10 years with a 20.3 percent standard deviation. Your mutual fund or asset has a slightly lower return than the benchmark (6.5 percent versus 7.8 percent), but with slightly lower risk than the benchmark (19.3 percent versus 20.3 percent).

You can also determine a portfolio’s risk level by comparing the portfolio to weighted individual
benchmarks. For example, if you choose a portfolio that is made up of 50 percent U.S. stocks, 20 percent international stocks, 25 percent bonds, and 5 percent real estate (all percentages should add up to 100), then your risk is equal to the risk defined by the benchmarks of each of these asset classes. In this case, your risk would be equal to the benchmarks of each element in a portfolio that contains 50 percent U.S. stocks (as measured by Standard and Poor’s 500 Index, a major benchmark for large-capitalization stocks); 20 percent international stocks (as measured by MSCI Europe Australia, Far East Index (EAFE), a major benchmark for international stocks); 25 percent bonds (as measured by the Barclays Aggregate Index, a major benchmark for bonds); and 5 percent real estate (as measured by Standard and Poor’s REIT Index, a major benchmark for real estate investment trusts). A list of the major benchmarks for a portfolio can be found in the Learning Tools directory of the website under Learning Tool 15: Possible Benchmarks for Investment Plans and Learning Tool 27: Expected Return Simulation and Benchmarks.

Asset class performance over the past 1, 5, 10, 25, 50, 75, and 85 years can be found in Table 4 in the previous chapter of this manual.

2. Investment Guidelines and Constraints

The second category of your Investment Plan is investment guidelines and constraints.

**Investment guidelines:** Your investment guidelines are the road map for how you will invest over your lifetime. These guidelines and constraints explain the ways in which you will invest differently at different phases in your life. Generally, most individuals have three stages of their financial life cycle. Most investors who are younger than age 55 are in stage one, or capital accumulation and growth. Investors who are approaching or in retirement are typically in stage two, where the main goal is investment preservation, or maintaining the value of investments. The choice of the number of stages is arbitrary. You can add more stages if you choose.

Your investment guidelines should provide you with a general road map for investing money at different stages of your financial life cycle. These guidelines should integrate all of your financial goals to give you a complete financial perspective.

**Investment constraints:** Once you have decided on your investment guidelines, you should identify your investment constraints, constraining factors that you must take into account as you manage your portfolio. Your Investment Plan should address a number of important constraints: liquidity, investment horizon, tax considerations, and any special needs.

**Liquidity** is the speed and ease with which an asset can be converted into cash. As you create your plan, consider how important it is for you to have the option of turning your assets into cash quickly. Ask yourself how much money you will need at different times in your life and how quickly that money needs to be available. Examples of liquidity constraints include paying for graduate school, making a down payment on a house, and sending a child to college. To pay for these expenses, you will need to convert assets into cash.

**Investment Horizon** is the amount of time you are planning to keep an asset to save for a
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particular purchase. Consider how soon you will need to use the funds from a particular investment. Examples of short-term investment horizons include saving for a new car or making a down payment on a house. An example of a long-term investment horizon would be saving for retirement or saving for your children’s college educations.

**Tax considerations** take into account your current tax bracket and your current tax rates. Consider your tax position: are tax-free or tax-deferred investments more advantageous than taxable investments? You cannot simply compare the stated returns of particular assets; you must compare assets by taking into account that certain investments eliminate federal or state taxes and those other investments are tax-free. For example, if you are comparing government I and EE savings bonds versus corporate bonds, you must take into account that government I and EE savings bonds are state tax-free (and federal tax-free if principal and interest are used for college tuition costs), while corporate bonds have no tax advantages.

**Special-needs** are constraints related specifically to your family, your business, and other areas of life that are important to you. Do you have a child with a disability? This may impose specific requirements on your Investment Plan because you will likely need life insurance to provide funds for a disabled child in case of your death. Is a large part of your wealth tied up in your company? This imposes constraints such as the decision of how much you should invest in your company’s employee stock-ownership plans. You may have other special constraints that will influence your investment decisions. It is critical that you understand your special needs before you begin investing.

3. Investment Policy

Your Investment Plan also includes your investment policy, which is a written statement of what you will and will not invest in, how you will allocate your investments, and how you will distribute your assets. Your investment policy is divided into six sections:

- Acceptable and unacceptable asset classes
- Investment benchmarks
- Asset allocation
- Investment strategy
- Funding strategy
- New investment strategy

**Acceptable and unacceptable asset classes:** It is important that you decide which assets you will invest in before you begin investing so that others will not be able to convince you to invest in asset classes that are not suitable for you at your stage in the financial life cycle. Invest where you have a particular expertise or where the odds are in your favor. You should plan to invest in asset classes that have a history of delivering long-term returns, not just high returns over very short periods of time. For example, I recommend that investors invest in stocks, bonds, mutual funds, and cash and cash equivalents; I do not recommend investing in futures, options, foreign currencies, or precious metals. The investments I have recommended have long-term histories of
consistent performance, while the investments I do not recommend lack a history of consistent performance.

Review the historical performance of various asset classes to roughly estimate future performance. After reviewing the historical performance of the various asset classes, it is likely you will decide to invest in stocks and mutual funds, bonds and cash equivalents, and real estate.

Once you have identified which asset classes you will invest in, you must also determine which asset classes you will not invest in. Asset classes on this list may include those in which you do not have expertise or those in which the odds are against you. For example, most investors should probably not invest in asset classes such as foreign currencies. The foreign currency trades are controlled by large international banks, which employ hundreds of very experienced men and women with PhDs in finance. These banks have billions of dollars invested in computers and computing power as well as real-time databases to alert them immediately to economic changes that may affect currencies. The odds are not in your favor: investing in foreign currencies is known as a “zero sum game.” This means that for every winner, there must be a corresponding loser. You do not want to be that loser. Other asset classes that typically require a great deal of expertise include commodities (especially commodity futures contracts, which have very high levels of implicit debt), precious metals, and art. Be cautious of investing in these areas unless you have specific expertise to support your investment decisions.

**Investment benchmarks:** are hypothetical investment portfolios that show how a specific set of assets performed over a specific period of time. These portfolios can help investors evaluate how their investments are performing versus how the benchmark is performing over the same time period. Unless you have a benchmark by which you can judge your investments’ performance, you cannot know how your investments are doing. For example, if you invest in a mutual fund of large-cap stocks and your annual return is 6 percent for 2015, how do you know if this is a good or bad return? You cannot know if you do not have anything to compare this information with. But if you know that your benchmark for large-cap stocks, the Standard and Poor’s 500 Index, rose 1.2 percent during 2015, then you know that your investment underperformed in that year. Your investment was up 6 percent for the period versus a 1.2 percent return for the benchmark.

Investors select benchmarks based on asset classes, size or capitalization, geography, issuer, and investment style. Investment benchmarks are covered more thoroughly in later sections of this course.

**Asset allocation** is the process of determining how much you will invest in each specific asset class in your portfolio. Research has shown that the decision of how to allocate your assets is the most important factor affecting your portfolio’s performance.¹ As you write this section of your Investment Plan, you should answer these questions:

- How much will you invest in each asset class?
- What percentage of your total investments will you invest in each asset class?
- What is the minimum allocation of funds you will invest in an asset class at any point in time?
• What is the maximum allocation?
• What is the target allocation?

Your target asset allocation will probably vary throughout your life. Again, the younger you are, the more likely it is that you will be willing to invest in riskier asset classes. Likewise, the older you are, the less likely it is that you will be willing to invest in riskier asset classes.

In general, the first decision you should make when determining your asset allocations is between stocks and bonds. One time-tested way to decide how much you should invest in bonds is to use your age as the percentage for the allocation. The logic behind this starting point is that the older you are, the more you should invest in bonds because bonds are less risky than other investments. The remainder of your portfolio would be allocated to equities.

The second step you should make when you are determining your asset allocations is to understand your risk tolerance. I recommend that you take a number of different risk-tolerance tests to help you decide how to make allocations in your portfolio. One example of a risk-tolerance test is found in Learning Tool 16: A Risk-Tolerance Test in the Learning Tools directory of the website. Based on the results from this test, you may either decide to increase your equity allocation above the time-tested approach if the test indicates you are an “aggressive” investor or reduce your equity allocation if the test indicates you are a “conservative” investor. The amount you increase or reduce for different allocations should be based on your individual tolerance for risk.

After you have decided on your portfolio’s allocations, you should add different types of stocks and bonds to deepen your portfolio. You might add some small-cap stocks or some international stocks if you want to take on more risk. Or you might add some federal tax-free municipal bonds or state tax-free Treasury bonds if you want to reduce the risk of your portfolio. You can then broaden your portfolio by adding additional asset classes, such as real estate, emerging markets, and inflation-linked bonds.

Once you know the asset classes you want to invest in, it is important that you decide on a minimum allocation, maximum allocation, and target allocation for each asset class. Having a set minimum allocation preserves diversity in your portfolio. Diversification is an important tool for reducing risk. Since your allocations will change over time, reaching your maximum allocation will be a signal that it is time to rebalance your portfolio back to your target allocation, which is your ideal allocation, based on your current expectations and the current market conditions.

When you are determining minimum, maximum, and target allocations, you should take into account where you want to be throughout your entire investing life. It is likely you will have to make different allocations for the different stages of your financial life cycle—for example, newly married, kids in college, retirement, and so on.

Your investment strategy describes how you will invest your money. It clarifies how you will manage, prioritize, and fund your investment; it also describes how you will evaluate new
investments. The following paragraphs explain some of the questions you should answer about your investment strategy.

Will you use active management or passive management? Active management is a strategy in which you try to outperform your benchmarks by actively buying and selling stocks and bonds. This strategy requires considerable time and expense to maintain. Passive management is a strategy in which you invest in index funds, or exchange-traded funds, instead of trying to beat your benchmarks: index funds, or exchange-traded funds, simply mirror the performance of your benchmarks. This strategy is much cheaper in terms of time and costs, and it is often more tax-efficient as well.

You may also choose to use a combination of active and passive management for your portfolio. For example, you may choose to use active management for your tax-deferred accounts (these accounts do not require you to pay taxes until retirement, when you withdraw the money) and passive management for your taxable accounts (these accounts require you to pay taxes each year). Your choices will depend on your goals, your objectives, and your investment style.

Will you invest in mutual funds or individual assets? Mutual funds are professionally managed portfolios that are composed of similar assets; mutual funds offer the benefits of diversification and economies of scale. Investing in individual assets, such as stocks and bonds, allows you to control what you invest in and when you will realize capital gains. While it is much more exciting to invest in individual assets, these assets also involve much more risk and instability. You may choose to invest in a mix of assets: a combination of mutual funds and individual stocks or bonds.

Will you use leverage in your investing? Using leverage is the process of borrowing either money or securities for your investment activities. Using leverage is not recommended. While leverage increases the potential for return on an investment, it also magnifies the potential for loss. Many investors have lost significant amounts of financial assets by using leverage. There are two types of leverage used by a few individual investors: buying on margin and short selling.

Buying on margin is borrowing to purchase a stock. The amount of borrowing you use is referred to as your “leverage.” For example, you are sure the value of a stock you do not currently own will go up soon. You invest $10,000 of your own money and invest another $10,000 that you borrow from your broker—buying on margin. If the value of the stock goes up, you make a larger profit because you used leverage to invest more. However, if the value of the stock goes down, you incur a larger loss because you invested more, and you must still pay back the $10,000 you borrowed, regardless of the price of the stock. With leverage you can lose considerably more than the amount you put up of your own money.

Short selling is another type of leverage in which you borrow stock and then sell it immediately. For example, you are positive the value of a stock will go down. Before the stock goes down, you borrow a hundred shares of that stock from your broker and sell them. Again, you are borrowing, but this time you are borrowing stock instead of money. If the stock price goes down,
you will be able to buy the shares back at a lower price; you make a profit by selling the
borrowed shares at a higher price and buying them back at the lower price to replace the stocks
you borrowed. However, if the value of the stock goes up, you will have to use your own money
to buy back the more expensive shares; you must also repay any dividends paid during the period
you borrowed the shares.

Using leverage is risky because you can lose much more than you originally invested. Do not
take the chance. Joseph F. Smith stated the following:

If there is anyone here intending to go into debt for speculation . . . I would advise him to
hesitate, pray over it, and carefully consider it before he obligates himself by borrowing
money and going into debt. In other words, keep out of debt if you can. Pay your debts as
soon as you can.\(^2\)

**Funding strategy:** You cannot invest without having the funds to invest, and you should not
invest with borrowed money. Where will you get the funds for your investments? In a previous
section, **Section 3: Budgeting and Measuring Your Financial Health,** I recommended that you
always pay the Lord first—that you pay tithes and other offerings before anything else—and then
pay yourself a minimum of 10 percent, hopefully more (20 percent).

Most financial planners recommend that you save a minimum of 10 percent when you are young,
and they recommend that this amount should increase as you get older. Once you have set aside
the recommended 10–20 percent each month, invest this money wisely according to your
personal Investment Plan. In this manual, I recommend that you save 20 percent of every dollar
you earn after college.

How will you manage the funds for your various financial goals? One way to save for different
financial goals is to set up different investment vehicles for each of your financial goals. You can
use a 401(k) plan to save for retirement, a taxable account to save for your children’s weddings,
and 529 funds and Education IRAs to save for your children’s educations. You can also set up
investment accounts to save for an emergency fund, a house down payment, or a car fund. If you
pay yourself at least 10 percent (hopefully more), you can divide this money among your
financial goals; for example, you could allocate 5 percent to your 401(k) plan, 4 percent to your
investment fund, and 1 percent to your 529 funds.

**New investment strategy:** How will you handle new investments? You need to decide the
maximum percentage you will allocate to any new investment. Most experts advise that this
amount should generally not be more than 10 percent of an investor’s assets. Too often, people
lose a great deal of money by putting all of their investments into one company or product that
they think is a sure thing. There are no sure things. To avoid falling into this trap, decide now on
the maximum amount you are willing to invest with a single investment: in other words, decide
how much you would be willing to lose with a single investment.
You should also decide on the maximum amount of your company’s stock that you will include in your 401(k) or other retirement account. For most people, this amount should not be more than 5 to 10 percent of the funds in their retirement account. Remember the principle of diversification. If your company does well, your job is secure and your retirement portfolio is strong. If your company does poorly, you may lose your job, and your retirement portfolio may be reduced substantially as well.

4. Portfolio Monitoring, Reevaluation, and Rebalancing

The final part of your Investment Plan is describing how you will monitor, reevaluate, and balance your portfolio. Monitor your performance. Compare the performance of each of your assets against benchmarks on a monthly, quarterly, and annual basis. How did your assets perform? Which assets had returns that were greater than their benchmarks, and which assets had returns that were less than their benchmarks?

Setting goals is not a one-time event. You should continually review and reevaluate your goals. Has your situation in life changed? Which goals need to be changed to accommodate your situation?

Finally, has your portfolio shifted away from your target asset allocations because of time or because of the performance of your assets? How will you rebalance your portfolio to regain your target allocations, while at the same time minimizing the tax effects of rebalancing? We will discuss the topic of rebalancing in more detail in later sections.

Final Thoughts on Your Investment Plan

To conclude our discussion on investment plans, I would like to offer a few final suggestions. First, develop a good Investment Plan and stick to it. This plan is your road map to attaining your financial goals. Think it through, write it well, and follow it closely. An example of a good Investment Plan can be found in Learning Tool 5A: Investment Plan Example in the Learning Tools directory of the website. Feel free to copy this plan and personalize it based on your views of risk, return, constraints, investment policy, and portfolio monitoring and rebalancing. Instructions on filling this plan out are found in Learning Tool 5B: Investment Plan Example Instructions.

Second, compare the performance of your assets to your chosen benchmarks on a monthly, quarterly, and annual basis. No one will watch your portfolio like you will.

Third, beware of following the investment crowd. It is unlikely that last year’s best-performing asset classes will be this year’s best-performing asset classes. In my experience with investing, I have found that winners rotate. Avoid chasing last year’s winners.

Finally, remember that there are tax consequences for selling—try to minimize those tax consequences as much as possible. Beware of churning, or buying and selling too often.
Rebalance your portfolio annually—perhaps even less often.

**Identify and Beware of Get-Rich-Quick Schemes**

Get-rich-quick schemes are investment methods in which you can supposedly make a lot of money in a short amount of time without having any knowledge or incurring any risk. If a promise seems too good to be true, it usually is. No one can guarantee a consistently high rate of return. Markets are unpredictable and so are returns. “Guaranteed high returns” are typically neither guaranteed nor high. The way to make money in the stock market is the old-fashioned way: saving and investing in a diversified portfolio for many years.

M. Russell Ballard stated the following about get-rich-quick schemes:

> There are no shortcuts to financial security. There are no get-rich-quick schemes that work. Do not trust your money to others without a thorough evaluation of any proposed investment. Our people have lost far too much money by trusting their assets to others. In my judgment, we never will have balance in our lives unless our finances are securely under control.\(^3\)

There are many types of get-rich-quick schemes. The paragraphs below discuss some of the most common schemes.

**In day trading**, an individual with little or no training in investing spends all of their free time in an attempt to outperform the market’s benchmarks (and other investment professionals) after taxes and other fees. Most day traders make very little money and waste a lot of time at the expense of their families and often their regular jobs. Few, if any, day traders beat the market consistently over time and after taxes. While day traders may make money when the market is going up, day trading is not a viable long-term strategy.

For many, day trading is a form of entertainment, not investment. As long as you consider day trading to be entertainment, and as long as you only speculate with a small percentage (less than two percent) of your overall portfolio, it can be entertaining and fun. But it is not investing.

**Trading rules** are recommendations generated by individuals or computers for buying and selling stocks, mutual funds, and other assets. An example of a trading rule would be you would buy a stock when the 15 moving average crosses up through the 30 day moving average, and sell it when it crosses down through the 30 day. Marketers insist you will be able to beat the market by using these rules. Do not be fooled by these “trading” rules.” Think about the marketers’ motives. Ask yourself, if this trading rule is so great, why are they telling me? If the rules were useful, the sellers would just use them to get rich; they would not sell them to others. Be aware that all trading rules have major flaws. The biggest flaw is that they do not work consistently.

**Stock market secrets** are shortcuts, or secrets, that supposedly only the professionals know; marketers are willing to share these secrets with you—for a price. Again, look at the marketers’
motives. Ask yourself, if this secret is so good, why don’t the marketers invest their own money, make millions of dollars, and retire to an island in the Pacific? If the shortcut were useful, the marketers would use them to get rich. They would not share them. In investing, it is critical to use time-tested information about markets, instruments, and trading; taking supposed shortcuts is usually hazardous to your wealth.

**Outright lies** are the promise of high and consistent above-market returns without risk. Don’t get sucked in. If it seems too good to be true, it usually is. No one can guarantee a consistently high specific rate of return. Markets and returns are volatile. Guaranteed high returns are never guaranteed or high. The way to make money in the market is the old-fashioned way—to invest in a diversified manner for many years.

**Insights on Get-Rich-Quick Schemes**

There are no get-rich-quick schemes that work consistently. Following are four general tips to help you identify and avoid get-rich-quick schemes:

1. *Beware of the amount of time, energy, and money the suggested strategy requires.* I recommend you spend time with your family and work, and keep your money for yourself and invest it.

2. *Beware of the agency problem.* Ask yourself what a person wants to be given in exchange for his or her rules and secrets. If the answer is money, keep the money for yourself and invest it wisely.

3. *Beware of the “you can do it too” pitch.* Ask yourself if they really did it. Most sellers of get-rich-quick scheme are very selective as to the information they will supply. They only reveal selective bits of information about their success (and in some cases the information is wrong). They comment on “selective performance” when the method actually made money; “selective funds,” the funds that actually made money; and “selective time periods,” the time periods when the method worked. Most sellers have not even tried the strategies they suggest.

4. *Beware of the hidden costs of trading.* When sellers tell you about potential returns, they usually have not accounted for transaction costs, taxes, and other trading costs; these costs will substantially reduce your annual returns.

**Summary**

Certain personal goals cannot be accomplished without meeting specific financial targets, such as saving for the down payment on a house, or saving for a child’s education. If you do not calculate and plan for the costs of your personal goals, it is likely you will not be able to accomplish them.
The most important financial planning document you will prepare, besides your list of personal and family goals, is your Investment Plan. An Investment Plan is important because it creates a framework for every investment activity in which you will participate. It states what you will invest in, how you will invest, why you will invest, what percentage of your money you will invest, and so on. Write this plan well and then follow it carefully.

We have discussed the importance of creating a personal Investment Plan that can help you achieve your financial goals. Remember that your personal Investment Plan is your road map to successful investing: it will help you achieve your goals and avoid dangerous get-rich-quick schemes. The following are some final thoughts to consider before you invest:

1. Learn and follow the principles of investing. Avoid taking shortcuts.
2. Make investing an automatic part of your lifestyle. Strive to reach a point where you do not have to think about investing, you just do it.
3. Let others help you save. Take advantage of employee benefits and federal and state tax advantages. Use tax-deferred and tax-eliminated investment vehicles as much as possible.
4. Institute barriers that limit your access to your savings. The harder it is to liquidate your investments, the less often you will use your investment assets for everyday purchases.
5. Invest bonuses and other money you receive unexpectedly to help you achieve your financial goals more quickly.

Finally, get-rich-quick schemes are investment methods in which you can supposedly make a lot of money in a short amount of time without having any knowledge or incurring any risk. If a promise seems too good to be true, it usually is. No one can guarantee a consistently high rate of return. The way to make money in the stock market is the old-fashioned way: investing in a diversified portfolio for many years.

Assignments

Financial Plan Assignments

Open your copy of Learning Tool 5A: Investment Plan Example. Make sure you understand the terminology related to investment plans. I will discuss many aspects of this plan in upcoming sections.

First, you will not have only one portfolio for your investments; you will likely have many portfolios, all of which are important parts of your Investment Plan. Review your goals and objectives. What are you trying to accomplish individually and as a family through investing? With your investments, what are you trying to accomplish? Think through your general investment guidelines in Section IIA for both Stage 1 and Stage 2, and fill in those sections.

Using Learning Tool 27: Expected Return Simulation and Benchmarks, input your stocks and bond allocations from your work you have done in the second on Investments 1: Before You Invest. You will now need to add some additional asset classes.
There are four different asset classes for equities or stocks that I have data for. Large-cap stocks are the largest and biggest companies, generally with market capitalization (or shares outstanding multiplied by share price) of over $10 billion dollars.

Small-cap stocks have market capitalization generally between $250 million and $2 billion dollars. International stocks are those registered on exchanges outside the United States. And emerging markets are stocks of companies listed outside the U.S. and outside the major developed markets.

In bonds and cash, there are two different asset classes. Treasury bonds are long-term government securities, which are government debt with maturities generally one year or more. Treasury bills are government debt with maturities less than one year.

Real Estate Investment Trusts (REITs) are neither stocks nor bonds but have components of both. Using the dropdown boxes in Learning Tool 27, try to come up with a preliminary target asset allocation. This is not your final target but just a preliminary pass.

Second, determine your investment constraints. When will you need money from your investments and why? Now is a good time to think about these needs. Fill out the constraints on Section II.B.1-4. on liquidity, time horizon, taxes, and unique needs. Your average and marginal tax rates should also be added and will come from your section on Tax Planning.

Finally, determine your policies. I recommend you make a first pass at your policies and then refine them as you learn more about investments. Major policies include:

**III.A.1. Acceptable asset classes:** Decide now what you will invest in and what you will not invest in. I recommend against asset classes where you have no discernible advantage.

**III.A.2. Total assets:** What is the maximum amount you will invest in any single asset? Remember the principle of diversification.

**III.A.3. Short selling or buying on margin:** Decide if you will use debt to invest. I recommend against it. Do not invest with borrowed money.

**III.A.4 Unacceptable asset classes:** What asset classes will you not invest in? Make the decision now. I recommend against foreign currencies, options, futures, derivatives, and collectibles and other

**III.B.1-2. Investment benchmarks:** Determine your investment benchmarks for each of your asset classes. I strongly recommend a minimum of four asset classes, so you will have at least four investment benchmarks. Suggestions for benchmarks for the various asset classes can be found in Learning Tool 27.
III.C.1-2. Asset allocation strategy: Determine your target and minimum and maximum allocations for your two different stages.

III.D.1. Investment strategy: Determine how you will invest. Will it be mutual funds or individual stocks? I strongly recommend mutual funds, at least initially, when your assets are few.

III.E. Funding strategy: Determine your funding strategy. How will you save money for investing and saving? What is your goal to save each week or each month? How will you keep your priorities in order?

III.F.1. New investments strategy: What is the maximum amount you will invest in new investments? I recommend not investing more than 5 to 10 percent in any new investment (except for broad-based mutual funds with more than 50+ assets).

III.F.2. Investments in company stock: Think about the maximum you will have in your retirement fund in investments of your company’s stock. I recommend no more than about 10 percent due to diversification concerns.

III.F.3. Unlisted investments: Finally, what is the maximum amount you will include in unlisted investments, i.e., investments that are not listed on a recognized stock exchange? While I recommend you not invest in assets that are not listed, it is your choice.

Learning Tools

The following Learning Tools may also be helpful as you prepare your personal Investment Plan:

5. Investment Plan Example

After reading Section 18, you are encouraged to copy this Investment Plan and change the investment goals, objectives, allocations, and other areas to make them consistent with your personal goals, objectives, return and risk requirements, asset allocation targets, and other investing parameters.

23. Return Simulation for Asset Classes

This spreadsheet helps you see the impact of various investment strategies as well as the volatility of different asset classes. It also shows you the historical impact of different asset-allocation decisions.

26. After-Tax, Equivalent Taxable Yield, and After-Inflation Returns

This spreadsheet calculates the after-tax, equivalent taxable yield, and after-inflation returns on various assets.
27. Expected Return Simulation and Benchmarks

This spreadsheet shows a historical perspective on returns and standard deviation (risk) for the major asset classes over the last 1, 5, 10, 25, 50, 75, and 80 years. It also includes the recommended benchmarks for some of the major asset classes.

Review Materials

Terminology Review

**Active management.** Active management is the process of trying to beat market returns by the active buying and selling of mutual funds and stocks.

**Buying on margin.** Buying on margin is borrowing money to invest. You borrow money from your broker and use it to purchase financial assets. If the stock goes up and you sell the stock, you make a profit due to leverage. Be careful as you can lose much more than your original investment.

**Day trading.** It is the process of an individual giving up all his spare time in an area in which he has little or limited competence, in an attempt to consistently beat the market and other professionals after taxes, costs and fees.

**Financial Goals.** Financial goals are personal goals with a cost attached.

**Investment Benchmarks.** An investment benchmark is the standard by which to judge your asset performance. You never choose an asset without choosing an investment benchmark. Use your investment benchmark to determine how well you are doing.

**Investment Constraints.** These are specific needs you have which will constrain how you will invest your portfolio.

**Investment Guidelines.** Your investment guidelines are the general road map on how you will be investing your assets over your life cycle. It integrates your personal goals and your financial goals into a complete financial perspective.

**Investment Horizon.** This is when will you sell the investment.

**Investment Plan** (also called and Investment Policy Statement). Your Investment Plan is the most important document you will prepare in regards to your investing activities. It sets the plan and framework on every investing activity. It states what you will do: what you will and will not invest in, how you will invest, why you will invest, what percentages you will invest, etc. In short, it is the key document that will impact your investment returns most for the rest of your future.
Investment vehicles. These are tax-law defined vehicles which allow you to save tax-advantaged for specific goals, i.e., Retirement: 401k, 403b, Roth 401k, IRA, Roth IRA; Education: 529 Funds, Education IRA etc.

Leverage. The decision of using debt to invest. It is not recommended.

Liquidity. This is the speed and ease with which an asset can be converted into cash.

Mutual Funds. These are professionally managed portfolios of similar instruments which offer the benefits of economies of scale and diversification.

Passive management. Passive management is the process of accepting average returns through purchasing index funds rather than trying to beat the market. It is much cheaper and more tax efficient.

Short-sell. Short-selling is borrowing shares from your broker, selling those shares, and hoping the price of the shares will decline so you can rebuy them at a lower price. Be careful as you can lose much more than your original investment. Don’t risk it!!

Stock Market Secrets. These are supposed short-cuts or secrets that only the professionals know, but they will share them with you for a price. Don’t get taken.

Tax Considerations. These are how taxes will impact your investment decisions, including your tax position, specifically your marginal and average tax rate; and how tax-free investments may fit into your plan, i.e. municipal versus corporate bonds.

Unique Needs. Unique needs are special needs that may impact your investing decisions.

Review Questions

1. How are your financial goals related to your personal goals?
2. What is the difference between a goal and a wish?
3. What is an Investment Plan? Why is it important?
4. What are the four categories of an Investment Plan?
5. What is an investment benchmark? How do they help an investor? What is the consequence of not having a benchmark to follow?

Case Studies

Case Study 1

Data

Last year Anne sold short (this is another term for short selling) 400 shares of stock at
$90 per share. Six months later the stock fell to $45 per share and she covered her short, i.e., she bought back shares to replace the shares she sold short. Over the six-month period, the company paid out two dividends of $1.50 per share. Her total commission cost for buying and selling the shares came to $125.

Calculations

A. Determine Anne’s profit or loss from this transaction.

B. What would her profit or loss have been if the stock had rallied to $250 per share and she had to cover her shares sold short?

Case Study 1 Answers

A. Profits are made on short selling as the market price of a stock goes down. In this example, the stock fell to $45 per share. To determine Anne’s profit or loss, use the following calculation:

Total value of the shares sold short at $90 * 400 $36,000 credit
Repurchase cost of the shares ($45 * 400) $18,000 purchase

This is the purchase cost to cover the shares she borrowed and sold.

Gross Profit $18,000
Dividends (2 *$1.50 x 400) $1,200

Since Anne sold these shares, she must pay back the dividends the owners would have received if they didn’t lend her the stock.

This is your commission cost $125 commissions
Net profit $16,675

This is Anne’s profit if the stock price declined from $90 to $45 after she sold the shares short and covered the shares at $45.

B. Profits are made on short selling as the market price goes down. In this example, the stock’s price went up to $250 per share. To determine Anne’s loss, use the following equation:

This is the sale of the shares at $90 (* 400) $36,000 credit
Purchase cost to cover borrowing ($250) $100,000 purchase
Net profit $64,000 loss
Dividends (2 * $1.50 x 400) $1,200 dividends

Since Anne sold these shares, she must pay back the dividend.

Commissions $125 commissions
Net profit $65,325 net profit

This is Anne’s loss if the stock price increased from $90 to $250 and she was forced to cover the shares at $250.
Case Study 2

Data
Bill is one of the 8,400 Utah victims of the 12DailyPro Internet fraud, where investors were supposed to receive a 12 percent return per day without any products or services.

Application
A. What advice would you give to Bill regarding purchasing products of this type in the future?
B. Which principles of investing did this fraud violate?

Case Study 2 Answers

A. 12DailyPro was a Ponzi scheme, where new investors’ money was the “return” to investors who got into the scheme before later investors. Investors had no idea how the firm made money but were only concerned that they made money. It seemed too good to be true, and it truly was.

B. 12DailyPro violated two main principles: (1) Principle 6: Know what you invest in and who you invest with and (2) Principle 9: Invest only with high-quality individuals and institutions.

Case Study 3

Data
Kim just purchased 1,000 shares of NS corporation at $15 per share, and 50 percent was purchased on margin (i.e., she borrowed 50 percent to buy the shares). She held the shares for six months and sold them. Interest on her margin loan was 12 percent annually.

Calculations
A. Assuming the price increased to $30 per share and Kim sold the shares, what is the total profit of her investment after paying back the loan with interest? Profit = total revenues – total expenses. Assume the money she invested is part of her expenses.

B. Assuming the price decreased to $5 per share and she sold the shares, what is the total value of her investment after paying back the loan with interest?

C. Generally, should an individual buy on margin?

Case Study 3 Answers

A. Kim’s purchase at $30 $30,000 ($30 * 1,000 shares)
Interest $-450 ((6 months /12 months) * 12% * $7,500)
Loan amount $-7,500 (She borrowed 7,500.)
Her personal money $-7,500 (She put up 7,500 of her money.)
Her profit is $14,550

B. Kim’s purchase at $5 $5,000 ($30 * 1,000 shares)
Interest $-450 ((6 months /12 months) * 12% * $7,500)
Loan amount $-7,500 (She borrowed 7,500.)
Her personal money $-7,500 (She put up 7,500 of her money.)
Her profit $-10,450

C. No. Buying on margin is a bad idea and should be avoided at all costs.

2 Conference Report, Oct. 1911, 128–29
3 “Keeping Life’s Demands in Balance,” Ensign, May 1987, 13

Introduction

Once you have your priorities in order, understand your personal and financial goals, and have written a thoughtful Investment Plan, you are ready to learn about securities markets, both physical and electronic, where financial or real assets are traded. What are the different types of securities markets in which you might invest? Who can help you achieve your goals? What are these individuals’ motivations, and how are they paid? How do you buy and sell securities, and what kind of help do you need? How do you choose someone to help you in the investment process? These and many other questions regarding securities markets will be addressed in this section.

Objectives

When you have completed this section, you should be able to do the following:

1. Recognize the different types of securities markets
2. Be aware of the basic characteristics of brokers and investment advisors
3. Understand how to buy and sell securities
4. Answer questions about choosing a broker or an investment advisor
5. Know how to select and use benchmarks

Recognize the Different Types of Securities Markets

Securities markets are the markets in which securities, or financial assets, are traded. There are two different types of securities markets. The first is known as the primary market, which is used for trading newly issued securities. The second type is known as the secondary market, which is used for trading securities that have already been issued. Primary markets and secondary markets are generally used for trading equity securities.

Primary Markets

Primary markets, or primary financial markets, are where new financial assets are issued. There are two main types of primary-market issues. The first type of issue is known as an initial public offering (IPO). These issues are the very first shares a company offers to the public. Investment bankers serve as underwriters for these issues: they facilitate the process of selling them.

The second type of issue is known as a seasoned new issue. These issues are new shares that are issued by a company that already has publicly traded shares on existing stock exchanges. A seasoned new issue is the way a company sells more shares to the investing public.
Secondary Markets

Secondary markets, or secondary financial markets, trade existing securities (previously owned shares of stocks, bonds, and other financial assets). Secondary markets consist of both organized exchanges, such as the New York Stock Exchange (NYSE), and over-the-counter or electronic markets, such as National Association of Securities Dealer Automated Quotation System (NASDAQ).

Organized stock exchanges are markets that are used to facilitate the trading of financial instruments. The main organized stock exchanges are the New York Stock Exchange and the American Stock Exchange. There are also regional stock exchanges, such as the Pacific, Chicago, Philadelphia, Cincinnati, Intermountain, Spokane, and Boston Stock Exchanges, but these are very small.

The largest stock exchange in the United States is the NYSE. This stock exchange is more than 200 years old, and it is still limited to 1,366 seats (the number of individuals/institutions who can trade), which is the same number of seats it has had since 1953. NYSE includes over 3,000 listed companies. Generally, 80 percent of the daily trading volume in the United States is done on this stock exchange.

Over-the-counter (OTC) market is an electronic network of dealers that allows investors to execute trades without going through specialists or intermediaries. That is, there is no single physical location where stocks are traded; rather, these trades are executed through NASDAQ, which links various dealers and brokers through a computer- or telephone-based system. Usually the bigger companies are traded on an exchange rather than OTC. These trades are also executed through the National Market System, a system under the sponsorship of the National Association of Securities Dealers (NASD), which trades stocks of specific sizes, profitability, and trading requirements. NASD also trades “pink sheets,” or lists of small companies not listed on any exchange; these stocks are traded by brokers through a network of phone and computer systems and may be significantly more risky.

Secondary bond markets: An organized exchange for individual retail investors to trade bonds does not exist. This may be because there is little demand for bonds among individual investors; this may also be because the transaction costs to trade bonds are so small. Generally, individuals must work with a broker who buys or sells bonds through a bond dealer.

Government bond trading is dominated by investment houses, commercial banks, and the Federal Reserve. Some bonds, such as Series EE and I Bonds and some Treasury securities, can be purchased online at www.treasurydirect.gov.

International stock markets: There are domestic stock exchanges in developed countries and in many emerging or developing countries. Most nations have securities exchanges; these markets trade more than $25 trillion in assets. In the U.S. stock markets, investors can often trade American Depository Receipts (ADRs), which are receipts for shares that are held on deposit by
foreign banks and represent ownership of companies that have their primary listing on exchanges outside the U.S. Buying an ADR is very similar to buying the underlying domestic share from the issuer’s home or domestic market, except you get your dividends in U.S. dollars and your annual report information in English. Another way to invest in international shares is to invest in mutual funds; many mutual funds invest internationally.

Be Aware of the Basic Characteristics of Brokers and Investment Advisors

A stockbroker is a person who is employed by a commission house or merchant to solicit business for these institutions. An investment advisor is a person or organization that makes the necessary daily decisions regarding an investor’s portfolio. Both stockbrokers and investment advisors want to be responsible for making investment and trade decisions because they earn commissions and fees as they help investors buy and sell securities.

How Stockbrokers and Investment Advisors Are Paid

Stockbrokers and investment advisors are generally paid in three different ways:

**Commission:** Investors may be charged a commission on the trades they make. This commission requires investors to pay a percentage of every order. For example, the commission might be 80 basis points per trade (0.8 percent of each trade) or a specific charge per trade, such as $29.99 for a trade of 1,000 shares.

**Assets under management:** Investors may be charged a percentage of the value of assets that are under management. For example, if you have a $500,000 portfolio, and the advisor’s fee is 1 percent per year, you will pay the advisor $5,000 per year for helping you manage your portfolio.

**Combination pay:** Stockbrokers and financial advisors may charge fees that are a combination of both commissions and assets under management.

Regardless of who you work with, it is important that you know how the individual or institution is compensated. If individuals or institutions are unwilling to share this information with you, find someone who will. There are many excellent, qualified brokers and investment advisors who make compensation arrangements a part of every meeting with clients.

Generally, you must work with brokers or investment advisors if you are buying and selling stocks, bonds, and some mutual funds with loads, or sales charges. If you wish to purchase stocks, bonds, or load mutual funds, you will need to work with a broker.

If you only want to purchase no-load mutual funds and Treasury bonds, you can buy most of these directly from the mutual fund company without cost or from some brokers also without cost. You can buy some U.S. Savings bonds and Treasury securities directly from the U.S. Treasury at [www.treasurydirect.gov](http://www.treasurydirect.gov).
Types of Brokerage Firms

Full-service brokers offer a complete range of tools, research, and advice to help you trade assets and invest money. These are the most expensive type of brokers, but they offer the most services and research.

Discount-service brokers perform only the trading portion of investment management, but their services usually cost 50 to 75 percent less than full-service brokers.

Deep-discount brokers are even less expensive than discount-service brokers because they specialize in only one area. Like discount-service brokers, these brokers do trading only, but they often cost as much as 90 percent less than full-service brokers.

Online-discount brokers are similar to deep-discount brokers and offer support for online trading. These brokers are often less expensive than discount-service brokers, and they offer low-cost immediate trading and other services.

There are two additional categories of brokers: captive and independent. This delineation is generally made when investors are considering purchasing mutual funds.

Captive brokers’ firms own part of a mutual fund company. Because of the ownership connection with this company, these brokers are often encouraged to sell the firm’s mutual funds rather than the mutual funds from other companies. Investors should be aware of this connection and make sure that a broker’s investment recommendations are in the investor’s best interest instead of the broker’s best interest.

Independent brokers are not part of a major chain and do not own a captive mutual fund company. These brokers may be more inclined to give unbiased advice because they do not sell specific mutual funds from a parent company.

Types of Brokerage Accounts

Cash accounts require you to leave money with the broker; this money is used to pay for purchases and to generate more money from the selling of securities. In trading, a specific amount of time is allowed between the notification of purchase and the deadline for payment. Therefore, having a cash account with a broker is a good idea in many cases because this account ensures that cash will be available for immediate payment upon the receipt of securities.

Discretionary accounts are accounts in which a broker or investment advisor is authorized to make trades for you. Exercise extreme caution in using this type of account; the broker can buy and sell securities at will, but you are responsible for paying all taxes and commission costs. Before you set up a discretionary account, make sure the broker has thoroughly read and understands your Investment Plan and your list of investment goals.
Margin accounts allow you to borrow money from the brokerage firm to purchase financial assets. Since this type of account involves debt, it amplifies both gains and losses (see Chapter 18: Investments 2: Creating a Personal Investment Plan on the website for more detail). Because the broker assumes a greater amount of risk with margin accounts, the broker requires you to maintain a specific maintenance margin in your account at all times; in other words, you must maintain a specific percentage of the value of the assets that have been purchased on margin. Currently, the maintenance margin is 50 percent. Should the value of the securities purchased on margin decline below this percentage, you will get a “margin call.” A margin call requires you to either put more money in your margin account or sell some of the assets you have purchased on margin to reduce the amount of money you owe. Rules for margin lending are federally regulated. I strongly suggest you do not buy on margin because you have the potential to lose more than the amount of your original investment. Buying on margin is a high-risk activity.

Understand How to Buy and Sell Securities

A broker is an intermediary between buyers and sellers of stock. An investor places orders with brokers, either indirectly by phone or fax, or directly through the Internet. The broker takes the orders to the securities exchange. If the broker is successful in finding a counter-party to the trade (i.e., a buyer is found when you want to sell a security, or a seller is found when you want to buy a security), the trade is executed on the exchange. The broker then notifies the investor that the trade has been made, and funds and securities are exchanged on the specified trade date (See Chart 1).

Types of Broker’s Orders

You can place orders to buy and sell securities with a broker in many different ways:

**Buy-and-sell orders** are directions you give to a broker to purchase or sell a specific number of shares at the market price or when the share reaches a specific price.

**Market orders** are directions to buy or sell a specific number of shares at the current market price. A benefit of this type of order is that it is the easiest to execute. A disadvantage is that the price may be significantly higher (for a buy) or lower (for a sell) than you had planned.

**Limit orders** are directions you give to a broker to buy or sell a specific number of shares at a specific price (or a better price, if possible). An advantage is that you may get the limit price or better. A disadvantage is that you may not get any shares at all if the market moves against you.

**Day orders** are buy-and-sell orders that are valid only until the end of the trading day. A benefit of this type of order is that at the end of the day you know everything you bought or sold. A disadvantage is that unfilled orders are automatically canceled.
Open orders, or good-till-canceled (GTC) orders are valid until they are filled or canceled. An advantage is that you can keep open orders for long periods of time, which may be helpful when dealing with securities that are thinly traded. A disadvantage is that if you fail to cancel these orders, they could be unexpectedly filled at a later date. If this happens, you are responsible for paying any fees related to the order.

Fill-or-kill orders must either be filled or canceled immediately. Most often, these are market orders at the current market price. An advantage of this type of order is that you will know immediately whether you have purchased or sold the shares. A disadvantage is that your trade may not be executed.

Chart 1. The Trading Process for Stocks and Bonds
Chart 2. The Trading Process for Mutual Funds with a Load, or Sales Charge (or Load)

1. Place order with the broker through website, phone or fax.
2. Confirms order.
3. Confirms order.
4. Confirms order.
5. Mails/emails confirmation statement.

Chart 3. The Trading Process for No-Load Mutual Funds

1. Place Order through website, phone, or fax directly with the mutual fund company.
2. Confirms order by email or mail.
Stop orders and stop-loss orders directions to either sell a specific number of shares if the stock price falls below a certain level or to buy a specific number of shares if the stock price rises above a certain level. Use care when you set stop prices to safeguard against major fluctuations. An advantage of this type of order is that you can minimize loss if the market price of a security falls. A disadvantage is that the brokerage house may not be able to sell the asset at the stop-loss price if the market falls too quickly.

When you trade, use wisdom in your decisions. I generally recommend using limit orders, which are only good for one day; this way you are sure you will get the price you want (or nothing at all), and you are sure that at the end of every day, your orders will have all been canceled. I also recommend that you try to buy and sell shares in round lots. Round lots (orders of 100 shares or multiples of 100 shares) are easier to sell than odd lots (orders of 1 to 99 shares). You will get better execution and a better price if you sell and buy round lots.

Share Registration

Financial assets can be registered in a number of different forms, as is the case with most assets. Street name registration is where the shares of the stock remain in the broker’s custody and under the broker’s name. Joint accounts are where shares are jointly owned with a spouse or partner. Joint tenancy is where shares are owned with a partner who has the right of survivorship. Tenancy in common is where shares are owned with a partner; however, when one shareholder dies, the shares of the deceased become the property of an heir, not the partner.

Answer Questions about Choosing a Broker or an Investment Advisor

How do you choose an investment advisor or stockbroker? The key is to decide what kind of assistance you need and to get quality help from the best individuals and institutions. Whichever institution or individual you choose, remember that this individual or institution must be registered and licensed to sell the assets you are interested in buying or selling. While the terms “advisor” and “broker” are often used interchangeably, the difference is largely based on what type of assets each advisor has recommended historically.

You should base your decision about a broker or investment advisor on what you are buying or selling, how much help you want with the investment process, and how much you are willing to spend.

What you are buying: If you are buying stocks and bonds, you must use either a broker or an investment advisor who works with a broker. If you are comfortable making investment decisions yourself and you just need help executing your stock and bond trades, you might decide to use a discount-service broker or an online-discount broker. A discount-service broker will charge lower commissions on trading but will not provide investment advice. If you work with a discount-service broker, you will determine what to buy and sell, and you will give the orders to buy and sell. A discount-service broker executes your orders at a reduced price.
If you are not comfortable making your own investment decisions and would like someone to help you decide what to buy and sell, you may want to think about using a full-service broker or an investment advisor. A full-service brokerage firm provides a variety of services to its clients including research and advice, retirement planning, tax tips, and much more. The full-service broker helps you decide what to buy and sell, executes trades for you, and keeps you informed about changes in the market. These services come at a price, however; commissions for full-service brokers are much higher than commissions for discount-service brokers.

If you invest only in mutual funds and make all of your asset allocation decisions yourself, you may not need a broker or investment advisor at all. You can buy many of your funds directly from the mutual fund family (the company that owns the mutual fund) or from a mutual fund supermarket that sells mutual funds from many different mutual fund families. Most of these purchases can be made directly without sales charges or loads (a fee charged to the purchaser for the privilege of purchasing the mutual fund and is generally used to compensate the broker for the work done to sell the mutual fund) or 12b-1 fees (fees charged to new investors to help cover the costs of selling the mutual fund to other investors). Be aware that the amount of your investment must meet a minimum investment requirement: many mutual fund families charge a fee if your account falls below the minimum required investment.

**Help in the investment process:** If you are comfortable making your own investment decisions, you may still appreciate some outside advice regarding your investments, or you may want to have someone to review your Investment Plans. If this is the case, consider talking with an investment advisor. A full-service broker or investment advisor can provide helpful advice about retirement planning, taxes, and other aspects of finance. You can negotiate for an up-front fee to pay for the specific amount of time you talk with the advisor or broker, or you can agree to make specific trades through the advisor to compensate for the advice.

**How much you are willing to pay?** If you are concerned about costs, you can purchase mutual funds directly from a mutual fund family, generally without fees. If you are buying or selling stocks or bonds, you can work with a discount-service broker or an online-discount broker so that you will pay the lowest costs possible.

**Working with a Broker or Advisor**

When working with a broker or advisor, remember that you are working with your money. Do your homework and take responsibility for your money. No one will watch it like you will.

Brokers and investment advisors offer specialized knowledge to help you in the investment process. However, if you do not need their services, you should not pay for them. Save money by using a discount-service broker or consider using no-load mutual funds if you feel comfortable making investment decisions yourself. Using alternatives to full-service brokers can greatly reduce your costs, especially because these alternatives may not charge transaction costs.
Keep transaction costs and taxes to a minimum. A percentage saved in cost is a percentage earned in return. Try to keep your trading to a minimum to reduce transaction costs and taxes. Likewise, if you buy mutual funds that have low turnover, you can reduce the amount of taxes you will have to pay each year due to mutual fund distributions. You may also be able to reduce costs by using index funds and applying a buy-and-hold strategy. Regarding bonds, you can work with a broker or buy direct. If you go through a broker or advisor, you will generally have to pay transaction costs.

**Trusted Advisor versus Salesperson**

Look for brokers or investment advisors that have your best interest in mind. Make sure trading is to achieve your goals—not theirs. Make sure they have the necessary expertise and licenses in the financial areas you think are important. If they don’t have the licenses, they cannot sell you the securities. Make sure they don’t trade a lot, or “churn” your portfolio. It’s not what you make but what you keep after all costs, taxes, and inflation that makes you wealthy.

Look for brokers with integrity, intelligence, and efficiency. Make sure they are upfront regarding all costs and commissions. If they will not tell you their commission, go somewhere else. Look for brokers with experience in both up and down markets. Generally, you will not find this type of experience in someone who cold-calls you on the phone. Make sure your broker listens. Ensure he or she will spend the time with you to know your investment philosophy and read your Investment Plan. If not, go somewhere else. Finally, choose a broker that has a reputation for allowing customers to say “no” without pressure. If you ever feel pressure to make a trade, get another broker.

There is a difference between a trusted financial advisor (TFA) and a salesperson. A trusted financial advisor has your best interest at heart, while a salesperson has his or her best interest at heart. The following are a few differences you should be aware of:

- A TFA follows a process to help you create a comprehensive financial plan. A salesperson has a technique for making a sale and placing a trade.
- A TFA is interested in the things that are important to you. A salesperson is interested in making small talk, making you feel comfortable, and then making the sale.
- A TFA requires you to bring all financial data to the first meeting but does not require you to disclose information you are not comfortable sharing. A salesperson does not require you to do anything but show up and asks probing, personal questions that are designed to make you feel uncomfortable so you will buy the products he or she recommends.
- A TFA expresses interest in you and frequently refers to the work you have done so far in your financial plan; a TFA makes an effort to understand you and your goals. A salesperson refers to the possibility of your impending demise, the need to protect your family, and so on in an attempt to scare you into buying a product.
• A TFA meets in a professional environment with all of the financial decision-makers. A salesperson will meet with anyone, anytime, anywhere for “convenience.”
• A TFA will not allow you to talk him or her into selling you a product that is not appropriate for you, even if you insist. A salesperson will sell you anything you want to buy or will redirect you to a preferred product that gives him or her a higher commission.
• A TFA works with you even during times when you are not doing much trading. A salesperson only works with you if you are generating commissions.

As you review your experience with brokers or financial advisors, you can come to understand the type of advisor you were working with. The key is to work with a trusted financial advisor, whether that person is registered as a financial advisor or a broker.¹

Choosing a Broker or Advisor

The best brokers and investment advisors are those that have your best interests in mind. They have expertise in the financial areas that are important to you, they make you feel comfortable, they have read and understand your Investment Plan, and they do not trade a lot. They are looking out for number one—you.

There are a number of important areas you should consider if you are thinking about hiring a broker or advisor. Some of these areas are listed below and include some of the basic questions you should ask before hiring anyone to help you manage your finances.

1. Are you a full-time broker/registered investment advisor (RIA)/financial planner (FP)?

   Work with brokers/RIAs/FPs who work full time at their business. This gives you greater assurance that they are knowledgeable about the products you need.

2. What is your education and what licenses do you have?

   Many financial advisors have had little or no financial training. There are no required courses for someone who wants to be called a financial advisor. If you are paying for help, get the best help you can. I recommend you stick with advisors that have trained and qualified for specific designations, such as certified financial planners (CFPs), chartered financial analysts (CFAs), and certified public accountants (CPAs).

   Make sure you choose licensed financial planners. If you require stock and bond assistance, they should have their CFA or Series 7. If they are RIA, they should have their Series 65 and 66. If they are financial planners, I recommend they be CFPs.

3. How long have you been a full-time broker/RIA/financial planner?

   Work with someone who is experienced and established.
4. Are you working as a fiduciary or an advisor?

Fiduciaries are required to recommend products that are in the best interests of their clients. Some fee-based advisors at brokerage firms are held to a lower standard that only requires that they recommend products that are a reasonable choice for their clients. I recommend that you work only with advisors that will commit to acting as fiduciaries on your behalf, and that will act only in your best interests.

5. Do you offer only investment advice or full financial-planning services?

Many advisors only offer investment advice. But taking into account what you have learned from this course, you must realize that there is much more to comprehensive financial planning than choosing financial assets. I recommend you work with someone who will help you in those other areas as well, including goals, budgets, mortgages, insurance, taxes, retirement planning, and so on.

6. What companies do you represent?

There is a trade-off here between captive and independent brokers/RIAs/FPs. If they work with multiple companies, they may be able to offer more competitive products. If they only work for one company, they may be limited (or biased) in what they recommend.

7. How are you compensated?

Many advisors earn money by collecting commissions on the investments they sell. While they are compensated for the time they spend, there is no additional incentive for them to watch your investments after you have purchased them because they make no additional fees. In addition, there is the potential for conflict of interest, as well as for excessive trading. Remember that every dollar in commissions you pay reduces your returns, and every time you sell a security, you create a taxable event that may require you to pay more taxes. You want to make sure the broker/RIA/FP is working on your behalf. By knowing the commission on various policies, you may be able to avoid investments that are more of a benefit to the broker than to you.

8. Tell me about your proposed assistance:

A. Trading commissions: How much will it cost to buy stocks or other securities? Are there different prices for market and limit orders? What are those prices? Does your firm offer both safekeeping and recordkeeping services?
B. Other fees: What are your annual maintenance or custody fees? Are there inactivity fees if you’re not a frequent trader?
C. Minimum initial deposit: What is your minimum initial deposit? What is the monthly fee for going below this minimum?
D. Customer service: How good is your customer service? Do you have references? Do you have an 800 number for transactions and quotes?
E. Traditional banking services: Do you offer traditional banking services? Can I write checks on my account?
F. Research: Do you provide objective, independent security analysis? Do I have to pay for reports?
G. Mutual funds: Do you have access to high-quality, low-cost fund families outside the funds sold by the broker, such as Vanguard/Fidelity? If not, what is the cost for me to invest with these fund families?
H. Investment product selection: Do you have certificates of deposit, bonds, options, and so on? (List the items you may want to invest in.)
I. Insurance: Is my account insured by the Securities Investor Protection Corporation (SIPC) to $500,000?
J. Other methods of trading: How do you make trades if your computer is down or you’re away from home? Can you trade via phone?
K. Other perks: Do you have any special deals that would make it more attractive for me to work with you? Do I receive interest on idle cash in your account?

9. Do you have any clients who are willing to recommend you?

Your broker should either supply you with names of satisfied clients or share testimonial letters from others. You should not consider a broker/RIA/FP without recommendations.

While it may be time consuming to find a good financial planner/broker/registered investment advisor, the correct choice can be very beneficial in helping you achieve your personal and financial goals.

**Know How to Select and Use Benchmarks**

Now that you know about securities markets and the investment personnel that can help, it is important that you understand Principle 7: Compare Performance versus Benchmarks. This section will discuss benchmark basics, types, construction, weighting, and finding data.

**Benchmark Basics**

A benchmark (also called an index) is a measuring device that shows the average performance of a specific set of securities; benchmarks are used for comparison purposes. Benchmarks may be modeled after published indexes or customized to fit a specific investment strategy. Benchmarks are the standard by which you should judge the performance of individual assets in your portfolio; they also allow you to evaluate your portfolio as a whole. You cannot know how well your portfolio is performing unless you have a benchmark against which to compare that portfolio. Comparing asset performance to benchmarks is Principle 7 of successful investing.
There are three primary purposes of benchmarks. First, benchmarks allow you to track the average returns of a specific asset class. Second, benchmarks allow you to compare different mutual fund managers in similar asset classes; similarly, benchmarks allow you to monitor recommendations made by financial brokers. Third, benchmarks give you a framework for building new portfolios and exchange traded funds (ETFs).

The following are a few questions you should ask yourself when choosing a benchmark:

- Does the benchmark represent the assets I am interested in?
- How broad is the benchmark?
- How many securities does the benchmark include?
- How is the benchmark constructed?
- How is the benchmark weighted?

**Benchmark Types**

**Type:** Benchmarks may be categorized by type of financial asset—stocks, bonds, and other asset classes. Stock benchmarks are subdivided by market capitalization, geography, industry, and investment style. Bond benchmarks are subdivided into corporate bonds, government bonds, convertible bonds, agency bonds, municipal bonds, junk bonds, and so on. Each asset class defines its own benchmarks: for example, real estate investment trusts (REITs), currencies, commodities, derivatives, gold, and hedge funds each have their own benchmarks.

**Geography:** Global benchmarks measure the performance of assets in several developed market countries, including the United States. Examples of global benchmarks include MSCI World and MSCI All Country Free. International benchmarks measure the performance of assets in developed countries outside the United States. An example of an international benchmark is the MSCI Europe, Australia, and Far East index (EAFE). Emerging markets benchmarks measure the performance of less-developed markets in Asia, Latin America, emerging Europe, and Africa. Examples of emerging markets benchmarks include the S&P/IFC Emerging Markets Free index and the MSCI Emerging Markets Free index. Regional benchmarks measure the performance of assets in a specific region of the world. Examples of regional benchmarks include MSCI Europe, MSCI Asia, Dow Jones Asia, and Dow Jones Latin America. Country benchmarks measure the performance of assets in a specific country. Examples of country benchmarks include the S&P 500, Russell 5000, Dow Jones, MSCI Argentina, S&P/IFC Chile, and Japan TOPIX.

**Asset size:** Market capitalization is the most common division within this category. Market capitalization benchmarks measure the performance of assets with a specific market capitalization range. Large-cap stocks generally have a market capitalization of greater than $10 billion, mid-caps are between $2 billion and $10 billion, and small-caps are less than $2 billion. Micro-cap stocks, a less common benchmark, generally have a market capitalization of less than $250 million.
**Industry**: Industry benchmarks (also called sector benchmarks) measure the performance of assets in a specific industry, such as telecommunications or retail. Industry benchmarks may also be subcategorized by geography; for example, there are industry benchmarks specifically for the Japanese automotive industry, the European telecommunications industry, and the Asian cement industry.

**Investment style**: Investment-style benchmarks measure the performance of stocks with different values. Value benchmarks measure the performance of stocks that are considered to be undervalued by the market; in other words, their price-earnings and price-book ratios are lower than the average price-earnings and price-book ratios for all companies. Growth benchmarks measure the performance of stocks that are expected to have accelerated growth caused by increased earnings, a dominant market position, or other factors; in other words, the price-earnings and price-book ratios for these stocks are higher than the average price-earnings and price-book ratios for all companies. Blend benchmarks measure the performance of all stocks in that asset class, both value and growth stocks.

**Maturity**: Long-term benchmarks measure the performance of bonds that will mature in more than 10 years. Intermediate-term benchmarks measure the performance of bonds that will mature in 2 to 10 years. Short-term benchmarks measure the performance of bonds that will mature in less than two years.

**Benchmark Construction**

There are a number of different ways that benchmark returns are calculated. The price return method calculates only the price appreciation of the underlying assets. The total return with gross dividends reinvested method uses both the price return and the dividend return to calculate the total return. However, the gross dividends method does not account for the impact of withholding taxes on dividends, which may be required for international investing.

The total return with net dividends reinvested method uses both price and dividends to calculate the total return. The total return with net dividends reinvested method accounts for the impact of international withholding taxes on dividends. Thus, benchmarks that use this last method of calculating returns will report a smaller return compared to the amount of return reported by methods that base calculations on the gross dividends; however, the total return with net dividends reinvested method will better represent the amount of return an international investor will actually receive.

**Benchmark Weighting**

Assets are weighted in a variety of ways, depending on the benchmark:

**Market-value weighting**: If assets are market-value weighted, they are weighted according to their market capitalization. An asset’s market capitalization is found by multiplying share price by outstanding shares. This method assumes that market capitalization is a viable representation
of asset size. Market-value weighting is the primary way most benchmarks weight assets. Indexes that are market-value weighted include the S&P 500; NASDAQ; and most MSCI global, country, and regional benchmarks. These benchmarks give a higher weighting to stocks with a greater market capitalization.

**Price weighting:** Benchmarks that use price weighting assume that the weight of a stock should be related to the price of the stock. In other words, a stock that trades at $10 is considered twice as important as a stock that trades at $5. Price-weighted benchmarks base the weight of an asset on the price of the stock. Examples of price-weighted benchmarks include the Dow Jones Industrial Average and Japan’s Nikkei index.

**Equal weighting:** Equally weighted benchmarks consider all stocks to have the same weight. These benchmarks place the same value on a stock with a market capitalization of $50 billion as they do on a stock with a market capitalization of $250 million. Examples of equally weighted benchmarks include the Value Line index and the MSCI Equal Weighted index.

**Float weighting:** Benchmarks that use float weighting assume that asset weightings should be based on both market capitalization and the amount of float outstanding. The amount of float outstanding refers to the number of shares that are actually available to investors (usually international investors); the amount of float outstanding does not include shares that are held by insiders or shares that are available only to local country investors. Examples of benchmarks that use this weighting system include the S&P/IFC Emerging Markets Free index and the MSCI Emerging Markets Free index. These benchmarks give a higher weight to companies that have more shares in the marketplace and companies that do not limit foreign ownership.

**Finding Data on Benchmarks**

You can find data on benchmarks in a number of places. Data on several benchmarks are accessible through the Internet on financial sites such as CNN Money or Yahoo! Finance. These free benchmarks do not typically account for dividends, so make sure you take this into account when looking at index performance.

Proprietary data providers, such as Morgan Stanley and Standard & Poor’s, have their own benchmarks. They will also design custom benchmarks for a fee; the MSCI Emerging Markets Free ex-Malaysia index is one example of a custom benchmark. Other data suppliers include NASDAQ, Bloomberg, and Reuters.

**Key Characteristics of Benchmarks**

The purpose of a benchmark is to reflect the performance of specific asset classes or funds. Any benchmark you choose should have the following five characteristics:
1. The benchmark should be constructed according to objective rules, not subjective judgments. There should be specific reasons for why each asset is included in the benchmark.

2. The benchmark should consistently weight its holdings according to its chosen weighting method. Choose benchmarks that use a weighting method you agree with.

3. The benchmark should feature overlapping buffer zones at the cutoff points between large-, mid-, and small-capitalization holdings. It is a bad sign if many holdings in the benchmark are considered small-cap stocks one day and mid-cap stocks the next day due to changes in the market.

4. The benchmark should use a variety of factors to determine whether a stock is a growth stock or a value stock. The benchmark should have buffer zones to prevent assets from changing their status daily.

5. The benchmark should gradually and carefully rebalance its holdings to reflect market changes. This rebalancing should take place infrequently—one a year at most.

**Key Benchmarks**

Some key benchmarks are found in Table 1.

**Summary**

There are two different types of securities markets. The first type is known as the primary market and is used for trading newly issued securities. The second is known as the secondary market and is used for trading securities that have already been issued. Primary markets and secondary markets are generally used for trading equity securities.

A stockbroker is a person who is employed by a commission house or merchant; stockbrokers solicit business for these institutions. An investment advisor is a person or organization that makes the necessary daily decisions regarding an investor’s portfolio. Both stockbrokers and investment advisors want to be responsible for making investment and trade decisions because they earn commissions and fees as they help investors buy and sell securities. Stockbrokers and investment advisors are generally paid in three different ways: commissions, assets under management, or a combination of commission and assets under management.

There are a number of different types of brokerage firms. There are three main types of accounts: cash accounts, discretionary accounts, and margin accounts.

A broker is an intermediary between buyers and sellers of stock. An investor places orders with a broker, either indirectly by phone or fax or directly through the Internet. The broker takes the orders to the securities exchange. If the broker is successful, the trade is executed on the
exchange. The broker then notifies the investor that the trade has been made, and funds and securities are exchanged on the specified trade date (See Chart 1).

Table 1. Key Benchmarks for the Major Asset Classes

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Benchmarks</th>
</tr>
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<tbody>
<tr>
<td><strong>Domestic Equities</strong></td>
<td></td>
</tr>
<tr>
<td>Large-Cap Stocks</td>
<td>S&amp;P 500</td>
</tr>
<tr>
<td>Small-Cap Stocks</td>
<td>Russell 5000</td>
</tr>
<tr>
<td>Micro-Cap Stocks</td>
<td>Wilshire Micro-Cap</td>
</tr>
<tr>
<td><strong>International Equities</strong></td>
<td></td>
</tr>
<tr>
<td>Global</td>
<td>S&amp;P Global 1200, MSCI &amp; DJ World</td>
</tr>
<tr>
<td>International</td>
<td>EAFE (Europe, Australia, and the Far East)</td>
</tr>
<tr>
<td><strong>Corporate Bonds</strong></td>
<td></td>
</tr>
<tr>
<td>Short-Term</td>
<td>DJ Corporate Bond</td>
</tr>
<tr>
<td>Intermediate-Term</td>
<td>Barclays Intermediate</td>
</tr>
<tr>
<td>High-Yield</td>
<td>Salomon Smith Barney High Yield</td>
</tr>
<tr>
<td>Mortgage-Backed</td>
<td>Barclays MBS</td>
</tr>
<tr>
<td>Yankee</td>
<td>Merrill Lynch Yankee</td>
</tr>
<tr>
<td><strong>Treasury Securities</strong></td>
<td></td>
</tr>
<tr>
<td>Intermediate-Term</td>
<td>Barclays Intermediate Treasury</td>
</tr>
<tr>
<td>Long-Term</td>
<td>Barclays Long-Term Treasury</td>
</tr>
<tr>
<td><strong>Real Estate</strong></td>
<td></td>
</tr>
<tr>
<td>Real Estate Investment Trusts</td>
<td>S&amp;P REIT</td>
</tr>
<tr>
<td></td>
<td>MSCI US REIT</td>
</tr>
</tbody>
</table>

Orders to buy and sell securities can be placed with a broker in many different ways. Buy-and-sell orders are directions that tell a broker when to purchase or sell a specific quantity of a security at either a pre-determined price or the market price. There are a number of different types of orders, and each type has specific advantages and disadvantages. Types of orders include market orders, limit orders, day orders, good-till-canceled (GTC) orders, fill-or-kill orders, and stop or stop-loss orders.

It is important to work with good people and institutions. Working with brokers and financial advisors can be challenging. You must understand what you want to accomplish, what you expect from the broker or advisor, and how the broker or advisor will be paid. You should be paying brokers and advisors to add value to your portfolio—you should not be paying them to do what you could do for yourself.
Finally, if you decide you need help, it is important to work with qualified, licensed, and appropriate institutions and individuals. Work with a trusted financial advisor, not just a salesperson.

A benchmark (also called an index) is a measuring device that shows the average performance of a specific set of securities: benchmarks are used for comparison purposes. Benchmarks may be modeled after published indexes or customized to fit a specific investment strategy. Benchmarks are the standard by which you should judge the performance of individual assets in your portfolio; they also allow you to evaluate your portfolio as a whole. You cannot know how well your portfolio is performing unless you have a benchmark against which to compare that portfolio. Comparing asset performance to benchmarks is a principle of successful investing.

**Assignments**

**Financial Plan Assignment**

It is important that you understand the environment in which you are investing. Understanding the key components of this environment is critical. You should decide whether you can invest on your own or whether you will need help. When assets are small, you can often make important decisions on your own. As the size of your assets increases, it may be a good idea to get help with your investment decisions.

First, be familiar with the major players in the investment world. Come to understand the strengths and weaknesses of each of the different providers of financial advice. Make sure they are operating in your best interests as fiduciaries, not just as brokers.

Second, think through the importance of diversification as you put your Investment Plan together. Fear and greed are typical feelings that affect us all. In order to minimize the problems of fear and greed, determine investment policies to help you as you work to achieve your goals. What is the maximum amount you will invest in any single investment? We are not talking about mutual funds, index funds, or ETFs, but single investments. Most institutions have a maximum of between 5 and 10 percent. Include your maximum total in Section III.A.2.

Third, determine whether you will use leverage to invest. Leverage is debt. I encourage you to not short-sell securities or buy on margin, but you can include your guidelines in Section III.A.3. Do not invest with borrowed money.

Finally, determine your investment benchmarks. Investment Principle 7 advises you to monitor portfolio performance. This means you must choose an appropriate benchmark for each of your asset classes and for each of your assets. If you would like help, I have included recommended benchmarks for each of the asset classes in Learning Tool 27: Expected Return Simulations and Benchmarks. When you select the asset classes in the spreadsheet you will receive three recommendations for asset class benchmarks. Include these benchmarks in Section III.B.1. and III.B.2. You will not include the allocations yet, but you should add the benchmarks.
Chapter 19. Investments 3: Securities Market Basics

Review Materials

Terminology Review

**Assets under management.** This is another way an investment advisor is paid. It is calculated as a percentage of your assets under management, i.e., if you have $500,000 with an advisor and their fee is 1.0% per year, you will pay them $5,000 per year.

**Captive brokers.** These are brokers whose company is part of a group which owns a mutual fund company. These brokers may be encouraged to sell company mutual funds which may not be the best fit for the investor but are in the interest of the company.

**Cash accounts.** This is money with the broker which you use to pay for purchases or receive any cash. There is a specific time between notification of purchases and when the purchases must be paid.

**Commissions.** Commissions are the way a broker or investment advisor is paid. It is either a percentage of every buy or sell order (e.g., 20 bps per trade), or a specific charge for a trade (e.g., $9.99).

**Day orders.** These are orders to buy and sell securities which are good only until the end of the trading day.

**Deep-discount and On-line brokers.** These are brokers who are even cheaper than discount brokers. They do only trading, but at a 90% discount to full-service brokers. On-line can even be cheaper with other services.

**Discount-service brokers.** These are brokers who only perform trading, but usually at a 50% to 70% discount to full-service costs.

**Discretionary accounts.** These are accounts where you authorize a broker or investment advisor to make trades for you and your account. Exercise caution with this as the broker can buy and sell securities at will and you are responsible for all taxes and commission costs.

**Fill or kill orders.** These are orders which must be either filled or canceled immediately. Most often these are market orders.

**Full-service brokers.** These are brokers who will give you all the tools, research and other advice to help you trade and invest.

**Independent brokers.** These are brokers whose company is not part of a major chain or who own a captive mutual fund company. They may be inclined to give unbiased advice as they do not sell specific mutual funds.
Chapter 19. Investments 3: Securities Market Basics

Initial public offerings (IPOs). These are the very first shares ever issued by a company. Investment bankers serve as underwriters or intermediaries for these IPOs.

Investment advisor. A person or an organization that helps makes the day-to-day decisions regarding a portfolio's investments for investors.

Limit orders. These are orders to sell or buy a specific number of shares at a specific price or better. This is generally the best method in working with brokers.

Maintenance margin. This is money you put up to buy on margin. If your maintenance margin falls below a specific level, you will be required to put up more money. If not, your position will be closed out.

Margin accounts. These are accounts where you borrow from the brokerage firm to purchase financial assets. This is debt, and can amplify both gains and losses.

Margin call. This is a call by the broker to put up more money when your margin declines below a certain level. I recommend you do not buy on margin. It is using debt to invest and you can lose more than your original investment doing this.

Market orders. These are orders to sell or buy a specific number of shares at the currently available or market price. Be careful as the market can move quickly and dramatically between when you place the order and order execution time.

Open orders (GTC: good till canceled, GTD: good till date specified). These are orders which are good until filled or canceled. Be very careful with open or GTC/GTD orders. If you fail to cancel specific orders, you might have orders filled that you forgot to close out.

Organized Exchanges. These are areas used to facilitate trading of financial instruments.

Over-the-Counter (OTC) Market. This is an electronic network of dealers used to execute trades without specialists or middle-men.

Primary markets. These are markets for trading newly issued securities.

Seasoned new issues. These are new shares being issued by a company that is already publicly traded.

Secondary markets. These are markets for trading already issued securities. Secondary markets trade previously owned shares of stocks, bonds, and other securities. Secondary markets consist of organized exchanges and over-the-counter or electronic markets where existing shares are traded.
Securities markets. Securities markets are where securities, i.e., financial assets, are traded. The two different types of securities markets are primary and secondary markets.

Stockbroker. A stockbroker is a person who is employed by and solicits business for a commission house or merchant.

Stop (or stop-loss) orders. These are orders to sell a specific number of shares if the stock price falls below a certain price or buy a specific number of shares if the stock price rises above a certain price. These are used to set prices to safeguard against major fluctuations.

Review Questions

1. What are securities markets?
2. What are the two types of securities markets? What role does each play in the securities market?
3. What are organized stock exchanges? What are the two main organized stock exchanges?
4. What is a stockbroker? Investment advisor? In what three ways are they usually paid?
5. What are the five questions you should ask before hiring a financial advisor?

Case Studies

Case Study 1

Data
After studying the fundamental trends in CHKP Company’s annual report and doing a lot of research, Steve decided to purchase one round lot of the firm’s stock on the open market. On Monday morning he calls a stockbroker and asks for the price of CHKP stock. The broker indicates that CHKP is bidding at $45.12, with an asking price of $45.19.

Calculations
A. Assuming Steve wants to place a market order to purchase shares, how much will he most likely pay (assume there are no major moves in the stock price)?

B. What are the advantages and disadvantages of a limit order versus a market order?

Case Study 1 Answers

A. The asking price of CHKP, $45.19, is the amount Steve would most likely have to pay for each share of CHKP stock. So, assuming he purchased a round lot (100 shares), Steve would pay $45.19 x 100 = $4,519 (assuming there were no commissions).
B. The advantage of a limit order is that it is not executed unless the stock reaches the specified price or better. The disadvantage is that it may not be executed if the market rises.

Case Study 2

Data
Steve’s purchase of 100 shares of CHKP has been a good investment. Yesterday the stock closed at $53.75 per share. In order to lock in his gains, Steve decides to employ a stop-loss order.

Application
A. Assuming Steve sets the stop-loss order at $53, what is likely to happen?

B. At what price would you recommend setting the stop-loss order? Why?

Case Study 2 Answers

A. Because the stop-loss order price of $53 is set so closely to the recent close of $53.75, it is likely the stock will be sold when it fluctuates around its closing price. When stop-loss orders are set too close to the market price, the chance of the price declining results in too much trading. This generates high commission costs and taxes for the seller. Steve should hold for the long term and put his stop-loss orders farther away from the current price.

B. Steve should set his stop-loss order to safeguard against a major fluctuation, not a minor fluctuation. A stop-loss price of $49 or $50 would be more appropriate; this price is 7 to 10 percent below the current market price.

1 (Main ideas for this section were from Jason Payne, Payne Financial Management, Orem, UT; and Bill Bachrach; *Values Based Financial Planning*; Aim High Publishing; San Diego, CA, 2000).
20. Investments 4: Understanding Bond Basics

Introduction

The purpose of an investment portfolio is to help individuals and families meet their financial goals. These goals differ from person to person and change over time. For example, a student who recently graduated will have different goals than an executive who is near retirement.

In the previous chapter, you learned about stocks and how they fit into an investment portfolio. Some investors find that they need a portfolio that provides more immediate income and greater safety than a portfolio composed mainly of stocks and stock mutual funds can provide. One way to accommodate these needs for increased income and safety is to add bonds to a portfolio. This chapter will discuss some basic, helpful information about bonds.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Explain the risks and returns associated with bonds
2. Understand bond terminology
3. Describe the major bond categories
4. Explain how bonds are valued
5. Explain the costs of investing in bonds

Explain the Risks and Returns Associated with Bonds

Bonds are a form of debt, and they are generally issued for longer than one year. Bonds are sold by national and local governments, municipalities, companies, and other institutions. When you buy a bond, you are lending money to the institution that is selling the bond. The seller of the bond agrees to repay the principal amount of the loan when the bond reaches maturity. For interest-bearing bonds, the seller also agrees to pay interest periodically, as specified in the loan contract.

Bonds are an important component of most investment portfolios. Bonds reduce the overall risk of a portfolio by introducing diversity. They also produce steady current income—income that investors receive each month. Bonds are relatively safe investments if they are held to maturity because it is possible to calculate exactly how much interest they will earn. Bonds are lower-risk investments than stocks; however, the returns on bonds are lower as well. Bonds are attractive options when the market anticipates lower interest rates. As interest rates drop, the value of existing bonds rises.
Although there are many advantages to investing in bonds, there are also several disadvantages. Bonds are less liquid than other types of assets: an investor may not be able to find a buyer or seller for a bond. Another disadvantage is that bonds are often sold in large amounts—amounts that are larger than most investors can afford to invest. Bonds may also be “called,” which means that the issuing company may force you to redeem your bond before you had planned to redeem it. This generally happens when current market interest rates are lower than market interest rates were when the company issued the bonds. The company will call the bonds and reissue new bonds at lower rates, which will save the company money on interest. Additionally, it may be difficult to find a good investment outlet for the interest yielded from your bonds, particularly if interest rates are declining.

**Bonds and Risk: All Risk Is Not Equal**

Bonds are susceptible to a number of risks, including the following:

**Interest-rate risk:** Interest rates may rise or fall at any time, resulting in a decline or increase in a bond’s value. Rising interest rates require that future cash flows have a higher rate of return. Since future cash flows are fixed in bonds, the principal value of the bond must be decreased to compensate for a higher required return.

**Inflation risk:** A rise or decline in inflation may result in an increase or decrease in the value of a bond. For most bonds, a higher rate of inflation results in a less valuable bond. The inverse of this situation is also true.

**Company risk:** The bond price may rise or decline because of problems with the company that is offering the bond. The better the future prospects for a company, the lower the required rate of return by investors and the higher the present value of a bond. The inverse of this situation is also true.

**Financial risk:** Whether or not a company is viewed as a financial risk has the potential to affect the performance of the company’s bonds. Companies whose cash flows are sufficient to meet their financial obligations are considered less risky and can usually borrow money at lower rates of interest; hence, these companies may have lower interest costs and likely higher earnings. The inverse is also true.

**Liquidity risk:** Investors take the risk that they may not be able to find a buyer or seller for a bond when they need one. Sometimes liquidity is related to current market conditions as well as the company’s financial statements.

**Political or regulatory risk:** Unanticipated changes in the tax or legal environment may have an impact on a company. Since taxes and the legal environment affect the outlook for a company, any regulatory changes that improve a company’s long-term prospects will generally result in a higher price for that company’s bonds. The inverse situation is also true.
Exchange-rate risk: Changes in exchange rates may affect profitability for international companies. As exchange rates strengthen, the cost of domestically produced goods that are sold overseas increases. The inverse is also true.

Understand Bond Terminology

To understand bonds, you must first understand the language of bonds. Below is a list of important bond terminology.

Bond Basics

Holder: The investor who owns the bond.

Issuer: The corporation or government agency that issues the bond.

Price: The price for which the bond could be sold.

Indenture: A document that outlines the terms of the loan agreement.

Par value: The face value of the bond, or the amount returned to the bond holder when the bond reaches maturity.

Coupon interest rate (interest rate): The percentage of the par value that is paid to the bond holder annually in the form of interest.

Call provision: A provision that allows the issuer to repurchase a bond before its maturity date. The price at which the bond may be repurchased is set in the indenture.

Deferred calls: A specification stating that call provisions cannot be exercised for a number of years. Deferred calls provide protection for the holder of the bond.

Redemption: The process of cashing in a bond.

Sinking fund: Money that is set aside annually by the issuer to pay off the issuer’s bonds when they reach maturity.

Current yield: The total annual interest payment on a bond divided by the bond’s current or market price.

Debt obligation: A term that is interchangeable with the term “bond.”

Bond Maturity

Maturity date: The date on which the bond expires and the issuer must pay back the loan.
Short-term bond: A bond that matures in one year or less.

Intermediate-term bond: A bond that matures in 2 to 10 years.

Long-term bond: A bond that matures in 10 or more years.

Types of Bonds

Asset-backed bond: A bond from an issuer whose bonds are backed or collateralized by loans, leases, personal property, or receivables, but not real estate.

Bearer bond: A bond with an attached coupon that allows the bearer to claim interest payments upon surrender of the coupon.

Book-entry bond: A bond that is registered and stored electronically (similar to stocks).

Collateralized mortgage obligations (CMO): More complex, specialized versions of mortgage-backed bonds.

Debenture: A bond that is backed by the credit of the issuer and has no specific security or collateral.

Discount bond: A bond that is sold at less than its principal value or at a discount to its par value.

Junk bond (high-yield bond): A bond with a very low (or risky) bond rating, a higher interest rate, and a higher default rate. Junk bonds are almost always callable.

Mortgage-backed bond: A bond that is backed by a pool (portfolio) of mortgages that are carried by the issuer.

Zero-coupon bond: A discount bond that does not allow for a coupon payment and pays no interest until maturity.

Bonds with Conditions

Callable bond: A bond where the issuer can force the investor to redeem this type of bond before the bond’s maturity date.

Convertible bond: A bond that gives the holder the option of converting the bond into company stock instead of obtaining cash repayment.

Floating-rate bond: A bond in which interest payments fluctuate according to a specific benchmark for interest rates and that varies with short-term interest rates.
Subordinated bond: A bond that will be paid only after the issuer’s other loan obligations have been paid in the event of financial distress.

Bond Ratings

Bond rating: A measure of the default risk associated with a company’s bonds. Ratings are done by a bond-rating company and may range from AAA for the safest bonds to D for the riskiest bonds. In general, the better the bond rating, the lower the interest rate the company will have to pay on its bonds.

Default risk: The risk that a company will be unable to repay a bond.

Bond-rating company: A private-sector company that evaluates the financial condition of a company that issues bonds—factors include the company’s revenues, profits, and debts. Bond-rating companies usually rate only issues of companies and sovereign issuers that offer corporate and municipal bonds.

Downgrade: A situation in which a bond-rating company reduces the bond rating of a particular issue, usually because of a company’s deteriorating financial condition. If a bond rating is downgraded, it is likely that investors who own the company’s bonds will have to reduce the price of their bonds (resulting in a lower return for the holder and a higher yield for the issuer) to make up for the increased risk if the investor wants to sell.

Upgrade: A situation in which a bond-rating company improves the bond rating of a particular bond, usually because of a bond-issuing company’s improving financial condition.

Describe the Major Bond Categories

While there are many different types of bonds, most can be grouped into one of six major categories: corporate bonds, U.S. Treasury debt securities, municipal bonds, agency bonds, international bonds, and U.S. Treasury savings securities. I will address the eight key areas for each of these types of bonds: issuer, par value, taxes, risk and return, ratings, trading, and call provisions.

Corporate Bonds

There are three main types of corporate bonds: secured corporate bonds, unsecured corporate bonds or debentures, and secured debt. Secured corporate bonds are bonds backed by company collateral, a mortgage, or other lien. Unsecured corporate bonds or debentures are bonds not backed by specific collateral, although the holder has the claim of a general creditor. These bonds are more risky; therefore, companies must pay a higher return on these bonds to sell them. Secured debt is debt that has claim on specific assets in the event of a default. The list below summarizes characteristics of corporate bonds:

Issuer: U.S. corporations.
Par value: $1,000 and greater.

Maturity: Varying. Generally, the maturity length on short-term corporate bonds ranges from 1 to 5 years, intermediate-term corporate bonds typically mature after 6 to 10 years, and long-term corporate bonds typically mature after 11 or more years.

Taxes: Corporate bonds offer no tax advantages to the holder and are subject to federal, state, and local taxes.

Risk and return: Riskier than government bonds, but they offer higher returns.

Ratings: Corporate bonds are generally rated by one or both of the major bond-rating companies (Standard & Poor’s and Moody’s).

Trading: May be purchased by brokers, either over the counter (OTC) or through an organized exchange.

Call provision: May be callable.

U.S. Treasury Debt Securities

The U.S. Treasury issues three main types of debt securities: Treasury bills, Treasury notes, and Treasury bonds. Treasury bills are short-term debt obligations; these bonds are issued at a discounted price and may be redeemed at par value upon maturity in 3, 6, or 12 months. Treasury notes are intermediate-term debt obligations that are issued at or near par value; interest is paid semiannually on Treasury notes. Treasury bonds are long-term debt obligations that are issued at or near par value; interest is paid semiannually on Treasury bonds. The list below summarizes characteristics of U.S. Treasury debt securities:

Issuer: The U.S. government.

Par value: Treasury notes are issued in amounts ranging from $1,000 to $5,000, and Treasury bonds are issued in amounts ranging from $10,000 to $1,000,000.

Maturity: Maturity length for U.S. Treasury debt securities ranges from three months (for Treasury bills) to more than 30 years (for Treasury bonds).

Taxes: Exempt from state and local taxes but not federal.

Risk and return: U.S. Treasury debt securities are government securities, so they are considered default-risk-free. However, because the risk on these bonds is lower, the returns are also lower.

Ratings: U.S. Treasury debt securities are issued by the federal government; therefore, they are not rated.
**Trading:** Newly issued bonds are traded at auction at the Federal Reserve. Outstanding bonds are traded by brokers over the counter.

**Call provision:** U.S. Treasury debt securities are generally not callable.

**Municipal Bonds**

There are two major types of municipal bonds ("munis"): revenue bonds and general obligation bonds. Revenue bonds are backed by the revenues of a specific municipal project. General obligation bonds are backed by the taxing power of the issuer. The list below summarizes characteristics of municipal bonds.

**Issuer:** State and local governments.

**Par value:** $5,000 and greater.

**Maturity:** Varying. Generally, short-term municipal bonds mature in 1 to 5 years, intermediate-term municipal bonds mature in 6 to 10 years, and long-term municipal bonds mature in 11 or more years.

**Taxes:** Exempt from federal taxes but not necessarily from state and local taxes. Municipal bonds may be exempt from state and local taxes if the holder lives in the state where the bond was issued.

**Risk and return:** Returns may be higher than those on government bonds to compensate for increased risk, as government bonds are essentially default-free. However, returns are generally lower for municipal bonds than corporate bonds because municipal bonds are exempt from federal taxes.

**Ratings:** Most are rated by bond-rating companies.

**Trading:** Traded through brokers and over the counter.

**Call provision:** Sometimes callable.

**Agency Bonds**

Agency bonds (agencies) are issued by various federal, state, and local agencies that are authorized by Congress to do so. Examples of agencies that are authorized to sell bonds include the Federal National Mortgage Association (FNMA, also called Fannie Mae), the Federal Home Loan Mortgage Corporation (FHLMC, or Freddie Mac), and the Government National Mortgage Association (GNMA, or Ginnie Mae). The list below summarizes the characteristics of agency bonds.
Issuer: Various federal, state, and local agencies. These institutions have all received congressional authorization to sell agency bonds.

Par value: Generally issued in amounts of $25,000 and greater. Agency bonds usually require a higher minimum investment than other types of bonds do.

Maturity: Varying. Generally, short-term agency bonds mature in 1 to 5 years, intermediate-term agency bonds mature in 6 to 10 years, and long-term agency bonds mature in 11 or more years.

Taxes: Agency bonds offered by Ginnie Mae, Fannie Mae, and Freddie Mac are taxable.

Risk and return: Agency bonds are only somewhat more risky than Treasury bonds and consequently pay higher returns.

Ratings: Some agency bonds are rated by bond-rating companies.

Trading: Traded through brokers and over the counter but also directly through banks.

Call provision: Not callable.

International Bonds

There are three types of international bonds: international bonds, Yankee bonds, and Eurobonds. International bonds are issued by international companies and sold in various countries and currencies. Yankee bonds are issued by international companies and sold in the United States in U.S. dollars. Eurobonds are issued by U.S. companies and sold outside of the United States in U.S. dollars. The list below summarizes characteristics of international bonds.

Issuer: U.S. or international corporations.

Par value: $1,000 and greater. The par value may be in different currencies.

Maturity: Varying. Generally, short-term international bonds mature in 1 to 5 years, intermediate-term international bonds mature in 6 to 10 years, and long-term international bonds mature in 11 or more years.

Taxes: Subject to federal, state, and local taxes. Depending on where they are issued, international bonds may also be subject to foreign taxes.

Risk and return: Risk and return varies depending on the type of international bond. International bonds may be more risky than government and corporate bonds, depending on the issuer. However, they typically offer higher returns than those offered by corporate bonds because investors may also be susceptible to exchange rate or currency risk.
Ratings: Bond-rating companies rate both U.S. companies and large international companies.

Trading: International bonds are either traded by brokers over the counter or in an exchange. These bonds may also be traded in domestic bond markets of foreign countries, as well as in the Euromarkets (markets outside the United States where securities are traded in U.S. currency).

Call provision: Sometimes callable.

U.S. Treasury Savings Securities

U.S. Treasury savings securities come in many forms: the most common types are EE bonds and I bonds. EE and I bonds are sold at face value, and interest is paid at maturity. Both securities have variable interest rates. The list below summarizes characteristics of U.S. Treasury savings securities.

Issuer: The U.S. government. These bonds are not marketable (i.e., they cannot be resold to others), but they can be redeemed at local banks.

Par value: Issued in amounts of $25, $50, $100, $1,000, and $10,000. They can be purchased online at www.treasurydirect.gov without transactions costs.

Maturity: U.S. Treasury savings securities that are redeemed within five years usually charge a three-month interest penalty. Investors can hold U.S. Treasury savings securities for up to 30 years.

Taxes: U.S. Treasury savings securities are registered as bearer bonds, which are exempt from state and local taxes. Another benefit of this type of security is that the interest is completely tax-free if it is used to pay for qualified educational expenses. Other taxes are deferred until maturity.

Risk and return: Minimal risk. The return on EE bonds is variable and changes every six months. The return on I bonds is also variable: the rate of return changes every six months to account for a guaranteed return over inflation for six months, as well as a real-return component. The real-return component is a guaranteed return amount over and above the return on inflation.

Ratings: Not rated because they are government securities.

Trading: Cannot be traded. They can be purchased online and can be redeemed at local banks.

Call provision: Not callable.

Explain How Bonds Are Valued

Bonds are valued in a number of ways. Generally, the value of a bond is determined by the present value of the bond’s cash flow, which includes periodic interest payments and the
repayment of principal. Three key factors affect a bond’s price: the par value, the market interest rate and length of maturity, and the investor’s discount rate.

**Par Value**

When a bond is sold for less than its par value, it is being traded at a discount; when a bond is sold for more than its par value, it is being traded at a premium. The terms “premium” and “discount” in this situation refer to the bond’s current market value. For example, suppose the market interest rate is four percent and the coupon interest rate on a bond is six percent. Because this bond pays more interest than the market average, investors will be willing to pay a higher price for this bond; thus, the bond will trade at a premium.

**Market Interest Rate and Maturity**

A bond’s value fluctuates according to changes in the market interest rate. A bond’s coupon interest rate and par value are fixed over the life of the bond. If the market interest rate increases, the value of the bond will decrease because investors will require a higher return on the bond to make up for the fact that coupon payments are lower than the market return rate. Investors will pay less for the bond to make up for the lower expected return. If the market interest rate decreases, the value of the bond will increase.

The price of a bond is also affected by the bond’s maturity length. The longer a bond takes to mature, the greater the impact of fluctuations in the market interest rate.

**Investor’s Required Rate of Return and Price**

The value of a bond is related to the investor’s required rate of return, which is the rate of return an investor requires to hold or invest in a bond. If the investor’s required rate increases, the investor will require a higher rate of return on all cash flows. Since the interest rate on bond coupons is generally fixed, the only way an investor can increase a bond’s cash flow is by paying a lower price for the bond. The less an investor is willing to pay for a bond, the more the value of the bond decreases. The reverse is also true. An investor’s required rate of return can change for many reasons:

**The investor perceives a change in the risk associated with the issuer of the bond.** As perceived risk of an issuer increases, investors require a higher discount rate to invest in the issuer’s bond.

**The investor perceives a change in the general market interest rate.** As the market interest rate increases, investors require a higher discount rate to invest in any bond.

**The investor perceives a change in overall market risk.** As the perceived riskiness of the market increases, investors require a higher discount rate to invest in all asset classes.

Note that the investor’s discount rate will vary from one investor to another.
**Bond Yields**

The bond yield is the total return on a bond investment; it is not the same as the coupon interest rate. The bond yield is affected by the bond price, which may be more or less than par value. The bond yield can be calculated in many ways; however, three common ways to calculate it are the current yield, the yield to maturity, and the equivalent taxable yield.

**Current yield** is the total annual interest payment divided by the bond’s current market price.

**Yield to maturity** is the promised yield the holder receives if the bond is held to maturity; when this yield is calculated, it is assumed that all interest payments can be reinvested at the same interest rate as the coupon rate. Since this calculation involves cash flow, it is best solved with a financial calculator.

**Equivalent taxable yield (ETY)** is the yield you must receive from a taxable security to get the same return you would make on a tax-advantaged security. To solve for the equivalent taxable yield, use the following formula:

\[
ETY = \frac{\text{tax-free yield}}{1 - \text{marginal tax rate}}
\]

Remember, the marginal tax rate is a combination of both state and local taxes. To effectively calculate after-tax returns, you must know the tax benefits of each type of bond (for example, you must know that municipal bonds are free from federal taxes, and Treasury debt securities are free from state and local taxes). For help with calculating after-tax returns and equivalent taxable yields, see Learning Tool 26: After-Tax, Equivalent Taxable Yield, and After-Inflation Returns in the Learning Tools directory of the website.

**Explain the Costs of Investing in Bonds**

There are a number of costs you should be aware of before you invest in bonds. The costs of investing in bonds can be divided into three categories: explicit costs, implicit costs, and hidden costs.

**Explicit Costs**

Explicit costs are the costs you see (or should see) on your brokerage account statement. These costs include commission costs, markup, and custody fees.

All bond trades incur commission costs, which are fees that are paid to the broker who arranged a purchase or trade. Some newly issued bonds may be sold to the investor without commission costs if the issuer absorbs the commission costs; however, most trades incur commission costs. Costs can either be fixed (e.g., $15 per trade) or a percentage of the purchase or sale amount (e.g., 15 basis points, or .15 percent of the trade).
Custody fees (annual fees) are charged by the brokerage house to hold bonds in your account. These fees may be a specific amount for small accounts (e.g., $15 per year). For larger accounts, the custody fee may either be assessed as a specific charge per holding (e.g., 8 basis points per security, or .08 percent) or a percentage of your assets (e.g., 25 basis points per security).

**Implicit Costs**

Implicit costs are those you may not see until months after you sell a security. The most common implicit cost is taxes. It is critical that you account for taxes when you are valuing the true return of your portfolio. Implicit costs such as taxes are not noted on your monthly report, and most investors do not think about them until they have to pay them. Understand taxes before you begin paying them.

The interest you receive from bonds each period is taxed at your ordinary income rate. Interest is an expensive type of income.

The amount of your capital gains is equal to the difference between what you paid for a bond, or the principal, and what you sold the bond for. In other words, capital gains are the difference between what you paid for a bond and the par value of that bond if it is held to maturity. Short-term capital gains are made when you sell bonds you have owned less than one year, and they are taxed at your marginal tax rate. Long-term capital gains are made when you sell bonds you have held for more than one year. Long-term capital gains are taxed at between 0 and 23.8 percent, depending on your income level and how long you have held the bond (see Figure 1).

**Hidden Costs**

In addition to understanding explicit and implicit costs, you should be aware of the hidden costs involved in investing in bonds, including the following:

**Account transfer fees:** Costs for moving assets in or out of an existing account.

**Account maintenance fees:** Fees for maintaining your account.

**Inactivity fees:** Fees for not having any account activity over a certain period of time.

**Minimum balance fees:** Fees for failing to maintain the required minimum balance in your account. Make sure you know what the minimum balance on your account is.

**Interest on margin loans:** Interest charged on money you borrow to buy securities.

**Selling charges (loads):** Commissions paid to a broker for helping you purchase certain securities, mainly load mutual funds.
Suggestions for Investing in Bonds

If you are investing in bonds, it is important you adhere to the following investment principles:

Figure 1. Tax Changes in 2013

Summary

Some investors find that they need a portfolio that provides more current income and greater safety than a portfolio composed mainly of stocks and stock mutual funds can provide. One way to accommodate these needs for increased income and safety is to add bonds to a portfolio.

Bonds are a form of debt, and they are generally issued for periods of time longer than one year. When you buy a bond, you are lending money to the institution that is selling the bond. The seller of the bond agrees to repay the principal amount of the loan when the bond reaches maturity. For interest-bearing bonds, the seller also agrees to pay interest periodically, as specified in the loan contract.

Bonds are an important component of most investment portfolios. Bonds reduce the overall risk of a portfolio by introducing diversity. They produce steady current income—income that investors receive each month. This steady stream is important to some investors, depending on their current needs. Bonds are lower-risk investments than stocks; however, the returns on bonds are lower as well. Bonds are attractive options when the market offers low interest rates. As interest rates drop, bond values rise.

While there are many different types of bonds, most bonds can be grouped into one of six major categories: corporate bonds, U.S. Treasury debt securities, municipal bonds, agency bonds, international bonds, and U.S. Treasury savings securities.

Bonds are valued in a number of ways. Generally, the value of a bond is determined by the price an investor is willing to pay for the bond. Three key factors affect a bond’s price: the par value, the market interest rate and length of maturity, and the investor’s discount rate.

Assignments

Financial Plan Assignments

Your assignment is to review the history of both short-term and long-term bonds over the past 5, 10, 25, 50, and 75 years. How have bonds performed overall? What do bonds add to a portfolio? What disadvantages do bonds have? How can you minimize the disadvantages of bonds, while at the same time enjoying the advantages bonds offer?

Benchmarks: What are the major benchmarks or indexes that correspond with bonds? (See Learning Tool 15: Possible Benchmarks for Investment Plans). It is likely you will include
bonds in your diversified portfolio, so it is important you select the major benchmarks you will follow to help you understand how bonds perform.

**Volatility:** Generally, investors consider bonds less risky than stocks. To graphically see the volatility of bonds versus other asset classes, open **Learning Tool 23: Return Simulation for Asset Classes.** Go to the Asset Class Data tab and use the light-blue drop-down boxes to select your asset classes (or you can just use the asset classes listed). Use the dark-blue drop-down boxes to select your time period. Then go to the Charts tab. Push the F9 button to see the impact of standard deviation.

This worksheet builds random portfolios with the expected return and standard deviation of the period and asset class chosen. It then assumes that each asset class builds 10 different portfolios and that those portfolios are run for 20 years. The differences between the 10 different portfolios are shown in the same colored lines. The more the lines move together, i.e., the more each of the random portfolios move together, the less risky or less volatile the asset class. The more the same colored lines diverge, the more risk or more volatile the asset class.

**Returns:** To see what the returns have been for various types of bonds, go to **Learning Tool 27: Expected Return Simulation and Benchmarks.** Go to the tab labeled Returns and Risk. Look for the 1-, 5-, 10-, 25-, 50-, 75- and 85-year returns for Treasury bonds (long-term government bonds with maturity of more than 10 years) and Treasury bills (short-term government bonds with maturities less than one year). How have these assets performed compared to equity or stock returns?

**Learning Tools**
The following Learning Tools may be helpful as you prepare your Personal Investment Plan:

15. **Possible Benchmarks for Investment Plans**
   This document shows possible benchmarks for most of the major asset classes.

24. **Return Simulation for Asset Classes**
   This spreadsheet shows the impact of various investment strategies and the volatility for different asset classes. This spreadsheet will also show you the historical impact of different asset allocation decisions for several asset classes.

26. **After-Tax, Equivalent Taxable Yield, and After-Inflation Returns**
   This spreadsheet calculates the after-tax return, equivalent taxable yield, and after-inflation return on various assets.

27. **Expected Return Simulation and Benchmarks**
This spreadsheet shows a historical perspective on returns and standard deviation (risk) for the major asset classes over the last 1, 5, 10, 25, 50, 75, and 85 years. The spreadsheet also includes recommended benchmarks for some of the major asset classes.

**Review Materials**

**Terminology Review**

**Account maintenance fees.** These are fees for maintaining your account.

**Account Transfer Fees.** These are charges for moving assets either into our out of an existing account.

**Agency bonds.** Bonds issued by government agencies which were authorized by Congress including the Federal National Mortgage Association (FNMA), Federal Home Loan Banks (FHLB), and Government National Mortgage Association (GNMA).

**Asset backed bonds.** Bonds backed by specific holdings of the issuing company, such as equipment or real estate.

**Baby bonds.** A bond with a par value of less than $1,000.

**Bearer bonds.** Bonds with coupons attach that pay interest only to the bearer upon surrender of the coupons.

**Bond rating companies.** A private sector company that evaluates the financial condition of the bond issuing company, its revenues, profits, debt, and other critical areas, and gives the company a rating which indicates the relative safety of the bond. They only rate corporate and municipal bonds. They include: Standard & Poor’s, Moody’s, and Fitch’s.

**Bond ratings.** Bond ratings are measures of the riskiness of a company. Ratings run from “AAA” (Standard & Poor’s) or “aaa” (Moody’s) for the safest to “D” for the extremely risky. Ratings categorize bonds by default risk, the risk of the company being unable to repay the bond.

**Book-entry bonds.** Bonds which are registered and stored electronically, similar to stock purchases.

**Business risk.** Risk that the bond’s value will decline due to problems with the company’s business.
Call provision. A provision that allows the issuer to repurchase the bonds before the maturity date. Deferred calls provide more protection.

Callable bonds. Bonds which can be called, i.e. redeemed, before maturity at the option of the issuer.

Capital Gains. This is the difference between what you paid for the bond and what you sold it for, or the par value if you held the bond to maturity.

Collateralized mortgage obligations (CMOS). More complex and specialized versions of mortgage backed bonds.

Commission costs. These are the cost associated with trading of bonds. While all bond trades incur commission costs, some newly issued bonds are sold without commission cost as the issuer absorbs the costs. Most trades however, incur commission costs, which are paid to the broker who arranged the trade.

Convertible bond. Bond which gives the holder the right to convert the bond to company stock instead of getting the cash repayment.

Corporate Bonds. Bonds secured corporate debts by collateral or real property liens.

Coupon interest rate (or interest rate). The percentage of the par or face value that will be paid annually to the holder in the form of interest.

Current Yield. It is the ratio of annual interest payments to the bond’s market price.

Custody (or annual) fees. These are fees the brokerage house charges to hold the bonds in your account. May be a minimum amount for small accounts ($15 per year), a specific charge per holding (8 basis points per security), or a percentage of assets for large accounts (25 basis points on assets under management)

Debenture. A long-term unsecured bond. It can have a hierarchy of payment, with unsubordinated and subordinated debentures. These are bonds backed by the credit of the issuing company.

Discount bonds. A bond that is sold at a discount to its par value. Generally, upon maturity the accrued interest and original investment add to the bond’s par value.

Downgrade. A situation where a bond rating company reduces the bond rating of a bond generally due to a deterioration in the company’s financial condition.

Equivalent taxable yield (ETY). This is the yield that must be offered on a taxable bond to give the same after-tax yield on a tax-exempt bond.
**Euro Bonds.** Bonds issued by U.S. companies and sold outside of the U.S. in U.S. dollars.

**Exchange rate risk.** Risk that changes in exchange rates will impact profitability for firms working internationally.

**Financial risk.** How the firm raises money could affect the financial performance of the firm and the value of the bonds.

**Floating rate bond.** Bond whose interest payments fluctuate according to a specific benchmark interest rate.

**General Obligation bonds.** Bonds backed by the taxing power of the issuer.

**Inactivity/Minimum balance fees.** These are fees imposed because you did not trade or have account activity during the period or because you failed to keep a minimum balance in your account.

**Indenture.** A document that outlines the terms of the loan agreement.

**Inflation risk.** Risk that a rise (decline) in inflation will result in a decrease (increase) in the bond’s value.

**Interest rate risk.** Risk that a rise (fall) in interest rates will result in a decline (rise) in the bond’s value.

**Interest.** Interest is the coupon payment received each period. These are taxed at your marginal tax (MTR).

**Intermediate-term bonds.** Bonds with a maturity of 2 to 10 years.

**International Bonds.** Bonds issued by international companies and sold internationally in various currencies.

**Issuer.** The corporation or government agency that issues the bond.

**Junk Bonds.** Bonds with very low bond ratings, a higher interest rate and default rate, and are almost always callable.

**Liquidity risk.** Risk that investors will be unable to find a buyer or seller for a bond when they need to sell or buy.

**Long-term bonds.** Bonds with a maturity of greater than 10 years.
**Long-term Capital Gains.** These are gains made in selling bonds held for more than 1 year. These are taxed at 5-15% depending on how long you have held the assets and your marginal tax rate.

**Markup.** This is the difference between the buying price and the calculated selling price.

**Maturity date.** The date when the bond expires and the loan must be paid back.

**Mortgage-backed bonds.** Bonds backed up by a pool of mortgages.

**Par value.** The face value or amount returned to the holder of the bond at maturity.

**Political or regulatory risk.** Unanticipated changes in the tax or legal environment will have an impact on a company’s bonds.

**Price.** The price that the bond sells for.

**Redemption.** The process of redeeming a callable bond before its maturity date.

**Revenue bonds.** Bonds backed by the revenues of a specific project.

**Risk of Downgrading.** Should a bond’s rating be downgraded, the seller would need to reduce the price of the bond (resulting in a lower yield to the seller and a higher yield to the buyer) to make up for the increased risk.

**Short-term bonds.** Bonds with maturity usually a year or less.

**Short-term capital gains.** These are gains made in selling bonds owned less than 1 year. They are taxed at your MTR.

**Sinking fund.** Money set aside annually to pay off the bonds at maturity.

**Subordinated bond.** Bond that will be paid after the other loan obligations of the issuer are paid.

**Taxes.** Taxes must be taken into account to get the true return of your portfolio but which are not noted on your monthly reports.

**Term or Bond Maturity.** The maturity of the bond.

**Treasury Bills.** A short-term debt obligation issued at a discount and redeemed at face value upon maturity in 3, 6, or 12 months.

**Treasury Bonds.** A long-term debt obligation issued at or near par and interest is paid semiannually.
**Treasury Notes.** An intermediate-term debt obligation issued at or near par and interest paid semiannually.

**Unsecured corporate debts.** Bonds not secured by collateral, and pay a higher return.

**Upgrade.** A situation where a bond rating company improves the bond rating of a bond due generally to an improving financial condition.

**US Savings EE Bonds.** Savings bonds issued by the US government that pay a fixed rate of interest with interest reset every 6 months.

**US Savings I bonds.** Bonds issued by the U.S. government, and tax deferred until maturity. They are not marketable, but can be redeemed from local banks. Bonds sold at face value, with interest paid at maturity, with the interest rate set to inflation with a fixed component.

**Yankee Bonds.** Bonds issued by international companies and sold in the U.S. in U.S. dollars.

**Yield to Maturity.** This is the true yield received if the bond is held to maturity, which assumes that all interest payments can be reinvested at the same rate as the bond itself.

**Yield.** The annual interest on a bond divided by its price.

**Zero-coupon bonds.** A discount bond which pays no interest until maturity.

**Review Questions**

1. How do bonds reduce the overall risk of a portfolio?
2. What seven risks are bonds susceptible to?
3. What is a bond rating? What does a high rating mean? What is Standard & Poor’s highest bond rating? Lowest bond rating?
4. What are the six major categories of bonds?
5. How are bond values determined? What three things affect bond prices?

**Case Studies**

**Case Study 1**

**Data**

Bill is considering purchasing a bond with a 5 percent coupon interest rate, a par value of $1,000, and a market price of $990. The bond will mature in nine years.

**Calculations**
A. What is the bond’s current yield?
B. Calculate the bond’s yield to maturity using your financial calculator.

Case Study 1 Answer

A. The bond’s current yield is the annual interest payments divided by the market price. The annual interest payments are the coupon interest multiplied by the par value—0.05 * 1,000, or $50. The price of the bond is $990, so the yield is $50 / $990, or 5.05%.

B. To calculate the yield to maturity, first clear the memories of the calculator and set it to annual payments. Set your present value as negative, what you would pay for the bond (PV = –990), your interest payments as your payment (PMT = 50), your future value as your par value (FV = 1,000), and your number of years as nine (N = 9). Then solve for your interest rate (I = 5.14%).

Note: Since Bill paid less for the bond than par, and his coupon interest rate was 5 percent, this would increase his YTM above your coupon interest rate.

Case Study 2

Data

Three friends—Kimberly, Natalie, and Clinton—are from Nevada, where there is no state income tax. They have asked you to determine the equivalent taxable yield on a municipal bond. This municipal bond is from the same state as your friends and is exempt from state and local taxes for interest. The bond’s coupon yield is 3.75 percent with five years left until maturity, and it is selling at par. Kim is in the 15 percent tax bracket, Natalie is in the 28 percent tax bracket, and Clinton is in the 35 percent tax bracket. Calculate the equivalent taxable yield for your three friends.

Calculations

Assuming a similar AAA corporate bond yields 5.0 percent, which of your friends should purchase the municipal bond?

Case Study 2 Answers

Kimberly is in the 15% federal marginal tax bracket, so the equivalent taxable yield is 4.41%, or 3.75% / (1 – .15). 
Natalie is in the 28% federal marginal tax bracket, so the equivalent taxable yield is 5.21%, or 3.75% / (1 – .28). 
Clinton is in the 35% federal marginal tax bracket, so the equivalent taxable yield is 5.77%, or 3.75% / (1 – .35). 
Assuming a corporate bond yields 5.0%, only Kimberly should purchase the corporate bond.
Case Study 3

Data
You paid $1,000 for a Boston Scientific bond at the end of the previous year. At the end of last year, the bond was worth $1,050. You are in the 25 percent federal marginal tax rate, and you live in a state that has no state income tax. Over the course of last year, you received $40 in coupon interest payments.

Calculations
A. What was your before-tax return for the bond?
B. What is your after-tax return, assuming you did not sell the bond?

Case Study 3 Answers

Calculations
A. You only pay taxes on realized income, not unrealized income. Your before-tax return is:
\[
\frac{1,050 - 1,000 + 40}{1,000}, \text{ or } 9.0\% 
\]
B. Your after-tax return would include the unrealized capital gains and the interest after you paid taxes. Since this is interest income, it is taxed at your marginal tax rate of 25% (there is no state tax). The after-tax return is:
\[
\frac{1,050 - 1,000 + [40 \times (1 - .25)]}{1,000} = 8.0\%. 
\]
Of the $40 coupon, you pay $10 in taxes and keep the remaining amount.

21. Investments 5: Understanding Stock (or Equity) Basics

Introduction

Of all the major asset classes, stocks (or equities) have consistently delivered the highest return over the longest period of time. It is critical for you to understand basic information about stocks if you want to achieve better returns than those yielded by long-term bonds and cash. This chapter will give you a basic understanding of how and why stocks perform the way they do. This chapter will also help you understand why you should consider stocks or stock mutual funds when building your portfolio.

Before I begin the discussion of stocks, I would like to reiterate three important principles of successful investing discussed earlier.

First, stay diversified. Diversification is your best defense against risk. When investing in stocks, do not invest in individual stocks but in portfolios of stocks. Investing is risky and uncertain; minimize risk by diversifying your stock holdings immediately by investing in index funds, ETFs, or diversified mutual funds.

Second, use caution if you are investing in individual assets. The fastest way to get rich or poor (depending on your luck) is investing in individual stocks. If you must invest in individual assets, know what you are investing in. Do your homework. Spend time learning about the company, its financial statements, its management, its short- and long-term strategy, its domestic and global industry, and its competition. Note that I emphasize that this chapter on stock basics is not sufficient background information to enable you to invest wisely in individual equity assets. I strongly recommend that you invest in index or mutual funds that hold hundreds of individual assets instead of investing in individual stocks.

Finally, do not waste too much time and energy trying to beat the market. It is very difficult, expensive, and time-consuming to beat the market (to gain returns in excess of the returns on the major asset classes). While it may be possible to beat the market on a short-term basis, it is very difficult to consistently beat the market on a long-term basis.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Review risk and return for stocks
2. Understand stock terminology
3. Understand how stocks are valued
4. Know why stocks fluctuate in value
5. Know stock-investing strategies
Chapter 21. Investments 5: Stock (or Equity) Basics

6. Calculate the costs of investing in stocks

**Review Risk and Return for Stocks**

**Why Include Stocks in Your Portfolio?**

Stocks, or equities, are an important part of most investors’ portfolios. As an asset class (not as individual stocks), common stocks have a history of delivering strong, long-term capital gains, making stocks the best and most tax-efficient type of investment return. In addition, dividends on stocks are currently taxed at a much lower rate than interest on bonds, so earnings from stocks are a viable alternative to earnings from bonds.

Investing in individual stocks can be risky. Stocks are susceptible to changes in the domestic and world economy as well as changes in the company and political environment. The growth of a stock or equity investment is susceptible to a number of risks; therefore, a stock’s growth is not solely determined by interest rates alone. Investing in a diversified portfolio can reduce the overall risk of your portfolio.

**Stocks and Risk: All Risk Is Not Equal**

Stocks are susceptible to a number of risks, including the following:

**Interest-rate risk:** Interest rates may rise or fall at any time, resulting in a decline or increase in a stock’s value. Rising interest rates lower the present value of a stock.

**Inflation risk:** A rise or decline in inflation may result in an increase or decrease in the value of a stock. For most stocks, a higher rate of inflation results in a lower value of a stock. The inverse of this situation is also true.

**Company risk:** The share price may rise or decline because of problems with the company. The better the future prospects for a company, the higher the present value of the stock. The inverse of this situation is also true.

**Financial risk:** Whether or not a company is viewed as a financial risk has the potential to affect the performance of the company’s stock. Companies that are less risky or have better prospects can usually borrow money at lower rates of interest; hence, these companies have lower expenses and higher earnings, which will cause an increase in their stock price. The inverse of this situation is also true.

**Liquidity risk:** Investors take the risk that they may be unable to find a buyer or seller for a stock when they need one. Often, liquidity is more closely related to market conditions than company conditions.

**Political or regulatory risk:** Unanticipated changes in the tax or legal environment may have an impact on a company. Since taxes and the legal environment affect the outlook of a company,
any regulatory changes that improve a company’s long-term prospects will generally result in a higher price for that company’s stock. The inverse situation is also true.

**Exchange-rate risk:** Changes in exchange rates may affect profitability for international companies. As exchange rates strengthen, the cost of domestically produced goods increases when these goods are sold overseas, which causes an increase in the stock price. The inverse situation is also true.

**Market risk:** Overall market movement may affect the price of a company’s stock. Investors often monitor the way a stock responds to movement in the market. A measure of how sensitive a stock is to movements in the market is called “beta” (\( \beta \)). A stock with a beta of one moves very closely with the market. A stock with a beta that is greater than one will be more volatile than the market. A stock with a beta of less than one will be less volatile than the market. Betas can help investors determine a stock’s market risk.

As you are building and monitoring your portfolio, you should track the beta of your portfolio, or the weighted beta of each of the individual stocks or mutual funds in your portfolio. This will tell you how risky your overall portfolio is in comparison to the market.

A diversified portfolio moves with the market: one company’s successes or failures cannot affect it as much. Remember the fourth principle of good investing: stay diversified. Do not invest solely in individual stocks—invest in a broad range of financial assets. Do not invest solely in large-cap stocks either; broaden and deepen your portfolio to include international, small-cap, and other asset classes.

Beware of using leverage. Using leverage is the process of increasing your purchasing power by borrowing money to invest in financial assets. Leverage increases risk: it magnifies capital gains and losses because the rate of return on the loan is fixed, while the rate of return on the investment is not. Do not use leverage to invest.

**Understand Stock Terminology**

There are a number of important terms you should understand before you begin working with stocks:

**Common stock** is an ownership share of a company. The company initially sells common stock through an initial public offering, or IPO. The stock is then traded among investors in secondary markets. Owners of common stock take more risk than owners of other types of stock, but they also receive a greater reward if the company performs well.

**Preferred stock** is also an ownership share of a company. However, this type of stock differs from common stock in that the dividend is paid before dividends on common stock are paid to shareholders. However, if the company’s profits increase, the dividend is not increased accordingly, so return is limited.
Classes of stock: Some companies have multiple classes of stock, usually called Class A, B, etc. These multiple classes of stock usually give certain advantages to the Class A shares, such as increased voting power. Companies may also have different dividend policies for different classes of stock.

Shareholders (stockholders) are investors who own shares, or equity, in a company. When you purchase shares of stock from a company, either individually or through a mutual fund, you become a partial owner in that company.

Voting rights: Shareholders have the right to vote on major policy issues. Usually, a shareholder is given one vote for each share of common stock he or she owns. However, some companies issue different classes of shares, and some classes have extra voting rights. Generally, shareholders vote by proxy, a practice similar to voting with an absentee ballot.

Book value per share is the value of each share of the company’s stock after the company’s liabilities have been subtracted from the company’s assets. To find the book value per share, subtract the company’s liabilities from the company’s assets to find the company owner’s equity (as seen on a balance sheet); then divide this amount by the weighted average number of shares that are outstanding. The book value per share is based on the value of the company’s assets at their purchase cost, minus depreciation, or the amount the asset has decreased in value since it was purchased. This value is based on the tax code and not on the actual loss in value of the assets. In other words, it is the value of the company’s assets at cost minus their depreciated amount.

Earnings per share refers to the level of earnings of each share of stock—not necessarily the amount that will be paid out as dividends. Earnings per share equals the net income minus preferred stock dividends divided by the weighted average number of common shares outstanding.

Dividend yield refers to the annual yield of dividends per share divided by the current market price. The dividend yield indicates the amount of return on the current share price. Dividend yield is only one way investors receive a return on their investment.

Stock splits are when the firm issues new shares of stock, which in turn, lowers the current market price. For example, assume you have 10 shares of stock priced at $100 per share ($1,000 total). If the stock splits two-for-one, you would then have 20 shares. The price of the stock would most likely decline from $100 per share to $50 per share ($100 divided by 2). You would still have the same total value of $1,000, but the price for each share would now be $50 per share instead of $100 per share, and you would now have 20 shares instead of 10 shares. While a stock split has no impact on a company’s value, it may be a positive indicator of the company’s prospects.

Reverse splits reduce the number of shares outstanding and raise the stock’s price. A reverse split is the opposite of a stock split.
Stock repurchases are when companies buy back their own shares. This is generally positive for the investor because each time a company repurchases stock, the investor owns a larger proportion of the company. In addition, a stock repurchase signals to the market that the company considers their shares undervalued.

Classification of Common Stocks

There are a number of different classifications for stocks. You should recognize that these classifications are temporary and may differ from investor to investor and from one time period to another.

Blue-chip stocks are the stocks of the largest and best-managed companies. There is not a specific list of blue-chip stocks, and the stocks that are considered “blue chips” change from year to year. The phrase “blue chip” relates to poker, where the blue chips are the highest value of chip.

Growth stocks are the stocks of companies that are growing faster than average; these companies generally reinvest dividends. These companies also generally have higher price-earnings ratios and higher price-to-book ratios than the market as a whole.

Value stocks are less expensive, compared to the overall market. The companies that are value stocks generally have lower price-earnings ratios and lower price-to-book ratios than the market as a whole.

Income stocks are the stocks of companies that pay dividends on a regular basis.

Cyclical stocks are the stocks of companies whose share prices move up and down parallel to the state of the economy.

Defensive stocks are the stocks of companies whose share prices move opposite to the state of the economy.

Making Money in Stocks

Investors make money on stocks in two ways: dividends and capital gains.

Dividends are payments companies make to shareholders with part of the companies’ profits. Different types of companies have different dividend policies, and these policies can change from year to year.

Capital gains: Investors purchase shares in companies with the expectation that the price of the shares will increase. This increase in share value is known as a capital gain. Because of lower tax rates for long-term capital gains, capital gains are the preferred type of earnings for companies and individuals. The following are descriptions of the different types of capital gains:
Realized capital gains are gains that are realized when shares of an asset are sold.

Unrealized capital gains are known as “paper gains” because the asset has yet to be sold, and the gains have not yet been realized.

Short-term capital gains are gains that apply when stock is owned less than one year. These gains are taxed as ordinary income.

Long-term capital gains are gains where the investor has held the financial asset longer than 366 days. Making the distinction between short-term and long-term capital gains is important because gains made on shares owned longer than one year and sold are taxed at a preferential (lower) federal tax rate than gains made on shares owned less than one year and sold.

**Understand How Stocks Are Valued**

The goal of stock valuation is to determine the intrinsic value of a company (in other words, the company’s fundamental economic value). If the market price of the company’s stock is greater than the company’s intrinsic value, the investor should sell the stock. If the market price of the company’s stock is less than the company’s intrinsic value, the investor should buy the stock.

Determining a company’s intrinsic value is one of the most challenging responsibilities an investor has. Determining this value is accomplished using various tools, including dividend discount models, fundamental analysis, cash-flow analysis, and technical analysis. Proper stock valuation is a difficult, time-consuming, and challenging activity—it is not something that can be done in a few minutes or that can be calculated using a program that can be purchased on the Internet. The purpose of this chapter is to familiarize you with some terminology that will help you understand stock valuation—not to give you the tools to value stocks. Teaching proper valuation of stocks is beyond the scope of this course.

**Dividend discount models** regard the value of a stock as the present value of all future dividends that will be earned while holding that stock; these dividends are discounted at the company’s required rate of return, or discount rate. The value of a company’s common stock is found by dividing the dividend you expect to have in the future by the current required rate of return you require for holding this stock, or discount rate \( k \), minus the stock’s long-term growth rate \( g \).

\[
\text{Value of common stock} = \frac{D_1}{k - g}
\]

The letter \( g \) represents how fast you expect dividends to grow over the next 50 years—the long-term growth rate. It is very difficult to determine the exact value of a company’s stock using this method because it is impossible to accurately project either the dollar amount of future dividends or the growth rate. However, this model may still be helpful in your stock analysis.
Fundamental analysis assumes that the value of the stock can be determined by the future earnings of the company. Analysts spend a great deal of time investigating the company, the industry, the global industry, and the global economy to determine the intrinsic value of the company and gather the necessary information for fundamental analysis. Fundamental analysis has been found to be a valuable tool for stock valuation, particularly when analysts are able to forecast earnings that are significantly different than the market consensus.

Cash-flow analysis assumes that the value of the company is measured by the discounted value of the free cash flows to all shareholders, including equity shareholders. Free cash flows are defined as cash flows in excess of cash flows required for operations and investment. To value a stock based on cash-flow analysis, investors build cash-flow models that forecast expected cash flows to all shareholders and to the company as a whole. While cash-flow analysis is helpful in determining intrinsic value, the value of the company often lies in areas that are difficult to quantify in terms of assets, such as video libraries for entertainment companies or patents for medical companies.

Technical analysis assumes that supply and demand are the key factors necessary to understand stock prices and markets. Technical analysis focuses on the psychological factors that determine a company’s value, such as greed and fear, as well as the economic factors that determine a company’s value. Major research studies have found that this type of analysis is not as reliable in predicting stock prices.

In addition to the methods discussed above, a few key ratios are often used to value stocks:

Price-earnings ratio (PE) is the market price of the stock divided by the earnings per share, or the amount you are paying for one dollar of earnings. The PE ratio is one of the most widely used ratios and compares the financial performance of different companies, industries, and markets. It is most useful when comparing a company’s current PE ratio to a company’s historical PE ratio (i.e., today’s PE ratio compared to the PE ratio for each of the past 10 years), the industry PE ratio (i.e., a weighted average of all the PE ratios of companies within an industry), or the market PE ratio (i.e., a weighted average of all the PE ratios of companies within an market). The company’s forecasted PE ratio, or the PE ratio for the upcoming year, is generally considered to be more important than the company’s historical, or accounting, PE ratio.

Price-to-book ratio (PB) is the price of the company’s stock divided by the company’s book value per share, or the amount you are paying for one dollar’s worth of assets, as shown on the balance sheet. The PB ratio does not consider the actual value of the assets, only the non-depreciated portion of the assets; there can often be a major discrepancy between the actual value of the assets and the book value of the assets.

Return on equity (ROE) is the company’s earnings per share divided by the company’s book values per share, or a measure of how well the company is utilizing its assets to make money. Generally, the higher this ratio, the better the company is utilizing its resources. Understanding
the trend of ROE is important because it indicates whether or not the company is improving its financial position.

**Dividend payout ratio** shows the dividends paid by the company divided by the earnings of the company. The dividend payout ratio can also be calculated as dividends per share divided by earnings per share. A high dividend payout ratio indicates that the company is returning a large percentage of company profits back to the shareholders. A low dividend payout ratio indicates that the company is retaining most of its profits for internal growth. The dividend payout ratio will be different for different types of companies.

**Know Why Stocks Fluctuate in Value**

There are many different reasons why stocks fluctuate in value. The most common reasons for fluctuations include changes in interest rates; the perceived risk of the company; company earnings, dividends, and cash flow; supply and demand; and investor sentiment in the market.

**Interest rates:** Investors require a certain expected return, or discount rate, to invest in stocks; this discount rate is greatly influenced by the interest rate. As interest rates decrease, shareholders’ discount rates also decrease; future earnings are therefore discounted at a lower rate, which results in a higher value of the company. As interest rates increase, shareholders require a higher discount rate to invest; all future earnings are therefore discounted at this higher rate, which reduces the value of the company.

**Perceived risk of the company:** There is an inverse relationship between perceived risk of the company and its stock price. This is because as the perceived riskiness of the company decreases, investors are willing to pay more for the company stock; this results in an increase in stock price. The inverse of this situation is also true.

**Earnings, dividends, and cash flow:** As earnings, dividends, and cash flow per share increase beyond investor expectations, investors are willing to pay more for the stock, and the stock price generally increases. The inverse is also true.

**Supply and demand:** Stock prices may rise and fall based solely on supply and demand for the shares. For example, an investor with a large number of shares may need to sell shares of a stock to meet his or her cash needs. When the shareholder sells these shares, the supply of shares that are for sale increases, and the price of the shares is likely to fall. Likewise, if an investor gets new money into his or her accounts and decides to substantially increase his or her holdings in a stock, the price for that stock will likely rise as demand increases.

**Investor sentiment in the market:** Stock prices may rise or fall based on the general sentiment investors have about the market and about how well the overall market is performing. If investor sentiment is positive and the market is performing well, investors will likely bid up the price of all stocks. If investor sentiment is negative and the market is performing poorly, investors will typically be less willing to purchase stock, resulting in lower stock prices.
Know Stock-Investing Strategies

There are several different strategies for investing in stocks. The most common are the buy-and-hold strategy, the dollar-cost averaging strategy, and the dividend-reinvestment strategy.

Buy-and-Hold Strategy

The buy-and-hold strategy refers to buying a stock and holding it for an extended period of time. This is a very cost-effective, long-term strategy. This strategy helps investors minimize brokerage fees and avoid market timing, where investors try to forecast whether the market will go up or down and invest accordingly. It also minimizes taxes because realized gains are taxed as long-term instead of short-term capital gains. Since you keep the stock for an extended period of time, you are not taxed on unrealized capital gains until these gains are realized when you sell the stock. Moreover, while you may still receive dividends each year, these dividends are taxed at lower rates than interest rates on bonds or savings accounts.

Dollar-Cost Averaging

Dollar-cost averaging refers to purchasing a fixed dollar amount of a security at regular intervals, for example, every month. This investing strategy is based on the general trend of the market and averages out fluctuations in the market; it takes luck and market timing out of the equation, and it adds discipline to your investing. This is a good investment strategy, particularly if you are planning to fund your investments by paying yourself (taking 10 to 20 percent or more out of your paycheck each month).

Dividend-Reinvestment Plans (DRIPs)

A dividend-reinvestment plan refers to a strategy in which additional shares of stock are purchased with a stock’s dividend payments. This strategy simplifies the investment process by allowing you to avoid brokerage fees in purchasing additional shares of stock. While you still pay taxes each year on the dividends received, the avoidance of brokerage costs results in a higher overall return.

Calculate the Costs of Investing in Stocks

The costs of investing in stocks can be divided into three categories: explicit costs, implicit costs, and hidden costs.

Explicit Costs

Explicit costs are reported to you each month; these costs include brokerage commissions and custody fees.

Brokerage commissions are service charges assessed by a broker in return for arranging purchases or sales of financial assets. Commissions vary widely from broker to broker. The
commission may be a set amount, such as $15 for a sale or trade, or a percentage of the purchase or sale price, such as 75 basis points (0.75 percent). Commissions apply to both buying and selling. You should agree on these costs with your broker prior to trading.

**Custody fees, or annual fees** are the fees a brokerage house charges for holding stocks, bonds, or mutual funds in your account. These charges may be a minimum amount for stock accounts (for example, $15 per year) or a specific charge per holding (for example, 18 basis points per security). These fees may also be assessed as a percentage of assets under management (for example, 25 basis points).

**Implicit Costs**

Implicit costs are those you may not see until months after you sell a security. The most common implicit cost is taxes. It is critical that you account for taxes when you are valuing the total return of your portfolio. Implicit costs such as taxes are not noted on your monthly report, and most investors do not think about them until they have to pay them. Understand taxes before you begin paying them.

**Taxes on capital gains:** Capital gains are earned by selling stocks or securities. Short-term capital gains are earned when you sell assets you owned for less than a year: they are taxed at your marginal tax rate, which includes both your federal and state marginal tax rates. Long-term capital gains are earned when you sell assets you held for more than one year: they are taxed at 0 to 23.8 percent, depending on your income level and how long you held the assets. Generally, the longer you hold an asset, the longer you can defer paying taxes on capital gains.

**Taxes on stock dividends:** Dividends are the returns you get from a company. Previously, stock dividends were taxed at your income rate. However, because of the tax changes in 2003 and 2013, stock dividends are now taxed the same as capital gains.

See Figure 1 below for further understanding of taxes on long term capital gains and stock dividends.

**Hidden Costs**

In addition to understanding explicit and implicit costs, you should be aware of these hidden costs involved in investing in stocks:

**Account transfer fees** are costs for moving assets in or out of an existing account. Understand the costs before you begin trading.

**Account maintenance fees** are fees for maintaining your account.

**Inactivity fees** are fees for not having any account activity over a certain period of time.
Minimum balance fees are charged when you fail to maintain the required minimum balance in your account. Make sure you know what the minimum balance on your account is.

Interest on margin loans is interest charged on money you borrow to buy securities.

Figure 1. Tax Changes in 2013

<table>
<thead>
<tr>
<th>Taxable income*</th>
<th>Ordinary income</th>
<th>Capital gains and dividends</th>
<th>Medicare tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>Joint</td>
<td>Earned income**</td>
<td>Investment income</td>
</tr>
<tr>
<td>$0+</td>
<td>$0+</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>$8,950+</td>
<td>$17,900+</td>
<td>15%</td>
<td>2.9%</td>
</tr>
<tr>
<td>$36,250+</td>
<td>$72,500+</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>$57,650+</td>
<td>$146,400+</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>$183,250+</td>
<td>$423,050+</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>$200,000+ (AGI)</td>
<td>$250,000+ (AGI)</td>
<td>33%</td>
<td></td>
</tr>
<tr>
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<td>3.8%</td>
</tr>
<tr>
<td>$400,000+</td>
<td>$450,000+</td>
<td>39.6%</td>
<td></td>
</tr>
</tbody>
</table>

*Based on estimated 2013 inflation adjustments. Amounts refer to taxable income except where noted.

**Combined rate includes 1.49% employer contribution.

Summary

Of all the major asset classes, stocks have consistently delivered the highest return over the longest period of time. It is therefore critical for you to understand basic information about stocks if you want to achieve better returns than those yielded by long-term bonds.

Stocks, or equities, are an important part of most investors’ portfolios. As an asset class (and not as individual stocks), common stocks have a history of delivering strong, long-term capital gains; stocks are the best and most tax-efficient type of investment return. Having individual stocks in a diversified portfolio can reduce the overall risk of the portfolio. Stocks are susceptible to a number of risks, including interest-rate, inflation, company, financial, liquidity, political or regulatory, exchange-rate, and market risks.

Understanding stocks requires you to understand a new set of terminology. There are a number of different classifications for stocks. You should realize that these classifications are temporary: they may differ from investor to investor and from one time period to another. Investors make money on stocks in two ways: dividends and capital gains.

The goal of stock valuation is to determine the intrinsic value of a company, or the company’s fundamental economic value. If the market price of the company’s stock is greater than the company’s intrinsic value, the investor should sell the stock. If the market price of the company’s stock is less than the company’s intrinsic value, the investor should buy the stock. Determining a company’s intrinsic value is one of the most challenging responsibilities an investor has. Determining this value is accomplished using various tools, including dividend
discount models, fundamental analysis, cash-flow analysis, and technical analysis. Proper stock valuation is a difficult, time-consuming, and challenging activity.

Assignments

Financial Plan Assignments

Your assignment is to review the history of stocks over the past 5, 10, 25, 50, and 75 years. How have stocks performed overall? What do stocks add to a portfolio? What disadvantages do stocks have? How can you minimize the disadvantages of stocks, while at the same time enjoying the advantages stocks offer? While stocks may be risky in the short term, they deliver higher risk-adjusted returns in the long term. Consider the following concepts:

Benchmarks: What are the major benchmarks or indexes that correspond with stocks? (See Learning Tool 15: Possible Benchmarks for Investment Plans). It is likely you will include stocks in your diversified portfolio, so it is important that you select the major benchmarks you will follow to help you understand how stocks perform.

Generally, investors consider stocks more risky than bonds. What do they mean by that? To see graphically the volatility of stocks versus other asset classes, open Learning Tool 23: Return Simulation for Asset Classes. Go to the Asset Class Data tab and use the light-blue drop-down boxes to select your asset classes (or you can just use the asset classes listed). Use the dark-blue drop-down boxes to select your time period. Then go to the Charts tab. Push the F9 button to see the impact of standard deviation.

This worksheet builds random portfolios with the expected return and standard deviation of the period and asset class chosen. It then assumes that each asset class builds 10 different portfolios, and those portfolios are run for 20 years. The differences between the 10 different portfolios are shown in the same colored lines. The more the colored lines move together, i.e., the more each of the random portfolios move together, the less risky or less volatile the asset class. The more the same colored lines diverge, the more risky or more volatile the asset class. Now compare the portfolios for large-capitalization stocks, small-capitalization stocks, and international stocks. You may get a sense for the volatility in this asset class.

While stocks are generally more volatile (or risky) than bonds, their returns are higher to compensate for this additional risk. To see what the returns have been for various types of stocks, go to Learning Tool 27: Expected Return Simulation and Benchmarks. Go to the tab labeled Returns and Risk. Look for the 1-, 5-, 10-, 25-, 50-, 75- and 85-year returns for large-capitalization, small-capitalization, international, and emerging-market stocks. How have these assets performed compared with bonds or inflation? You might also look at the return and risk history of Real Estate Investment Trusts, or REITs, which have characteristics of both equities and bonds.
Now that you have reviewed the historical asset class performance, estimate your expected return for your Plan for Stage 1 and Stage 2. This process involves three steps:

1. Determine your asset-allocation targets.
2. Using those targets, use historical estimates over specific time periods to get a recommendation for your expected return.
3. Adjust the historical data to take into account current market conditions and expectations.

First, to get your asset-allocation targets, start with your stocks, bonds, and other asset class allocations determined earlier in Section III.C.1 and III.C.2. For most individuals, your initial emergency fund allocation will be to Treasury Bonds, completing your bond allocation. The more difficult allocation is to divide up your equity or stock allocations. It is important to recognize risk in building your portfolio. Your bond allocations are generally the least risky. Within stocks, the large-cap stocks add the next level of risk and are generally the least risky of all equities. Next in order of risk come small-cap stocks, international stocks, and emerging-market stocks, all of which have much more risk than large-cap stocks. I generally recommend that investors have over half or more of their stock allocations in large-cap stocks because they are the least risky of all stocks or equities. Conservative and very conservative investors may have two-thirds to three-quarters of their equity allocation in these large-cap stocks. Realize that your allocation will differ in comparison to other investors depending on your age, risk tolerance, and investment experiences.

Finally, there are asset classes that are neither bonds nor equities but have some characteristics of both. Real Estate Investment Trusts (REITs) fall under this category and may be useful to include in your allocation. I include these as “Other Asset Classes.”

I strongly recommend you have a minimum of four asset classes, consistent with building your investment portfolio. I generally recommend investors include more asset classes than four, with the riskier asset classes (i.e., small-cap and emerging-market stocks) limited in their allocations to between 5 percent and 15 percent. Determine your asset allocation targets for Stage 1 (now) and Stage 2 (retirement) and include these targets in Section III.B.1 and III.B.2.

Second, you need to get an idea of how that allocation would have done using historical data and your proposed asset allocation. To determine this historical return, use Learning Tool 27: Expected Return Simulation and Benchmarks and include this as Exhibit 1. Using the light-blue drop-down boxes, include the asset classes you are interested in. Using the dark-blue drop-down boxes, include the time periods over which you are interested. Finally, using the green boxes, type in your allocation targets for each asset class, making sure the totals add up to 100 percent. For example, a period of 80 means you are using the last 80 years of data ending in 2007 and calculating the geometric return for that asset class. Note that your choice of time periods will have a significant effect on the historical data. I generally recommend that investors use the longest time period available.
After you have entered your allocations and time periods, **Learning Tool 27** will give you a weighted return using historical data. I encourage you to change the time periods (look at 1, 5, 10, 50, and 80 years to see what impact that has on your weighted returns). Determine your weighted return for Stages 1 and 2, your periods before and during retirement.

Finally, adjust the expected returns from **Learning Tool 27** to account for current market conditions. I strongly recommend that if your weighted return is greater than 10 percent from the historical returns for **Learning Tool 27**, use an expected return of less than 10 percent (7–9 percent). I also recommend that your expected return for Stage 2, or retirement, be less than your expected return on Stage 1. Determine your expected return and enter these into your Plan in Sections I.A.1 and I.A.2. Print off Exhibit 1 from **Learning Tool 27**.

To calculate risk, instead of using standard deviation, beta, or other measure of risk, we have simplified the plan to state that we accept the risk of our weighted benchmarks. Copy your allocations from Section III.B.1 and II.B.2 to the sections on risk in Section I.B.1 and I.B.2.

**Learning Tools**

The following Learning Tools may be helpful as you prepare your Personal Financial Plan:

**15. Possible Benchmarks for Investment Plans**

This document shows possible benchmarks for most of the major asset classes.

**23. Return Simulation for Asset Classes**

This spreadsheet shows the impact of various investment strategies and also shows the volatility for different asset classes. This spreadsheet will also show you the historical impact of different asset allocation decisions for several asset classes.

**26. After-Tax, Equivalent Taxable Yield, and After-Inflation Returns**

This spreadsheet calculates the after-tax return, equivalent taxable yield, and after-inflation return on various assets.

**27. Expected Return Simulation and Benchmarks**

This spreadsheet shows a historical perspective on returns and standard deviation (risk) for the major asset classes over the last 1, 5, 10, 25, 50, 75, and 80 years. The spreadsheet also includes recommended benchmarks for some of the major asset classes.
Review Materials

Terminology Review

**Assets under management.** This is another way an investment advisor is paid. It is calculated as a percentage of your assets under management, i.e., if you have $500,000 with an advisor and their fee is 1.0% per year, you will pay them $5,000 per year.

**Captive brokers.** These are brokers whose company is part of a group which owns a mutual fund company. These brokers may be encouraged to sell company mutual funds which may not be the best fit for the investor but are in the interest of the company.

**Cash accounts.** This is money with the broker which you use to pay for purchases or receive any cash. There is a specific time between notification of purchases and when the purchases must be paid.

**Commissions.** Commissions are the way a broker or investment advisor is paid. It is either a percentage of every buy or sell order (e.g., 20 bps per trade), or a specific charge for a trade (e.g., $9.99).

**Day orders.** These are orders to buy and sell securities which are good only until the end of the trading day.

**Deep-discount and on-line brokers.** These are brokers who are even cheaper than discount brokers. They do only trading, but at a 90% discount to full-service brokers. On-line can even be cheaper with other services.

**Discount-service brokers.** These are brokers who only perform trading, but usually at a 50% to 70% discount to full-service costs.

**Discretionary accounts.** These are accounts where you authorize a broker or investment advisor to make trades for you and your account. Exercise caution with this as the broker can buy and sell securities at will and you are responsible for all taxes and commission costs.

**Full-service brokers.** These are brokers who will give you all the tools, research and other advice to help you trade and invest.

**Independent brokers.** These are brokers whose company is not part of a major chain or who own a captive mutual fund company. They may be inclined to give unbiased advice as they do not sell specific mutual funds.

**Initial public offerings (IPOs).** These are the very first shares ever issued by a company. Investment bankers serve as underwriters or intermediaries for these IPOs.
**Investment advisor.** A person or an organization that helps makes the day-to-day decisions regarding a portfolio’s investments for investors.

**Limit orders.** These are orders to sell or buy a specific number of shares at a specific price or better. This is generally the best method in working with brokers.

**Maintenance margin.** This is money you put up to buy on margin. If your maintenance margin falls below a specific level, you will be required to put up more money. If not, your position will be closed out.

**Margin accounts.** These are accounts where you borrow from the brokerage firm to purchase financial assets. This is debt, and can amplify both gains and losses.

**Margin call.** This is a call by the broker to put up more money when your margin declines below a certain level. I recommend you do not buy on margin. It is using debt to invest and you can lose more than your original investment doing this.

**Market orders.** These are orders to sell or buy a specific number of shares at the currently available or market price. Be careful as the market can move quickly and dramatically between when you place the order and order execution time.

**Open orders** (GTC: good till canceled, GTD: good till date specified). These are orders which are good until filled or canceled. Be very careful with open or GTC/GTD orders. If you fail to cancel specific orders, you might have orders filled that you forgot to close out.

**Primary and Secondary markets.** Primary markets are markets for trading newly issued securities. Secondary markets are for trading already issued shares of stocks, bonds, and other securities. Secondary markets consist of organized exchanges and over-the-counter or electronic markets where existing shares are traded.

**Securities markets or organized exchanges.** These are areas used to facilitate trading of financial instruments.

**Over-the-Counter (OTC) Market.** This is an electronic network of dealers used to execute trades without specialists or middle-men.

**Seasoned new issues.** These are new shares being issued by a company that is already publicly traded.

**Stockbroker.** A stockbroker is a person who is employed by and solicits business for a commission house or merchant.

**Stop (or stop-loss) orders.** These are orders to sell a specific number of shares if the stock price falls below a certain price or buy a specific number of shares if the stock price
rises above a certain price. These are used to set prices to safeguard against major fluctuations.

Review Questions

1. What are eight risks that stocks are susceptible to?
2. What is leverage? How does leverage affect risk?
3. What is common stock? Preferred stock?
4. What are the two ways an investor can make money in stocks?
5. What is the goal of stock valuation? Why is it important for an investor to know a company’s intrinsic value? Based on a company’s intrinsic value, when should an investor buy or sell a stock?

Case Studies

Case Study 1

Data

Peter and Jessica, acting on the advice of their next-door neighbor, recently purchased their first stock, 500 shares of a small-capitalization Internet company trading at $80 per share. The neighbor told them that the stock was a “real money maker” because it recently had a two-for-one stock split and would probably split again soon. Even better, according to the neighbor, the company was expected to earn $1 per share and pay a $0.25 dividend next year. Peter and Jessica have so far been unimpressed with the stock’s performance—the stock had underperformed the S&P 500 index this year.

Application

Peter and Jessica have come to you for advice. What is your recommendation?

Case Study 1 Answer

Peter and Jessica lack an important part of investing process—knowledge of what they are invested in. Apparently their next-door neighbor lacks that same understanding. Buying stock is the process of understanding and owning a piece of a company. It is not enough to just know the numbers; they must know what the numbers mean, especially with individual stocks. Peter and Jessica do not know what the numbers mean.

Before they invest in individual stocks, they should learn more about the investment process. When buying individual stocks, it is critical to understand what is going on in the world, region, country, economy, industry, and company. They need to understand Investing Principles 6 and 8: If you must invest in individual assets, know what you invest in and who you invest with, and don’t waste too much time, money, and energy trying to beat the market.
For people who have never invested before, I believe buying mutual funds (which are portfolios of stocks or bonds) is a much better first step in the investment-education process. Buying individual stocks is the last step on the bottom of the investment hourglass, not the first step.

Case Study 2

Data
Anne owns 200 shares of ABC stock, selling at $410 per share. In order to make the stock more affordable for the average investor, ABC’s management has decided to split the stock.

Calculations
A. How much was Anne’s investment before the split?
B. Assuming ABC’s management decides to split the stock three-for-one, how many shares would Anne own after the split?
C. What is the new price per share after the split?
D. How much would Anne’s investment be worth after the three-for-one split?

Case Study 2 Answers

Calculations
A. Before the split, Anne’s investment was worth $82,000, or 200 shares multiplied by $410 per share.
B. Afterward, Anne would have 600 shares, or 200 shares multiplied by 3.
C. Afterward, the price of the share should decline to $136.67, or $410 divided by 3.
D. After the split, the value of Anne’s investment should remain at $82,000, or $136.67 multiplied by 600 shares.

Case Study 3

Data
MAM Corporation recently announced that its year-end earnings per share (EPS) for this last year was $4.50, and they estimate next year’s EPS will be $5 per share. MAM stock is currently selling at $85 per share.

Calculations
A. What is the historical (last year’s) PE ratio for MAM?
B. What is the estimated (or forward) PE ratio for MAM?
C. Assume the earnings prospects for MAM deteriorate and the company now estimates next year’s earnings to be $4 per share. What would be MAM’s new forward PE ratio?

**Case Study 3 Answers**

Divide the price per share by the earnings per share to calculate the respective PE ratios. PE ratios are normally computed with an x after them to denote “times.”

A. The historical PE is $85 / $4.5, or 18.9x.
B. The forecast or forward PE ratio is $85 / $5, or 17.0x.
C. Assuming prospects decline for next year, the forecast or forward PE ratio would be $85 / $4, or 21.3x.

**Case Study 4**

**Data**

Clinton owns 1,000 shares of Boston Scientific Stock, selling at $50 per share at the beginning of the year. He is in the 25 percent federal marginal tax rate, and he live in a state that has no state income tax. At the end of the year, the stock rose to $55 and he received $1.50 in dividends.

**Calculations**

A. What was Clinton’s before-tax return?
B. What is Clinton’s after-tax return, assuming he held the stock?

**Case Study 4 Answers**

Calculations

A. Clinton only pays taxes on realized income, not unrealized income. Clinton’s before-tax return is:

\[
\frac{(55 - 50 + 1.5)}{50}, \text{ or } 13.0\%.
\]

B. Clinton’s after-tax return would include the unrealized capital gains and the dividend after he paid taxes. Since this is a stock dividend, it is taxed at the preferential rate of 15%. The after-tax return is:

\[
\frac{(55 - 50 + [1.50 \times (1 - .15)])}{50} = 12.55\%.
\]

Of the $1.50 dividends, Clinton pays 22.5 cents in taxes and keeps the remaining amount.

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22. Investments 6: Understanding Mutual Fund Basics

Introduction

Mutual funds are collections of stocks, bonds, and other financial assets that are owned by a group of investors and managed by a professional investment management company. As an investor in a mutual fund, you own a share of the fund that is equal to the amount of your investment divided by the total value of the fund.

Mutual funds provide many important benefits to investors; these benefits particularly apply to investors who are just beginning to invest. Since a mutual fund can include hundreds of different securities, the performance of the fund is not dependent on any single security: the risk is spread among the various securities. In most cases, a portfolio manager is assigned to monitor the performance of securities in the fund. Well-chosen mutual funds can help you achieve your financial goals.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Explain the advantages and disadvantages of mutual funds
2. Describe the different types of mutual funds
3. Describe the different classes of mutual fund shares
4. Calculate mutual fund returns
5. Understand how to purchase a mutual fund
6. Explain the costs of investing in mutual funds

Explain the Advantages and Disadvantages of Mutual Funds

There are both advantages and disadvantages to investing in mutual funds. The following is a discussion of some of these advantages and disadvantages.

Advantages of Mutual Funds

One of the main reasons for the creation of mutual funds was to give investors who wanted to make smaller investments access to professional management. However, mutual funds offer many advantages to investors of all types, such as:

Diversification: Investing in a single stock or bond is very risky, but owning a mutual fund that holds numerous securities reduces risk significantly. Mutual funds provide diversification, which is crucial to a well-balanced portfolio. Diversification is particularly crucial in small accounts.
**Professional management:** It is difficult and time consuming to pick the best stocks and bonds for your portfolio and to try to beat the benchmarks on these stocks and bonds. Allowing a professional mutual fund manager to make decisions about stocks and bonds for you can save you time and frustration.

**Minimal transaction costs:** Buying individual stocks and bonds is expensive in terms of transaction costs. Mutual funds offer the advantage of economies of scale in purchases because mutual fund transactions are typically large. Economies of scale refers to the fact that mutual fund costs may decrease as the mutual fund’s asset size increases, since brokers may charge lower fees to try to get more of the mutual fund’s business.

**Liquidity:** Money invested in mutual funds is generally liquid. You can sell your shares and collect money from open-ended funds (funds that can create and redeem shares on demand), usually within two business days. If the open-end funds are no-load funds, investors are not required to pay transaction costs when they buy or redeem shares.

**Flexibility:** Owning individual stocks and bonds does not allow for much flexibility in terms of liquidity, or the ability to access your money. You cannot write checks on the value of individual stocks and bonds. However, many mutual funds allow for more flexibility by allowing you to write checks on your account.

**Low up-front costs:** Certain types of mutual funds have financial benefits that make them less expensive than individual stocks and bonds. For example, no-load mutual funds can be sold and redeemed without incurring any sales charges, and open-ended mutual funds can be purchased at the fund’s net asset value (NAV). A fund’s NAV is calculated daily by subtracting the fund’s liabilities from its assets and dividing the resulting amount by the number of outstanding shares. The benefit of open-ended funds is that you do not need to pay a premium or a sales charge to purchase or sell the shares.

**Service:** Mutual fund companies generally have good customer service representatives who can answer your questions and help you open accounts, purchase funds, and transfer funds. Mutual fund companies may also offer other services, including automatic investment and withdrawal plans; automatic reinvestment of interest, dividends, and capital gains; wiring funds to and from your accounts; account access via phone; optional retirement plans; check-writing privileges; bookkeeping services; and help with taxes.

**Disadvantages of Mutual Funds**

Although there are many advantages to investing in mutual funds, there are also some disadvantages.

**Below market performance:** Generally, most actively managed mutual funds have not beaten their benchmarks over the long term. While in some years actively managed funds outperform
their index fund counterparts, the support for actively managed funds for longer periods of time is low.

For the period from 1962 to 1997, the average actively managed fund, or a fund whose purpose is to outperform a specific index by the active buying and selling of securities, failed to outperform their benchmarks. In 22 of 35 years, less than half of all actively managed funds beat their benchmarks.¹

Another paper that examined mutual fund performance on both a total return and after-tax basis reported:

> In general, we find that index funds outperform actively managed funds for most equity and all bond fund categories on both a total return and after-tax total return basis, with the exception of actively managed small company equity and international funds. These results should be viewed with caution, however, as there is evidence that actively managed funds outperform the index funds during periods when the economy is either going into or out of a recession.²

Recent experience is not much different. In the last 10 years, 60–65 percent of actively managed funds failed to beat their benchmarks, depending on asset class (see Chart 1).

**Chart 1. Percentage of Actively Managed Funds That Failed to Beat Their Benchmarks³**

![Percentage of Actively Managed Funds Which Underperformed their Benchmarks 2002-2015](image)

*Source: S&P Indices versus Active Funds (SPIVA Scorecard, S&P Research, year-end 2015.*
**High costs:** Unless you analyze funds carefully before you buy them, you may inadvertently choose a mutual fund that charges significant management, custodial, and transfer fees. Each of these fees reduces your total amount of return. Moreover, many mutual funds charge loads (sales charges) and 12b-1 fees, which is are paid by shareholders to cover the cost of marketing the fund to other investors. These charges and fees also reduce your total amount of return.\(^4\)

**Risks:** Mutual funds are subject to both market-related risks and asset-related risks, particularly in very concentrated portfolios, which are not as well diversified.

**Inability to plan for taxes:** Mutual funds are considered pass through vehicles for tax purposes and are required to distribute 95 percent of all capital gains and dividends to shareholders at the end of each year. Even if shareholders do not sell their mutual fund shares, if they are in taxable vehicles they may be required to pay a significant tax bill each year, particularly if the fund trades often and has a lot of short-term interest, dividends, or capital gains. It is difficult to plan for taxes because the decisions that affect the amount of taxes you will pay are made by the portfolio manager, not you.

**Premiums or discounts:** Closed-end mutual funds may be traded at a premium or discount to the fund’s underlying net asset value. These premiums and discounts are based on investor demand more than they are based on actual share value; therefore, premiums and discounts are not constant over time.

**New investor bias:** Shares purchased by new investors dilute the value of the shares owned by current investors. When new money enters the mutual fund at net asset value, the money must be invested, which costs roughly 0.5 percent in an average U.S. stock fund. Thus, the funds of current investors are used to subsidize the purchase of the new investors’ shares.

**Describe the Different Types of Mutual Funds**

There are three major types of mutual funds that parallel the major asset classes: money market, stock, and bond mutual funds.

**Major Types of Mutual Funds**

**Money market mutual funds** invest primarily in short-term, liquid financial assets, such as commercial paper and U.S. Treasury bills. The goal of these funds is to obtain a higher return than traditional savings or checking accounts.

**Stock mutual funds** invest primarily in common stocks listed on the major securities exchanges discussed in **Investments 5: Stock Basics**. Each type of stock mutual fund has a particular emphasis or objective, such as large-cap stocks, small-cap stocks, value stocks, growth stocks, and so on.
**Bond mutual funds** invest primarily in the bonds offered by companies or institutions. Each of these bond mutual funds has a particular emphasis or objective, such as corporate, government, municipal, and agency bonds. Most of these funds have specific maturity objectives, which relate to the average maturity of the bonds in the fund’s portfolio. Bond mutual funds can either be taxable or tax-free, depending on the types of bonds the fund owns (see Investments 4: Bond Basics).

**Specialty Mutual Funds**

**Index funds** are mutual funds that are designed to match the returns of a specific benchmark. Since these funds buy and sell securities infrequently (i.e., they have a low turnover), they are very tax-efficient investment vehicles. Index funds have the option of following many different benchmarks, including the S&P 500 (large-cap stocks), Russell 5000 (small-cap stocks), MSCI EAFE (international stocks), Barclays Aggregate (corporate bonds), and DJ REIT (real estate investment trusts). As of August 12, 2016, there were 1,299 different index funds listed in the Morningstar database (Morningstar is one of the largest and best private data providers of mutual fund information).

**Exchange-traded funds (ETFs)** are similar to mutual funds in that they comprise groups of stocks; however, ETFs are different because they are traded in an organized exchange. Because ETFs are purchased on an exchange, they incur all the transaction fees and custody costs that stocks do. They are also similar to stocks in that they are priced throughout the day rather than at the end of the day like mutual funds. ETFs can be both shorted and purchased on margin. ETFs can be structured as either unit investment trusts (UITs), whose money is invested in a portfolio where the composition is fixed for the life of the fund, or open-end mutual funds, where money is invested in a portfolio that can change over time. The UIT structure does not allow for immediate reinvestment of dividends. As of August 12, 2016, there were 1,750 different ETFs listed in the Morningstar database.

**Balanced funds** are mutual funds that purchase both stocks and bonds, usually in a set ratio (e.g., 60 percent stocks and 40 percent bonds). The benefit of these funds is that the fund manager makes both the asset-allocation decisions and the stock-selection decisions for the investor.

**Asset-allocation funds** are mutual funds that rotate investments among stocks, bonds, and cash, with the goal of beating the return of a specific benchmark after all expenses have been accounted for. These funds invest in the asset classes that the portfolio managers expect to perform the best during the coming quarter.

**Life-cycle mutual funds** change their allocations of stocks and bonds depending on the age of the investor. As an investor ages, life-cycle funds reduce their allocations in stocks and increase their allocations in bonds, which typically makes the fund more consistent with the goals of an older investor. These funds make asset-allocation decisions for the investor and aim to reduce transaction costs.
**Hedge funds** are mutual funds that assume much more risk than normal mutual funds in the expectation of higher returns. Sometimes the managers of these funds take long positions, in which they buy and hold assets; sometimes the fund managers take short positions, in which they borrow assets and sell them. The managers of hedge funds hope they will later be able to buy back the assets at a lower price before they must return them to the lender.

**Describe the Different Classes of Mutual Fund Shares**

Mutual funds may be divided into classes depending on the loads, or sales charges. There are two types of loads, front-end and back-end. Front-end loads are commissions charged at purchase of the fund; they directly reduce the amount of money invested by the amount of the load. Back end loads are sales charges to compensate the sales force for selling the fund.

While there are differences of opinion as to the choice of load versus no-load funds, research has found that the performance of load funds and no-load funds is generally identical over the periods analyzed. However, when the sales charges are included in the calculation of returns, no-load funds significantly outperform load funds.

While there are differences in classes of shares among investment management companies which charge loads, they generally include the following.

**Class A shares** commonly have a front-end or back-end load to compensate for the sales person’s commissions. Because of the high loads, they usually have lower management fees.

**Class B shares** commonly have a back-end load that is paid when the shares are sold. The amount of this back-end load traditionally declines over time. Class B shares generally have higher expense ratios when compared to Class A shares.

**Class C shares** generally have lower front- and back-end load fees but higher management fees.

**Class R shares** are generally for retirement purposes. Check the loads and management fees, which may be substantial.

**No-load shares** are sold without a commission or sales charge. Generally, this type of mutual fund share is distributed directly by the investment management company instead of through a sales channel. These shares may have higher management fees to compensate for the lack of a front- or back-end load.

**Class Y shares** have very high minimum investments (i.e., $500,000) but have lower management fees and waived or limited load charges. These are generally for institutional investors.

**Class Z shares** are only available for employees of the fund management company.
Chapter 22. Investments 6: Mutual Fund Basics

**Calculate Mutual Fund Returns**

There are two ways to make money on mutual fund holdings: capital appreciation and distributions.

**Capital Appreciation**

One way to earn money on mutual fund shares is to purchase shares and hold them for an extended period of time. Then, when the market value of the shares increases, you can sell the shares and collect capital gains. Capital gains are generally the preferred type of earnings because they are not taxed until you sell your mutual fund shares and you get to decide when to sell those shares. In addition, capital gains are taxed at 15 percent by the federal government whereas ordinary income may be taxed at a rate of up to 35 percent.

**Distributions**

Distributions are the second way you can make money on mutual funds. They are a less attractive type of earnings than capital gains because you do not have control over the taxes associated with distributions. Even if you do not sell any mutual fund shares, you must still pay taxes on your mutual fund’s annual distributions. There are five main types of distributions: short-term capital gains, long-term capital gains, qualified stock dividends, ordinary (non-qualified) dividends, and bond interest and bond fund distributions.

**Short-term capital gains:** Short-term capital gains are earnings on assets you owned for less than 366 days. Short-term capital gains are taxed at your marginal tax rate, which can be up to 39.6 percent for federal taxes and 10 percent for state taxes.

**Long-term capital gains:** Long-term capital gains are earnings on assets the fund has owned for 366 days or more. In 2016, long-term capital gains are taxed at a federal rate of 0 percent if your marginal tax rate is 15 percent or less, at 15 percent if your federal marginal tax rate is between 25 and 35 percent, and at 20 percent if your federal marginal tax rate is 39.6 percent or higher. There is also an added Medicare tax on long term capital gains of 3.8 percent if your adjusted gross income (AGI) is $250,000 or higher (Married Filing Jointly).

**Qualified stock dividends:** A qualified dividend is a dividend paid by a U.S. corporation whose stock you held for more than 60 days during the 121-day period that begins 60 days before the ex-dividend date (see **Learning Tool 32: Taxes on Securities Earnings Including Qualified Dividends**). In 2016, qualified stock dividends are taxed at a federal rate of 0 percent if your marginal tax rate is 15 percent or less, at 15 percent if your federal marginal tax rate is between 25 and 35 percent, and at 20 percent if your federal marginal tax rate is 39.6 percent or higher. There is also an added Medicare tax on long term capital gains of 3.8 percent if your AGI is $250,000 or higher (Married Filing Jointly).
The following chart summarizes the taxes on long term capital gains and qualified stock dividends:

**Ordinary (or non-qualified) stock dividends:** Ordinary stock dividends are cash earnings paid to investors that have not held the stocks for the necessary amount of time. These dividends are taxed as ordinary income at both the federal and state levels.

**Bond dividends and interest:** Bond dividends and interest are distributions from bonds and bond mutual funds. These earnings are taxed at your marginal tax rate, which may be as high as 39.6 percent for federal taxes and 10 percent for state taxes.

The key to making money on mutual fund holdings is to invest in funds with high after-tax returns. The higher the after-tax returns on a fund, the more quickly you will be able to achieve your personal and financial goals.

**Figure 1. Tax Changes in 2013**

<table>
<thead>
<tr>
<th>Taxable income*</th>
<th>Ordinary Income</th>
<th>Capital gains and dividends</th>
<th>Medicare tax</th>
<th>Earned income**</th>
<th>Investment income</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0+</td>
<td>$0+</td>
<td>10%</td>
<td>0%</td>
<td>2.9%</td>
<td>0%</td>
</tr>
<tr>
<td>$5,950+</td>
<td>$17,900+</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$36,250+</td>
<td>$72,500+</td>
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<td></td>
<td></td>
</tr>
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<td>$146,400+</td>
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<td>15%</td>
<td></td>
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</tr>
<tr>
<td>$183,250+</td>
<td>$223,050+</td>
<td>33%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>$200,000+ (AGI)</td>
<td>$250,000+ (AGI)</td>
<td>35%</td>
<td>3.8%</td>
<td>3.8%</td>
<td></td>
</tr>
<tr>
<td>$398,350+</td>
<td>$398,350+</td>
<td>35%</td>
<td>3.8%</td>
<td>3.8%</td>
<td></td>
</tr>
<tr>
<td>$400,000+</td>
<td>$450,000+</td>
<td>39.6%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Based on estimated 2013 inflation adjustments. Amounts refer to taxable income except where noted. **Combined rate includes 1.45% employer contribution.

**Calculating Mutual Fund Returns**

Calculating mutual fund returns is not as easy as it sounds. Too often investors only account for the explicit costs of trading and they forget about the implicit tax costs. These costs can significantly reduce the amount of a fund’s return. Remember to invest wisely and to account for after-tax returns.

**Calculating total returns:** Mutual fund returns include dividends and distributions as well as any net asset value (NAV) appreciation. The basic equation for total return is as follows:

\[
\frac{([\text{ending NAV} - \text{beginning NAV}] + \text{distributions})}{\text{beginning NAV}}
\]

Before using this equation, be sure to adjust your beginning and ending net asset values to account for the costs of both front-end and back-end loads. These costs will significantly decrease your return.
Calculating before-tax returns: Before-tax returns are the same as total returns if all distributions are reinvested. The before-taxes total return includes the increase in the net asset value and the increase in the number of shares. The total return before taxes is calculated as follows:

\[
\frac{(#ES \times EP) - (#BS \times BP) + \text{distributions}}{(#BS \times BP)}
\]

In the before-tax returns equation, the variables are defined as follows:

- \( #BS \) = number of beginning shares owned
- \( BP \) = beginning price of the shares
- \( #ES \) = number of ending shares owned
- \( EP \) = ending price of the shares

Calculating after-tax returns is more difficult because you must know your marginal tax rate at the federal, state, and local levels and the tax rate for the different types of distributions. If all distributions are reinvested, the after-tax total return includes the increase in the net asset value, the increase in the number of shares, and the after-tax impact of distributions. The after-tax (AT) total return is calculated as follows:

\[
\frac{(#ES \times EP) - (#BS \times BP) + \text{ATSD} + \text{ATLCG} + \text{ATSCG} + \text{ATBDI}}{(#BS \times BP)}
\]

In this equation, the variables are defined as follows:

- \( #BS \) = number of beginning shares owned
- \( BP \) = beginning price of the shares
- \( #ES \) = number of ending shares owned
- \( EP \) = ending price of the shares
- \( \text{ATSD} \) = after tax stock distributions, or stock dividend distributions * (1 – the tax rate on stock dividends)
- \( \text{ATLCG} \) = after tax long-term capital gains distributions, or long-term capital gains distributions * (1 – tax rate on long-term capital gains)
- \( \text{ATSCG} \) = after tax short-term capital gains distributions, or short-term capital gains distributions * (1 – tax rate on short-term capital gains)
- \( \text{ATBDI} \) = after tax bond dividends and interest distributions, or bond dividends and interest distributions * (1 – the tax rate on bond dividends and interest)

Remember that the tax rate on short-term capital gains, bond dividends, and bond interest is your marginal tax rate, which includes your federal, state (if applicable), and local (if applicable) tax rates.

Understand How to Purchase a Mutual Fund

There are five steps to buying a mutual fund:
1. Determine your investment objectives and key principles.
2. Choose an appropriate investment benchmark.
3. Identify funds that meet your objectives.
4. Evaluate the funds.
5. Make the purchase.

**Step 1: Determine Your Investment Objectives**

The first step is to determine your investment objectives. What is the ultimate purpose of the funds you will be investing? Before you can decide on the funds you will invest in, you must know your budget and your financial goals. Understand where you are currently in your investment program and determine which key principles of investing will help you reach your financial goals.

**Step 2: Choose an Appropriate Investment Benchmark**

The second step is to choose an appropriate investment benchmark. The benchmark you choose is very important because it will help you determine how well your mutual fund is performing over time. Before choosing a benchmark, you must decide which asset class you want to invest in and the way you want your fund to perform. Choose the benchmark that most closely matches the performance you are seeking. Do you want your benchmark to be broadly based (i.e., have more constituents) or narrowly based (i.e., have fewer constituents)? Generally, a more broadly based benchmark is better because it is more diversified, and the returns will be less influenced by the poor performance of a single security. I recommend choosing a benchmark with as many constituents as possible.

**Step 3: Identify Funds That Meet Your Objectives**

The third step is to identify funds that meet your objectives. One of the easiest ways to identify mutual funds that will meet your needs is to use resources such as financial publications or financial services. Another resource you can use to identify mutual funds that meet your needs is online databases. After you have input your objectives, a database will generate a list of funds that fit your criteria. Examples of these databases include Morningstar Mutual Funds and Schwab One Source. These databases can help you learn about a mutual fund’s performance, size, fees, investment style, and objectives.

**Step 4: Evaluate the Funds**

The fourth step is to evaluate the funds. To effectively evaluate a mutual fund, you must understand a number of characteristics that differ among funds. The following tips will help you evaluate mutual funds:
Compare funds with the same objectives. It makes no sense to compare funds with different objectives. Funds that are trying to accomplish different goals will have different return and risk characteristics. Make sure you are comparing funds with similar objectives.

Evaluate the fund’s long-term performance versus the long-term performance of its corresponding benchmark. The difference between the fund’s return and the benchmark’s return is known as the fund’s tracking error. Research the reasons a particular fund has done well. If the fund has performed well because it has made good security selections, this is a good sign; however, make sure the fund has not inflated its returns by buying outside of its asset class, such as a large-cap U.S. mutual fund buying securities from Mexico or Brazil. Try to determine whether the fund has a record of good performance over many years or if the fund has only performed well during a single year. Examine the history of returns during both up markets and down markets. If the fund has historically underperformed as compared with its benchmark and similar funds, avoid the fund. It is easier to spot funds that are performing badly than funds that are performing well.

Look at portfolio managers. How long has the manager been managing the fund? Was he or she managing the fund during periods of good performance? After a fund has performed well, good managers will sometimes leave a company to start their own mutual fund company, and new managers will be assigned to manage the fund. Look at how long the managers have been managing the fund. If they have not been managing the fund for very long, you may want to consider other funds.

Examine the size of the fund. How much has the fund grown or shrunk in the last month, quarter, or year? If a fund is shrinking, it generally sells its liquid assets first. After this liquidation, investors who still have investments in the fund are stuck with illiquid stocks, which cannot be sold or must be sold at a substantial discount.

Research the fund’s history. How long has the fund existed? Has it changed its style? How did it perform under previous names and managers? Mutual fund companies sometimes rename a poorly performing fund and change the fund’s investment objectives to mask poor performance. Be on the lookout for these changes.

Identify the fund’s fee structure. Sometimes funds will add additional fees or impose back-end loads on investors to reduce the mutual fund company’s costs. One example of an additional fee is the 12-b1 fee, which is a marketing fee paid by shareholders to cover the cost of marketing the fund to other investors. Avoid funds that charge 12b-1 fees. Generally, I recommend purchasing only no-load mutual funds. Although you cannot control returns, you can control costs.

Once you have selected a few funds you are interested in, read each fund’s prospectus carefully. The prospectus should explain the fund’s goals, the fund’s investment strategy, any investment limitations the fund has (asset class constraints), any tax considerations that will be of importance to investors, the minimum account size, the investment and redemption process for buying and selling shares in the fund, fees the investor is responsible for paying, and the fund’s
annual turnover ratio. Turnover is particularly important, as it is an indication of how tax-efficient the mutual fund is. Funds with high turnover ratios generally cause investors to pay more taxes than funds with low turnover ratios, as each sell generates a taxable event.

Consult other sources of information. There are many different sources of financial information that can help you choose a good mutual fund. Printed sources (many of which have online sources as well) include The Wall Street Journal, Morningstar Mutual Funds, Forbes, Business Week, Kiplinger’s Personal Finance, Smart Money, and Consumer Reports. A good electronic source is the Motley Fool website at www.fool.com.

Step 5: Make the Purchase

Once you have selected the fund that is right for you, you are ready to make the purchase. There are three ways to purchase a mutual fund: (1) you can make the purchase directly through the mutual fund company, (2) you can work through a financial professional, or (3) you can use a mutual fund supermarket.

Buying through the mutual fund company: If you do this, the mutual fund will likely be a no-load fund without annual custody fees. You will have access to many or all of the mutual fund company’s services, including a toll-free number and Internet account access. Some mutual fund companies’ systems are also compatible with major money-management software, such as Intuit Quicken or Microsoft Money.

Buying through a financial professional: If do this, you will likely be charged a load on the sale (a load is similar to a sales commission). The financial professional will likely sell you a class of shares (called R shares), which will rebate the financial professional a commission, or the financial professional will charge you an annual custody fee. Many mutual funds have multiple classes of shares, each with different loads and management fees. Research has shown that, on average, individuals who invest in load funds do not gain higher returns than individuals who invest in no-load funds.

If you decide to purchase your mutual fund through a financial professional, you will still have access to all the services offered by the mutual fund company. Whether you buy directly from the mutual fund company or through a financial professional, you should check to make sure you will be able to access your account through Intuit Quicken, Microsoft Money, or other software programs. Keep in mind that not all mutual funds can be accessed through software programs. Also, be sure that the amount you are willing to invest is larger than the minimum account size.

Buying through a mutual fund supermarket: If you do this, you will still receive all the benefits offered by the mutual fund company. If you work with one of these companies, you will have access to a wide range of mutual fund companies. Mutual fund companies “give back” a portion of their management fees to the mutual fund supermarkets, such as Fidelity Funds Network or Charles Schwab, each month to compensate the supermarkets for bringing in new customers; therefore, mutual fund supermarkets usually charge you less for their services.
Minimum account balances and management fees vary from fund to fund, but a custody fee is not generally charged on funds purchased through a mutual fund supermarket.

**Explain the Costs of Investing in Mutual Funds**

There are a number of explicit, implicit, and hidden costs associated with investing in mutual funds:

**Explicit Costs**

**Loads** are a sales charge an investor must pay to purchase certain types of mutual fund shares. Front-end loads are charged when a fund is purchased and are essentially sales charges to pay the broker for selling the fund. Back-end loads are charged when an investor sells certain types of shares. Some funds use back-end loads to discourage investors from switching funds too often. Back-end loads are often given a sliding scale, which means that the longer you hold the shares, the smaller the back-end load. No-load funds do not charge a commission when funds are purchased or sold.

**Management fees** are assessed to compensate the portfolio manager; these fees are generally based on a percentage of annual average assets (e.g., 75 basis points, or 0.75 percent per year of assets under management). These fees are assessed annually but are taken out of the net asset value on a daily basis (i.e., the fund managers are paid daily).

**Annual custody fees** are charged to hold mutual funds or ETFs in your account. The custody fee may be a fixed amount for small accounts. For large accounts, the custody fee may be either a specific charge per holding or a percentage of assets held.

**Other fees:** There are a number of other fees that may be assessed to your mutual fund, including 12b-1 fees, distribution fees, and transfer agent fees. A mutual fund charges investors 12b-1 fees to cover some of the costs of advertising and marketing the fund to new investors. The fund also charges distribution fees to cover the costs of selling the fund. The transfer agent fee is charged to compensate the transfer agent, or the company or institution responsible for ensuring shares are transferred correctly, for maintaining the investor’s records.

**Overall expense ratio** is the overall cost of all management fees, custodial fees, trustee fees, and other fees. It represents the most important explicit cost you should consider when evaluating mutual funds. An overall expense ratio of 2.25 percent means the mutual fund must earn 2.25 percent before you will break even on your investment.

**Implicit Costs**

Implicit costs are expenses that must be accounted for to calculate the true return of your portfolio; these costs do not appear on your monthly mutual fund report. The implicit cost of investing in a mutual fund is taxes. You must pay taxes on the four main types of distributions:
bond dividends and interest, stock dividends, short-term capital gains, and long-term capital gains.

**Hidden Costs**

**Transaction costs** cover the expenses of buying and selling securities and the expenses that are not covered by any other fees. These expenses include commission costs, bid-ask spreads, and soft-dollar arrangements. Mutual funds that have high turnover—funds that buy and sell a lot of securities—will have much higher transaction costs than mutual funds that use a buy-and-hold investment strategy. Recent research has shown that in some high-turnover funds, the hidden costs of trading are more than double the explicit overall expense ratio. Such costs significantly reduce the amount of return on the fund.

**Commission costs** are the costs incurred by the mutual fund buying and selling the securities in the fund. Mutual fund companies are not required by law to disclose the amount of commission costs in the prospectus, although this information should be included in the firm’s statement of additional information. A good way to evaluate commission costs is to look at the mutual fund’s turnover ratio. The turnover ratio is a measure of trading activity during the current period. The turnover ratio is calculated by dividing the average number of net assets in the fund by the amount of securities that have been bought and sold. A turnover ratio of 50 percent means that half of the value of the mutual fund has been bought or sold during the period. Not only does turnover raise commission costs but it also results in short-term capital gains, which are taxed at a higher percentage rate than long-term capital gains.

**Bid-ask spread:** Contrary to popular belief, investors may be charged different prices for buying a security and for selling a security. The difference between these two prices is the bid-ask spread. This spread can vary depending on the liquidity of the security and the supply and demand for the security.

**Soft-dollar arrangements:** Many mutual funds have soft-dollar arrangements with brokerage houses whereby the brokerage house charges commissions for services in addition to charges for order execution. These commissions may be charged for research, access to information sources, computer equipment, and even personal services.

**Other hidden costs:** In addition to transaction costs, mutual funds may charge several other hidden costs, such as account transfer fees, account maintenance fees, inactivity fees, and minimum balance fees.

**Summary**

Mutual funds are collections of stocks, bonds, and other financial assets that are owned by a group of investors and managed by a professional investment company. As an investor in a mutual fund, you own a share of the fund that is equal to the amount of your investment divided by the total value of the fund.
One of the main reasons for the creation of mutual funds was to give investors who wanted to make smaller investments access to professional management. However, mutual funds offer many advantages to investors of all types. These advantages include diversification, professional management, low transaction costs, liquidity, flexibility, low up-front costs, and services. The disadvantages of mutual funds include the risks of below market performance, inability to plan for taxes, and new investor bias.

There are three major types of mutual funds that parallel the major asset classes: money market mutual funds, stock mutual funds, and bond mutual funds. Within the main asset class that each of the mutual funds comprises, there are many smaller asset classes that investors should consider when selecting a mutual fund. There are also several specialty mutual funds you should know about: index funds, exchange traded funds (ETFs), balanced funds, asset-allocation funds, life-cycle mutual funds, and hedge funds.

Calculating mutual fund returns is not as easy as it sounds. Too often, investors account for only the explicit costs of trading and forget about the implicit tax costs; these costs can significantly reduce the amount of a fund’s return.

There are five steps to buying a mutual fund: (1) determine your investment objectives, (2) choose an appropriate investment benchmark, (3) identify funds that meet your objectives, (4) evaluate the funds, and (5) make the purchase.

Assignment

Financial Plan Assignment

Your assignment is to gain an understanding of how mutual funds can give you exposure to the major asset classes. How have mutual funds performed versus the individual securities that mutual funds comprise? What do mutual funds add to a portfolio? What disadvantages do mutual funds have? How can you minimize the disadvantages of mutual funds while at the same time maximizing their advantages?

Mutual funds have their own separate benchmarks, which are noted in the Wall Street Journal each week and each month.

Learning Tools

The following Learning Tools may also be helpful as you prepare your Personal Financial Plan.

15. Possible Benchmarks for Investment Plans

This document suggests possible benchmarks for most of the major asset classes.

26. After-Tax, Equivalent Taxable Yield, and After-Inflation Returns
This spreadsheet calculates the after-tax returns, equivalent taxable yield, and after-inflation returns on various assets.

**Review Materials**

**Terminology Review**

**12-b1 fees.** These are fees paid by the shareholders to market the fund to other possible shareholders. These are just marketing fees. Avoid them.

**Account Transfer Fees.** These are charges for moving assets either into our out of an account.

**Asset allocation funds.** These are mutual funds which rotate asset classes among stocks, bonds, and cash for the best return. Asset allocation funds invest the fund’s assets in the asset classes expected to perform the best over the coming period of time.

**Balanced funds.** These are mutual funds which purchases both stocks and bonds generally in a specific percentage or relationship, i.e. 60% stocks and 40% bonds. Their benefit is that they perform the asset allocation, stock selection, and rebalancing decision for the investor.

**Bond mutual funds.** Bond mutual funds are funds which invest a majority of their assets in bonds of specific types of companies or institutions. These funds generally have a specific objective, i.e. “corporate,” “government”, “municipals,” “growth,” etc. which relates to the types of bonds the mutual fund invests in. In addition, most have a specific maturity objective as well, which relates to the average maturity of the bonds in the mutual fund’s portfolio.

**Capital gains.** Capital gains are the best type of earnings as capital gains at the share level are not taxed until you sell your mutual fund shares. You decide when to taxed.

**Closed-end mutual funds.** These are mutual funds with a specific number of shares outstanding. Individuals must purchase shares from existing shareholders, and shares may trade at a premium to (more than) or discount (less than) the underlying Net Asset Value (NAV). These premiums or discounts may be based more on investor demand than the underlying share value.

**Custody (or annual) fees.** These are fees the brokerage house charges to hold the mutual funds or ETFs in your account. May be a minimum amount for small accounts ($15 per year), a specific charge per holding (8 basis points per security), or a percentage of assets for large accounts (25 basis points on assets under management).
Distributions (i.e., interest, dividends, realized capital gains, etc.). Distributions is a less attractive type of earnings. Even though you do not sell any mutual fund shares and most investors reinvest earnings, you are still liable to pay taxes on all distributions that your mutual fund makes during the year. Distributions are divided into 5 main types:

- **Short-term capital gains.** These are capital gains where the Fund has owned the assets for less than 366 days. These are taxed at your Federal and state “ordinary” or “Marginal Tax Rate (MTR)”
- **Long-term capital gains.** These are capital gains where the Fund has owned the assets for more than a year (366 days). These are taxed at rate dependent on your taxable income.
- **Qualified stock dividends.** These are payment of cash to the Fund by the companies owned where the company owned the shares for a specific length of time. These are taxed at a preferential rate depending on your taxable income.
- **Ordinary (not-qualified) stock dividends.** These are payment of cash to the Fund by the companies who did not hold the stock for the required length of time. Taxes on ordinary or non-qualified stock dividends are at your Federal and state Marginal Tax Rate.
- **Bond interest and bond fund distributions.** These are taxed at your Federal and state Marginal Tax Rate.

Diversification. The process of risk reduction due to holding numerous securities that are diversified across sectors, asset classes and market capitalization.

Exchange traded funds (ETFs). These are portfolios of stocks similar to mutual funds which trade on organized exchanges. ETF’s trade like stocks, are purchased with all the transaction/custody costs, are priced throughout the day (rather than at day’s end like mutual funds), and can be sold short and purchased on margin. ETFs can be either in a unit investment trust (UIT) format or an open-end mutual fund structure. The UIT structure does not allow for reinvestment of dividends.

Hedge funds. Hedge funds are less-regulated mutual funds which take much more risk than normal with the expectation of much higher returns. Generally they can take both long positions (where they buy assets) and short positions (where they short-sell assets, i.e., borrow assets and sell them). They hope to later buy back the assets at a lower price before they must return them to the borrower.

Inactivity/Minimum balance fees. These are fees because you did not have account activity during the period or because you failed to keep a minimum balance in your account.

Index funds. Index funds are mutual funds designed to match the returns of a specific index or benchmark. Different Index funds may track many different benchmarks, including the S&P500 (Large-cap stocks), Russell 5000 (small-cap stocks), MSCI EAFE
(international stocks), Barclay Aggregate (corporate bonds), DJ REIT (Real estate investment trusts), etc. Index funds are tax efficient since they do little in buying and selling of securities, and their goal is to match the return of their relative benchmarks.

**Life-cycle funds.** These are funds which change their allocation between stocks and bonds depending on investor age. As an investor ages, life cycle funds reduce their allocation to stocks and increase their allocation to bonds, more consistent with the goals and objectives of an older investor.

**Loads.** Loads are sales charges to compensate the sales force for selling the fund. Loads directly reduce the amount of money invested by the amount of the load. Loads can either be front-end or back-end, depending on when the mutual fund company takes out the load or sales charge. Generally, research has found that the performance of load funds and no-load funds is identical. When the sales charges are included, no-load funds significantly outperform load funds. (Matthew R. Morley, “Should You Carry a Load? A Comprehensive Analysis of Load and No-Load Mutual Fund Out-of-Sample Performance,” Journal of Banking and Finance, vol. 27, nu. 7 (2003), pp. 1245-71.)

**Management fees.** These are fee charged by the advisor to a fund generally on the basis of a percentage of average assets under management, i.e. 75 basis points or .75% a year.

**Minimum purchase amount.** This is the minimum amount the mutual fund company will allow you to purchase in their funds to begin investing.

**Money market mutual funds.** Money market mutual funds are funds which invest the majority of their assets in short-term liquid financial instruments such as commercial paper and government treasury bills. Their goal is to obtain a higher return, after fees and expenses, than traditional bank savings or checking accounts.

**Mutual fund returns.** Mutual fund returns include distributions of dividends, capital gains, and interest, and any NAV appreciation. Your total return: (ending NAV–beginning NAV)+ distributions / beginning NAV. Mutual Fund after-tax returns is your return after all taxes are taken out. Mutual fund before-tax returns is your return before taxes.

**Mutual fund supermarkets.** Mutual fund supermarkets i.e., Fidelity Funds Network, Charles Schwab, or Jack White, allows you the benefits of the mutual fund company while you get access to a whole range of mutual fund companies (but not all of them). Mutual fund companies rebate part of their management fees back each month to the “mutual fund supermarkets” to have them included in their list of funds.

**Mutual fund.** It is a way of holding financial and real investments. It is an Investment company that pools money from investors to buy stocks, bonds, and other financial
investments. Investors own a share of the fund proportionate to the amount of their investment divided by the total value of the fund.

**Mutual fund share classes.** These classes of shares vary depending on the loads and management fees paid. While there are differences in classes of shares among investment management companies which charge loads, they generally are:

- **Class A Shares:** These shares commonly have a front-end or back-end load to compensate for the sales person’s commissions. Because of the front-end loads, they usually have lower management fees.
- **Class B Shares:** These shares commonly only have a back-end load that is paid only when the shares are sold. This load traditionally declines over time. Class B shares generally have higher expense ratios when compared to Class A shares.
- **Class C Shares:** These shares generally have a lower front- and back-end load fees, but higher management fees.
- **Class R Shares:** These shares are generally for retirement purposes. Check the loads and management fees which may be substantial.
- **No-Load Shares:** These are shares sold without a commission or sales charge. Generally, these shares are distributed directly by the investment management company, instead of going through a sales channel. They may have higher management fees to compensate for the lack of a front- or back-end load.
- **Class Y Shares:** These are shares with very high minimum investments, i.e., $500,000, but which have lower management fees and waived or limited load charges. These are generally for institutional investors.
- **Class Z Shares:** These are shares only available for employees of the fund management company.

**New investor bias.** New investors dilute the value of existing investor’s shares. Since new money comes into the fund at Net Asset Value, and since this money must be invested (at roughly 0.5% on average in the U.S.), existing investors are subsidizing new investors coming into the fund.

**No-load mutual funds.** Mutual funds that are sold without a sales charge and are redeemed without a charge as well.

**Open-end mutual funds.** These are mutual funds that can be purchased and sold each day at the fund’s Net Asset Value, which is the fund’s assets less liabilities, divided by the number of shares outstanding.

**Stock mutual funds.** These are stock mutual funds are funds which invest a majority of their assets in common stocks of listed companies. These funds generally have a specific objective, i.e. “large-cap,” “small-cap”, “value,” “growth,” etc. which relates to the types of stocks the mutual fund invests in.
Taxes on Distributions. These are taxes on your distributions which must be taken into account to get the true return of your portfolio but which are not noted on your monthly reports.

Total expense ratio. This is the total percentage of assets that are spent each year to manage the fund including management fee, overhead costs, and 12b-1 fees.

Transaction costs. These are costs of the fund buying and selling securities, which are not included in other costs. Mutual funds which turn over the portfolio often, i.e. buy and sell a lot, will have higher transactions costs. A good proxy for this is the turnover ratio.

Turnover ratio. This is a measure of trading activity during the period divided by the fund’s average net assets. A turnover ratio of 50% means half the fund was bought and sold during the period. Turnover costs money and incurs taxes.

Types of Mutual funds. The types of mutual funds generally follow the major asset classes, i.e., money market, stock, and bond mutual funds.

Review Questions

1. What are mutual funds? Why are they suitable for the novice investor?
2. What are seven advantages of investing in mutual funds?
3. What are six disadvantages to investing in mutual funds?
4. What are the three major types of mutual funds?
5. What are the three different ways in which you can purchase a mutual fund?

Case Studies

Case Study 1

Data

Bill and Sally invested in five mutual funds. They are in the 25-percent federal and 7-percent state marginal tax brackets, and made $40,000 in taxable income. (Remember, in 2016 qualified stock dividends and long-term capital gains are taxed federally at 15 percent if your marginal tax rate is 25 percent). They are concerned to calculate their returns.

Calculations

A. Calculate the before-tax and after-tax returns on each of the funds in their portfolio for 20XX.
B. Calculate their overall portfolio before-tax and after-tax returns. Note that the first three funds are all taxable, the municipal bond fund is federal tax-free for interest only, and the Treasury bond fund is state tax-free for interest only.
### Chapter 22. Investments 6: Mutual Fund Basics

<table>
<thead>
<tr>
<th>Funds</th>
<th>End NAV</th>
<th>Begin NAV</th>
<th>Short-Term LTGC Distr.</th>
<th>Qual. Stock Dividends</th>
<th>% of Total Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fid. Magellan (FMAGX)</td>
<td>62.98</td>
<td>71.67</td>
<td>0.41</td>
<td>0.02</td>
<td>50%</td>
</tr>
<tr>
<td>Sch. Small Cap (SWSSX)</td>
<td>19.01</td>
<td>21.11</td>
<td>0.35</td>
<td>1.16</td>
<td>10%</td>
</tr>
<tr>
<td>Van. ST Bond (VBISX)</td>
<td>10.61</td>
<td>10.55</td>
<td>0.19</td>
<td>0.06</td>
<td>20%</td>
</tr>
<tr>
<td>WF Muni Bond (SXFIX)</td>
<td>9.80</td>
<td>9.29</td>
<td>0.40</td>
<td>0.00</td>
<td>10%</td>
</tr>
<tr>
<td>Van. ST Treasury (VFISX)</td>
<td>10.79</td>
<td>10.68</td>
<td>0.07</td>
<td>0.06</td>
<td>10%</td>
</tr>
</tbody>
</table>

Notes: ST = short-term distributions. For bond funds, these are interest and short-term capital gains; for stock funds, they are non-qualified dividends, interest, and short-term capital gains. LTCG Distr. = Long-term capital gains distributions. Qual. Stock Distr. = qualified stock dividend distributions. % Portfolio is the beginning weight of the assets in your portfolio. Remember, your overall portfolio return is your return of each asset multiplied by your beginning period weight.

To calculate the after-tax return from each asset, determine the amount of taxes you will pay on each type of earning. Since you have not sold the assets, the only taxes you will pay will be on the distributions you have received. Subtract out the taxes on distributions to give you the distributions you get to keep, and calculate your return.

\[
\text{(NAV}_{\text{Ending}} - \text{NAV}_{\text{Beginning}} + (\text{Distributions} \times 1 - \text{tax rate})) / \text{NAV}_{\text{Beginning}}
\]

Remember that the tax benefits on municipal and Treasury bonds are only on the interest distributions. You still must pay all taxes on the capital gains distributions.

### Case Study 1 Answers

To calculate the after-tax return on each asset, determine the amount of taxes you will pay on each type of earning. Since you have not sold the assets, the only taxes you will pay will be on distributions you have received. Subtract the amount of distribution taxes you must pay to find the amount of distributions you will get to keep, and calculate the amount of return you will get to keep after taxes.
Case Study 2

Data

Bill is concerned about turnover. He knows that the turnover rate for financial assets is a measure of the amount of trading activity completed during a year; the turnover rate is expressed as a percentage of the average amount of total assets in the fund. A turnover rate of 10 percent means that 10 percent of the average amount of total assets in the fund were bought and sold during the year. He also knows that a mutual fund investor must pay taxes on any distributions received during the year, including distributions the investor reinvests in additional shares. While high turnover may lead to higher returns, high turnover always leads to higher transaction costs as well as increased taxes if assets are held in taxable accounts. Bill’s marginal tax rate is 35 percent, and he lives in a state that does not have a state income tax, so his short-term distributions will be taxed at 35 percent.

- The following information is for two of Bill’s bond mutual funds:

<table>
<thead>
<tr>
<th>Mutual Funds</th>
<th>Fund A</th>
<th>Fund B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning NAV</td>
<td>$100.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>Short-Term Distributions</td>
<td>$1.00</td>
<td>$0.90</td>
</tr>
<tr>
<td>Ending NAV</td>
<td>$109.00</td>
<td>$10.10</td>
</tr>
</tbody>
</table>
Calculations

- Calculate Bill’s before-tax and after-tax returns on Fund A and Fund B.
- What would have changed had the mutual funds been stock mutual funds and the distributions been qualified stock dividend distributions instead of bond distributions?

**Case Study 2 Answer**

A. Bill’s before tax and after-tax returns are:

<table>
<thead>
<tr>
<th></th>
<th>Fund A</th>
<th>Fund B</th>
</tr>
</thead>
<tbody>
<tr>
<td>YTD Nominal Returns</td>
<td>10% (note 1)</td>
<td>10%</td>
</tr>
<tr>
<td>Estimated Turnover</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>Taxes on Short-Term Distributions</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>Taxes Paid (on Short-Term Distributions)</td>
<td>$.035</td>
<td>$0.315</td>
</tr>
<tr>
<td>After-Tax Return</td>
<td>9.65%</td>
<td>6.85%</td>
</tr>
<tr>
<td>Loss from Nominal Return Due to Taxes</td>
<td>0.35%</td>
<td>3.15%</td>
</tr>
</tbody>
</table>

To calculate Bill’s before-tax return, the formula is \((\text{ending NAV} + \text{distributions} - \text{beginning NAV}) / \text{beginning NAV}\).

- Fund A: \((109.00 + 1.00 - 100.00) / 100.00 = 10 \text{ percent}\)
- Fund B: \((10.10 + 0.90 - 10.00) / 10.00 = 10 \text{ percent}\)

The formula for finding the after-tax return is:

\((\text{ending NAV} + [(\text{distributions} - \text{taxes paid}) - \text{beginning NAV}]) / \text{beginning NAV}, \text{ or:}\)

- Fund A: \((109 + [(10 - 3.50) - 100]) / 100 = 9.65\%\)
  - Bill pays $0.10 * .35 in taxes and keeps $0.10 * (1-.35).
- Fund B: \((10.10 + [(0.90 - 0.315) - 10.00]) / 10.00 = 6.85\%\)
  - Bill pays .90 * .35 in taxes and keeps .90 * (1-.35).

Regarding Fund A, Bill must pay 35 percent, or $3.50, in taxes on a $10 distribution. Thus, his nominal return is 10 percent, his after-tax return is 9.65 percent, and he loses 0.35 percent to taxes.

Regarding Fund B, Bill must pay 35 percent, or 31.5 cents in taxes on a 90-cent distribution. Thus, his nominal return is 10 percent, but his after-tax return is 6.85 percent, and he loses 3.15 percent to taxes.

Although both funds have the same nominal return and the same tax rate, Fund B’s return is 29-percent lower because of taxes related to higher turnover. Clearly, understanding taxes is very important. Know your tax-rate on each type of earnings.
B. If the distributions would have been qualified stock dividend distributions instead of short-term distributions, instead of paying taxes at 35 percent, which is Bill’s ordinary income rate, he would pay a preferential tax rate of only 15 percent for both Fund A and Fund B.

---

Introduction

In this chapter, you will use what you have learned about goal setting, asset classes, and investing to begin building a successful investment portfolio. Before you can build a successful portfolio, you must first understand how to select investment vehicles, learn the phases of successful investing, and know how to use the investment process to build your portfolio.

Reinhold Niebuhr in the Serenity Prayer wrote, “God grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom to know the difference.” There are six factors that control investment returns. Five of those factors are within your personal control, while only one is outside your control.

The five factors you control are:

- How much you save,
- How long your investments grow,
- Your mix of investments, i.e., your asset allocation,
- How much you pay in expenses, and
- How much you pay in taxes.

The only factor you do not control is

- Your investment returns.

If you want to do well on your investing, spend your time and efforts on the things you can control! Focus on

- Saving money each week or month by reducing your spending and sticking to your budget;
- Keeping your investments in the market;
- Keeping your risk consistent with your risk tolerance through a correct asset allocation mix;
- Maintaining adequate diversification;
- Reducing fees, expenses, transactions costs, and taxes; and
- Doing the math that controls returns.

Most novice investors spend their time on areas they cannot control, i.e., investment returns, and fail to be concerned over areas they can control, i.e., savings, asset allocation, time, and expenses.
Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand how to select investment vehicles
2. Describe the phases of a successful investment portfolio
3. Explain the investment process and know how to build your portfolio

Understand How to Select Investment Vehicles

Before you can build a successful investment portfolio, you must understand the difference between investment vehicles and investment (or financial) assets.

Investment vehicles are special types of investment accounts with a tax-advantaged framework that allows you to invest in various financial assets. Tax advantages include the deferral of current taxes (as for a traditional IRA or 401(k)) or the elimination of future taxes on earnings (as for a Roth or Education IRA). These accounts are useful because they provide specific tax advantages that are not available when financial assets are purchased individually. Investment vehicles are like shopping carts in a grocery store.

Investment assets are specific classes of financial securities in which you may invest, including stocks, bonds, mutual funds, real estate, money-market mutual funds, CDs, and so on. As you have learned, these financial assets are grouped into asset classes and are associated with different levels of risk. Investment assets are like the groceries you put in your shopping cart.

There are many types of investment vehicles. Many investment vehicles are geared toward helping you build a retirement account. Most are named after a specific line in the Internal Revenue Code. For example, a 401(k) plan is a retirement plan offered to employees of private companies, a 403(b) plan is a retirement plan offered to employees of public companies, a Simplified Employee Plan (SEP IRA) is a retirement plan designed for employees of small businesses, and an Individual Retirement Account (IRA) is a retirement plan designed for individuals. Table 1 shows characteristics of select investment vehicles for 2016.

Understanding how to select investment vehicles can help you identify the tax benefits and other benefits of different investment vehicles. Understanding these priorities can help you determine which investment vehicles will help you achieve your financial goals the quickest. The process of selecting investment vehicles is divided into three sections: free money; tax-advantaged money; and tax-efficient, wise investments. Understanding these priorities can help you determine which investment vehicles you should use first in working toward your financial goals.
Priority 1: Free Money

The first priority is free money, in the form of money provided by your company when you participate in a company-sponsored retirement plan. Free money is often provided through a matching plan, in which your company offers to match a percentage of the money you invest in your 401(k), Keogh (or small business retirement plan for sole proprietorships), or other retirement plan. A matching plan is used as an incentive for employees to remain with the company and invest in a retirement plan. Some states also allow a tax deduction for your contribution to that state’s 529 plans for education, which is, in essence, free money as well.

Table 1. Select Investment Vehicles for 2016 (Before Catch-Up)

<table>
<thead>
<tr>
<th>Plan</th>
<th>Tax-Deferred</th>
<th>Tax-Eliminated</th>
<th>Maximum Amount</th>
<th>For Employees of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>401(k)</td>
<td>Yes</td>
<td></td>
<td>$18,000</td>
<td>Businesses w/ Plans</td>
</tr>
<tr>
<td>Roth 401(k)</td>
<td>Yes</td>
<td>Yes</td>
<td>$18,000</td>
<td>Businesses w/ Plans</td>
</tr>
<tr>
<td>403(b)</td>
<td>Yes</td>
<td></td>
<td>$18,000</td>
<td>Non-profit, tax-exempt</td>
</tr>
<tr>
<td>Roth 403(b)</td>
<td>Yes</td>
<td>Yes</td>
<td>$18,000</td>
<td>Non-profit, tax-exempt</td>
</tr>
<tr>
<td>457</td>
<td>Yes</td>
<td></td>
<td>$18,000</td>
<td>State/Municipalities</td>
</tr>
<tr>
<td>SEP IRA</td>
<td>Yes</td>
<td></td>
<td>$53,000</td>
<td>Small Businesses</td>
</tr>
<tr>
<td>SIMPLE IRA</td>
<td>Yes</td>
<td></td>
<td>$12,500</td>
<td>Small Businesses</td>
</tr>
<tr>
<td>IRA</td>
<td>Yes</td>
<td></td>
<td>$5,500</td>
<td>Individuals</td>
</tr>
<tr>
<td>Roth IRA</td>
<td>Yes</td>
<td>Yes</td>
<td>$5,500</td>
<td>Individuals</td>
</tr>
<tr>
<td>Education IRA</td>
<td>Yes</td>
<td></td>
<td>$2,000</td>
<td>Individual Education</td>
</tr>
<tr>
<td>529 Plans</td>
<td>Yes</td>
<td></td>
<td>$418,000 per child</td>
<td>Individual Education</td>
</tr>
</tbody>
</table>

Free money is your first priority because it is free, and the percentage matched by the company is usually higher than any rate of return you could earn in the market. The risk of investing in a company-sponsored plan is that you are usually required to stay with the company for a certain number of years to become fully vested, or in other words, to take full ownership of the free money. If you leave for any reason prior to the required time, you forfeit the match, but your contributions are fully vested, and you can take them with you to your next place of employment.

Examples of free money include company matching in a 401(k) or 403(b) plan, or even in a Roth 401(k) or Roth 403(b) plan.

Priority 2: Tax-Advantaged Money

There are two different types of tax-advantaged vehicles: tax-eliminated and tax-deferred. Your choice of which account is better mainly depends on your current tax rates and your estimation of your future tax rates. If you expect your tax rates to be higher in the future than they are now, you will save a greater amount for retirement by eliminating future taxes by choosing a Roth IRA or Roth 401(k) rather than one of the traditional retirement accounts. If you expect your tax
rates to be lower in the future than they are now, you will save a greater amount for retirement if you defer taxes by choosing a traditional IRA or 401(k). To help you decide which type of IRA is better for you, see Learning Tool 28: Roth versus Traditional: Which Is Better for You in the Learning Tools directory of the website. This tool allows you to set an annual contribution, an estimated rate of return on earnings, and your current and (estimated) future tax rates. By changing your future tax rates, you can determine whether your balance in the future would be higher or lower, all other areas being held constant.

Tax-eliminated accounts require you to pay taxes on the principal before investing; however, you do not have to any pay any taxes on the capital gains or earnings in the future. There are several different tax-eliminated investment vehicles that can help you save for retirement (i.e., Roth IRAs and Roth 401(k)) or for education (i.e., 529 funds, Education IRAs, and Series EE or I bonds). When tax-eliminated accounts are used for qualified purposes, withdrawals can be made without penalty and without taxes.

With a Roth IRA or a Roth 401(k), you pay taxes on the principal before depositing the money into your retirement account. In other words, you are contributing after tax dollars to your account. Once you reach age 59.5, you can take both the principal and interest out of this retirement account without paying taxes on the money. Paying taxes beforehand eliminates taxes on all capital gains and earnings in this account. Roth IRAs have an additional advantage: if you need the funds in your account before retirement, you can withdraw the principal without penalty because you have already paid taxes on the principal. The disadvantage of a Roth IRA is that, like all retirement accounts, you cannot withdraw your earnings without penalty until you are at least 59.5 years old.

With many 529 funds and Series EE and I bonds, you are also investing with after-tax dollars. If you use your earnings to cover qualified educational expenses for your children, you do not have to pay taxes on the earnings. However, if you do not use the earnings for qualified educational expenses, you must pay a 10 percent penalty on your earnings, as well as federal and state taxes on the amount withdrawn as it is considered ordinary income for tax purposes.

Tax-deferred accounts allow you to invest without first paying taxes on the principal; then, when you withdraw money from the account at retirement, you pay taxes on both the principal and the earnings. This type of account is advantageous because it allows you to invest a larger amount of money using a smaller percent of your net income. Examples of tax-advantaged investment vehicles include Individual Retirement Accounts (IRAs), 401(k) and 403(b) plans, and Simplified Employment Plan Individual Retirement Accounts (SEP IRAs).

Suppose your gross income last year was $45,000 and you invested $3,000 in a traditional IRA. Your adjusted gross income (AGI—the income on which you pay taxes) would be $42,000. Contributing to an IRA reduces the amount you must pay in taxes today (the amount of your tax savings would be equal to $3,000 multiplied by your tax rate). However, when you retire after age 59.5 and take this money out of your retirement accounts, you are not only required to pay taxes on your $3,000 investment but you must also pay taxes on any earnings the IRA
investment has produced. The initial investment and any earnings are taxed at your ordinary income-tax rate, which can be as high as 39.6 percent.

The risk of using tax-deferred investment vehicles is that you must be at least age 59.5 to make withdrawals. If you withdraw funds before reaching this age, you must pay taxes on the funds at your ordinary income-tax rate and you must also pay a 10 percent penalty fee. Thus, if you make early withdrawals, you may lose up to 45 percent of your investment in taxes and penalties (a 10 percent penalty charge plus 35 percent in taxes if you have the highest marginal tax rate possible). Even tax-deferred earnings that have remained in your retirement account for more than 12 months are taxed as ordinary income rather than the preferential long-term capital gains rate.

**Priority 3: Tax-Efficient, Wise Investments**

The third priority is tax-efficient, wise investments. Wise investors know they will have to pay taxes and transaction fees on any investment they make, so they work to minimize these costs as much as possible. They also monitor their investments’ performance by comparing their returns after taxes and transaction fees to the appropriate benchmarks. Following are five important suggestions for investing tax-efficiently and wisely:

1. **Know the impact of taxes.** As an investor, you must be particularly concerned about the effects of taxes, because taxes are one of the largest expenses you will have to pay when you invest; every dollar you pay in taxes is a dollar you will not be able to invest. To invest in a tax-efficient manner, you must understand how taxes influence your returns (capital gains, dividends, and interest). You can use the following formula to calculate your after-tax return:

   \[
   \text{Return after tax} = \text{Return before-tax} \times (1 - \text{marginal tax rate})
   \]

   Your after-tax return is equal to your before-tax return multiplied by the result of one minus your marginal tax rate. Your marginal tax rate is the tax rate you pay on your last dollar of earnings and encompasses your federal, state, and local taxes. It is important for you to know your marginal tax rate. Remember that different types of earnings are taxed differently. Bond interest is taxed at your ordinary marginal tax rate, stock dividends are taxed at 15 or zero percent, and unrealized capital gains are not taxed until the assets have been sold.

   To understand the impact of taxes, you must calculate the estimated after-tax return of each asset you are considering.

2. **Reduce taxes and defer earnings and taxes to the future.** Long term capital gains are taxed at a much lower rate than ordinary income (0 percent if your marginal tax rate is 15 percent or less, 15 percent if your marginal tax rate is between 25 and 35 percent, and 20 percent if your marginal tax rate is higher than 35 percent (see Figure 1). Also note there is a 3.8 percent additional Medicare tax on long term capital gains if your Adjusted Gross Income (AGI) is more than $250,000 (MFJ) compared to ordinary rates, which may be as high as percent). Earn as much of your income as possible in the form of long-term capital gains.
Figure 1. Tax Changes in 2013

<table>
<thead>
<tr>
<th>Taxable income*</th>
<th>Ordinary income</th>
<th>Capital gains and dividends</th>
<th>Medicare tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>Joint</td>
<td>Earned income**</td>
<td>Investment income</td>
</tr>
<tr>
<td>$0+</td>
<td>$0+</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>$6,650+</td>
<td>$17,900+</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>$36,250+</td>
<td>$72,500+</td>
<td>25%</td>
<td>15%</td>
</tr>
<tr>
<td>$57,500+</td>
<td>$146,400+</td>
<td>28%</td>
<td>2.9%</td>
</tr>
<tr>
<td>$183,250+</td>
<td>$223,050+</td>
<td>33%</td>
<td>3.6%</td>
</tr>
<tr>
<td>$200,000+ (AGI)</td>
<td>$250,000+ (AGI)</td>
<td>35%</td>
<td>3.6%</td>
</tr>
<tr>
<td>$398,350+</td>
<td>$398,350+</td>
<td>35%</td>
<td>3.6%</td>
</tr>
<tr>
<td>$400,000+</td>
<td>$450,000+</td>
<td>39.6%</td>
<td>20%</td>
</tr>
</tbody>
</table>

*Based on estimated 2013 inflation adjustments. Amounts refer to taxable income except where noted.
**Combined rate includes 1.45% employer contribution.

You can replace ordinary income with long term capital gains by using a buy-and-hold strategy when you invest. This strategy means that you hold on to your assets for as long as possible and do not trade in your accounts. By holding on to assets for extended periods of time, you defer earnings to the future and avoid paying taxes now.

3. **Minimize turnover and taxable distributions.** Minimize turnover on all assets and minimize taxable distributions on your mutual funds. Every time you sell an asset, you create a taxable event.

The law requires that mutual funds distribute 90 percent of all capital gains and interest to shareholders annually. You will have to pay taxes and fees on these distributions, even if you do not sell your mutual fund. As an investor in a mutual fund, you must sometimes pay taxes because of the actions of the mutual fund’s portfolio manager.

You can minimize turnover and taxable distributions by selecting your mutual funds wisely. Invest in funds that do not have a history of trading actively (i.e., funds that have low turnover or trading). These funds will reduce the amount you must pay in taxes each April.

4. **Replace interest income with stock dividend income.** Because of changes in the tax law in 2004, taxes on dividends from individual company stocks or stock mutual funds were reduced to 15 percent or 0 percent, depending on your marginal tax rate. However, interest earned on bonds or bond mutual funds is taxed at your ordinary income rate, which can be as high as 35 percent. If you put more emphasis on stock dividend income than interest income, you will potentially increase your portfolio’s return and pay less in taxes as well. These steps should only be taken if they are appropriate for your risk-tolerance level.

5. **Invest tax-free.** If you are in a high marginal tax bracket, you can invest in assets that do not require you to pay federal or state taxes. For example, municipal bonds are federal tax-free; they may also be state tax-free if you are a resident of the state that is issuing the bonds. Treasury...
bonds are state tax-free, and certain government savings bonds, such as Series EE and Series I bonds, are both federal and state tax-free if the proceeds are used solely for qualified education expenses.

Selecting Investment Vehicles

Some investment vehicles are preferred over others because they provide tax and other advantages. Unfortunately, some of the investment vehicles with tax advantages also have lower maximum contribution limits. For example, in 2016 the maximum amount you could contribute to a Roth IRA was $5,500, while there was no limit on how much you could invest in individual financial assets without the tax benefits.

Although some investment vehicles have limitations, it is still a good idea to adhere to the process. You should first invest money in vehicles that are the highest priority. When you have reached the maximum amount you can invest in these vehicles, or when you have invested as much money as your company is willing to match, then you should invest in the next highest priority. Continue to invest until you have utilized all of your available investment funds.

When selecting financial assets to include in your retirement account, remember that you will not have to pay taxes on the principal or earnings until you take the money out. If you own financial assets that are actively traded or generate a lot of income, these assets should be held in your retirement accounts so you will not have to pay taxes on them until you take them out at retirement. Assets that you may want to hold in your retirement account include actively traded accounts, taxable bonds, and high-turnover mutual funds.

Financial assets that you manage with a buy-and-hold strategy should be kept in taxable investment accounts. Such assets include tax-free bonds, tax-efficient indexes and mutual funds, and other financial assets that you do not plan to sell for a long time. Although you may be required to pay taxes on these funds each year for dividends and other short-term distributions, it is usually tax-efficient to hold these assets for extended periods of time. The taxes you must pay on these funds will add little to your yearly tax bill.

Describe the Phases of a Successful Investment Portfolio

Strategies for developing investment portfolios differ among individual portfolio managers and institutions. The strategy each investor prefers depends on the way he or she views the market and on his or her goals, budget, and experience in investing. It is impossible to discuss the strategies every portfolio manager uses to build each portfolio; however, as I have reviewed successful portfolios, I have found that several critical phases of investment remain the same (see Chart 1). In an earlier chapter, you saw the top of the investment hourglass, which details the steps you should take before you begin investing. Like the way we live our lives and decide on our goals, the way we invest should be based on our priorities. This chapter includes the bottom of the investment hourglass, which describes a pattern of successful portfolios.
The bottom of the investment hourglass is divided into four levels, representing the phases of investment. The first level of the hourglass represents the phase in which you develop your emergency fund and food storage. The second level represents the phase in which you develop your portfolio’s core, which includes broad market index funds or core mutual funds. The third level represents the phase in which you diversify your portfolio by broadening and deepening your asset classes. Finally, the fourth level represents the phase in which you develop your opportunistic assets, such as individual stocks and sector funds.

Levels two, three, and four are also divided in terms of taxable assets and retirement assets. Taxable assets are assets whose earnings you will need to pay taxes on each year. Retirement assets are assets you will not need until after you retire and on which you do not pay taxes until you take the money out at retirement. The breakdown of your assets between your taxable and retirement accounts will depend on your personal goals and your available retirement vehicles.

The bottom of the investment hourglass illustrates three important principles. First, it illustrates the importance of keeping risk in perspective. The base of the hourglass encompasses the least risky investments. As you move up the hourglass, you take on higher risk and, hopefully, higher returns. Second, the hourglass teaches you the “how to” of investing. You should invest in lower-risk assets first and then expand your portfolio to increase its potential for greater risk and more return as the size of your assets increases. Third, the investment hourglass separates taxable assets and retirement assets. The impact taxes have on these two types of accounts is not the same, so retirement and taxable assets should be managed differently.

**Phase 1: Building an Emergency Fund and Food Storage**

While this course will not cover the process of building your food storage, please be aware of its importance. If you lose your source of income, food storage can help reduce the amount of cash needed to survive.

The main objectives of your emergency fund should be liquidity, safety, and the preservation of principal. The first assets you add to your portfolio should be low-cost, high-liquidity money-market mutual funds or other savings vehicles, such as savings accounts, money-market deposit accounts, short-term Treasury bills, or CDs (see Chapter 5: Cash Management on the website for ideas of other assets that could be included in your emergency fund). Ideal assets for your emergency fund will allow for adequate liquidity in case of an emergency while still giving you a positive return (or as close to a positive return as possible) after inflation and taxes. The goal for this phase is to accumulate three to six months of income in your emergency fund before you begin investing in any other phase. If you are worried about your job security or if you have a volatile income stream, you may want to maintain a higher percentage of your income in this fund.
Chapter 23. Investments 7: Building Your Portfolio

Chart 1: The Investment Hourglass Bottom

Taxable Assets

Retirement Assets

4. Opportunistic: Individual Stocks and Sector Funds

3. Diversify: Broaden and Deepen your Asset Classes

2. Core: Broad Market Index Fund/ETF, or Core Mutual Funds

1. Basics: Emergency Fund and Food Storage

Phase 2: Building a Core

The main objective of this phase is to give your portfolio broad exposure to the equity market. The assets in the equity market have consistently yielded the highest return of any of the major asset classes after taxes and inflation.

I recommend investing in a large-capitalization stock mutual fund or index fund because large-cap stocks are the least risky of all equity asset classes and because mutual funds are diversified and low cost. S&P 500 index funds will have roughly 500 stocks in their portfolios.

For this phase, you will want to purchase a low-cost, broad market index fund or a core low-cost, low-turnover mutual fund. Using the principles discussed in Chapter 19. Investments 1: Before You Invest, invest in the main equity markets. These markets will give you a higher risk-adjusted return. I recommend purchasing a low-cost, no-load index fund that follows large-cap stocks. These funds generally have a low minimum purchase amount (sometimes less than $100) and cost about 0.30 percent (or 30 basis points: a basis point equals 1/100 of a percent) per year or less. These funds have low turnover, are very tax-efficient, and generally match the performance of the benchmark.

During this phase, you should also add a broad market index fund or core mutual fund to your retirement vehicles (your 401(k) plan and/or your IRA). The amount you invest in your
retirement account versus the amount you invest in your taxable account depends on your personal goals and budget and the availability of retirement vehicles.

**Phase 3: Diversifying Your Portfolio**

In this phase, your main objective is to increase your portfolio’s diversity beyond your core market exposure.

To deepen your exposure to the market, you will need to add equity assets other than your core or large-cap stocks to your portfolio. Ideas for diversifying your portfolio include adding smaller assets from the equity asset class, such as a small-cap stock fund or a mid-cap stock fund.

To broaden your exposure to the market, you will need to purchase asset classes in addition to U.S. large-cap stock funds. For example, you can broaden your asset classes by purchasing international stock or bond funds, a real estate investment trust, or emerging markets stock or bond funds. During this phase, you should also add these diverse assets to your retirement account to deepen and broaden your exposure.

**Phase 4: Developing Your Opportunistic Assets**

This phase is optional; it involves purchasing individual stocks or sector funds that usually have a higher risk. Many investors eliminate this phase completely with little impact to their portfolios.

If you decide to move into the opportunistic phase, the assets you should purchase include individual stocks and sector funds. Sector funds are mutual funds that follow a specific industrial sector, such as technology or financials. You would invest in stocks and sectors that you think are likely to outperform your other benchmarks. Remember that high-turnover funds should be included in your retirement account so you can defer taxes.

Once you have incorporated the principles in the bottom of the investment hourglass into your portfolio, you can continue to diversify your portfolio by adding additional assets and asset classes that are consistent with the principles and priorities discussed in this chapter.

**Explain the Investment Process and Know How to Build Your Portfolio**

Once you understand the principles of investing and have developed your Investment Plan, you must learn the process of investing. The process of investing is a disciplined approach to building an investment portfolio. There are many ways to approach building your investment portfolio; the process of investing outlined in this chapter is a consistent, logical, and principle-supported approach that can help you minimize transaction costs and taxes. This approach to building an investment portfolio will also teach you a logical order for purchasing securities and will help you set financial goals as you build your portfolio.
There is a five-step investment process that will help you build your portfolio once you have established your Investment Plan.

1. Determine Your Initial Target Portfolio Monetary Goal

The first step is to determine an initial size for your portfolio, or a target monetary goal. You must decide how much money you want to invest in your portfolio. An easy way of determining your target portfolio size is to divide the dollar amount of your emergency fund by the percentage of funds you want to invest in cash and bonds. Cash and bonds are usually the assets included in your emergency fund. Let us assume you make $60,000 per year, your goal for an emergency fund is four months of income ($60,000 / 12 * 4, or $20,000), and your target allocation for bonds and cash is 20 percent. With this information you can calculate your target portfolio size by dividing the dollar amount of your emergency fund ($20,000) by the percentage of funds in bonds and cash (20 percent) to give you your initial target portfolio ($100,000). This goal is the first of many target portfolio goals you will set.

2. Determine Target Percentages for Each Asset Class

Once you know the target size of your portfolio, you can use the target allocation percentages listed in your Investment Plan to determine how much you will invest in each remaining phase.

Assume that in your Investment Plan, you listed a target allocation of 60 percent in core exposures, 10 percent in international investments, 10 percent in small-cap investments, and 20 percent in bonds and cash. To calculate the target amount for your core investments, multiply 60 percent by your target portfolio size of $100,000; you should invest $60,000 in the core asset class. The remaining asset class allocations are calculated in a similar manner: 10 percent multiplied by $100,000 equals a $10,000 allocation for international and real estate investments, respectively, and 20 percent multiplied by $100,000 equals a $20,000 allocation for bonds and cash, which make up your emergency fund.

3. Calculate the Target Amount for Each Asset Class in Both Taxable Accounts and Retirement Accounts

Next, separate the allocations into the categories of taxable accounts and retirement accounts. Continuing with the previous example, let us assume that, regarding your core allocations, 35 percent is allocated to taxable accounts (e.g., funds for a down payment on a home and education) and 25 percent is allocated to your retirement account. Let us also assume that half of international and small-cap investments are allocated to retirement accounts and half are allocated to taxable accounts. How do you determine the amount of these allocations?

The target amount of each asset you should allocate to your taxable accounts and retirement accounts is the percentage of each asset multiplied by the target portfolio amount. To find the amount of core assets you should allocate to your taxable accounts, multiply 35 percent by $100,000, which results in $35,000 for your core taxable account. To find the amount of core assets you should allocate to your retirement account, multiply 25 percent by $100,000, which
results in $25,000 for your core retirement account. You can calculate the allocation amounts of the remaining asset classes in a similar manner.

No percentage of your emergency fund is allocated to a retirement account. Since this account is for emergencies, the funds must be readily available; hence, you should not put these funds in a retirement account.


In this step, you determine which assets are likely to deliver the return you need to achieve your goals. The next chapter, Investments 8: Choosing Financial Assets discusses the process of choosing financial assets.

5. Purchase the Assets and Compare the Actual Portfolio with the Target Portfolio

Once you have determined which assets you would like to include in your portfolio, the final step is to purchase these assets. Purchase your emergency fund first, then your core assets, and then the assets you are including to diversify your portfolio. The order of purchasing assets that this chapter outlines is important; however, once you have purchased your emergency fund, you can purchase all the remaining assets simultaneously if desired.

Once you reach your target portfolio size and your individual asset allocation targets for phases one through four, create a new target portfolio size by adding a specific amount to your original target portfolio size (e.g., $100,000). Your new target portfolio goal would be $200,000. You can then incorporate all new investments in your portfolio according to the new target allocations in your Investment Plan. Keep your investments consistent with your goals, your budget, the investing principles outlined in this course, and your Investment Plan.

Examining a Sample Portfolio

Following is an example to help you understand the process of investing: Jim is 25 years old; he is married and is the father of one child. He earns $50,000 a year, pays 10% to his church for tithing, and has adequate health and life insurance. Jim has no credit card or consumer debt and has written a detailed Investment Plan. Jim is an aggressive investor, and he wants to maintain six months of income in his emergency fund. The following data come from Jim’s Investment Plan. Using the investment process discussed in this chapter, we will follow Jim and his wife through the five steps of the investment process.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Asset Class</th>
<th>Financial Asset</th>
<th>Benchmark</th>
<th>Total</th>
<th>Taxable</th>
<th>Retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>Cash/Bonds</td>
<td>Fidelity Bond</td>
<td>Barclays Ag.</td>
<td>25%</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>Core</td>
<td>Large Cap</td>
<td>Vanguard 500</td>
<td>S&amp;P 500</td>
<td>55%</td>
<td>35%</td>
<td>20%</td>
</tr>
<tr>
<td>Diversity</td>
<td>International</td>
<td>Oakmont Int’l</td>
<td>MSCI EAFE</td>
<td>10%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Diversity</td>
<td>Small Cap</td>
<td>Wells Fargo</td>
<td>Russell 5000</td>
<td>10%</td>
<td>6%</td>
<td>4%</td>
</tr>
</tbody>
</table>
First, Jim must determine the target size of his portfolio. Jim’s goal for his emergency fund is six months of income ($25,000), and his target allocation for cash and bonds is 25 percent. To calculate the target size of Jim’s portfolio, divide $25,000 by 25 percent, which equals $100,000, his initial target monetary goal.

Second, Jim must determine how much he should invest in each asset class. Jim’s target portfolio size is $100,000: he wants to invest 25 percent ($25,000) in his emergency fund, 55 percent ($55,000) in his core, and 10 percent ($10,000) in international and small-capitalization funds, respectively.

Third, Jim must calculate the amount of each asset he should allocate to taxable accounts and retirement accounts during each phase of investing. Multiply the target allocation of each asset by the target portfolio size. In this case, Jim’s allocations would be as follows:

<table>
<thead>
<tr>
<th>Phase</th>
<th>Financial Asset</th>
<th>Taxable</th>
<th>Retirement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency</td>
<td>Fidelity Bond Fund</td>
<td>$25,000</td>
<td>$0</td>
<td>$25,000</td>
</tr>
<tr>
<td>Core</td>
<td>Vanguard 500 Fund</td>
<td>$35,000</td>
<td>$20,000</td>
<td>$55,000</td>
</tr>
<tr>
<td>Diversity (Broaden)</td>
<td>Oakmont Int’l Fund</td>
<td>$6,000</td>
<td>$4,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Diversity (Deepen)</td>
<td>Wells Fargo Small Cap.</td>
<td>$6,000</td>
<td>$4,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Total Target Size</td>
<td></td>
<td>$72,000</td>
<td>$28,000</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

Fourth, Jim should research potential candidates for financial assets and select the assets most likely to help them achieve their goals.

Fifth, Jim and his wife must purchase the funds they selected.

This investment process is a disciplined, systematic approach to constructing an investment portfolio. It is only one of many ways of building a portfolio. Some final cautions about building a portfolio are important:

Remember to invest in your emergency fund first. You might consider making no-load, open-end mutual funds an important part of your emergency fund because of the liquidity of no-load funds.

When you receive your paycheck, remember to pay the Lord first (tithing and other charitable contributions) and yourself second (a minimum of 10 to 20 percent). Put the money you have used to pay yourself directly into your emergency fund until you have saved at least three to six months of income. While you are in the process of building your emergency fund, the only other investment you should consider is a retirement account that provides free money through a matching plan (see the discussion on the selecting investment vehicles). If this type of retirement account is available to you, invest the minimum amount necessary to receive your free money, and then use the rest of your savings to fill your emergency fund.

Finally, do not begin prepaying your mortgage, i.e., making additional mortgage payments, until you have saved at least three to six months of income in your emergency fund. If problems arise
that limit your income, a large emergency fund is often the key to surviving and keeping your home.

**Summary**

There is a difference between financial assets (investment assets) and investment vehicles. Financial assets are specific classes of securities that you can invest in, including stocks, bonds, mutual funds, real estate, money-market mutual funds, CDs, and so on. Investment vehicles are special types of investment accounts that provide special tax advantages and allow you to invest in various financial assets. These accounts are useful because they provide specific tax advantages that are not available if financial assets are purchased individually.

Understanding how to select investment vehicles can help you identify the tax benefits and other benefits different investment vehicles offer. Understanding these priorities can help you determine which investment vehicles will help you achieve your financial goals the quickest. The process is divided into three sections: free money; tax-advantaged money; and tax-efficient, wise investments. Understanding the process can help you determine which investment vehicles you should use first in working toward your financial goals.

Some investment vehicles are preferred over others because they provide tax advantages and other advantages. Unfortunately, some of the investment vehicles that are higher on the priority list also have lower maximum-contribution limits. Although some investment vehicles have limitations, it is still a good idea to adhere to the process. You should first invest money in vehicles that are the highest priority. When you have reached the maximum amount you can invest in these vehicles, or when you have invested as much money as your company is willing to match, then you should invest in the next highest priority. Continue to invest until you have utilized all of your available investment funds.

Strategies for developing investment portfolios differ among individual portfolio managers and institutions. The strategy each investor prefers depends on the way he or she views the market; an investor’s strategy also depends on his or her goals, budget, and experience in investing. It is impossible to discuss the strategies every portfolio manager uses to build each portfolio; however, as I have reviewed successful portfolios, I have found that several critical phases of investment remain the same. The bottom half of the investment hourglass describes a pattern of successful portfolios I have seen in my experience.

The bottom of the investment hourglass is divided into four phases. The first level of the hourglass represents the phase in which you develop your emergency fund and food storage. The second level represents the phase in which you develop your portfolio’s core, which should include broad market index funds or core mutual funds. The third level represents the phase in which you diversify your portfolio by broadening and deepening your asset classes. Finally, the fourth level represents the phase in which you develop your opportunistic assets, such as individual stocks and sector funds. This final step is optional.
To build a successful portfolio, you must first learn about the process of investing. The process of investing is a disciplined approach to building an investment portfolio. This approach teaches a logical order for buying securities and helps you minimize transaction fees and taxes. There are many ways to approach building your investment portfolio; the process of investing outlined in this chapter is a consistent, logical, and principle-supported approach that can help you minimize transaction costs and taxes. This approach also teaches a logical order for purchasing securities and helps you set financial goals to help you as you build your portfolio.

Once you have established your Investment Plan and understand how to build your portfolio, there is a five-step investment process that will help you build your portfolio:

1. Determine a target monetary size goal for your portfolio.
2. Determine target percentages for each asset class.
3. Calculate the target amount for each asset class in both your taxable accounts and retirement accounts.
4. Research potential candidates for financial assets and select the assets most likely to help you achieve your goals.
5. Purchase the assets and compare the actual portfolio with the target portfolio.

The investment process presented in this chapter is just one method of building a portfolio. As you build your portfolio, follow your Investment Plan carefully. This plan will help you make choices that are consistent with your personal goals, your risk-tolerance level, and your budget. Write a well thought-out Investment Plan, follow the principles you have learned in this course, and invest according to your plan. Remember to follow the principles of wise investing and the priorities and processes of investing; be aware of the effects of taxes, turnover, and costs; keep allocations within your target ranges; limit turnover as much as possible; use dividends, or interest, to buy new financial assets or make changes to your existing assets; sell wisely and infrequently; if you are able, sell appreciated assets in the form of donations; and remember the investment hourglass!

Assignments

Financial Plan Assignments

For this chapter, you must first determine the size of your emergency fund. This fund should contain three to six months’ worth of income. This is the first asset you will invest in, before mutual funds of stocks, bonds, and other asset classes.

Second, determine what percentage of your portfolios you can allocate between taxable and retirement accounts. The amount you can put in retirement accounts is limited each year by the IRS. Make an estimate for planning purposes. If you have no better idea, it is acceptable to split the allocation initially to half in retirement and half in taxable accounts. Remember that you will have no allocation to retirement for your emergency fund because you need access to those funds in an emergency, and you do not want to pay a penalty to the IRS.
Third, once you know your emergency fund, divide that by your allocation to bonds and cash (your percentage allocation) to get your initial target portfolio size goal. You can then multiply each of your asset allocation targets by their respective percentages to come up with the amounts you need in each asset class and in each of the retirement and taxable accounts.

Finally, transfer this data to Learning Tool 13: Investment Process Spreadsheet. You can put in your data for your emergency fund and your asset allocation percentages, and it will calculate your initial target portfolio size for you and your allocations to the various asset classes.

**Learning Tools**

The following Learning Tools may be helpful as you prepare your Personal Financial Plan:

13. Investment Process Spreadsheet
   This Excel spreadsheet helps you determine how much you should invest in different assets based on the asset-allocation targets in your Investment Plan. It can also help you as you work toward reaching your investment targets by showing you the target amount for each asset, the amount you have invested thus far, and the amount that remains for you to reach your target.

28. Roth Versus Traditional: Which Is Better for You?
   This Excel spreadsheet helps you determine which retirement account would be most beneficial to you: the Roth IRA or the traditional 401(k) or 402(b) IRA.

**Review Materials**

**Terminology Review**

**After-tax return.** This is your return after you pay taxes. It is calculated as: after-tax return = before-tax * (1 − marginal tax rate) and your marginal rate includes both your federal, state and local (if any) taxes.

**Distributions.** These are distributions of interest, capital gains, and dividends by a mutual or index fund while you own the underlying shares. Even though you have not sold the shares, you are responsible to pay taxes on this distributions because the mutual fund is a pass-through vehicle and the taxes on these distributions are paid at the shareholder level.

**Education investment vehicles.** These are investment vehicles with the purpose to help you save for your children’s education, i.e., Education IRA, 529 plans.

**Free money.** This is money that is made available by a company, generally on a matching basis, to encourage greater participation in company sponsored retirement...
plans, i.e., 401k, Roth 403b, Keogh, etc. It is also money made available through education tax benefits, i.e. 529 plan contributions deductible from state taxes.

**Initial target portfolio.** This your first goal for a target dollar amount as you begin building your portfolio. It is calculated by taking your emergency fund goal and dividing it by your percentage in bonds and cash.

**Investment vehicles.** The investment vehicle is the tax-law defined framework that has specific tax advantages, i.e., 401k, 403b, Individual Retirement Account (IRA), SEP IRA, Roth IRA, Roth 401k, etc. Investment vehicles have different benefits, i.e., due to matching (free money), tax elimination, tax deferral, or just tax-efficient and wise investing. Investment vehicles are like shopping carts in the grocery store, they are the things you put your groceries, or financial assets, into.

**Investment/financial assets.** Investment or financial assets are the securities that are invested in by the investment vehicles, i.e., stocks, bonds, mutual funds, REITs, MMMFs, CDs, etc. They are like the groceries you put in your shopping cart, which is your investment vehicle.

**Long-term capital gains.** These are federal taxes on gains held more than 366 days. It may be taxed at a preferential rate depending on your marginal tax rate.

**Marginal tax rate.** This is your taxes on each additional dollar of earnings. If you made $1 more this year, at what rate would it be taxed.

**Ordinary dividends.** These are stock dividends earned from holding a stock an insufficient number of days within a specific period to be reported as qualified dividends. Ordinary dividends are taxed at a federal marginal or ordinary tax rate.

**Priority of money.** This is an educational tool to help individuals determine the order of which they should utilize investment vehicles to achieve their personal and family goals.

**Qualified dividends.** These are stock dividends earned from holding a stock a minimum number of days within a specific period. Qualified dividends are taxed at a federal preferential tax rate depending on your marginal tax rate.

**Retirement vehicles.** These are investment vehicles to help you save for retirement. These include for private businesses: 401-k, Roth 401-k plans; non-profit tax-exempt businesses: 403-b/Roth 403-b plans; State and municipalities: 457 plans; Individual retirement accounts: IRA/Roth IRA; and small business plans: SEP IRA, SIMPLE IRA;

**Short-term capital gains.** These are federal taxes on gains held less than 366 days. It are taxes at your ordinary or marginal tax rates.
Tax-advantaged money. This is the process of using investment vehicles that have specific advantages. There are two types: Tax deferred and tax-eliminated vehicles.

Tax-deferred money. This money has the ability to be invested before-tax, with principle and earnings taxed only at retirement (IRA, SEP IRA, etc.). This money converts long-term capital gains into short-term income for tax purposes.

Tax-efficient and wise investments. This is money that is invested tax-efficiently and wisely, consistent with the principles of successful investing discussed earlier.

Tax-eliminated money. This money can be used at retirement (or for education) without penalty and without taxes, i.e., a Roth IRA/410k/403b for retirement, and 529 Funds and Education IRA for education. You pay the taxes upfront, and then pay not taxes on earnings or capital gains when you take it out at retirement.

Review Questions

1. What is the difference between financial assets and investment vehicles?
2. Name at least three investment vehicles (see Table 1).
3. What are the three priorities of money in regard to investment vehicles?
4. What is Phase I of successful investing? What type of financial assets should this phase include?
5. What is the first step in the investment process?

Case Studies

Case Study 1

Data

Suzie is 25 years old, unmarried, and makes $50,000 per year in 2016. She is in the 15 percent marginal federal tax bracket and the 7 percent marginal state tax bracket. Her company has a 401(k) plan that matches 50 percent of contributions up to 3 percent of her annual salary. Suzie determines that she can save 20 percent of her salary every year, and she will set the entire 20 percent ($10,000) aside for retirement each year. She thinks her taxes will be higher when she retires.

Application

A. According to the process of selecting investment vehicles discussed, which investment vehicles should she use and why?
B. How much did she save considering her savings, company match, and tax saving?

Case Study 1 Answers

Suzie should use the process of selecting investment vehicles to solve this problem.
First, she should take advantage of free money.
Suzie has the option of saving up to 3 percent of her salary, or $1,500 per year, that her company will match with 50 percent of that amount, or $750. Note that this money is tax-deferred, or money that has not been taxed yet. The maximum contribution for 2016 in a 401(k) account is $18,000. Since Suzie’s first priority is free money, she should first invest $1,500 in her 401(k) plan. Note that Suzie also saves on taxes when she invests in her 401(k) plan because investments in her 401(k) reduce her adjusted gross income because these investments are tax-deferred.

Second, Suzie should capitalize on tax-eliminated money.
Investments in a Roth IRA or a traditional IRA or more investments in her 401(k) are all good options, but because she believes her taxes will be higher in the future, she should choose the Roth IRA. A Roth IRA not only offers total elimination of future taxes, it also has the additional benefit of allowing her to withdraw the principal without incurring a penalty or taxes because the money has already been taxed. Suzie can invest up to $5,500 per person in a Roth IRA or traditional IRA in 2016. If Suzie invests $1,500 in her 401(k) plan and $5,500 for herself in a Roth IRA, she still has $3,000 remaining.

Third, Suzie should take advantage of tax-deferred money.
Suzie could invest the remaining $3,000 in her 401(k), even though there is no additional match. Remember, her goal was to invest $10,000 for retirement.

Based on the priorities discussed, Suzy should invest the following in each vehicle:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Money</td>
<td>$1,500</td>
<td>401(k) for the Company Match</td>
</tr>
<tr>
<td>Tax-Advantaged</td>
<td>$5,000</td>
<td>Roth IRA for the Elimination of Future Taxes</td>
</tr>
<tr>
<td>Tax-Advantaged</td>
<td>$3,500</td>
<td>401(k) for Tax Deferral</td>
</tr>
<tr>
<td>Total</td>
<td>$10,000</td>
<td>Total Amount Suzie Saved</td>
</tr>
</tbody>
</table>

B. In addition, Suzie received the following:
1. Invested $10,000 of her own money
2. Got a free $750 match from her company
3. Saved $990 on next year’s taxes. (This is her 22 percent marginal tax rate based on her 15 percent federal marginal tax rate and her 7 percent state tax rate) multiplied by the $4,500 she invested in her 401(k) plan. The total amount Suzie saved, including the match and tax savings, is $11,740.

**Case Study 2**

**Data**
Suzie recently married, and her husband, Bill, just graduated with a master’s degree. Suzie and Bill are square with the Lord, have adequate insurance, and are out of credit
card debt (although they still have 3.25 percent student loans outstanding), and they know their goals but have not yet written their Investment Plan. They have agreed to save 20 percent of everything they will be earning to pay themselves. Bill starts his first job next week and will be making $50,000 per year, and Suzie is making $50,000 per year as well. They will be investing 20 percent, or $20,000, each year.

Application

How should they invest that money? What should they invest in first? Second? Third? How much should they invest? How should they invest?

Case Study 2 Answers

Bill and Suzie should follow the principles of the bottom of the investment hourglass. While we do not have enough information to give allocations and amounts, we can give general guidelines:

First, Bill and Suzie should invest in their emergency fund and food storage. Once this is filled, they should go on to core assets. Once core assets have been filled, Bill and Suzie should go on to diversify their assets.

Case Study 3

Data

Bill and Suzie are now both 30, and have one child. Suzie stays home with the baby. They are earning $60,000 per year, are full tithe payers, have adequate health and life insurance, are out of credit card and consumer debt, and have an Investment Plan. They are aggressive investors, want three months of income as an emergency fund, and have determined their asset classes and investment benchmarks as 75 percent equities and 25 percent bonds and cash with targets:

- 25% Bonds/Cash (Barclays Aggregate) 25% T, 0% R
- 55% U.S. (S&P 500 Index) 35% T, 20% R
- 10% Small Cap (Russell 5000 Index) 4% T, 6% R
- 10% International (MSCI EAFE Index) 4% T, 6% R

How should Bill and Suzie build their portfolio?

Case Study 3 Answers

1. Determine the initial target portfolio monetary goal.

   An easy method is to take their emergency fund goal and divide it by the percentage of assets in cash and bonds (which are generally used for your emergency fund).
If their goal is three months of income ($15,000) and their target allocation for cash and bonds is 25 percent, their target fund size would be $15,000 times 25 percent, or $60,000.

2. Determine asset classes and target percentages.
Multiply their asset class percentages by their initial target portfolio size to get their asset-allocation targets.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Target Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Fund</td>
<td>$15,000</td>
</tr>
<tr>
<td>U.S.</td>
<td>$33,000</td>
</tr>
<tr>
<td>International</td>
<td>$6,000</td>
</tr>
<tr>
<td>Small Cap</td>
<td>$6,000</td>
</tr>
<tr>
<td>Total Portfolio Target</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

Note that your first allocation will always produce your target emergency fund amount.

3. Calculate the target amount for each asset class in both the taxable and retirement accounts.
Take the target weight of each asset on both the taxable and the retirement side multiplied by the target portfolio size to get the target asset size.
For example, Bill and Suzie decided that 4 percent of their small cap allocation of 10 percent is in the taxable accounts, with the remaining 6 percent in their retirement accounts. Their dollar allocations would be
- Taxable: $2,400
- Retirement: $3,600

4. Research potential candidates for financial assets and select the assets most likely to deliver the return you need.
Using the principles discussed earlier, Bill and Suzie would select the assets they would purchase to gain exposure to their chosen asset classes.
For example, if Suzie and Bill decided that their core U.S. allocation was to be the Vanguard S&P 500 Index fund, their dollar allocations to Vanguard would be
- Taxable: $21,000
- Retirement: $12,000

5. Purchase the assets and compare the actual portfolio against the target portfolio.

Case Study 4

Data
Bill and Suzie are now 40 years old and have four children. They are earning $80,000 per year and have achieved their initial target portfolio size goal. Their financial house is in order; they have three months of income in their emergency fund and have determined
their next portfolio size goal is $200,000)?

**Case Study 4 Answers**

1. Determine their next target portfolio size goal.
   Bill and Suzy added $140,000 to their initial portfolio size goal of $60,000. Now their goal is $200,000. They will need to readjust their target allocations consistently with this goal.
   With their current salary of $80,000, their three-month emergency fund value would be $20,000, which they already have. Their allocation to bonds and cash, however, is now 25% * $200,000, or $50,000. Since their emergency fund is filled, they now can purchase additional fixed income securities to fill this gap.

2. Determine asset classes and target percentages.
   Multiply their asset class percentages by their next target portfolio size to get their asset allocation targets.
   - Emergency Fund (25% * $200,000) = $50,000
   - U.S. (55% * $200,000) = $110,000
   - International (10% * $200,000) = $20,000
   - Small Cap (10% * $200,000) = $20,000
   - Total Portfolio Target = $200,000

3. Calculate the target amount for each asset class in both the taxable and retirement accounts.
   Take the target weight of each asset in both the taxable and retirement side multiplied by the target portfolio size to get the target asset size. For example, Bill and Suzie decided that 4 percent of their small cap allocation of 10 percent is in the taxable accounts, with the remaining 6 percent in their retirement accounts. Their dollar allocations would be
   - Taxable: 4% * $200,000 = $8,000
   - Retirement: 6% * $200,000 = $12,000

4. Research additional candidates.
Bill and Suzie’s emergency fund is completed. But they still have allocation in the bonds/cash asset class of $30,000. Using the principles discussed earlier, Bill and Suzie could then select another asset to gain exposure to their chosen asset classes.

Suppose they decided to add the Charles Schwab Intermediate Term Bond Fund to their portfolio. Their bonds/cash allocation would be

\[
\text{Bonds/Cash Allocation} = 25\% \times 200,000 = $50,000
\]
\[
\text{Emergency Fund} = \frac{20}{200} = 10\% \text{ or } 20,000
\]
\[
\text{Remainder of 15\%, or } $30,000
\]

5. Purchase the new assets and compare the actual portfolio against the target portfolio.
   A. Since their emergency fund is full, they could begin purchasing the Schwab Intermediate Bond Fund.
   B. Purchase core assets.
   C. Purchase diversification assets.
   D. Purchase opportunistic assets (optional).

Bill and Suzie’s target portfolio would be:

![Portfolio Diagram](image)

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Chapter 23. Investments 7: Building Your Portfolio

2 Tax Legislative Update, Washington, D.C. (http://www.grantthornton.com/staticfiles/GTCom/Ta

January 2, 2013.

480
You are now ready to begin selecting specific assets for your portfolio. Before you get started, you should recognize that this step cannot be completed in one day. In fact, it is likely that your portfolio will be most successful if you build it a little at a time by adding small amounts of money to your investments each month. In explaining how investing can help us become self-reliant, L. Tom Perry said:

Be prudent, wise, and conservative in your investment programs. It is by consistently and regularly adding to your investments that you will build your emergency and retirement savings. This will add to your progress in becoming self-reliant.1

As Perry states, you should strive to be prudent, wise, and conservative in your investing. The information provided in this chapter will help you to follow his counsel as you select securities for your investment portfolio.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand why you should wait to purchase individual stocks until your assets have grown
2. Know how to find information on mutual funds and stocks
3. Describe how to pick a good mutual fund
4. Explain the value of purchasing an index fund or exchange traded fund
5. Understand taxes on financial assets

Understand Why You Should Wait to Purchase Individual Stocks Until Your Assets Have Grown

This chapter provides a detailed framework for selecting mutual funds but only briefly discusses a framework for selecting stocks. If you add individual stocks to your portfolio before it has become large enough to handle them, you are violating four of the principles of successful investing: stay diversified; invest low-cost; know what you are investing in; and don’t spend too much time, energy, and money trying to beat the market. Purchasing individual stocks is not a necessary part of a successful portfolio. The following paragraphs explain these principles:
1. Stay Diversified

Buying individual stocks early in your investing career violates the principle of diversification. It is difficult to achieve an acceptable level of diversification in a small portfolio with a limited number of stocks. Investing in individual stocks is both the fastest way to become rich and the fastest way to become poor. Drawn by the potential for high returns, some investors treat the stock market like a lottery and invest a large percentage of their portfolio in a single investment. Such investors ignore the principle of diversification and significantly increase their risk.

The best way to build your portfolio is by wisely investing money in a variety of assets and asset classes (e.g., a diversified mutual fund) each month—not by aggressively “betting” on a single stock.

2. Invest Low-Cost and Tax-Efficiently

When you have a small portfolio, investing in individual stocks is very expensive. Transaction costs for purchasing stocks are the highest of any major asset class. Also, many of the costs of individual stocks are charged according to the number of transactions and not based on the amount purchased or sold. Costs for smaller purchases or sales are therefore much higher as a percentage of the assets purchased or sold than are costs for larger purchases or sales.

3. Know What You Are Investing In

Although several chapters in this course discuss investing in stocks and specify the qualities of a good stock, you have not learned all you need to know to successfully evaluate stocks for your portfolio. While buying individual stocks can be fun and exciting, it can also be a form of gambling if you do not have the necessary knowledge base. Your knowledge of stocks will grow with experience; the information on the website will not give you all of the tools necessary to make good stock-selection decisions, but it will give you a good foundation.

4. Don’t Spend Too Much Time, Energy, and Money Trying to Beat the Market

Trying to beat the market through purchasing individual stocks is a time-consuming and challenging activity. Expending great amounts of time and energy selecting individual stocks violates the principle that you should not spend too much time trying to beat the market. Most of you will be able to gain more substantial returns through wise investing and proper asset allocation.

5. Stock Selection Is Not Required for a Successful Portfolio

It can be fun and intellectually challenging to select individual stocks; however, your return will usually be greater and your risk will be reduced if you wisely select your asset allocation targets and use an index or other low-cost mutual fund to purchase a diversified portfolio of stocks. You can have a successful portfolio without ever buying an individual stock or sector fund.
Since many of you will not become experts at analyzing companies, it will be in your best interests to focus on developing a “Sleep-Well Portfolio.” This is done by writing and carefully following your Investment Plan, maintaining a generally passive strategy (indexing is a viable long-term strategy for most investors), enjoying your family and friends (make memories, not investment reports), and doing well in your day jobs (make a difference where you work).

**Know How to Find Information on Mutual Funds and Stocks**

The Internet has facilitated a virtual explosion of information related to financial assets and investing. Many companies provide investing information on the Internet in hopes that investors who use the information will buy their products or use their services. Unfortunately, much of this information is biased, flawed, or even incorrect. So where can you find reliable mutual fund and stock information? There are a number of helpful resources you can and should use before selecting your financial assets.

**Good Sources of Information**

**Mutual fund monitoring companies:** These companies usually provide information to subscribers for an annual fee. Mutual fund monitoring companies include Morningstar Mutual Funds and Lipper Analytics.

**Stockbrokerage firms:** The different types of stockbrokerage firms range from full-service brokerages to discount and online brokerage houses. Full-service brokerage firms usually supply investment data to their clients free of charge, while discount firms usually charge a fee. Stockbrokerage firms include companies such as Merrill Lynch, TD Ameritrade, Morgan Stanley, and Charles Schwab.

**Fund supermarkets:** Mutual fund supermarkets are brokerage houses that offer mutual funds from many different fund families. To compensate these mutual fund supermarkets for bringing in new customers, mutual fund companies rebate part of their management fees to them. Mutual fund supermarkets have large databases composed of the mutual funds they offer, and they make these databases available to clients. Mutual fund supermarkets include companies such as Schwab, Fidelity, and TD Ameritrade.

**Financial websites:** There are a number of reliable financial websites you can access without paying a fee, including [www.indexfunds.com](http://www.indexfunds.com), [www.money.cnn.com](http://www.money.cnn.com), [http://finance.yahoo.com](http://finance.yahoo.com), [www.fool.com](http://www.fool.com), [www.money.msn.com](http://www.money.msn.com), and [www.dailyfinance.com](http://www.dailyfinance.com).

**Financial publications:** There is a great deal of information available in financial publications such as *The Wall Street Journal*, *Financial Times*, *Kiplinger’s*, and *Smart Money*.

**Libraries:** Libraries also house a lot of helpful information. The Harold B. Lee Library at Brigham Young University has a wealth of information—much of it online—that can help students analyze the various financial assets they are thinking of including in their portfolios.
Chapter 24. Investments 8: Selecting Financial Assets

**Finding the Best Format for Information**

Investors need to have access to accurate and current information. Although there are many good sources that offer financial information, the best sources are databases that are regularly updated and easy to search via the Internet.

One example of such a database is Morningstar.com. Morningstar provides both free information and subscription information to investors; it is just one of many available databases. Please note that I am merely using this database as an example; I am neither endorsing Morningstar nor implying it is the best database. However, I do think the information provided by Morningstar is generally good. Graphs for this chapter are from Morningstar, Library Edition and are examples of the types of information that are available on mutual funds as of August 8, 2014. This product is also available as a free resource for students enrolled in many colleges. For help in using Morningstar on the Internet or from your local college, see Learning Tool 7: Using Morningstar to Select Funds.

**Describe How to Pick a Good Mutual Fund**

Before you can choose which funds you will invest in, you must understand the process of choosing good mutual funds:

1. Determine the asset classes that are appropriate for your plan.
2. Determine the appropriate benchmarks.
3. Determine key parameters for each asset class (e.g., costs, fees, diversification, etc.) to identify potential funds.
4. Use a database program to set your chosen parameters and evaluate each potential candidate.
5. Evaluate each candidate and select the best funds.
6. Purchase the funds and monitor performance carefully.

Be careful not to purchase funds before distributions are made. Distributions result in taxes and are generally made in December. Try to purchase your mutual funds after their distributions are made.

You already determined the asset classes your portfolio should contain and the appropriate benchmarks for these asset classes in Chapter 19. Investments 2: Your Investment Plan. Therefore, you have already completed steps one and two. This chapter will discuss steps three and four; you will learn how to determine key parameters for evaluating mutual funds of specific asset classes, and you will learn how to use a database program to set those parameters and evaluate potential candidates.

There are a number of important criteria you should consider when selecting mutual funds. Seven of the key criteria include diversification, low cost, tax-efficiency, low turnover, low levels of un-invested cash, no manager style drift, and small (or positive) tracking error.
Wide Diversification

Diversification is your most important defense against market risk. Select mutual funds that include many different companies in each portfolio category. Avoid investing in sector funds or industry funds, individual stocks, or concentrated portfolios of any kind until you have sufficient education, experience, and assets. Even then, keep the percentage of these assets low in relation to the amount of your overall assets.

There are four main factors that determine whether a mutual fund is sufficiently diversified: numbers, concentration, types of assets, and location.

**Numbers:** What is the total amount of holdings, or securities, in the fund? You want to select a fund that holds many securities and industries. Check the number of holdings in the fund (see Table 1). If the fund has only 15 holdings, it is not very diversified and you should carefully understand each of those 15 companies. If the fund has 504 holdings (as does the Vanguard 500 index fund), it is much more diversified. Since there are over 500 companies in the portfolio, and since no company is a significant portion of the portfolio, it is not as critical that you carefully understand each of the companies in the portfolio.

**Concentration:** What percentage of the fund is allocated to the top 10 holdings? If 50 percent or more of the fund is invested in the top 10 holdings, then the fund has a high concentration in these holdings. If only 17 percent of the fund is invested in the top 10 holdings, then the fund has a lower concentration in these holdings and your risk is most likely spread out over many companies.

**Table 1. Morningstar Website: Diversification**

![Table 1. Morningstar Website: Diversification](image)

Source: All Morningstar charts are from Morningstar Library Edition, 2016-09-12
In addition, by looking at the top 10 holdings of a mutual fund, you can see the percentage of net assets or of the value of the portfolio that the top 10 stock comprises. Generally, the lower the concentration in the top 10 holdings, the lower the risk of a problem with a single company, and the better for most investors.

**Type of assets:** What types of assets are in the fund? If the mutual fund is an equity fund or a bond fund, then all assets should be of the same asset class. However, if the fund is a balanced fund, an asset-allocation fund, or life-cycle fund, you should examine the percentage of the fund that is allocated to stocks, bonds, and cash. Again, the more diversified the fund is in terms of its holdings of different types of financial assets, the less volatile the fund will be.

**Location:** What is the location of the companies that are included in the mutual fund? The more diversified the locations, the less risk to the fund. Companies from different geographical areas are subject to different business cycles; hence, these companies should experience highs and lows at different times in the investment cycle.

**Invest Low Cost**

Investment returns are limited, and investment costs of all kinds reduce your returns. If you have two funds with the same return, the fund with the lower expense ratio will give you the higher actual return. Keep costs low!

I recommend you invest in low-cost, no-load (i.e., without a sales charge) mutual funds. You should rarely (if ever) pay sales charges of any kind. Because you are a long-term investor, it may be acceptable to invest in funds with back-end loads or funds with a sales charge for selling within a specific period of time, as long as that period of time is under 180 days. You should also minimize management fees as much as possible. Remember, a dollar saved is a dollar you can invest to earn more money.

Costs are explained in the mutual fund’s prospectus (a document that describes all aspects of the mutual fund) in the section entitled “Fees, Management Fees, and Expenses” (see Table 2). This section details all administrative costs, management fees, 12b-1 fees, and other charges. The most important ratio listed in this section is the total expense ratio. This is the overall cost of the listed fees. Remember that the fund manager will reduce your investment by this amount every year. The lower this ratio, the more you will be able to earn for your personal goals. Note that the Vanguard Fund charges 0.16 percent a year for total expenses. Compare this to the average total expense of large-cap stocks, which is .92 percent. While you cannot change the management fee once you have invested in a fund, you can and should understand the management fee before you invest in any fund.

If you are investing in a non-retirement investment vehicle, taxes are another important expense you should analyze. Look at the tax cost ratio in the section entitled “Returns: Tax Analysis.” Too many investors fail to account for the impact taxes will have on their returns: taxes typically reduce returns by about 25 percent each year.
Invest Tax Efficiently

If you are investing in a non-retirement investment vehicle, taxes are another important expense you should analyze. Look at the tax cost ratio in the section entitled “Returns: Tax Analysis.” Too many investors fail to account for the impact taxes will have on their returns: taxes typically reduce returns by about 25 percent each year.

When investing in taxable funds, choose funds with an eye to obtaining high returns while keeping taxes low. Taxes reduce the amount of money you can use for personal and family goals. Watch the historical impact of taxes for the fund because it is likely to be similar in the future. Remember, it is not what you earn, but what you keep after taxes that makes you wealthy.

Your tax-adjusted return is the estimated return after the impact of taxes. There are two ratios to watch: the tax cost ratio and the potential capital gains exposure (see Table 3).

The tax cost ratio is the percent of nominal fund returns that is taxable, assuming the fund is taxed at the highest rate, and is calculated as $(1 + \text{return}) \times (1 - \text{tax cost ratio}) - 1$. If a fund had an 8 percent return and the tax cost ratio was 2 percent, investors in the fund took home 5.84 percent, or $(1.08 \times .98) - 1$. The potential capital gains exposure is an estimate of the percent of the fund’s assets that represent capital gains. If this number is high, there is a high probability that investors may receive gains as capital gains rather than as ordinary income.
Table 3. Morningstar Website: Tax Efficiency

<table>
<thead>
<tr>
<th>Vanguard 500 Index Inv</th>
<th>VFINX</th>
<th>★★★★</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Analysis</td>
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<tr>
<td>Pretax Return</td>
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<tr>
<td>VFINX</td>
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<tr>
<td>1-Mo</td>
<td>12.31</td>
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</tr>
<tr>
<td>3-Mo</td>
<td>10.99</td>
<td>13.21</td>
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<tr>
<td>6-Mo</td>
<td>5.46</td>
<td>7.62</td>
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<tr>
<td>YTD</td>
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<td>1-Year</td>
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<td>5-Year</td>
<td>10.28</td>
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<tr>
<td>10-Year</td>
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<tr>
<td>15-Year</td>
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<tr>
<td>% Rank in Category</td>
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<tr>
<td>Tax Cost Ratio</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>VFINX</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>(07/31/2016)</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td>Currency is displayed in USD.</td>
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<td></td>
</tr>
<tr>
<td>Post tax returns are load adjusted.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maintain Low Turnover

Look for funds with low turnover. Turnover is a measure of the amount of trading activity that takes place during a given period of time; turnover is shown as a percentage of the average amount of total assets in the fund. Calculate turnover by adding the fund’s sales and purchases and dividing by two. High turnover, or excessive trading, increases the amount of taxes and transaction costs you will have to pay. Many costs associated with turnover are hard to quantify and are therefore not disclosed in the prospectus. Other costs that stem from high turnover include commissions, bid-ask spreads (the difference between what buyers are willing to pay and what sellers are asking for in terms of price), and market impact costs (a jump in price that occurs when a manager tries to buy a large block of shares). Remember that each transaction generates a taxable event, and the cumulative taxes can be very expensive.

A mutual fund’s turnover is described under the prospectus heading “Annual Turnover” (see Table 5). You want a mutual fund that invests long-term, consistent with the principles of good investing. The more turnover a fund has, the more the investor will spend on transaction costs and taxes (which are not included in the total expense ratio). The more costs the fund generates, the higher the fund’s returns must be to offset these expenses.

You should also look at the section entitled “Potential Capital Gains Exposure in the Returns: Tax Analysis.” You should avoid mutual funds that have a high potential for earning short-term capital gains because they are taxed at the highest marginal tax rate.
Keep Levels of Un-Invested Cash Low

Un-invested cash is cash the mutual fund has not yet invested in securities. High levels of un-invested cash are drags on a mutual fund’s performance. For example, if the fund’s portfolio has a small percentage of large-cap stocks and a large percentage of cash, the low rate of return on the cash will dilute the higher rate of return on the large-cap stocks. Look for funds that keep the percentage of cash in their portfolios low. Some mutual funds hold large amounts of cash to fund potential redemptions or to comply with their investment policy. Choose funds that are fully invested (95 to 99 percent, depending on the asset class and fund size) in the market segment you are targeting. Do not pay the mutual fund to manage cash. While it is acceptable for open-end mutual funds to have some frictional cash, this cash should comprise less than 5 percent of the fund.

The percentage of un-invested cash in a fund is listed in the “Asset Allocation” section of the prospectus (see Table 5). Remember that the amount of un-invested cash in a fund may change over time, so monitor this amount. The Vanguard fund has 0.4 percent un-invested cash.

Table 4. Morningstar Website: Turnover

No Manager Style Drift

The law requires that mutual funds have a prospectus available for individual clients to review. This prospectus states the investment objective of the fund (whether the fund will invest in large-capitalization stocks, international bonds, real estate, etc.). Manager style drift relates to the fund...
manager’s style and the types of companies the fund will buy or sell. Over time, portfolio managers may change the types of companies they choose to invest in; this change is called manager style drift. Changes in the size, geographical location, or relative valuation of the companies included in the fund can alter a manager’s investment style. Since this investment style affects the performance of the fund, a portfolio manager should generally remain consistent in the types of companies he or she selects for the fund.

Table 5. Morningstar Website: Un-Invested Cash

The fund’s prospectus should clearly define the asset classes that will be included in the portfolio, the size of the target companies, and whether the portfolio has a growth or value tilt. A growth tilt means that the portfolio manager invests in stocks that have higher price-earnings and price-book ratios than the market and are likely to grow faster than the market. A value tilt means that the portfolio manager invests in stocks that are cheaper than the market and have lower price-earnings and price-book ratios than the market. A portfolio manager should not change the type of asset classes included in the fund. You are paying the manager to invest in the asset classes that are detailed in the prospectus, and this is what he or she should do. If you purchase a small company mutual fund, the fund manager should not purchase international or emerging market shares because these investments are not part of the fund’s target asset classes. If you want exposure to these asset classes, you should invest in a mutual fund that specializes in international and emerging market shares.

The portfolio manager’s investment style is described in the “Manager’s Style” box in the section called “Portfolio: Style Box Details” (see Table 6). The diagram in the “Manager’s Style” box lists the company valuation across the top and the company size on the side. The
manager’s style should not have changed over time. If you see that it has changed, find another fund where the style has remained consistent.

**Table 6. Morningstar Website: Manager Style Drift**

![Morningstar Website: Manager Style Drift](image)

**Small (or Positive) Tracking Error**

Tracking error (or trailing return, as defined by Morningstar) is the difference between the return on the fund and the return on the fund’s benchmark.\(^2\) Tracking error should be small, meaning that the fund return should be very close to the benchmark return. Generally, the smaller the tracking error, the more consistent the performance of the fund is compared to its benchmark. If the tracking error is negative, the fund has yielded lower returns than the benchmark. Most people do not complain too much if the tracking error is positive, or in other words, if the fund has yielded higher returns than the benchmark.

A fund’s tracking error is usually listed in the prospectus section entitled “Tracking Error: Returns: Performance History” (see Table 7). You should look at three major parts of the section that deals with tracking error: “Tracking Error versus the Index,” “Tracking Error versus the Category,” and “Percent Rank in Category.”

**Tracking error versus the index (+/– index):** This section shows the difference between the return on the fund and the return on the benchmark, or index. If tracking error is consistently small, it is likely you will consistently receive benchmark returns.

**Tracking error versus the category (+/– category):** Sometimes funds with similar objectives will have different benchmarks. This section combines all funds with similar objectives. This
information indicates how well the fund performs in comparison with other funds in the same asset class (or category). A positive tracking error indicates that a fund has had higher-than-average returns as compared with other funds in the category.

**Table 7. Morningstar Website: Tracking Error**

<table>
<thead>
<tr>
<th>Vanguard 500 Index Inv</th>
<th>VFINX</th>
<th>★★★★</th>
<th>Fund Family Data</th>
<th>POP Report</th>
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<tr>
<td>Total Returns</td>
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<td></td>
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<tr>
<td>Performance</td>
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<td></td>
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<tr>
<td>Growth of 10,000</td>
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</tr>
<tr>
<td>Percent rank in category:</td>
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</tr>
</tbody>
</table>

**Percent rank in category:** This section shows the percentile in which a fund falls in a given category. A rank of 15 indicates that the fund is in the top 15th percentile of all funds; the lower the number, the better the performance of the fund compared to the performance of other funds in the category. Watch this percentage rank for consistency. A fund that is in the top-third of all funds year after year is a much better prospect than a fund that is the top performer one year and a mediocre performer for several years. Remember that winners rotate, and last year’s best-performing fund is unlikely to be this year’s best-performing fund. Consistency is a critical factor.

**Using Databases to Select Funds**

Now that you understand the parameters you should adhere to when selecting mutual funds, you can set your criteria and then use a database to get a list of all the funds that meet your criteria. For example, you can use Morningstar and Learning Tool 7: Using Morningstar to Select Funds to set your criteria for stocks, bonds, and other financial assets.

While there are many different resources for finding mutual funds, the Premium Fund Screener from Morningstar is one of the better resources. You will need to set up an account and a password. The cost of using Morningstar on the Internet is $125 per year. This service is available for free for some college students.
Explain the Value of Purchasing an Index Fund or Exchange Traded Fund

Index funds are mutual funds that hold the same proportions of specific shares as that held by a specific benchmark or index. Exchange-traded funds (ETFs) are mutual funds that are similar to index funds, except that instead of being traded only once a day like a mutual fund, they can be purchased and sold at any time the market in which they trade is open. The goal of index funds and ETFs is to match the benchmark performance of a specific asset class. There are nearly 1,000 different index funds and over 500 different ETFs, and they all follow different indices or benchmarks related to geography, maturity, capitalization, and style.

Index funds and ETFs were created because some investors were concerned that actively managed funds were not always able to beat benchmarks after the effects of fees, taxes, and other expenses. By purchasing an index fund, investors stop trying to beat the benchmark: instead, they accept the benchmark’s return and risk. Interestingly, index funds have tended to outperform most actively managed mutual funds over the long term.

ETFs were created because index funds trade only once per day at the fund’s ending net asset value. Some investors wanted to trade index funds throughout the day. In addition, although the management fees on index funds were low, some people thought they should be even lower. Hence, many ETFs have lower management fees than many index funds. However, since ETFs trade on a market just like a stock, investors in ETFs need to factor in the additional cost of buying and selling the shares into the total cost calculation.

Active management tends to hurt a mutual fund’s performance because excessive trading generates taxes and fees. Actively managed funds also have much higher management fees than index funds. (The average index fund charges 18 basis points, while the average actively managed mutual fund charges 80 to 200 basis points).

Index funds and ETFs use a passive investing strategy that requires very little time to maintain. Passive investment does not require you to know much about valuation, security analysis, or other company-specific information. You just need to be willing to accept the general market return for the asset classes included in your index fund or ETF. Although returns on index funds vary from year to year (just as returns on benchmarks vary from year to year), they still yield a consistent, respectable return. Jason Zweig, a senior writer for *Money* magazine, said the following about index funds:

> With an index fund, you are on permanent auto-pilot: you will always get what the market is willing to give, no more and no less. By enabling me to say “I don’t know, and I don’t care,” my index fund has liberated me from the feeling that I need to forecast what the market is about to do. That gives me more time and mental energy for the important things in life, like playing with my kids and working in my garden.\(^3\)

Index funds have become the standard against which other mutual funds are judged. If an actively managed mutual fund cannot perform better (after taxes and fees) than an index fund
(index funds are very tax-efficient), then investors should lean toward purchasing the index fund. Warren Buffet wrote the following in 1993, and I believe his statement still applies today: “By periodically investing in an index fund, the know-nothing investor can actually outperform most investment professionals. Paradoxically, when “dumb” money acknowledges its limitations, it ceases to be dumb.”

He also said: “Doing reasonably well investing in stocks is very, very easy. Buy an index fund, preferably over time, so you end up owing good businesses at a reasonable average price. If you own a cross-section of American businesses, you are going to do well.”

In addition, the amount of time necessary to invest in index funds and ETFs is significantly less than the time needed to analyze, evaluate, value, and purchase individual stocks. In general, most actively managed funds and brokerage accounts tend to under-perform index funds in the long run after all taxes, costs, and fees. Invest accordingly.

The competition in stock-market research is intense and will get more competitive in the future. This will help make markets more efficient and indexing even more attractive. Market indexing or “passive investing” is a free ride on the competition; it takes very little time and contributes to a “sleep-well” portfolio.

Many dislike indexing because passive investing is boring, selecting stocks can be intellectually challenging, sharing investment “war” stories with friends is fun, and doing “nothing” about your investments is unnerving. Reasons to use index funds include immediate diversification, generally superior long-run performance, tax-efficient strategy, and time efficiency, which allows you to spend more time on the things that are important to you, such as family and friends, helping others, and doing well at work, instead of spending time analyzing individual companies.

Understand Taxes on Financial Assets

All investment earnings are not created equal. There are different taxes and tax rates on different types of financial assets. Some have preferential federal, and others preferential state tax rates. Taxes on financial assets fall under three main headings: (1) stocks, (2) bonds and savings vehicles, and (3) mutual funds (which include index funds and exchange traded funds). Note that each of these assets is taxed at the federal level and may be taxed at the state and local level as well, depending on your state of residence (see Table 8).

Taxes on Stocks (or Equities)

There are two main types of federal taxes on stocks: capital gains taxes and taxes on dividends. Capital gains are realized earnings from selling a stock. They are divided into short-term and long-term realized capital gains.

Stock dividends are of two types, qualified and ordinary (or not qualified). A qualified dividend is a dividend paid by a U.S. corporation where the investor held the stock for more than 60 days during the 121-day period that begins 60 days before the ex-dividend date (see Learning Tool
32: Taxes on Security Earnings Including Qualified Dividends. Qualified dividends are taxed at a preferential federal tax rate. An ordinary dividend is a dividend that is not qualified, i.e., you have not held the stock for a long enough time period to qualify for the preferential tax treatment.

**Table 8: Taxes on Securities Earnings**

<table>
<thead>
<tr>
<th>Type of Earnings</th>
<th>Federal Tax Rate</th>
<th>State Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stocks:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Gains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term capital gains</td>
<td>Marginal Tax Rate</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Long-term capital gains</td>
<td>15% or 0%</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Dividends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock Dividends: Qualified</td>
<td>15% or 0%</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Stock Dividends: Ordinary/Not Qualified</td>
<td>Marginal Tax Rate</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td><strong>Bonds and Savings Vehicles:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Gains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term capital gains</td>
<td>Marginal Tax Rate</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Long-term capital gains</td>
<td>15% or 5%</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Interest Payments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treasury-bills/bond Interest</td>
<td>Marginal Tax Rate</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Muni-bond Interest (bonds from your state)</td>
<td>0%</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Muni-bond Interest (bonds from another state)</td>
<td>0%</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td><strong>Mutual Funds (Pass Through Vehicles):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Gains for Stocks/Bonds/Municipals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term capital gains</td>
<td>Marginal Tax Rate</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Long-term capital gains</td>
<td>15% or 0%</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Dividends and Interest</td>
<td></td>
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<tr>
<td>Stock: Dividends: Qualified</td>
<td>15% or 0%</td>
<td>Marginal Tax Rate</td>
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<tr>
<td>Stock Dividends: Not Qualified/Ordinary</td>
<td>Marginal Tax Rate</td>
<td>Marginal Tax Rate</td>
</tr>
<tr>
<td>Bond: Interest</td>
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<td></td>
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<tr>
<td>Treasury-bills/bond Interest</td>
<td>Marginal Tax Rate</td>
<td>Marginal Tax Rate</td>
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<tr>
<td>Muni-bond Interest (bonds from your state)</td>
<td>0%</td>
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</tr>
<tr>
<td>Muni-bond Interest (bonds from another state)</td>
<td>0%</td>
<td>Marginal Tax Rate</td>
</tr>
</tbody>
</table>

**Summary Definitions and Notes on Taxes**

1. Short-term capital gains are gains where shares or bonds that were sold were held for one year or less.
2. Long-term capital gains are gains where shares or bonds that were sold were held more than one year.
3. If your marginal tax rate (MTR) is 15% or lower, long-term capital gains and qualified stock dividends are taxed at 0%. If your MTR is between 25 and 35%, long-term capital gains and qualified stock dividends are taxed at 15% for 2016. If your MTP is higher than 35%, long-term capital gains and qualified stock dividends are taxed at 20% for 2016. Also note, if your Adjusted Gross Income (AGI) is higher than $250,000 (MFJ), there is an additional 3.8% tax under Medicare.
4. State tax rates vary state to state; some states do not have a state income tax.
5. Qualified dividends are dividends paid by a U.S. corporation for stocks you have held for more than 60 days during the 121-day period that begins 60 days before the ex-dividend date (see the Qualified Dividends tab on Learning Tool 32 to see whether your dividends qualify for the lower rate).
Taxes on Bonds and Savings Vehicles

There are two main types of bond taxes: capital gains taxes and taxes on interest, or coupon, payments:

Capital gains are taxed similarly to stocks.

Interest, or coupon payments, is payments received as part of the contractual agreement to receive interest payments. They are taxed at your ordinary, or marginal, tax rate.

Bonds that receive preferential tax treatment for interest (municipal bonds and Treasuries) have a preferential tax rate of 0 percent on their respective taxes, i.e., 0 percent federal tax for municipal bonds and 0 percent state tax for Treasuries. You must still pay capital gains taxes on any capital gains earned by both types of bonds.

Taxes on Mutual Funds

Mutual funds are pass-through vehicles, which means that taxes are not paid at the fund level but are instead passed through to the individual shareholders who must then pay the taxes. Mutual fund taxes are mainly on capital gains, stock dividends, and interest, or coupon, payments. They are handled the exact same way as the taxes for stocks and bonds discussed earlier.

Summary

Your portfolio is likely to be most successful if you build it gradually, adding a small amount money to your investments each month.

This chapter provides a detailed framework for selecting mutual funds but only briefly discusses a framework for picking stocks. Adding individual stocks to your portfolio before it has become large enough violates four principles of successful investing: stay diversified; invest low-cost; know what you are investing in; and don’t spend too much time, energy, and money trying to beat the market. Individual stocks are not a necessary part of a successful portfolio, but many people enjoy picking individual stocks.

The Internet contains much information related to financial assets and investing. Many companies provide investing information online, hoping that investors who use the information will buy their products or use their services. Unfortunately, much of this information is biased, flawed, or even incorrect. It is important to use reliable resources.

Before picking funds to invest in, you must understand how to pick good mutual funds:

Steps one and two were to determine the asset classes your portfolio should contain and the appropriate benchmarks for these asset classes. For steps three and four, you determine key parameters for evaluating mutual funds of specific asset classes and use a database program to
set those parameters and evaluate potential candidates. In steps five and six, you select and purchase the best funds.

You should consider a number of factors when selecting mutual funds, including diversification, costs, turnover, un-invested cash, manager style drift, and tracking error.

Now that you understand the parameters for selecting mutual funds, you can set your criteria and use a database, such as Morningstar, and Learning Tool 7: Using Morningstar to Select Funds, to get a list of all the funds that meet your criteria.

Index funds and exchange-traded funds (ETFs) hold the same proportions of specific shares as a specific benchmark does. Their goal is to match the benchmark performance of a specific asset class. Nearly 1,000 different index funds and over 500 different ETFs follow different indices related to geography, maturity, capitalization, and style.

Index funds and ETFs were created because actively managed funds do not always beat benchmarks after fees, taxes, and other expenses. With an index fund, investors stop trying to beat the benchmark and instead accept the benchmark’s return and risk.

The challenge is getting and keeping your finances (and your life) under control.

**Assignments**

**Financial Plan Assignments**

Your challenge now is to begin building your portfolio. When you are starting to invest, you will have only a few assets, but you must still apply the 10 principles of building a successful portfolio regardless of the size of your investment portfolio or the number of assets invested in. How do you apply these principles?

Diversification is critical to building a successful portfolio. Single assets do not add much diversity to your portfolio. Most mutual funds hold multiple assets and may already be diversified. Consider purchasing mutual funds as your first financial assets. What factors make a good mutual fund? What factors are important to you? What are your thoughts on index funds and ETFs (exchange-traded funds)? What tools are available to help you choose candidates for your portfolio?

This chapter gives you the opportunity to choose your financial assets and to develop your investment strategy. To choose your financial assets, read Learning Tool 7: Using Morningstar to Select Funds, which explains how to access the Morningstar database and how to set up criteria to select the best mutual funds in your chosen asset classes.

Using Learning Tool 7, determine which assets you should purchase to give you exposure to your desired asset classes. What are the minimum purchase amounts, management fees, 12b-1
fees (if any), loads (loads are sales charges and are generally not recommended), and other critical areas of the assets you are considering? Select a minimum of four assets you will initially include in your investment portfolio.

The first asset for your portfolio should be for your emergency fund. Choose a liquid, no-load fund that has a low minimum balance requirement yet still yields positive returns. It could be a money market mutual fund, intermediate-term bond fund, Internet bank deposit, or other liquid investment.

Your second asset should be a core mutual fund. Select a fund that is inexpensive, has low turnover, and is tax-efficient. This fund should also offer you exposure to your main equity market. I personally like index funds for core allocations because they are low cost and tax-efficient and generate good returns. I also like the broadest index funds I can get that offer exposure to the total market, i.e., both large and small stocks.

Your third and fourth assets should be funds that broaden and deepen your portfolio. Broaden your portfolio by adding new asset classes to your portfolio; these assets could include international stocks or bonds, emerging market stocks or bonds, and real estate investment trusts (REITs).

To deepen your portfolio, add more companies to your core allocation or your main asset class. You might also include a U.S. small-cap or mid-cap fund or a fund that offers exposure to all the stocks in the U.S. market, such as the Wilshire 5000 index, which includes most of the listed stocks in the United States.

Once you have determined which assets to include in your portfolio, print off the “Snapshot” page for each of your assets. This page includes information on pricing, size, fees, total return, and return versus benchmarks. These pages will be included in your financial plan.

Then use **Learning Tool 13: Investment Process Spreadsheet**. Open the spreadsheet and determine which tab to use. If you own no financial assets or have only a few in your portfolio (fewer than 10 financial assets), use Tab “Inv. Process (4–10 Assets).” If you have more than 10 assets, use tab “Inv. Process (4–42 Assets).” Assets include stocks, bonds, mutual funds, savings, CDs, and other financial assets.

Add your expected annual salary after you get out of school to cell G11. It will calculate a three-to six-month estimate. Looking at these ranges, type in your emergency fund goal in cell G14. This is the amount you want to save before you begin investing.

Add in your asset classes consistent with your phases in column D in the light-green rows from Section III.B.1. Add the benchmarks in column D from the same section.

Once you have selected a minimum of four assets (one for each asset class), type in the name of the financial assets in the dark-green section.
Finally, type in the percentage allocation in columns F and G, with F being the taxable accounts and G being retirement accounts. The sum of the taxable and retirement accounts should be added to your total allocations as stated in Section III.B.1.

Notice that Learning Tool 13: Investment Process Spreadsheet automatically calculates your initial target portfolio size goal, or your first goal for investing. It takes the amount of your emergency fund and divides this by the percentage you allocate to bonds and cash. For example, if your emergency fund goal were $20,000 and you allocated 25 percent to bonds and cash, your initial target portfolio size would be $80,000, or $20,000 / .25. This is just one way of calculating your first goal for investing, but it is a good starting point. Once you achieve this first target portfolio size, you will add an amount to this goal, say $100,000; type the new amount directly over the formula in cell L12 and begin working on your new targets.

Learning Tools

7. Using Morningstar to Select Funds

This document helps you use the website www.morningstar.com to select financial assets (mainly mutual funds) for your Investment Plan. This learning tool will help you use both the Internet edition and the library edition of Morningstar.

10. Key Sources of Financial Information

This document gives suggestions on finding quality sources of financial information.

Review Materials

Terminology Review

% Rank in Category. This is the number the fund ranks in its category or versus the benchmark. It is the top percentile, i.e., the lower the number the better.

Actively managed funds. These are funds where the portfolio managers try to beat the performance of a benchmark through the active purchase and sell of securities in their asset class. Actively managed funds generally have higher management fees which must be overcome through higher returns

Benchmark. This is the relevant index for the specific category tracked by Morningstar or other fund monitoring company.

Capital gains taxes. Capital gains are realized earnings from selling a financial asset at a profit. It is the sale price less the purchase price, and are divided into short-term and
long-term. Short-term capital gains are gains from the sale of an asset where the asset was held for less than 366 days and is taxed at your marginal tax rate. Long-term capital gains are gains on the sale of an asset where the asset was held for more than 366 days and is taxed at a preferential federal rate.

**Category.** These are all funds in the same category as established by Morningstar.

**DALBAR.** A firm that produces the book titled Quantitative Analysis of Investor Behavior which tracks the performance of individual investors over succeeding 20 year periods.

**Diversification.** Diversification is the process of “not putting all your eggs in one basket.” It is your key defense against market risk. Pick a fund with many companies in their portfolios within each asset class.

**Index funds.** These are mutual funds or ETFs which hold specific shares in proportion to those held by a specific index, i.e., the S&P 500 or Russell 2000. Their goal is to match the benchmark performance. Index funds have become the standard against which other mutual funds are judged.

**Interest/coupon payments.** These are payments received as part of the contractual agreement to receive interest payments from a bond. Bonds which have preferential interest tax treatment, i.e., muni’s and Treasuries, must still pay capital gains taxes.

**Cost.** These are the fees and expenses you pay to own a mutual fund or asset. Invest low cost. In a world where investment returns are limited, investment costs of any kind reduce your returns. We recommend you invest in no-load mutual funds to reduce costs.

**Manager Style Drift.** This is a check on the management style. Make sure the managers investment style remains constant. Investment fund managers have no authority to change the asset class. If you purchase a small cap fund, the manager should purchase small cap shares. The fund's prospectus should clearly define the market, size company, and portfolio style tilt.

**Potential Cap Gains Exposure.** This is an estimate of the percent of a funds asset’s that represent capital gains. If this is high, the probability is high that these may come to the investor as capital gains.

**Stock dividends.** Stock dividends are dividends received from a company from the ownership of the company shares. Stock dividends are of two types, qualified or ordinary/not qualified. A qualified dividend is a dividend paid by a U.S. corporation where the investor held the stock for more than 60 days during the 121-day period that begins 60 days before the ex-dividend date (see Teaching Tool 32). An ordinary
dividend is a dividend that is not qualified, i.e., you have not held the stock for a long enough time period to get the Federal preferential tax rate.

**Tax Cost Ratio.** This is the percent of nominal Fund return attributable to taxes, assuming the fund is taxed at the highest rate. If a fund had an 8.0% return, and the tax cost ratio was 2.0%, the fund took home \((1 + \text{return}) \times (1 - \text{tax cost ratio}) - 1\) or \((1.08 \times 0.98) - 1\) or 5.84%.

**Tax Efficiency.** Invest in taxable funds with an eye to obtaining high returns while keeping taxes low. Taxes reduce the amount of money you can use for your personal and family goals. Watch the historical impact of taxes, for it will likely continue. Remember it is not what you earn, but what you keep after taxes that makes you wealthy.

**Tax-adjusted Return.** This is your return after taxes

**Taxes on mutual funds.** Mutual funds are pass through vehicles, which means that taxes are not paid at the Fund level but are passed through to the individual shareholders who must pay the taxes. Mutual fund taxes are mainly capital gains, stock dividends and interest/coupon payments. They are handled the exact same way as the taxes for stocks and bonds discussed earlier.

**Tracking Error.** This is the return on the fund less the return on the benchmark. This tracking error should be small versus your benchmark. Tracking error is the historical difference between the return of a fund (i.e. a mutual fund) and its specific market/sector benchmark or index. The smaller the tracking error, the better the performance of the Index fund relative to the benchmark. However, you won’t complain if the tracking error is positive (i.e., your fund had higher returns than the index or benchmark).

**Turnover.** This is the amount of the portfolio that is bought and sold during a specific period. Keep turnover low, as turnover is a proxy for fund expenses and taxes. The costs associated with turnover are hard to quantify and may not be disclosed in the prospectus. These costs include commissions, bid-ask spreads, and market impact.

**Un-invested Cash.** This is the amount of cash in the portfolio. High cash levels in the portfolio are drags on performance so keep un-invested cash low.

**Review Questions**

1. What advice does L. Tom Perry give in regard to building an emergency fund and retirement savings?
2. What four principles of successful investing would you break by investing in individual stocks before completing the other steps outlined in the previous chapters?
3. What are six good sources of information for researching individual stocks?
Chapter 24. Investments 8: Selecting Financial Assets

4. In regard to mutual funds, what is turnover? Why is turnover an important consideration when buying a mutual fund?
5. What is an index fund? What is the goal of any given index fund?

Case Studies

Case Study 1

Data
You already have your emergency fund but are concerned that you have only $50 per month to invest. You would like to find an index fund that follows the large-cap stocks, and your chosen benchmark is the S&P 500 Index. You have determined your criteria as large-cap stocks, index funds that have a minimum purchase of $50, an asset size greater than $750 million, and a lack of sales charges (i.e., a no-load fund).

Application
Using either Morningstar at your local library or Morningstar on the Internet, determine how many funds meet these criteria. Which fund(s) would you choose?

Case Study 1 Answers

Go to the library edition of Morningstar, and go to the screeners (see Learning Tool 7). Set up the problem with the following criteria:
• Fund Category = Domestic Stock (ex-specialty); your category is Large Blend
• Special Fund Types and Index Fund = Yes
• Minimum Purchase and ≤ $50
• Fund Size (Total Assets) and Value ≥ $750
• Fees and Expenses and No-Load Fund = Yes
• Fees and Expenses and Expense Ratio ≤ .15

As of March 4, 2014, there were 11 index funds that matched your criteria. However, 9 of the 11 were funds for institutional investors only. The remaining ones individual could buy were:
Columbia Large Cap Index I (ccxix)
Type: S&P 500 Index, Expense ratio: .15%
Min. Investment: $0, $0 initial AIP
DFA U.S. Large Cap Index I (dfusx)
Type: S&P 500 Index, Expense ratio: .10%
Min. Investment: $0, $0 initial AIP

Which fund you choose will depend on which factors, such as tenure of managers, expense costs, asset size, and tax position, you consider most important.
Please note that after doing the analysis in Morningstar, you need to call each fund family to make sure the information is correct. Toll-free numbers are available under the Purchase Info tab. With the Fidelity and Vanguard Funds above, the information was incorrect: those funds were available only for institutional or retirement clients and not for the general public or retail clients. They do, however, have funds for individual investors.

Case Study 2

Given the Morningstar report for VFINX (see Table 9 below), highlight the areas where you find the critical information below (with the colors listed):

1. Diversification (orange)
2. Costs and Fees (orange)
3. Taxes (light green)
4. Turnover (red)
5. Un-invested cash (blue)
6. Style and style drift (green)
7. Tracking error and performance (blue)
Table 9 Morningstar Mutual Report for VFINX: Vanguard 500 Index Fund

Vanguard 500 Index Inv

<table>
<thead>
<tr>
<th>Morningstar Analyst Rating</th>
<th>04.07.14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morningstar Pillars</td>
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<tr>
<td>Performance</td>
<td></td>
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<tr>
<td>Rating and Risk</td>
<td></td>
</tr>
<tr>
<td>Morningstar's Take by Michael Hewson 04-02-14</td>
<td></td>
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</tbody>
</table>

Vanguard 500 Index is one of the best S&P 500 Index funds available.

This fund is a suitable passive option for those looking to establish a core portfolio allocation to large-cap U.S. equities. Investors have a number of options for exposure to the S&P 500 Index. However, Vanguard is known for its strong manager and operational expertise, which has funded this fund with superior performance. The past 10 years through February 2014, it logged S&P 500 Index by 92.1% and 111.6% respectively, beating the S&P 500 Index by 92.1% and 111.6% respectively. Investors in this fund should be prepared for the risk inherent in the stock market. Volatility has averaged about 15% in the last decade and the index fell 17%. While it is not clear over the course of the past several years, risk-averse investors or those with a short-term focus might consider limiting their holdings to U.S. stocks. Like many of Vanguard’s index funds, this fund is expected to track low-cost-based shares of the portfolio in a tax-efficient manner. The fund does not issue a capital gains distribution in more than 10 years.
Case Study 2 Answers
To help you in finding the information, we have color coded a report in the following slides to show you where the criteria discussed can be found.

1 “Becoming Self-Reliant,” *Ensign*, Nov. 1991, 64
http://library.morningstar.com/Education/MLE_Glos
sary_T_Z.html#TrailingReturnCategory

3 “Indexing Lets You Say Those Magic Words,”
CNN Money, Aug. 29, 2001
4 Letter to Berkshire Hathaway Shareholders

5 “Warren Buffet: Top 3 Investment mistakes to
Avoid,” USA Today, October 26, 2013.
6 Morningstar Mutual Fund Report for VFINX, from
Chapter 25. Investments 9: Portfolio Performance, Rebalancing, and Evaluation

25. Investments 9: Understanding Portfolio Performance, Rebalancing, and Evaluation

Introduction

In addition to the steps you have taken to build your portfolio, you must repeat three steps throughout the life of your portfolio in order for it to be a success. First, you must monitor your portfolio’s performance and compare asset performance to benchmarks; second, you must evaluate asset performance; and third, you must rebalance your portfolio as necessary to keep it within the targets for risk defined in your Investment Plan. This chapter will begin with a discussion of benchmarks and will then explain each of the three steps that must be repeated throughout the life of your portfolio.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand portfolio rebalancing
2. Manage and evaluate your portfolio return
3. Calculate risk-adjusted performance
4. Perform a portfolio return attribution analysis

Understanding how and when to rebalance and evaluate your portfolio is an important part of successful investing.

Understand Portfolio Rebalancing

Portfolio rebalancing is the process of buying and selling assets to align your portfolio with the target asset-allocation percentages you determined in your Investment Plan. Over time, a portfolio can become unbalanced, or different from your target asset allocations, due to changes in asset and asset class performance, changes in your personal objectives or risk-tolerance level, and the introduction of new capital or new asset classes that you consider attractive.

It is important to rebalance your portfolio to ensure you continue moving toward your personal goals at an acceptable level of risk. The challenge of rebalancing is that each time you sell a security, you incur transaction costs; if the account is taxable, you also create a taxable event.

Portfolio Rebalancing Strategies

There are many different strategies for rebalancing a portfolio. In this chapter we will discuss two strategies: periodic-based rebalancing and percent-range rebalancing.
In periodic-based rebalancing (also called calendar-based rebalancing), you must decide how often you will rebalance your portfolio—monthly, quarterly, or annually. After each designated period of time, you will rebalance your portfolio to make it consistent with the target asset-allocation percentages listed in your Investment Plan. Allowing longer periods of time to pass between each rebalancing entails lower transaction costs but higher tracking error (the difference between the return you actually receive and the return you would have received if your portfolio had been at its target asset allocations).

The advantage of periodic-based rebalancing is that it is a simple method. The disadvantage is that it does not account for current market performance, which influences overall portfolio performance.

In percent-range rebalancing (also called volatility-based rebalancing), you rebalance your portfolio every time the portfolio’s target asset-allocation percentages stray a predetermined percentage from your target percentages (e.g., plus or minus five percent). A higher percentage will reduce transaction costs but raise tracking error, while a smaller percentage will reduce tracking error but raise transaction costs.

The advantage of this method is that it is easy to implement because asset performance will indicate when you should rebalance. The disadvantages include that it is difficult to set an ideal range and that assets with higher target percentages and more volatility will have to be rebalanced more often than assets with lower target percentages and less volatility.

New money/donations (NMD) addendum: Regardless of which rebalancing strategy you use, I recommend you also consider using an NMD addendum. Since most of you pay yourselves monthly, donate to charities on a monthly basis, and use caution in your selection of assets, you are in a strong position to combine the aforementioned strategies with an NMD strategy.

An NMD addendum may be used when the following situation applies: in the process of rebalancing, you may find that you need to sell assets on which you have large capital gains. If this is the case, you may want to use the NDM addendum to donate the appreciated asset instead of selling the asset and paying taxes on the capital gains.

You can donate appreciated assets to churches and other qualified charities tax free. For members of the Church of Jesus Christ of Latter-day Saints (LDS), you can donate to tithing, fast offerings, missionary fund donations, and almost any other type of donation listed on the LDS Church ward donation slips. This may be the same for other churches as well. The “donation-in-kind” of an appreciated asset can take the place of your tithing, fast offerings, or other charitable contributions. Then, since you have paid your tithes and offerings through donated securities, you can use the cash you would have paid for your contributions to buy securities to rebalance your portfolio back to your asset-allocation target percentages. (For more information on how to donate appreciated assets to the LDS Church, please see the LDS Church website at lds.org.)

Within about four to six weeks of donating an asset to the Church, you will receive a donation-in-kind receipt (see Learning Tool 8: Tithing Share Transfer Example). Keep this receipt as
well as a copy of the *Wall Street Journal* to verify the value of the assets on the day you made your donation. You can then use these two documents to report a charitable donation on your tax return next year.

The key to rebalancing is minimizing market impact, transaction costs, and taxes due. By donating assets “in-kind,” you eliminate capital gains taxes on your donated assets, minimize transaction costs and market-impact costs, contribute to a reputable charity (the charity must be a 501(c)(3) organization), and get a tax deduction.

Which rebalancing method is best? For most people, the strategy that is easiest for them will likely be the strategy that is most useful for them. A combination of periodic-based rebalancing and percent-range rebalancing usually works well, especially for smaller portfolios. These strategies can also be combined with the new money/donations addendum to minimize tax implications.

**Managing the Costs of Rebalancing Your Portfolio**

When you rebalance your portfolio, pay attention to the cost basis of the assets you plan to sell. The cost basis is the amount you paid for the assets. If you sell assets at a loss—in other words, if you sell the assets for less than the amount you paid for them—you will not incur any taxes by selling. Keep good records of the assets you sell at a loss because you can use capital losses to offset capital gains. If you have more capital losses than capital gains, you can deduct the excess (up to $3,000 per year) from your taxable income in 2016. By rebalancing your portfolio through selling assets at a loss, you can avoid paying taxes on capital gains, you can deduct the capital loss on your income taxes, and you can buy the assets you need to rebalance your portfolio while minimizing market impact, taxes, and transaction costs.

**Manage and Evaluate Your Portfolio Return**

Portfolio management is the process of developing and maintaining your portfolio as a means of achieving your financial goals. Performance evaluation is the process of analyzing your portfolio’s return performance with the goal of identifying your key sources of return. These two processes are somewhat complicated, but both are critical to successful investing.

**Portfolio Management Styles**

In **active portfolio management**, investors use publicly available data to make decisions about actively buying and selling financial assets. The goal of this investment strategy is to beat the benchmarks after all transaction costs, taxes, management fees, and other expenses have been accounted for. This strategy can be considered successful only if it works consistently year after year—not if the strategy works for one lucky trade. Active management is expensive: management fees for actively managed mutual funds that consistently outperform benchmarks are 5 to 25 times higher than the management fees for passively managed mutual funds (18 basis points for an index fund versus 250 basis points for an actively managed fund).
In passive portfolio management, you buy a well-diversified portfolio of financial assets (usually a broad market index) and do not attempt to outperform the market by buying underpriced securities or selling over-priced securities. Most actively managed funds fail to outperform their benchmarks, especially after transaction costs and taxes have been accounted for. Many investors have realized that the saying “if you can’t beat them, join them” applies well to investing, so they buy low-cost, passively managed index funds, which consistently match their benchmarks and minimize taxes.

Factors That Lead to Above-Benchmark Returns

Two main factors lead to above-benchmark returns: superior asset allocation and superior stock selection.

Superior asset allocation requires you to be sensitive to changes in the market and adjust your portfolio’s asset allocations accordingly: you must change allocations from poorly performing asset classes to high-performing asset classes to receive above-benchmark returns. You must shift your portfolio’s allocations among stocks, money market funds, bonds, and other asset classes based on your expectations for return from each of these asset classes. Superior asset allocations yield higher returns with lower risk. If assets are not allocated well, the result is lower returns, higher transaction costs, and higher taxes.

Superior stock selection requires you to pick sectors, industries, or companies that correspond to a specified benchmark and together outperform the specified benchmark. To build an investment portfolio that earns returns in excess of the benchmark, you must carefully buy or sell undervalued stocks while working to purchase securities in an index that contains stocks with the highest growth potential. Superior stock selection yields higher returns with lower risk. Poor stock selection yields lower returns, higher transaction costs, and higher taxes.

Performance Evaluation

Performance evaluation, or portfolio evaluation, is the process of monitoring the performance of your financial assets by comparing them to the relevant benchmarks. Unless you regularly monitor your portfolio’s performance, you will not know how well you are moving toward achieving your personal goals. If an asset in your portfolio consistently underperforms its benchmark, you may want to sell that asset and purchase another asset that more closely follows its benchmark. By making adjustments to your portfolio along the way, you can achieve your financial goals more quickly.

To evaluate your portfolio’s performance, calculate the following:

1. The period returns on each asset (the return after all taxes and fees have been accounted for)
2. The index returns on each asset’s benchmark (the return on the benchmark whose performance most closely mirrors the performance you are trying to achieve)
3. The difference between the asset returns and benchmark returns
4. The weight of each asset or fund in the overall portfolio
5. The overall portfolio return

With this information, you can evaluate how each of your funds or assets is performing compared to its benchmark and how well the portfolio is performing as compared to the goals outlined in your Investment Plan.

**Portfolio Reporting**

Thomas S. Monson gave the following counsel, “When performance is measured, performance improves. When performance is measured and reported, the rate of improvement accelerates.”

Although he was speaking about a different type of activity, his counsel is still important.

Portfolio reporting is the process of reviewing your portfolio’s performance with everyone who is affected by the portfolio’s performance. This would include you, your spouse if married, and any other individuals affected. If you are responsible for managing your family’s portfolio, you should report performance to your spouse (and perhaps older children) at least quarterly. If others are helping you manage your portfolio, they should report performance to you and your spouse at least monthly and quarterly as well.

**Calculate Risk-Adjusted Performance**

As you analyze the returns on the various assets in your portfolio, how can you tell how well you are doing? Is only the total return on each asset important, or should you consider other factors to determine whether each asset performed as well as it should have? How do you determine whether a portfolio manager is generating excess returns (returns that are higher than the portfolio’s benchmarks)? Is performance just a matter of high returns, or should you also be concerned about risk?

It is important to understand risk in managing portfolios. For example, two portfolios have the same 5 percent annual return. One is 100 percent invested in Treasury bonds, and the other is 100 percent invested in small-cap stocks. With the Treasury portfolio, there is very little risk or volatility in returns. With the small-cap portfolio, there is very high risk and extreme volatility in returns. Clearly, risk matters.

One of the easiest and most popular ways of comparing risk is to compare the return rates of investment funds that have similar investment objectives and similar risk characteristics. For example, all large-cap “blend” mutual funds are grouped in the same category, all small-cap “growth” mutual funds are grouped in another category, and all international stocks are grouped in a third category. The average return on each fund within a specific category is calculated, and each fund is given a percentile ranking depending on its relative performance within the category and within the same time period. Generally, the lower the percentile ranking (the range is between 1 and 100), the better the performance. If your fund’s percentile ranking is 16, that fund is in the top 16 percent of all mutual funds within its category. To see an example of a mutual
fund and the performance tab giving its relative ranking, see Chart 1, which is a Morningstar Mutual Fund Performance tab, from the Morningstar Library Edition, 2016, or which can also be found at www.morningstar.com. The chart shows the fund’s total return, the fund’s return minus the category average, and the return minus the index return. The “percent rank in category” shows the fund’s percentile ranking for each year that the fund has reported its performance to mutual fund reporting companies.

Comparing the managers of similar investment groups is another useful first step in evaluating performance, but the numbers may be misleading. Some managers may concentrate on very narrow sub-groups of their investment objectives, so portfolio characteristics may not be comparable. For example, in the large-cap “blend” category, some managers may concentrate on high beta (more volatile) stocks, while others may take a more balanced approach. In addition, some managers may change style. Managers may watch the performance of growth stocks versus value stocks and invest in the style that is currently performing the best.

There are a number of accepted ways of measuring portfolio performance: the most widely used measuring tools include the Sharpe measure, the Treynor measure, and the Jensen measure. Each of these measures means little in and of itself; rather, they have meaning when compared to the measure of the relevant market benchmarks.

**Sharpe Measure**

The Sharpe measure is a ratio of your portfolio’s excess return divided by your portfolio’s standard deviation. The portfolio’s excess return is found by subtracting the risk-free rate (the rate of return you are guaranteed to make with limited risk) from the amount of the portfolio’s actual return. The risk-free rate is the benchmark over which all other financial or real assets are compared. The rate is considered by most investment professionals as the amount of return you receive on a 6- or 12-month Treasury bill. Since these bills are default-free, they are considered a proxy for the risk-free rate. The difference between an asset’s return and the risk-free rate is called the risk premium, or excess return. The Sharpe measure is calculated as follows:

\[
\frac{(r_p - r_f)}{s_p}
\]

- \( r_p \) = the average return on the portfolio
- \( r_f \) = the risk-free rate
- \( s_p \) = the standard deviation of portfolio returns
Chart 1. Performance History

The Sharpe measure is found by dividing the portfolio risk premium, or the return on the portfolio minus the risk-free rate, by the portfolio risk as measured by the standard deviation.

An asset’s Sharpe measure in isolation means little. It must be measured against the market’s Sharpe measure, which is calculated the same way: by dividing the market risk premium, or the return on the market minus the risk-free rate, by the standard deviation of the market. If the asset’s Sharpe measure is greater than the market’s Sharpe measure, the asset has outperformed the market on a risk-adjusted basis.

**Treynor Measure**

The Treynor measure is similar to the Sharpe measure, but the Treynor measure uses the portfolio’s beta instead of the portfolio’s standard deviation. The Treynor measure is calculated as follows:

\[
\frac{(r_p - r_f)}{\beta_p}
\]

- \(r_p\) = the average return on the portfolio
- \(r_f\) = the average risk-free rate
- \(\beta_p\) = the weighted average beta of the portfolio

The Treynor measure is found by dividing the portfolio risk premium by the portfolio risk as measured by the beta.
An asset’s Treynor measure in isolation also means little. It must be measured against the market’s Treynor measure, which is calculated by dividing the market risk premium, or the return on the market minus the risk-free rate, by the beta of the market, which is 1.0. If the asset’s Treynor measure is greater than the market’s Treynor measure, the asset has outperformed the market on a risk-adjusted basis.

**Jensen Measure**

The Jensen measure is the ratio of your portfolio’s return minus the portfolio’s expected return as determined by the Capital Asset Pricing Model (CAPM). The CAPM is an economic theory that describes the relationship between the risk of assets and the pricing of those assets. This theory suggests that the only risk that should be priced by investors is risk that cannot be eliminated through diversification. In its most simple form, the CAPM shows that the expected return of an asset or portfolio is equal to the rate on a risk-free security plus the asset’s risk premium multiplied by the asset’s beta, or, in mathematical terms: \[ r_f + \beta_p (r_m - r_f) \].

The Jensen measure incorporates the CAPM into its calculation. The Jensen measure is calculated as follows:

\[
\alpha_p = r_p - [r_f + \beta_p (r_m - r_f)]
\]

- \( \alpha_p \) = the alpha for the portfolio, or the return over and above your benchmark
- \( r_p \) = the average return on the portfolio
- \( \beta_p \) = the weighted average beta of the portfolio
- \( r_f \) = the average risk-free rate
- \( r_m \) = the average return on the market index

This measure is the portfolio’s performance \( (r_p) \) minus the expected portfolio return as determined by CAPM.

Note that this measure can also be used to determine risk-adjusted performance. Since we know the market’s beta is 1.0 (by definition), and since we both add and subtract the risk-free rate, the CAPM return is just the market return. So if the Jensen measure is positive, the asset has outperformed the market on a risk-adjusted basis.

**Which measure is most appropriate?**

Because different risk-adjustment measures can give different implications about a portfolio’s performance, it is important to choose the appropriate measuring tool for your particular portfolio.

Generally, if a portfolio represents an individual’s entire investments, or if there are few financial assets in the portfolio, many academics and practitioners consider the Sharpe measure to be the best measurement option. Use the Sharpe measure if you are concerned with the overall
variability of the portfolio. Remember, the portfolio’s Sharpe measure must be compared to the market’s Sharpe measure to measure performance.

If your portfolio comprises many different assets and asset classes, or if you are evaluating only a portion of your portfolio, most recommend the Jensen or the Treynor measures. If your portfolio is well diversified, your main concern will generally be non-diversifiable risk (the risk you cannot eliminate through diversification). Of these two measures, the Treynor measure is more complete because it adjusts for non-diversifiable risk (ibid.).

The assumptions that underlie risk-adjustment measures limit their usefulness. Understanding these assumptions is important. For example, these measures assume that a portfolio is basically stable: however, when the portfolio is actively managed, basic stability requirements for some statistical measures are not met. Risk-adjustment measures should be used with caution.

In addition to using risk-adjustment measures, investors should measure performance by comparing their portfolios with portfolio benchmarks as well as with the portfolios of other investors in the same investment-objective category.

Perform a Portfolio Return Attribution Analysis

Portfolio attribution analysis is the process of separating portfolio returns into various categories based on specific indicators of portfolio performance, such as broad asset allocation, security selection, industry, currency, and trading. This analysis allows you to determine how well your portfolio is performing.

There are many different methods of performing a portfolio attribution. I will explain only the most basic method. To perform a basic portfolio attribution, investors must complete the steps described below:

**Step 1: Create a Weighted Benchmark That Includes All of Your Asset Classes**

Suppose you have three asset classes in your portfolio—stocks, bonds, and cash. Your target allocations, benchmarks, and quarterly returns are shown below:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Target Allocations</th>
<th>Benchmark</th>
<th>Quarterly Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stocks</td>
<td>60%</td>
<td>S&amp;P 500</td>
<td>2.5%</td>
</tr>
<tr>
<td>Bonds</td>
<td>30%</td>
<td>Barclays Aggregate</td>
<td>1.2%</td>
</tr>
<tr>
<td>Cash</td>
<td>10%</td>
<td>Barclays Cash</td>
<td>0.5%</td>
</tr>
<tr>
<td>Overall Portfolio</td>
<td>100%</td>
<td>Overall Return</td>
<td>1.91%</td>
</tr>
</tbody>
</table>

A different benchmark is assigned to each component: use the target asset allocations listed in your Investment Plan as your target asset allocations.
Step 2: Calculate Returns for Each Asset Class and for the Overall Portfolio

Calculate the weighted return for each asset class and then calculate the total actual return.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Actual Weight</th>
<th>Quarterly Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Mutual Funds</td>
<td>70%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Bond Mutual Funds</td>
<td>20%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Cash</td>
<td>10%</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>Total Actual Return</strong></td>
<td><strong>100%</strong></td>
<td><strong>1.69%</strong></td>
</tr>
</tbody>
</table>

Step 3: Compare Your Returns for Each Asset Class to the Benchmark Returns

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Actual</th>
<th>Benchmarks</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Mutual Funds</td>
<td>2.0%</td>
<td>2.5%</td>
<td>–0.5%</td>
</tr>
<tr>
<td>Bond Mutual Funds</td>
<td>1.2%</td>
<td>1.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Cash</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Step 4: Calculate Your Attribution and Make Decisions Accordingly

Once you have the information from Steps 1–3, the easiest way to calculate the attribution is to put the information into a portfolio attribution spreadsheet (see Learning Tool 17: Portfolio Attribution Example).

It is important to attribute the portfolio’s performance to specific factors, such as asset allocation or security selection. A portfolio attribution analysis can help you evaluate how well you are managing your financial assets. If you do not perform a portfolio attribution analysis, you will not understand the reasons your portfolio is performing the way it is, and you will not understand how to improve its performance.

Monitoring Long-Term Performance of Mutual Funds

Once you decide to include a mutual fund in your portfolio, you should stick with that fund for a minimum of two or three years. This is important, especially if you choose to invest in actively managed funds. Do not take investment decisions too lightly. When you are evaluating the performance of mutual funds, realize that below-benchmark performance for a month or a quarter is normal, but the returns on the fund should be positive over a period of two or three years. If the returns on a particular fund do not come close to mirroring the benchmark’s return over an extended period of time, you may want to sell that fund and purchase a low-cost index mutual fund that will at least give you market returns.

Summary

Portfolio rebalancing is buying and selling of assets to align your portfolio with the target asset-allocation percentages in your Investment Plan. Over time, a portfolio can become unbalanced due to changes in asset and asset class performance, changes in your personal objectives or risk-tolerance level, and the introduction of new capital or new asset classes. Rebalancing your
portfolio helps ensure that you are moving toward your personal goals and have a comfortable level of risk. However, each time you sell a security you incur transaction costs and, if the account is taxable, you create a taxable event. In this chapter, we discussed two strategies for rebalancing a portfolio: periodic-based rebalancing and percent-range rebalancing.

Portfolio management is the process of developing and maintaining your financial assets. Performance evaluation is the process of analyzing your portfolio’s performance to identify your key sources of return. These two processes are complicated but critical to successful investing. The most widely used tools for measuring portfolio performance include the Sharpe measure, the Treynor measure, and the Jensen measure. These measures are then compared to the measures of the relevant benchmarks.

Portfolio attribution analysis is the process of separating portfolio returns into various categories based on specific indicators of portfolio performance, such as broad asset allocation, security selection, industry, currency, and trading. This analysis allows you to determine how well your portfolio is performing or why it is underperforming. While there are many different methods of performing a portfolio attribution, this chapter discussed only the most basic method.

Assignments

Financial Plan Assignments

First, determine how often you will rebalance your portfolio and include that goal in your Investment Plan. Select your portfolio rebalancing method and include this in Section IV.B. Generally, the easiest method of rebalancing is periodic-based rebalancing.

Second, I encourage you to use the new money/donations addendum to minimize market impact, transaction costs, and taxes on your portfolio.

Third, determine how often you will monitor and report on your portfolio and include that information in Section IV.A.

Finally, determine how you will communicate the results of the portfolio performance to everyone who is affected by the portfolio’s performance.

Learning Tools

8. Tithing Share Transfer Example

This document is an example of a form you can use to pay your tithes and other offerings with appreciated stocks or mutual funds.

17. Portfolio Attribution Example
This Excel spreadsheet helps you perform a simple portfolio attribution analysis based on your asset-allocation targets and benchmarks. This analysis will help you understand the distribution of return in your portfolio.

**Review Materials**

**Terminology Review**

**Active portfolio management.** It is the process of using publicly available data to actively manage a portfolio in an effort to beat the benchmark after all transactions costs, taxes, management, and other fees. However, to do this successfully you must do this consistently year-after-year, and not just from luck.

**Jensen’s Alpha.** This is a risk-adjusted performance measure. This is the ratio of your portfolio return less CAPM determined portfolio return, or \( \alpha = \text{rp} - [\text{rf} + \beta_p (\text{rm} - \text{rf})] \) where \( \alpha_p \) = alpha for the portfolio, \( \text{rp} \) = average return on the portfolio, \( \beta_p \) = Weighted average Beta, \( \text{rf} \) = average risk free rate, and \( \text{rm} \) = average return on market index port. It is portfolio performance less expected portfolio performance from CAPM model.

**Monitor performance.** The process of understanding and reviewing the performance of a portfolio. Unless you monitor performance, you will not know how you are doing in working toward accomplishing your objectives. You need to know how every asset you own is performing, and performing versus its benchmark, so you can determine how well you are moving toward your goals.

**NMD (New Money / Donations) Addendum.** This is a way to rebalance using either of the rebalancing methods. Rebalance as determined previously, but pay your charitable donations using appreciated assets, and use the money you would have spent on charity to purchase the “underweight” assets, so you do not have to sell and incur transactions costs or taxable events.

**Passive portfolio management.** It is the process of buying a diversified portfolio which represents a broad market index (or benchmark) without any attempt to outperform the market or pick stocks. Since most active managers fail to outperform their benchmarks, especially after costs and taxes, investors have realized that if you can’t beat them, join them, so they buy low-cost passive funds which meet their benchmarks consistently and minimize taxes.

**Percent-range-based rebalancing.** This is the process of rebalance the portfolio every time actual holdings are +/-5% (or +/-10%) from target ratios. Rebalance whenever you are outside this range. It is easy to implement and wider ranges will reduce transactions costs (at the expense of higher tracking error).
Performance evaluation. It is the process of evaluating a portfolio’s performance with the goal of understanding the key sources of return.

Periodic-based rebalancing. This is the process of rebalancing where you specify a time period, i.e. bi-annually, annually, etc. After each time period, rebalance the portfolio back to your original asset allocation targets. It is the most simple of the methods, and longer periods have lower transactions and tax costs (but higher tracking error costs).

Portfolio attribution. It is the process of separating out portfolio returns into their related components, generally attributable to asset allocation, securities selection, industry, and currency.

Portfolio evaluation. The process of monitoring financial asset performance, comparing asset performance to the relevant benchmarks, and determining how well the fund is meeting its objectives.

Portfolio management. It is the development, construction, and management of a portfolio of financial assets to attain an investor’s specific goals.

Portfolio rebalancing. It is the process of bringing portfolios back into given target asset allocation ratios. Changes in allocation occur due to changes in asset class performance and investor objectives or risk, or introduction of new capital or new asset classes.

Portfolio reporting. The process of reviewing portfolio performance with the necessary participants, i.e. your spouse or your investment advisor.

Risk-adjusted Performance. It is the process of determining performance after adjusting for the risk of the portfolio.

Sharpe Index. This is a risk-adjusted performance measure. It is the ratio of your “excess return” divided by your portfolio standard deviation, i.e., your \((rp - rf)/sp\) where \(rp\) = Average return on the portfolio, \(rf\) = your riskfree rate, and \(sp\) = Standard deviation of portfolio return. The Sharpe Index is the portfolio risk premium divided by portfolio risk as measured by standard deviation.

Style analysis. It is another way of obtaining abnormal returns is by analyzing the investment style pf the portfolio. You can decompose returns by attributing allocation to style, and style tilts and rotation are important active portfolio strategies.

Taxable accounts. There are investment vehicles without tax advantages.

Tracking error. Tracking error is the return that is lost from your portfolio being different from your target asset allocation.
**Treynor Measure.** This is a risk-adjusted performance measure. This is similar to Sharpe but it uses the portfolio beta instead of the portfolio standard deviation, or \((rp - rf)/\beta_p\) where \(rp\) = average return on the portfolio, \(rf\) = average risk-free rate, and \(\beta_p\) = weighted average \(b\) for portfolio. It is the portfolio risk premium divided by portfolio risk as measured by beta.

**Review Questions**

1. What is portfolio rebalancing?
2. What are the two strategies for rebalancing portfolios mentioned in this chapter?
3. Why is it important to pay attention to the cost basis when you sell an asset?
4. What is portfolio management? What is portfolio evaluation?
5. What are the two types of portfolio management styles? Which is more costly?

**Case Studies**

**Case Study 1**

**Data**

Steve and Suzie, both 45 years old, are aggressive investors; they have an investment portfolio worth over $250,000. Their target asset allocations are 60 percent equities and 40 percent bonds and cash; they have invested these assets in 10 mutual funds. Their actual asset class weights differ from their targets because of the underperformance of the equity part of their portfolio.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Actual</th>
<th>Target</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>70%</td>
<td>60%</td>
<td>10%</td>
</tr>
<tr>
<td>Bonds</td>
<td>20%</td>
<td>30%</td>
<td>-10%</td>
</tr>
<tr>
<td>Cash</td>
<td>10%</td>
<td>10%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Application**

When should Steve and Suzie rebalance their portfolio, and how should they do this?

**Case Study 1 Answers**

The decision of when to rebalance should be part of Steve and Suzie’s Investment Plan. They need to determine the best time to rebalance and the most cost-effective means of rebalancing. The key to rebalancing is minimizing transaction costs and turnover while maintaining adequate diversification and return.

A possible strategy for rebalancing is the NMD strategy: Steve and Suzie can donate appreciated assets to charity and use new money to rebalance their portfolio. If they donate their appreciated equity assets (e.g., donations-in-kind to a charity), they can use...
the money they would have spent on their charity donations to purchase more of their underweight assets, in this case, they would likely purchase bonds.

**Case Study 2**

**Data**
Steve is reviewing the performance of his largest asset, XYZ mutual fund, over the most recent sample period. The T-bill rate during this period was four percent.

<table>
<thead>
<tr>
<th>XYZ Fund</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Return</td>
<td>12%</td>
</tr>
<tr>
<td>Beta</td>
<td>1.2</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>26%</td>
</tr>
</tbody>
</table>

**Calculations**
Calculate the risk-adjusted performance for the fund and the market. Use the following measures: Sharpe, Jensen (alpha), and Treynor.

**Application**
On a risk-adjusted basis, did the XYZ fund outperform the market? Which risk-adjusted measure should Steve use?

**Case Study 2 Answers**

Steve’s risk-adjusted return analysis shows the following:

<table>
<thead>
<tr>
<th>XYZ Fund</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Return</td>
<td>12%</td>
</tr>
<tr>
<td>Beta</td>
<td>1.2</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>26%</td>
</tr>
</tbody>
</table>

Sharpe = \( \frac{r_p - r_f}{\text{sd}} \)
- Fund: \( \frac{12 - 4}{26} = 0.31 \)
- Market: \( \frac{10 - 4}{24} = 0.25 \)

Jensen = \( r_p - [r_f + \beta_p (r_m - r_f)] \)
- Fund Alpha = \( 12 - [4 + 1.2 (10 - 4)] = 0.8\% \)
- Market Alpha = 0

Treynor = \( \frac{r_p - r_f}{\beta_p} \)
- Fund: \( \frac{12 - 4}{1.2} = 6.7 \)
- Market: \( \frac{10 - 4}{1.0} = 6.0 \)

Because each of the fund ratios was higher than the market ratios, Steve’s XYZ fund outperformed the market in terms of the Sharpe, Jensen, and Treynor measures.
Chapter 25. Investments 9: Portfolio Performance, Rebalancing, and Evaluation

Which measure is most appropriate?

- Generally, if the portfolio represents the entire investment for an individual, the Sharpe Index compared to the Sharpe Index for the market is best. This is not the case here.
- If many alternatives are possible, or if this is only part of the overall portfolio, use the Treynor measure versus the Treynor measure for the market, or the Jensen’s alpha.
- Of these two, the Treynor measure is more complete because it adjusts better for risk.

Case Study 3

Data

Steve and Suzie have a portfolio containing three asset classes. The equity benchmark for their portfolio is the S&P 500 index, the bond benchmark for their portfolio is the Salomon Brothers Intermediate index, and the cash benchmark for their portfolio is the Barclays Cash index. Benchmark weights are their target asset allocations, and their actual asset weights differ from their targets since they have not rebalanced recently. They are happy with their current asset class weights. Last quarter, Steve and Suzie’s portfolio had the following performance:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Actual Return</th>
<th>Actual Weight</th>
<th>Benchmark Weight</th>
<th>Benchmark Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>2.0%</td>
<td>.70</td>
<td>.60</td>
<td>2.5%</td>
</tr>
<tr>
<td>Bonds</td>
<td>1.0%</td>
<td>.20</td>
<td>.30</td>
<td>1.2%</td>
</tr>
<tr>
<td>Cash</td>
<td>0.5%</td>
<td>.10</td>
<td>.10</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Calculations and Application

How did Steve and Suzie do last quarter?
Which assets outperformed and which underperformed?

a. What was the contribution of security selection in their portfolio?

b. What was the contribution of asset allocation in their portfolio?

c. What implications does this return contribution have for their portfolio?

Case Study 3 Answers

Steve and Suzie’s actual return was (2.0 * .7) + (1.0 * .2) + (.5 * .1) = 1.65%.

Their benchmark return was (2.5 * .6) + (1.2 * .3) + (.5 * .1) = 1.91%.

The difference between the index return and the actual return shows their portfolio’s performance. In this case, this portfolio underperformed its benchmark by .26 percent for the quarter.
A. Security selection contributed –.39 percent to performance. This is calculated as follows:

<table>
<thead>
<tr>
<th>Market</th>
<th>Difference of Return</th>
<th>Actual Portfolio Weight</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>–0.5%</td>
<td>.70</td>
<td>–0.35%</td>
</tr>
<tr>
<td>Bonds</td>
<td>–0.2%</td>
<td>.20</td>
<td>–0.04%</td>
</tr>
<tr>
<td>Cash</td>
<td>0.0%</td>
<td>.10</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Contribution of Security Selection = –0.39%

(1) Managed fund’s return minus the index fund’s return (2.0% – 2.5%)
(2) Actual weight of the managed portfolio

(1 * 2) Contribution of asset class security selection to the portfolio

B. Asset allocation contributed .13 percent to performance. This is calculated as follows:

<table>
<thead>
<tr>
<th>Market</th>
<th>Excess</th>
<th>Weight Index-Benchmark</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>10%</td>
<td>0.59%</td>
<td>0.059%</td>
</tr>
<tr>
<td>Bonds</td>
<td>–10%</td>
<td>–0.71%</td>
<td>0.071%</td>
</tr>
<tr>
<td>Cash</td>
<td>0%</td>
<td>–1.41%</td>
<td>0.000%</td>
</tr>
</tbody>
</table>

Contribution of Asset Allocation = 0.130%

(3) Weight of actively managed fund minus the benchmark weight (negative = underweight)
(4) Asset class return minus total portfolio return (equity is 2.50% –1.91% = .59%; bond is 1.20% – 1.91% = –.71)

(3 * 4) Contribution of the asset class to the total portfolio

C. Steve and Suzie’s actively managed portfolio underperformed the benchmark by .26 percent, or 26 basis points (1.65 percent – 1.91 percent). This underperformance was a combination of a –.39 percent contribution from security selection and a 0.13 percent contribution from asset allocation. Steve and Suzie did well to have more invested in an asset class than indicated in their asset allocation targets; however, they did not do as well picking the specific assets in the asset classes that performed well.

If this performance continues for 24 to 36 months, Steve and Suzie should consider indexing their stock selection decision (i.e., buying passively managed index funds). They should keep doing what they are now doing regarding their asset class decisions because their value is increasing.

Case Study 4

Data

You have five mutual funds in your portfolio, an emergency bond fund (VIPSX), a large cap fund (SWPPX), a small cap fund (FSCRX), an emerging markets fund (SSEMX), and a REIT (VNQ).
Using the data from www.finance.yahoo.com, type in the ticker and go to the Risk tab for each fund. Look at their performance versus their categories (as a proxy for the market).

Application

a. Did these funds outperform their benchmarks over the past three years on a risk-adjusted basis?

Case Study 4 Answers

We will use the category as the proxy for the market. The following data is from finance.yahoo.com.

<table>
<thead>
<tr>
<th>Name</th>
<th>Sharpe</th>
<th>Cat.</th>
<th>Treynor</th>
<th>Cat.</th>
<th>Outperform?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIPSX</td>
<td>1.71</td>
<td>1.72</td>
<td>6.34</td>
<td>6.85</td>
<td>N</td>
</tr>
<tr>
<td>SWPPX</td>
<td>.94</td>
<td>.77</td>
<td>14.01</td>
<td>11.24</td>
<td>Y</td>
</tr>
<tr>
<td>FSCRX</td>
<td>1.07</td>
<td>.76</td>
<td>17.40</td>
<td>11.39</td>
<td>Y</td>
</tr>
<tr>
<td>SSEMX</td>
<td>0.41</td>
<td>0.39</td>
<td>6.80</td>
<td>6.63</td>
<td>Y</td>
</tr>
<tr>
<td>VQQ</td>
<td>17.73</td>
<td>NA</td>
<td>1.11</td>
<td>NA</td>
<td>Y</td>
</tr>
</tbody>
</table>

Following is a screen from the finance.yahoo.com website for VIPSX:

26. Retirement Planning 1: Understanding the Basics

Introduction

People are living longer in modern times than they did in the past. Experts project that as life spans continue to increase, the average individual will spend between 20 and 30 years in retirement. With fewer traditional pension plans available and smaller payouts from traditional government and private plans, retirement planning is an increasingly important part of personal investment planning.

Most people want to be financially secure during retirement. This chapter on retirement planning is divided into four parts that will help you achieve financial security during retirement: (1) retirement basics, (2) Social Security, (3) employer-sponsored retirement plans, and (4) individual and small-business retirement plans. The sooner you begin planning and saving for retirement, the more likely it is that you will be financially secure during retirement.

Ezra Taft Benson gave the following counsel: “Plan for your financial future. As you move through life toward retirement and the decades which follow, we invite all . . . to plan frugally for the years following full-time employment.”

Retirement planning includes answering three important questions:

1. How much money do I need to have available at retirement to allow me to reach my retirement goals?
2. How do I tell if I am on track to reach my retirement goals?
3. What are the major retirement vehicles available to me, and how can I use them to reach my retirement goals?

This first chapter gives general guidelines on answering the first two questions. The remaining chapters discuss the major retirement vehicles available to you.

The purpose of this chapter is to help you lay the foundation for a successful retirement plan and encourage you to follow your plan. This chapter reviews and builds upon concepts discussed in earlier chapters. You should read this chapter before reading the succeeding chapters in this course.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Describe how retirement planning fits into your Personal Financial Plan
Chapter 26. Retirement Planning 1: Basics

2. Understand the principles of successful retirement planning
3. Understand the stages of retirement planning
4. Explain the steps of successful retirement planning
5. Describe payout options available at retirement
6. Understand one method of monitoring your retirement-planning progress

Understanding the basics of retirement planning is important to planning, constructing, and managing a portfolio to achieve your retirement-planning goals.

Describe How Retirement Planning Fits into Your Personal Financial Plan

You have the responsibility to take care of yourself and your family. No one will assume that responsibility for you. Building an adequate retirement fund will ensure that you will be able to fulfill this responsibility even after you stop working. By planning ahead, you will help to ensure a better future for you and your family.

Life Expectancy

The following are some interesting statistics on aging from Kiplinger Magazine (Feb. 2001):

- There are an estimated 67,000 Americans who are at least 100 years old. This is a 130 percent increase from 1990.
- The number of people over the age of 100 is expected to rise to 834,000 by 2050.
- Of these people over the age of 100, 82 percent are likely to be women.
- In 1900, the life expectancy at birth for men and women was 46 and 48, respectively. In 1997, the life expectancy at birth for men and women was 74 and 80, respectively, and rising.

As the average life expectancy rises, the need to save for longer periods of retirement becomes more important. As we discussed earlier in the chapters on the time value of money, the sooner you invest your money and the more time your money has to compound, the larger your nest egg will be when you retire.

Getting Started

You should begin planning for retirement today. Retirement may seem to be a long way off, but it isn’t! You may think your employer or the government will provide the funds to help you through retirement, but this is typically not the case anymore. Employer-sponsored retirement benefits are changing, being reduced, or being eliminated altogether, and the future of government programs, particularly Social Security, is uncertain. Even if Social Security is still available when you retire, it will probably not provide enough money for you to live on exclusively. You need to be aware of these changes in employer-sponsored retirement benefits and government programs and plan accordingly.
Understand the Principles of Successful Retirement Planning

There are generally six key principles to successful retirement planning: (1) know yourself, (2) know the retirement-planning vehicles available to you, (3) choose financial assets wisely, (4) follow the retirement-planning steps, (5) develop a good retirement plan and follow it closely, and (6) start now.

1. Know Yourself

It is critical that you know yourself. You must understand your personal and family goals. If you have not written them down, you should do so now. Know what you want out of life. Understand what kind of retirement you want. And most importantly, be willing to work toward the kind of retirement you want.

2. Know the Retirement-Planning Vehicles Available to You

The government offers a number of retirement vehicles that have specific tax advantages to help you as you save for retirement. Understand them carefully and utilize them to your best advantage.

Understand the government retirement plan, which is Social Security. Social Security promises specific retirement benefits. It is up to you to understand what you are entitled to and the steps you must take to receive those benefits.

Understand the numerous employer-qualified retirement plans, including 401(k), Roth 401(k), 403(b), Roth 403(b), or 457 retirement plans for the employee. Understand these plans and use them to your best interest.

Understand individual and small-business retirement accounts. These include traditional IRAs, Roth IRAs, Keoghs, and SEPs and SIMPLEs for the self-employed.

Finally, once you understand these vehicles, use the highest priority money first, which will help you achieve your financial goals the fastest.

3. Choose Financial Assets Wisely

To help you reach your goals, choose the financial assets that will earn the highest after-tax returns. Follow the principles of successful investing discussed earlier and invest wisely.

4. Follow the Retirement-Planning Steps

Follow the steps to successful retirement planning, which will be discussed next. Plan your retirement and live your plan.
Chapter 26. Retirement Planning 1: Basics

5. Develop a Good Retirement Plan and Follow It Closely

Develop a good retirement plan and write it down. Follow it closely, and include ways to check your progress toward your goals. Check yourself regularly to make sure you are on track to meet your goals. Monitor your performance, and re-balance and re-evaluate as needed.

6. Start Now

The longer you wait to start, the more money you will need to invest for retirement. Start investing early so your money will be earning money to help you reach your retirement goals.

Understand the Stages of Retirement Planning

There are three general stages in retirement planning: accumulation, retirement/annuitization, and distribution. It is important to develop goals and plans in each of these areas as you prepare for retirement.

Stage 1: Accumulation: This is your plan for how you will save money for your retirement before you retire. An example of accumulation might include saving 20 percent of every dollar you make after college. Of that 20 percent, 10 percent will go into your company 401(k) for retirement, 3 percent into a taxable account for missions, 2 percent into education funds for your children’s education, and 5 percent into a taxable savings account to pay off your home early or for other long-term family goals. Another strategy might be to convert funds from tax-deferred accounts into Roth accounts with minimum tax impact if doing so makes financial sense.

Stage 2: Retirement/Annuitization: This is your plan for how your assets will be distributed at retirement (i.e., immediate annuity versus lump sum distribution that you invest) so you will have sufficient assets for your lifetime. An example might include the expectation of receiving $25,000 each year between Social Security and a defined benefit plan and the realization that you will need $40,000 each year to meet your minimum acceptable level of retirement income. When you retire, you will plan to purchase an immediate annuity to provide that $15,000 each year to bring you up to that minimum acceptable level of retirement income.

Stage 3: Distribution-Disposition-Decumulation: This is your plan for how best to take distributions from your remaining retirement and taxable accounts to minimize taxes and maximize the availability of your assets after you retire. An example might include taking a maximum distribution of 3.6 percent of your total retirement assets based on the asset value as of the previous December, or to only take out earnings from investments for the previous year.

Realize that these are general but important stages to think about in retirement planning. It is important to develop plans and strategies for each of these areas.
Explain the Steps of Successful Retirement Planning

There are a number of factors that determine how much you will need to save for retirement, including your anticipated retirement age, your desired retirement income (be realistic), your other sources of retirement income (for example, Social Security, investment accounts, real estate, your home), and your tax rate before and during retirement. Other factors include the expected rate of inflation both before and during retirement and the expected return on your retirement savings accounts both before and during retirement. Each of these factors will help you decide how much you must save in order to have sufficient financial resources during retirement. There are seven steps to successful retirement planning:

1. Set retirement goals and estimate how much money you will need at retirement.
2. Estimate how much income you will receive annually during retirement based on your current investments.
3. Estimate your total retirement needs after accounting for inflation.
4. Determine how much you have already saved for retirement.
5. Estimate the value of your home.
6. Determine how much money you still need to save at an expected rate of return to meet your total retirement needs.
7. Determine your optimal investment vehicles and begin saving.

Each of these steps is described in detail below. This process of successful retirement planning mirrors Learning Tool 6: Retirement Planning Needs in the Learning Tools section of the website.

Before you begin the retirement process, you must make five critical estimates. First, estimate how many years you have left until you want to retire. While many people retire at age 65, others retire earlier or later. A possible key to successful retirement planning is to achieve your personal financial goals so you can retire with no change in lifestyle.

Second, estimate how long you will be in retirement. Although it is challenging to estimate how long you will live, take the challenge seriously. This estimate has a major bearing on how much money you will need for retirement. You may be able to call your life insurance broker and ask him or her what the actuarial tables predict your lifespan will be.

Third, estimate the average rate of return you will receive on your investment portfolio before retirement and the rate of return you will receive on your investment portfolio during retirement. Be conservative in making these estimates. As you enter retirement, you will most likely reduce the amount of risk in your portfolio, phasing out higher-risk, higher-return financial assets for lower-risk, lower-return financial assets. These estimates should come from Section 1 of your Investment Plan developed in the investments chapters. I strongly recommend you use conservative estimates (which are generally significantly less than 9 percent).
Fourth, estimate what the rate of inflation will be both before you retire and while you are in retirement. Inflation will have a major impact on the amount you will need to save for your retirement needs, especially if you have many years left until you retire. See Learning Tool 27: Expected Return Simulation and Benchmarks for 1-, 5-, 10-, 25-, 50-, 75-, and 85-year inflation data.

Finally, estimate the average tax rate you will likely pay during retirement. While some retirement assets are tax-eliminated (you pay taxes on the asset before you invest) and you eliminate all future taxes on earnings and principal, most individuals have a large percentage of their assets in tax-deferred accounts; these individuals must pay taxes on the funds when they are withdrawn for retirement. When making this estimate, assume that most of your retirement assets are tax-deferred assets rather than tax-eliminated assets.

**Step 1: Set Retirement Goals and Estimate How Much You Will Need at Retirement**

The most important question you must ask yourself is how you want to live when you retire. Will you need more or less money than you are earning now? Be realistic in answering this question. Examine your own situation, estimate how much retirement income you will need, and then work toward achieving that goal.

To make your estimation, start with the amount of money you currently earn on an after-tax basis. Then multiply this amount by the percentage of your income you expect to need for basic living expenses annually during retirement; these are your mandatory costs in retirement and include housing, food, health-care, transportation, etc. This amount is usually between 70 and 90 percent of your current income. Some of your retirement goals may require you to save an annual amount in addition to this base amount—these goals may include visiting your grandchildren, going on vacations, and so on. Add this additional amount to your base amount to estimate your after-tax annual living expense.

Next, use the estimation of what your tax rate will be during retirement to calculate your before-tax annual living expense. For most of the funds in your retirement accounts, you will need to pay taxes when you make withdrawals. Estimate conservatively. To calculate the amount you will need for your before-tax annual living expenses during retirement, divide your annual living expense estimate by the result of one minus your estimated tax rate. This calculation will give you an estimate of your before-tax annual living expense in today’s dollars. From the Tax Planning section of your Personal Financial Plan, you know your current average tax rate. This is a good starting point for estimating your tax rate in the future.

Finally, adjust this before-tax estimation to account for inflation both before retirement and during retirement. Using a financial calculator, solve for the amount you will need to save after inflation has been accounted for. Set the present value equal to the amount of before-tax annual income you will need during retirement, set N equal to the number of years before you retire, and set I equal to the estimated inflation rate. Then solve for the future value; the result will be the amount of money (in future dollars) you will need in the first year of retirement.
**Step 2: Estimate Your Current Annual Income Available at Retirement**

Once you know how much money you will need for retirement, you should decide which sources of retirement income are already available to you. Start with government resources (in most cases, Social Security). The amount of your Social Security benefit is determined mainly by two factors: (1) your average salary during the years you work and (2) when you begin receiving benefits. Most individuals become eligible to receive Social Security at age 67; however, if you defer receiving benefits until age 70, the amount of your monthly benefit will increase. Estimate how much money you will receive from Social Security each month and multiply that amount by 12. I recommend that you go to www.socialsecurity.gov and request information regarding your Social Security benefits. See **Chapter 27: Retirement Planning 2: Social Security** for more information about Social Security.

Next, work with your company’s benefits coordinator to determine how much you can expect to receive from any defined-benefit pension plans, which will be covered later. Estimate a payout amount based on your current age and earnings. Be conservative in this estimate.

Finally, using a financial calculator or spreadsheet program, solve for how much your retirement assets will be worth at retirement. This estimate will likely be different from your estimate of growth on your personal investments because you do not have control over your retirement assets. Set your present value equal to the current value of these assets, set N equal to the number of years before you retire, and set the interest rate equal to the estimated growth rate of these assets. Then solve for the future value. This calculation will reveal the amount of retirement money (in future dollars) that is available to you from your retirement assets.

**Step 3: Estimate Your Total Retirement Needs after Inflation**

Next, determine the inflation-adjusted shortfall, or how much additional money you will need for retirement after the effects of inflation have been accounted for. To calculate the annual inflation-adjusted shortfall, subtract the amount you expect to receive from Social Security, qualified retirement plans, individual retirement plans, and small-business retirement plans from the total annual amount you will need for retirement. Once you know your inflation-adjusted shortfall, the next step is to figure out how much money you will need to fund that shortfall each year.

You are now ready to calculate the total amount you will need to have invested by retirement in order to receive your desired annual payment.

Use a financial calculator or spreadsheet to solve this problem. Set your payment (PMT) equal to your desired annual payment, set N equal to the number of years you will be in retirement, and set the interest rate equal to your real return rate. Then solve for the present value. The result of this equation will be the amount of money (in today’s dollars) you will need to have invested by the time you retire in order to receive your needed annual payments. Once you retire, you will
either live off the returns generated by your investments or use the money you have invested to purchase an annuity from a financial institution to receive your needed monthly amount.

**Step 4: Determine How Much You Have Already Saved for Retirement**

Now that you know how much money you will need to fund your retirement, you must determine how much you have already saved for this purpose. First, list the current value of all of your retirement accounts and taxable accounts. This list should include the value of 401(k) plans, IRAs, Keogh plans, and any other savings and retirement vehicles you own. Your next challenge is to determine how much these assets will be worth when you retire, assuming you do not make any withdrawals from these accounts.

Using your estimate of the number of years until you retire, your estimate of the average rate of return you will receive on your investment portfolio before you retire, and your estimate of the rate of inflation before you retire, calculate the real return on your investments. Now, solve for the future value of your investments using a financial calculator. Set the present value equal to the current value of your investments, set N equal to the number of years until you retire, and set the interest rate equal to your real rate of return. Then solve for the future value; the result will be an estimation of the future value of your current investments.

**Step 5: Estimate the Value of Your Home**

Your home may or may not be an important part of your retirement plan. In this step, you must decide whether your home will be an expense or an asset during retirement. If your home is not paid off when you retire, you will still need funds to pay the mortgage, and you will need an increased amount of income to pay off your loan. If your home is paid off, and it is larger than your needs require when your kids are gone, you may want to sell your home and downsize when you retire.

There are two ways you can sell your home. You can simply sell your home for cash (usually to another family), or you can sell your home through a reverse mortgage. With a reverse mortgage, the buyer (usually a bank or investor) pays for the home, and you, the owner, can stay in the home until your death.

If you want your home to be a part of your retirement plan, begin by determining the current value of the home. Current appraisals are good starting points. Next, estimate how much your home’s value will increase by the time you retire. Again, be conservative in making your forecast. For example, I usually forecast housing growth rates at below forecasted inflation rates. Finally, determine how much you will owe on the home when you retire. Many people have a goal to have their mortgages paid off before retirement. However, if you expect to still have a mortgage when you retire, allow for mortgage payments when calculating your retirement expenses. Some people plan to buy another home after they retire; this is an additional expense to consider.
To calculate how much money your home will contribute to your retirement plan, subtract the amount you still owe on your mortgage as well as the cost of a new home from the estimated value of your home at retirement.

**Step 6: Determine How Much You Still Need to Save at an Expected Rate of Return to Meet Your Total Retirement Needs**

This step brings all the calculations together. Begin with the total investment needed (see Step 3). Subtract the future value of your current investments (see Step 4) from the total investment needed. Then subtract the amount your home will contribute to your retirement plan (see Step 5). This will give you the final amount (in future dollars) you must invest, or the total investment shortfall.

Since you have already accounted for the impact of inflation both before retirement and during retirement, you can use a financial calculator to find out how much you will need to save each month. Set the future value equal to the total investment shortfall, set N equal to the number of years until you retire, and set the interest rate equal to the amount of your expected portfolio return before you retire. Then solve for the payment (PMT). This calculation will give you the amount of money you must save every month or year to achieve your retirement goals.

**Step 7: Determine Your Optimal Investment Vehicles and Begin Saving**

Finally, using the priorities of money and the investment hourglass, determine which investment vehicles and financial assets will help you achieve your retirement goals most efficiently. Then begin saving!

**Describe Payout Options Available at Retirement**

Before deciding on the manner in which you want to receive your retirement payouts, make sure you understand the tax consequences of your decision. Look at all of your investment payouts and retirement payouts together. Consider the pros and cons of an annuity versus a lump-sum payout. Plan your payouts to minimize your taxes.

**Types of Retirement Payouts**

There are several types of retirement payouts available to you when you retire. A single life annuity provides equal payments for as long as you live.

A life annuity with certain period provides payments as long as you live; however, with this option, when you die, your heirs receive payments until the end of the specified or guaranteed period.

A joint and survivor annuity means that payments will continue as long as you or your spouse is alive. In some cases, the benefits may be reduced when you die, so review your options carefully.
A lump-sum payout is a single payment of all principal and accumulated interest that is paid to you when you retire.

Deciding how you want to receive your payout is critical, and once the decision is made it usually cannot be changed. Do not make the decision until you have done as much research as possible. When making this decision, you should account for your goals, budget, family situation, and current health.

**Tax Treatment of Payouts**

Different types of payouts are taxed differently. Annuity payments are taxed as normal income—annuity payments are the most expensive payout option. A lump-sum payout is normally taxed as ordinary income; however, the payout is taxed as if you had received the money over a 10-year span, which reduces taxes slightly. You are still liable for all taxes on a lump-sum payout immediately. One advantage of a lump-sum payout is that it can be rolled over into a traditional IRA if you want to avoid immediate taxes and continue tax-deferred growth. You can then pull the money out of the IRA as needed and pay taxes on these withdrawals. It is important that you understand the tax implications of whatever payout choice you make.

**Understand One Method of Monitoring Your Retirement-Planning Progress**

Retirement planning is not easy, but it is an important and worthwhile objective. There are a few key points you should remember when planning for retirement. First, remember to plan for inflation. Changes in inflation can have a drastic effect on the amount of money you need to save for retirement. Watch inflation carefully and plan accordingly.

Second, recognize that once you retire, you may still live for a long time. Plan accordingly, and be prudent in your estimation of how long you will live after you retire.

Third, do not neglect your insurance coverage. Health-care costs can quickly reduce a good retirement plan to nothing if you do not have sufficient insurance.

Fourth, monitor the progress you are making toward your goals, and make changes to your plans and goals as necessary. Review and evaluate performance annually.

**Monitoring Progress**

Evaluating how well you are doing in preparing for retirement is a major challenge. One method of monitoring your progress is to review your progress every year using **Learning Tool 6: Retirement Planning Needs**. This method is useful, but keep in mind that it does not account for large-ticket expenses, such as a home, nor does it allow you to see where you should be in the retirement-planning process based on your age. In addition to these disadvantages, this Learning Tool does not allow you to see the impact changes in interest rates can have on your available savings at retirement.
An article by Jonathan Clements entitled “Ugly Math: How Soaring Housing Costs Are Jeopardizing Retirement Savings” proposes an interesting idea. Using guidelines put together by Charles Farrell, Clements proposes that individuals and families can determine how close they are to achieving their retirement goals by looking at three specific factors: (1) the amount saved in their taxable and retirement vehicles, (2) the amount of their overall debt, and (3) the amount of their annual earnings. By looking at the ratios of year-end savings-to-annual income and year-end debt-to-annual income, you can see whether or not you are on track to achieve your retirement goals based on a table shown in Clements’s article (see Table 1).

These guidelines are a reality check in today’s spending frenzy because they show the relationship between savings and debt—you must manage both variables, not just one. The article also encourages you to reduce debt while at the same time increasing savings. Clements’ article has three main assumptions:

1. Investors will earn 5 percent more than inflation. While I think this assumption is reasonable, 5 percent might be on the high side for older investors who are primarily invested in fixed-income assets.

2. Investors ages 30 to 65 will save about 12 percent of their pre-tax income every year. Currently, the average individual in the United States is saving significantly less than this amount—between 0 and 8 percent (some are even negative). Individuals need to increase the amount they save.

3. Investors will withdraw 5 percent of their portfolio’s value each year in retirement. This is probably an acceptable assumption.

While these assumptions are fairly reasonable, the targets proposed in Table 1 are likely too soft. Both Clements and Farrell state that these targets should probably be made more stringent. Overall, this is a great article and a good resource to help you understand where you are and where you want to be in terms of retirement planning.

Are there tools that can help you figure out where you are now and where you want to be as you work toward retirement? One suggestion is Learning Tool 25: Retirement Planning Ratio Forecasts. In this spreadsheet, I took the framework proposed by Jonathan Clements and Charles Farrell and developed a chart to help you plan and chart your progress. This chart assumes basic information that can be changed depending on your current situation and age. It can help reveal weaknesses in your current plan and help you monitor your progress. The major disadvantage of this spreadsheet is that it assumes earnings and other factors increase each year at a specific rate, and it is only as accurate as the respective inputs. I make five assumptions in this spreadsheet:

1. Housing payments are expenses, and investors can handle housing payments in amounts up to the “back-end ratio” used by many banks: 36 percent of gross salary. Inputs include not only the interest rate and the number of years left on the loan but also annual property costs and
insurance costs. If your housing costs are greater than 36 percent, you will get an error message telling you to reduce the cost of the mortgage.

Table 1. Key Ratios

<table>
<thead>
<tr>
<th>Age</th>
<th>Savings-to-Income</th>
<th>Debt-to-Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>0.1</td>
<td>1.70</td>
</tr>
<tr>
<td>35</td>
<td>0.9</td>
<td>1.50</td>
</tr>
<tr>
<td>40</td>
<td>1.8</td>
<td>1.25</td>
</tr>
<tr>
<td>45</td>
<td>3.0</td>
<td>1.00</td>
</tr>
<tr>
<td>50</td>
<td>4.5</td>
<td>0.75</td>
</tr>
<tr>
<td>55</td>
<td>6.5</td>
<td>0.50</td>
</tr>
<tr>
<td>60</td>
<td>8.9</td>
<td>0.20</td>
</tr>
<tr>
<td>65</td>
<td>12.0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

2. Additional payments for housing expenses, such as pre-payments, come out of money earmarked for savings. If you decide to pre-pay your housing loan, the money you have put in savings is diverted to pay off your mortgage. There is a relationship between mortgage payments and savings. The more you pay in mortgage payments, the less you will be able save for your other goals.

3. Individual inputs are consistent and achievable. Any program is only as good as an individual’s forecasts. I encourage you to be conservative with your forecasts.

4. Tax savings on interest payments are considered part of expenses. While this spreadsheet accounts for tax rates in retirement, it does not account for a tax shield on interest payments before retirement.

5. The amount of retirement savings desired is a multiple of income. I have included an input for your estimated market interest rate at retirement. You may decide to use your savings to purchase an annuity when you retire. This spreadsheet will estimate the amount of the annual payment you will receive during retirement based on that estimated market rate.

If used correctly, this spreadsheet can help you represent your current situation.

Example

Suppose you are 26 years old and have an annual income of $50,000. You expect to retire at age 65, and you forecast market interest rates to be 4 percent at that time. You estimate you will be in retirement for 30 years, you will save 5 percent of your salary every year until retirement, you will earn 8 percent on your investments, and inflation will be 3 percent each year. You do not anticipate any real growth in income. You estimate that you will buy a home in 4 years, and you will pay $270,000 for the home with a $20,000 down payment. You will finance $250,000 of the
home at 7 percent for 30 years, and you will pay $250 per month in property taxes and insurance. You will pay off the home in 30 years, and the home’s value will grow at 3 percent, consistent with inflation.

| Age at beginning of employment | 26 |
| Starting income | $50,000 |
| Average annual increase in income | 3.0% |
| Age at retirement | 65 |
| Estimated market rates at retirement | 4% |
| Years in retirement | 30 |
| Annual percent of salary saved | 10.0% |
| Return on investment | 8.0% |
| Assumed inflation rate | 3.0% |
| Age when you will purchase a home | 30 |
| Cost of the home | $270,000 |
| Down payment | $20,000 |
| Mortgage amount | $250,000 |
| Taxes and insurance ($250 per month) | $3,000 |
| Mortgage interest rate | 7.0% |
| Mortgage term | 30 |
| Years to pay off loan | 30 |
| Assumed growth in home prices | 3.0% |

Based on the above information, the Learning Tool gives the following(121,558),(815,751):

<p>| Estimated Savings and Debt-to-Income Ratios | Article-Recommended Ratios |</p>
<table>
<thead>
<tr>
<th>Age</th>
<th>Savings-to-income</th>
<th>Debt-to-income</th>
<th>Savings-to-income</th>
<th>Debt-to-income</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>0.59</td>
<td></td>
<td>0.10</td>
<td>1.70</td>
</tr>
<tr>
<td>35</td>
<td>1.34</td>
<td>3.79</td>
<td>0.90</td>
<td>1.50</td>
</tr>
<tr>
<td>40</td>
<td>2.29</td>
<td>3.06</td>
<td>1.80</td>
<td>1.25</td>
</tr>
<tr>
<td>45</td>
<td>3.50</td>
<td>2.37</td>
<td>3.00</td>
<td>1.00</td>
</tr>
<tr>
<td>50</td>
<td>5.03</td>
<td>1.73</td>
<td>4.50</td>
<td>0.75</td>
</tr>
<tr>
<td>55</td>
<td>6.97</td>
<td>1.11</td>
<td>6.50</td>
<td>0.50</td>
</tr>
<tr>
<td>60</td>
<td>9.43</td>
<td>0.50</td>
<td>8.90</td>
<td>0.20</td>
</tr>
<tr>
<td>65</td>
<td>12.54</td>
<td></td>
<td>12.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retirement Annuity Payment</th>
<th>5% Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total savings $1,985,902</td>
<td>$114,845</td>
</tr>
<tr>
<td>Savings to income / % of salary 12.5%</td>
<td>73%</td>
</tr>
<tr>
<td>Total inflation adjusted savings $959,082</td>
<td>$37,005</td>
</tr>
</tbody>
</table>
Savings to income / % of salary  6.06%  76%  99%

The benefit of this spreadsheet is that it gives you an idea of where you are in your retirement-planning process. If you had input the information in the previous chart and noticed that the 5 percent payout was only 64 percent of your desired annual income stream, you might have decided you needed a higher percentage. By changing the amount saved, you can see how increasing your savings will lead to an increase in the annual amount available for retirement. For example, by increasing your savings from 10 percent to 15 percent, the 5 percent payout amount increases from 64 percent of your income at retirement to 94 percent of your income at retirement. If you want to receive a payout of 100 percent of income, you can adjust the savings percentage to give you 100 percent of salary at retirement by increasing your savings percentage to 16 percent.

Monitoring your progress toward retirement is an important but challenging responsibility. Nevertheless, this responsibility must be assumed if you are to achieve your financial goals and retire in a manner you desire.

**Summary**

You have the responsibility to take care of yourself and your family. No one will assume that responsibility for you. Building an adequate retirement fund will ensure that you will be able to fulfill this responsibility even after you stop working. By planning for the future, you will ensure a better future.

Before you plan for retirement, you should know your budget, your personal goals, and your needs. You must also ask yourself two questions: What kind of retirement are you planning for? How much money will you need each year?

You should be aware of which investment vehicles are available to you; they may include Social Security, employer-sponsored plans, small-business plans, and individual plans. Once you know which investment vehicles are available to you, you must decide which financial assets should be included in these investment vehicles to most effectively help you achieve your goals. As you make your retirement plan, select the investment vehicles and financial assets that will give you the highest after-tax returns and therefore allow you to reach your personal and retirement goals.

There are seven steps of successful retirement planning:

1. Set retirement goals and estimate how much money you will need at retirement.
2. Estimate how much income you will have annually at retirement based on your current investments.
3. Estimate your total retirement needs after accounting for inflation.
4. Determine how much you have already saved for retirement.
5. Estimate the value of your home.
Chapter 26. Retirement Planning 1: Basics

6. Determine how much money you still need to save at an expected rate of return to meet your total retirement needs.
7. Determine your optimal investment vehicles and begin saving.

Before deciding on the manner in which you want to receive your retirement payouts, make sure you understand the tax consequences of your decision. Look at all of your investment payouts and retirement payouts together. Consider the pros and cons of an annuity versus a lump-sum payout. Plan your payouts to minimize your taxes.

Retirement planning is not easy, but it is an important and worthwhile objective.

Assignments

Financial Plan Assignments

One of the most challenging aspects of retirement planning is deciding what kind of retirement you would like. What are you spending this year for basic needs? How much money will you need each year in retirement to maintain your lifestyle? Is this amount more or less than what you are currently spending? These are not easy questions, but they are important questions.

Your assignment is to make a first pass at answering these questions. Using Learning Tool 6: Retirement Planning Needs, determine how much you must save each month to achieve your specific lifestyle at retirement based on your estimates of years until retirement, expected return, inflation, and tax rates.

To see the impact of inflation on the amount you must save, increase your forecast for inflation by just one percent both before and during retirement and see how much this affects the amount you must save each month. Likewise, decrease your forecast for inflation by one percent both before and during retirement and see how much this affects the amount you must save each month.

Learning Tools

The following Learning Tools may be helpful for this chapter:

6. Retirement Planning Needs

This Excel spreadsheet helps you determine how much you must save each month to achieve a specific lifestyle at retirement based on your estimates of years until retirement, expected return, inflation, and tax rates.

25. Retirement Planning Ratio Forecasts
Chapter 26. Retirement Planning 1: Basics

This spreadsheet is an Excel template that will help you determine where you are in your progress toward achieving your retirement goals. By inputting the relevant information, you can estimate whether you are on track for reaching your retirement goals, based on your age and income.

Review Materials

Terminology Review

**Accumulation Stage** (of retirement). This first stage of retirement begins when you first begin to work and is the time where you accumulate assets which you will later use for retirement needs.

**Accumulation strategies.** These are possible strategies to use while you are in the accumulation stage of retirement. They could include to save 20% of every dollar you earn after school, with 10% into the company 401k (or Roth 401k), 5% into the taxable account for retirement, and 5% into children’s mission and education funds; save 20% of every dollar, with the priority of maxing out the Roth IRA for both yourself and your spouse, 3% into education IRAs for kids, etc.; or convert funds from traditional 401k and IRA accounts into Roth accounts with a minimum tax impact if financially viable.

**Annuities.** These are financial products developed and sold by insurance companies designed to accept and grow funds, and then, upon annuitization, pay out a stream of payments for a specified length of time. Annuities can be structured many different ways, such as payments for life for annuitant or spouse (i.e., for life of both), duration of payments (i.e., 20 years certain or life, whichever is longer), the type of payments (i.e., fixed or variable), etc. The different ways in which annuities can be structured (they are insurance products) provide the flexibility to construct an annuity contract to be meet your needs. However, it also increases expenses.

**Annuitization.** The process of determining what percent of retirement assets should be annuitized to ensure sufficient funds for the recipients life.

**Annuity types.** These are the different types of annuities.

- **Deferred.** Payments are deferred until the specified time the investor elects to begin receiving the payments.
- **Fixed.** Payments are a fixed amount, and are made to the investor until the end of the contract, usually till the investor dies.
- **Immediate.** Payments begin immediately upon receiving the funds.
- **Life.** Payments are fixed and are made each period until the end of the investor’s life.
- **Period Certain.** Payments are made for a specific period, regardless of the investor’s life span.
Chapter 26. Retirement Planning 1: Basics

- **Variable.** Payments are variable based on a specific asset’s performance as specified in the contract. Variable payments are made to the investor until the end of the contract.

**Distribution Options.** This is the decision as to how a distribution or payout is to be received. Make sure you understand the tax consequences of any payout or distribution option chosen.

**Distribution/disposition/decumulation Stage** (of retirement). This stage begins after you have retired. This is your plan as to how best take distributions from your remaining retirement and taxable accounts to minimize taxes and maximize the availability of your assets.

**Distribution/disposition/decumulation strategies.** These strategies help you set up a framework where you will not outlive your assets. Recommendations include taking out maximum distribution of 3.6% of total assets each year; only taking out maximum earnings from investments of previous year; or during your later years which income is less, i.e., during missions, transfer money from your tax-deferred to tax-eliminated accounts.

**Retirement/Annuitzation strategies.** These are strategies to use while you are in the retirement stage. They might include: calculate a minimum acceptable level of retirement income, and annuitize that amount; take out on a specific percentage of assets each year in retirement, etc.

**Retirement vehicles.** These are a specific type of investment vehicles which are related to retirement. These include qualified retirement plans such as both traditional and Roth 401k, 403b, and 457 plans; Individual retirement plans such as Roth and traditional IRAs; and small business plans such as SEPs, Simple, and Keogh plans.

**Retirement/Annuitzation Stage** (of retirement). This stage begins when you retire. It is your plan on how your assets will be distributed at retirement. Your goal should be to have sufficient assets for your lifetime to enable you and your spouse to live like you want in retirement.

**Shortfall.** This is the difference between what you have now saved for retirement and what you think you need for retirement.

**Retirement Payout Options.** These are the types of annuity distribution payouts available at retirement. Investors and spouses jointly determine the types of payments at retirement.
Chapter 26. Retirement Planning 1: Basics

- **Joint and Survivor.** You receive payments for as long as both you and your spouse live. Benefits may be reduced for your spouse when you die, depending on the contract specifics.
- **Life with “certain period”.** You receive payments for as long as you live; however, if you die before the certain period, payments continue until the end of the certain period.
- **Lump-sum.** You receive a single payment of all principal and interest at retirement that you are responsible to manage.
- **Single life.** You receive payments for the rest of your life only—not including your spouse’s life.

**Shortfall.** This is the difference between what you have and what you need for retirement.

**Social Security.** Social security is a government funded investment plan where individuals pay into the system for a specific number of years and then are promised benefits according to a specific formula set by the government. It is a “pay as you go” system where current benefits are paid by current employees.

**Review Questions**

1. Before you begin the retirement-planning process, what are the five critical estimates you must make?
2. What is the first of seven steps to retirement planning as mentioned in this chapter?
3. Why is it important to include inflation when calculating how much money you will need to save for retirement?
4. What are the two ways in which you can sell your home in retirement?
5. What is your investment shortfall?

**Case Studies**

**Case Study 1**

**Data**

Kevin and Whitney, both age 35, recently reviewed their future retirement income and expense projection. They hope to retire in 25 years. They determined they would have a retirement income of $25,000 each year in today’s dollars before tax ($10,000 from Social Security and $15,000 from their savings), but they would actually need $67,500 before tax in retirement income to retire comfortably.

**Calculations**

How much must Kevin and Whitney save annually for 30 years of retirement if they wish to meet their income projection, assuming a two percent inflation rate both before and
after retirement, and an eight percent return on investments before retirement and seven percent during retirement?

**Case Study 1 Answers**

First, draw the diagram discussed earlier in the chapter.

1. Calculate the shortfall.
2. Inflation-adjust the shortfall.
3. Calculate the real return and the annuity.
4. Calculate the period payment.

<table>
<thead>
<tr>
<th>Time</th>
<th>25 years</th>
<th>30 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now</td>
<td>Retirement</td>
<td>Death</td>
</tr>
<tr>
<td>Return</td>
<td>8%</td>
<td>Return 7%</td>
</tr>
<tr>
<td>Inflation</td>
<td>2%</td>
<td>Inflation 2%</td>
</tr>
</tbody>
</table>

1. Calculate the shortfall (all on a before-tax basis as stated):
   The shortfall is $67,500 – $25,000 = ?
   Kevin and Whitney’s shortfall is $42,500 before-tax.

2. Calculate the inflation-adjusted shortfall (end mode):
   The adjustment is PV = $42,500, I = 2%, N = 25, FV = ?
   Kevin and Whitney need $69,726 each year (you can round to the closest dollar).

3. Calculate the real return and annuity:
   The real return is $(1 + \text{nominal return}) / (1 + \text{inflation}) - 1$, or $(1.07)/(1.02) - 1$ = ?
   The real return is 4.90%.
   To calculate an annuity (remember you will want the payments at the beginning of the period, use the begin mode on your calculator).
   To get an annuity of $69,726 for 30 years at a 4.90% return, set PMT = $69,726, N = 30, I = 4.90%, and solve for PV.
   Kevin and Whitney need $1,137,074 to be available in 25 years to give them the annuity for 30 years.

4. Calculate the period payment (use end mode):
   To get this future amount, set the FV = $1,137,074, N = 25, I = 8%, and calculate the PMT = ?
   Kevin and Whitney need to save $15,554 each year to meet their retirement goal.

**Case Study 2**

Data
Chapter 26. Retirement Planning 1: Basics

Kevin and Whitney are now 45 years old and have six kids. They are 20 years into their retirement plan. They have $115,000 in savings, and their remaining balance on their home mortgage and some credit card debt is $150,000. They have saved only five percent per year and have earned seven percent on their savings, which they felt was sufficient.

Calculations
A. Are they on track for retirement or not?
B. Calculate their income/debt ratios based on the information in the *Wall Street Journal* article.

Application
How are they doing, and what more should they be doing?

**Case Study 2 Answers**

Calculations
Are they on track? You can’t tell until you calculate their ratios.

<table>
<thead>
<tr>
<th>Current</th>
<th>Salary Savings</th>
<th>Debt</th>
<th>Debt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 45</td>
<td>$82,000</td>
<td>$115,000</td>
<td>($150/82)</td>
</tr>
</tbody>
</table>

They are way behind on their savings and debt goals for retirement. They need to increase their savings to a minimum of 20 percent.

Application
They have too little savings and too much debt.
They need to save an even bigger percentage of their salary (20 percent).
They need to work harder if retirement is really a goal.
They may need to sell assets to reduce debt.
They may need to downsize.

**Learning Tool 25: Retirement Planning Ratio Forecasts** may be a useful tool for different financial situations and goals.

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1 “To the Elderly in the Church,” *Ensign*, Nov. 1989, 4
2 March 25, 2005 issue of the *Wall Street Journal*, D1
Chapter 27. Retirement Planning 2: Social Security

27. Retirement Planning 2: Understanding Social Security

Introduction

For many of the 40 million Americans who are 65 and older, Social Security is the primary source of retirement income. Social Security is the first resource most Americans turn to when saving for retirement; however, most younger Americans, who will not face retirement for many years, might not have access to the benefits of the Social Security program, at least not in its present form. The Social Security Administration has given the following forecast:

Social Security is a compact between generations. For decades, America has kept the promise of security for its workers and their families. Now, however, the Social Security System is facing serious financial problems, and action is needed soon to make sure the system will be sound when today’s younger workers are ready for retirement.

Without changes, by 2033 the Social Security Trust Fund will be able to pay only about 77 cents for each dollar of scheduled benefits. We need to resolve these issues soon to make sure Social Security continues to provide a foundation for future generations.¹

It is important for you to understand Social Security, its history, its processes, and its current form. Likewise, it is important for you to understand the challenges related to Social Security. The purpose of this chapter is to help you understand these topics.

Social Security is not an investment. Social Security is a social insurance program that provides not only retirement income but survivors insurance for children and spouses, disability insurance for people who are unable to work, and Medicare insurance for the elderly.

You are eligible to receive Social Security benefits if you have paid money into the Social Security program through your employment. Most experts expect Social Security to replace only about 42 percent of your current average earnings; therefore, although Social Security may be the first resource you turn to for retirement income, it should definitely not be your only source of retirement income.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Describe how the Social Security program works
2. Describe the benefits of the Social Security program
3. Answer frequently asked questions about Social Security
4. Describe the future of Social Security
Describe How the Social Security Program Works

Prior to 1935, retirement assistance was solely the responsibility of the individual, and the government did not provide financial help to retired workers. However, when the stock market crashed in 1929 and the gross domestic product (GDP) of the United States fell 48 percent in five years (from $105 billion to $55 billion), many individuals and families were left economically devastated. Millions of Americans were laid off, over 9,000 banks failed, and depositors lost over $7 billion in assets. In an attempt to ensure that this type of depression did not happen again, Franklin D. Roosevelt signed the Social Security Act in 1935 to aid individuals who were displaced and unemployed.

The Social Security Program

The Social Security program was designed to be a pass-through account. This means that the taxes you pay for Social Security (through the Federal Insurance Contribution Act, or FICA) are used to pay benefits to those who are currently retired, disabled, widowed, or orphaned. Because there are currently more people paying into Social Security than there are people receiving Social Security benefits, the tax reserves are maintained in interest-earning government bonds held by the Social Security Trust Fund. There was no investment or savings component to Social Security when it was originally set up because the government assumed that there would always be enough people in the working generation to pay for the retired generation’s benefits. In 1935, there were 17 workers for each retiree who received benefits. Today, it is estimated that there are only 3.4 workers for each retiree who receives benefits.

Financing for Social Security is roughly split evenly between the employee and employer. All employees pay at least 7.65 percent of their wages in FICA taxes, which are used to pay for Social Security and Medicare. This FICA tax comprises a Social Security tax of 6.20 percent and a Medicare tax of 1.45 percent. If your adjusted gross income (AGI) is larger than $250,000 (Married Filing Jointly), then the taxpayer is required to pay an additional 0.9 percent in Medicare tax. Also any investment income is taxed an additional 3.8 percent. Since 1937, the government has made major changes in the Social Security tax rate. Table 1 shows how the Social Security tax rate has changed from 1937 to 1990.

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937</td>
<td>1.0%</td>
</tr>
<tr>
<td>1954</td>
<td>2.0%</td>
</tr>
<tr>
<td>1960</td>
<td>3.0%</td>
</tr>
<tr>
<td>1971</td>
<td>4.7%</td>
</tr>
<tr>
<td>1984</td>
<td>5.8%</td>
</tr>
<tr>
<td>1990</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

There is a limit on the amount of wages that are subject to Social Security taxes; this limit changes each year. In 2016, the maximum amount of wages subject to the Social Security tax...
was $118,500. There is no limit, however, on the amount of earnings that is subject to the Medicare tax. In other words, in 2016, any earnings in excess of $118,500 are exempt from the Social Security tax but not from the Medicare tax. Table 2 shows a historical perspective on changes to this limit.

Table 2. Maximum Wage Amount Subject to Social Security Taxes

<table>
<thead>
<tr>
<th>Year</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$106,800</td>
</tr>
<tr>
<td>2012</td>
<td>$110,100</td>
</tr>
<tr>
<td>2013</td>
<td>$113,700</td>
</tr>
<tr>
<td>2014</td>
<td>$117,000</td>
</tr>
<tr>
<td>2015</td>
<td>$118,500</td>
</tr>
<tr>
<td>2016</td>
<td>$118,500</td>
</tr>
</tbody>
</table>

Employers must provide a dollar-for-dollar match to the funds employees pay in Social Security and Medicare taxes. Self-employed individuals are required to pay both the employee’s part of the FICA tax and the employer’s part of the FICA tax. This means that self-employed individuals pay 12.4 percent on the first $118,500 of their net earnings for Social Security and 2.9 percent on all taxable earnings for Medicare (3.8 percent if AGI is higher than $250,000). However, self-employed individuals may deduct up to half of their Social Security taxes as an adjustment to taxable income on their federal income tax returns.

OASDI-HI, which is the official name of Social Security, stands for “Old Age, Survivors, and Disability Insurance and Hospital Insurance.” Individuals must pay Social Security taxes only on taxable wages. Taxable wages include salaries; bonuses; commissions; the value of employer-provided meals and lodging; sick pay during the first six months of illness; employer-paid group life insurance premiums in excess of $50,000; salary reductions from 401(k), 403(b), and 457 plans; nonqualified deferred compensation that is no longer at risk; nonqualified stock options; vacation pay; and severance pay. Nontaxable wages include sick pay after six months, payments made by an employer for medical or hospital expenses, and employer contributions to qualified retirement plans.

Key Terms

In order to understand Social Security, you should understand a number of key terms:

Average indexed monthly earnings (AIME) is calculated using your top 35 highest earning years up to age 60. It entails adjusting each year’s earnings total for inflation to reflect its value in the year in which eligibility is requested.

Primary insurance amount (PIA): Your primary insurance amount is the basic unit used to express the amount of a worker’s benefit at their full retirement age (FRA). The calculation of a worker’s PIA is based on the average indexed monthly earnings (AIME), which is split into three segments and multiplied by specific percentages for each segment and summing the parts.
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Calculating your PIA from your AIME is divided into three separate calculations (the numbers are for 2016). These numbers are called “bend points” (see Table 3).

1. 90% of the amount for the first $856
2. 32% of earnings from $856 - $5,157, and
3. 15% of earnings above $5,157 subject to a maximum.

If your AIME was $5,000 per month, the amount is:

- 90% of the first $856 – ($856*.90) $770.40
- 32% of $5,157 - $856 ($4,144*.32) $1,326.08
- 15% of amount over $5,000 ($0*.15) $0.00

Your total PIA would be $2,096.48

Table 3: PIA Benefit Formula Bend Points²

<table>
<thead>
<tr>
<th>Year</th>
<th>First</th>
<th>Second</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>767</td>
<td>4,624</td>
<td>980</td>
<td>1,415</td>
<td>1,845</td>
</tr>
<tr>
<td>2013</td>
<td>791</td>
<td>4,768</td>
<td>1,011</td>
<td>1,459</td>
<td>1,903</td>
</tr>
<tr>
<td>2014</td>
<td>816</td>
<td>4,917</td>
<td>1,042</td>
<td>1,505</td>
<td>1,962</td>
</tr>
<tr>
<td>2015</td>
<td>826</td>
<td>4,980</td>
<td>1,056</td>
<td>1,524</td>
<td>1,987</td>
</tr>
<tr>
<td>2016</td>
<td>856</td>
<td>5,157</td>
<td>1,093</td>
<td>1,578</td>
<td>2,058</td>
</tr>
</tbody>
</table>


**Full retirement age (FRA)** is the age at which retirees will receive 100 percent of the benefits (PIA) to which they are entitled. If individuals choose to receive benefits prior to reaching the FRA, they will receive a reduced amount. Individuals can begin receiving benefits as early as age 62, even though they are not yet at full retirement age. If individuals choose to delay receiving benefits until after they reach the FRA, they will receive an increased amount of benefits. The full retirement age can be calculated using Table 4.

**Fully Insured:** A worker is only entitled to receive benefits if that worker is fully insured. In 2016, workers are only considered fully insured if they have worked at least 40 quarters of work (a quarter is three months) and earned at least $1,260 per quarter (see Table 5).
Currently Insured: To have currently insured status, workers must have worked a minimum of 6 quarters in the previous 13 quarters.

Table 4. Full Retirement Age:

<table>
<thead>
<tr>
<th>Birth Year</th>
<th>Year at Age 62</th>
<th>Full Retirement Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937</td>
<td>1999</td>
<td>65</td>
</tr>
<tr>
<td>1938</td>
<td>2000</td>
<td>65 + 2 mo.</td>
</tr>
<tr>
<td>1939</td>
<td>2001</td>
<td>65 + 4 mo.</td>
</tr>
<tr>
<td>1940</td>
<td>2002</td>
<td>65 + 6 mo.</td>
</tr>
<tr>
<td>1941</td>
<td>2003</td>
<td>65 + 8 mo.</td>
</tr>
<tr>
<td>1942</td>
<td>2004</td>
<td>65 + 10 mo.</td>
</tr>
<tr>
<td>1955</td>
<td>2017</td>
<td>66 + 2 mo.</td>
</tr>
<tr>
<td>1956</td>
<td>2018</td>
<td>66 + 4 mo.</td>
</tr>
<tr>
<td>1957</td>
<td>2019</td>
<td>66 + 6 mo.</td>
</tr>
<tr>
<td>1958</td>
<td>2020</td>
<td>66 + 8 mo.</td>
</tr>
<tr>
<td>1959</td>
<td>2021</td>
<td>66 + 10 mo.</td>
</tr>
<tr>
<td>1960</td>
<td>2022</td>
<td>67</td>
</tr>
<tr>
<td>1961 +</td>
<td>2023 +</td>
<td>67</td>
</tr>
</tbody>
</table>

Table 5. Quarters of Coverage

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$1,120</td>
</tr>
<tr>
<td>2012</td>
<td>$1,130</td>
</tr>
<tr>
<td>2013</td>
<td>$1,160</td>
</tr>
<tr>
<td>2014</td>
<td>$1,200</td>
</tr>
<tr>
<td>2015</td>
<td>$1,220</td>
</tr>
<tr>
<td>2016</td>
<td>$1,260</td>
</tr>
</tbody>
</table>

Describe the Benefits of the Social Security Program

Social Security benefits are calculated using the worker’s AIME to determine their primary insurance amount (PIA). The PIA is the basis for determining the amount of benefits that are actually to be paid. Typically, the 35 years during which earnings were the highest are used to compute the AIME. To determine your benefit, you must know your PIA, your FRA, and the age at which benefits will begin.

There are four main types of Social Security benefits: retirement, disability, survivors’, and Medicare benefits. These four main types are discussed in detail in the following paragraphs.

1. Retirement Benefits

Retirement benefits are available to four classes of people: workers, spouses, children, and single parents who have a child under the age of 16.
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Worker’s benefit: Workers may receive retirement benefits beginning at any month between the time they turn age 62 and the time they reach full retirement age. Benefits received up to 36 months before FRA will be reduced by 5/9 of 1 percent per month for each month you began receiving benefits before your FRA, for a maximum reduction of 20 percent. Additional reductions of 5 percent per year will be effective when the full retirement age exceeds age 65. Note that once you begin receiving benefits, this reduction will remain through the rest of your life.

For example, if your full retirement age is 66, and you begin retirement at age 62, your benefits will be reduced by 20 percent for the first three years and 5 percent for the fourth year; your benefits will be reduced by 25 percent total.

Delaying payment beyond full retirement age results in a benefit increase for each year of delay. You may delay benefits after age 67 up to age 70 and receive credits amounting to a specific percentage increase for each year of delay (see Table 6). For example, if your FRA is 67 and you begin receiving benefits at age 70, your PIA will be increased by 24 percent (three years multiplied by 8 percent).

Table 6. Percentage Increase per Year for Delaying Benefits

<table>
<thead>
<tr>
<th>Year Born</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935-36</td>
<td>6.0%</td>
</tr>
<tr>
<td>1937-38</td>
<td>6.5%</td>
</tr>
<tr>
<td>1939-40</td>
<td>7.0%</td>
</tr>
<tr>
<td>1941-42</td>
<td>7.5%</td>
</tr>
<tr>
<td>1943 or later</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

You may work while you are receiving benefits. Earnings you receive during or after the month in which you reach full retirement age will not reduce your Social Security benefits. However, if you choose to continue working while receiving benefits before your full retirement age, your benefits will be reduced. In 2016, earnings you receive in the year you reach your FRA will be reduced by $1 in benefits for every $3 you earn above the annual limit of $41,880; your earnings will only be reduced until the month you reach full retirement age. In the years before you reach full retirement age, your earnings will be reduced by $1 in benefits for each $2 you earn above the limit ($15,720 in 2016). Note that these limits change each year (see Table 7).

Spouse’s benefit: The spouse of a fully insured worker is eligible to receive a retirement benefit of 50 percent of the worker’s PIA, subject to the family maximum. This benefit is reduced by up to 25 percent for three years if it is received while the spouse has not reached his or her FRA. Once the spouse has reached age 65, a reduction of 5/12 of 1 percent per month, or 5 percent per year, is imposed for each of the remaining months the spouse is below the FRA. Any reductions to the worker’s benefit resulting from early retirement will not affect the amount of the spouse’s retirement benefit. If a spouse is entitled to benefits from his or her own employment, that spouse...
will receive 100 percent of his or her own PIA or 50 percent of his or her spouse’s PIA, whichever is larger.

Table 7. Benefits Withheld for Earnings
Before You Reach Full Retirement Age: One dollar in benefits will be withheld for every $2 in earnings above the limit:

<table>
<thead>
<tr>
<th>Year</th>
<th>Benefit Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$14,160</td>
</tr>
<tr>
<td>2012</td>
<td>$14,640</td>
</tr>
<tr>
<td>2013</td>
<td>$15,120</td>
</tr>
<tr>
<td>2014</td>
<td>$15,480</td>
</tr>
<tr>
<td>2015</td>
<td>$15,720</td>
</tr>
<tr>
<td>2016</td>
<td>$15,720</td>
</tr>
</tbody>
</table>

Year You Reach Full Retirement Age: One dollar in benefits will be withheld for every $3 in earnings above the limit:

<table>
<thead>
<tr>
<th>Year</th>
<th>Benefit Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$37,680</td>
</tr>
<tr>
<td>2012</td>
<td>$38,880</td>
</tr>
<tr>
<td>2013</td>
<td>$40,080</td>
</tr>
<tr>
<td>2014</td>
<td>$41,400</td>
</tr>
<tr>
<td>2015</td>
<td>$41,880</td>
</tr>
<tr>
<td>2016</td>
<td>$41,880</td>
</tr>
</tbody>
</table>

There is no limit on earnings made during the month when an individual reaches FRA.

Child’s benefit: Any child who is under 18 (19, if the child is still in high school), is eligible to receive a benefit of 50 percent of the retired worker’s PIA (this amount is subject to a family maximum).

Mother’s or father’s benefit: The spouse of a fully or currently insured worker is eligible to receive a benefit of 75 percent of the worker’s PIA if the spouse is caring for a child under age 16 or a child who was disabled before age 22.

2. Disability Benefits

Worker’s Benefits: Workers who qualify for disability benefits are entitled to receive 100 percent of their PIA until one of the following situations occurs: the disability ends (benefits are terminated in the second month after the end of the disability); the worker dies (benefits are terminated in the month after the worker dies); or the worker attains full retirement age (disability benefits convert to retirement benefits). Note that it is very challenging to qualify for disability benefits.
Retirement Planning 2: Social Security

Spouse’s Benefit: The spouse’s disability benefit is either 50 percent of the worker’s benefit or the spouse’s own Social Security benefit, whichever is larger. Retirement or disability benefits paid to a spouse who is 62 years old will be reduced by a maximum of 25 percent each year. If the worker’s benefit is decreased, the benefit paid to the worker’s spouse is also decreased.

Child’s Benefit: Any child who is under 18 (19 if the child is still in high school), is eligible to receive a benefit of 50 percent of the disabled worker’s PIA.

Mother’s or Father’s Benefit: The surviving spouse of a fully or currently insured worker is eligible to receive a benefit of 75 percent of the worker’s PIA if he or she is caring for a child under age 16 or a child who was disabled before age 22.

Maximum family benefit: When more than one family member is eligible to receive benefits (e.g. the worker, his or her spouse, and children), a family maximum applies. This maximum applies to all benefits paid to the family. For disability benefits, the family maximum is either 150 percent of the worker’s disability benefit or 85 percent of the AIME used to calculate the worker’s benefit, whichever is smaller. This maximum will not be less than the benefit paid to the worker.

3. Survivor Benefits

Lump-sum benefit: If the deceased worker was fully insured (40 quarters of credits) or currently insured (6 quarters of credits), a lump-sum survivor benefit will be paid to eligible survivors. A monthly lump sum is available to the surviving resident spouse, nonresident spouse, or eligible children.

Widow(er)’s benefits: A benefit of up to 100 percent of the fully insured, deceased spouse’s PIA will be paid to the surviving spouse who is at least age 60 and who was married to the deceased spouse for at least nine months. The surviving spouse is generally eligible if he or she is not remarried and is not entitled to retirement benefits (for his or her covered employment) in at least the amount of the deceased spouse’s PIA. If the worker dies before receiving retirement benefits, the surviving spouse of full retirement age is entitled to a benefit of 100 percent of the deceased worker’s PIA.

A surviving spouse between the ages of 60 and 65 (below the FRA) would receive reduced benefits of 19 to 40 percent per month each month until the spouse turned 65. If a worker dies after Social Security benefits have begun, the surviving spouse’s benefit cannot exceed the amount being paid at the time of death. A widow(er)’s benefit terminates at death or at eligibility for an equal or greater retirement benefit.

Child’s benefits: Child’s benefits terminate at age 18, at marriage, or at death. The dependent child of a fully or currently insured worker will receive a benefit of 75 percent of the worker’s PIA (this amount is subject to the family maximum) under at least one of the following
circumstances: if the child is under age 18 (or age 19 if the child is a full-time high school student) and not married, or if the child is over age 18 and has been disabled since before age 22.

*Mother’s or father’s benefit:* The surviving spouse of a fully or currently insured worker is eligible to receive a benefit of 75 percent of the worker’s PIA if that surviving spouse is caring for a child who is under age 16 or a child who was disabled before age 22 (the benefit amount is subject to the family maximum). The benefit is paid until the youngest child reaches 16 or marries or until the surviving spouse dies or remarries.

### 4. Medicare Benefits

The Medicare hospital insurance (HI) portion of Medicare, also known as Part A, is largely funded by the 2.9 percent HI tax on earnings. Part A is compulsory insurance. Part B of the Medicare program, supplemental medical insurance (SMI), is financed by premiums paid by participants and by federal government funding.

Individuals who are at least age 65 and who are eligible for Social Security retirement benefits on their own behalf are entitled to coverage under Medicare Part A. If the individual has applied for Social Security retirement benefits, no separate application is required. If the individual continues to work after age 65 and is not receiving Social Security benefits, an application must be filed in order for the individual to receive Medicare Part A coverage. Recipients of disability benefits are eligible for Part A coverage after they have been eligible for disability benefits for 24 months.

Survivors and dependents of individuals who are entitled to Part A coverage must be at least 65 years old to be eligible for Part A coverage. U.S. citizens who are not eligible for Part A coverage but who are enrolled in Part B may pay a monthly premium to enroll in Part A. Individuals are automatically enrolled for Part B coverage when they become eligible for Part A coverage. Part B coverage can be waived by completing the necessary forms. Any individual may enroll in Part B coverage if he or she is at least age 65 and has been a citizen or resident for five years.

**Answer Frequently Asked Questions about Social Security**

There is a great deal of important information about Social Security that may be of interest to you. The following are a few of the more frequently asked questions and their answers.

*If I have a full-time job and I have a small business on the side, how much do I pay for Social Security?* If you have both a full-time job and you have a small business on the side, no more than $118,000 of your combined earnings is subject to the FICA tax in 2016. However, any additional wages are subject to the Medicare tax.

*How does Social Security account for the increasing cost of living expenses?* Benefits are increased annually on January 1 to reflect increases in the cost of living.
Do unearned income and asset ownership affect how much one pays in Social Security?
Unearned income, such as interest earned on investments and assets, has no effect on eligibility for Social Security benefits.

How does earned income affect Social Security before age 65? Earned income has an effect on retirement benefits and survivor benefits paid to individuals who are under age 65 if such earnings exceed their earnings limitations. When individuals begin to take advantage of retirement benefits, the earnings limit is applied as a monthly amount in the months preceding the 65th birthday.

How do I qualify for benefits? To qualify for full benefits, you must meet the quarters-of-coverage requirement, which means you must earn at least the required minimum during each calendar quarter (every three months). For 2016, the quarters-of-coverage minimum was $1,260. You need to meet this minimum for at least 40 quarters to qualify for full benefits; this is equivalent to 10 years of work. Earning beyond 40 quarters will not increase your benefits.

What is an annual Social Security statement, and when will I receive it? An annual Social Security statement shows your quarters-of-coverage credit, the amount you have paid in Social Security taxes, and the amount of your estimated benefit. You must be at least 18 years old to receive a statement. The statement is sent to you each year three months before your birthday, or may be reviewed online at www.ssa.gov.

How can I apply to receive benefits? You can complete the application process at a Social Security office, over the telephone, or via the Internet. When you apply, you may need to show verification of your age by providing your birth certificate or your Social Security card.

When will I receive my retirement benefits? Benefits are paid once a month on either the second, third, or fourth Wednesday of the month, depending on your birth date. You can choose to receive your payment as a check or through direct deposit.

Do I have to pay federal income taxes on my retirement benefits? About 20 percent of those who receive Social Security benefits must pay some federal taxes on the benefit, when they earn substantial income (including pension and wages) in addition to the Social Security benefit. See an accountant to discuss your personal situation.

Describe the Future of Social Security

The Social Security program is currently collecting more money than it is paying out. In 2012, the program collected $840.2 bn (versus $784.9 bn in 2007) and paid out $785.8 bn in benefits ($495.7bn in 2007) to 56.8 mn people (54.7mn). Note that income is growing 1.4% per year over this period and expenses are growing 9.7% over the same period.
Today, it is estimated that there are 2.8 workers per recipient of Social Security (see Chart 1). However, by the year 2075, it is estimated that there will be only 2.0 workers per recipient of Social Security. Clearly, the program must undergo some changes to accommodate this major shift in demographics.

According to government projections, Social Security benefits can be paid solely from tax revenues until 2015. From 2016 to 2025, Social Security benefits will likely have to be paid with the interest from government bonds. From 2026 to 2033, the Social Security Trust Fund may have to redeem its bonds to pay Social Security benefits. Current projections estimate that Social Security funds will be exhausted in 2033.

**Summary**

For many of the 40 million Americans who are 65 and older, Social Security is the primary source of retirement income. However, most young Americans, who will not face retirement for many years, might not have access to the benefits of the Social Security program, at least not in its present form.

The Social Security program was designed to be a pass-through account; this means that the taxes you pay for Social Security (through the Federal Insurance Contribution Act, or FICA) are used to pay benefits to those who are currently retired, disabled, widowed, or orphaned. Because there are currently more people paying into Social Security than there are people receiving Social Security benefits, the tax reserves are maintained in interest-earning government bonds held by
the Social Security Trust Fund. There was no investment or savings component to Social Security when it was originally set up because the government assumed there would always be enough people in the working generation to pay for the retired generation’s benefits.

Social Security should be the first component of your retirement plan, but it should not be the only one. To fully understand how Social Security can benefit you, you must understand what Social Security is, what Social Security does, and how your benefits will be calculated. You must also realize that the program is in transition and that you should include other retirement resources in your retirement plan accordingly.

Assignments

Financial Plan Assignments

Your assignment is to learn about the benefits you will receive from Social Security. Get a copy of your Social Security statement benefits by going to www.ssa.gov. Click on Get a Copy of your Social Security Statement Online near the middle left of the page, and then click on Sign in or Create an Account. Fill out your name, middle initial, last name, social security number, birthday, and other information that is requested. Follow the on screen instructions, and you can view or print a copy of your Social Security statement. Use this statement as you work to determine how much you will need for retirement.

Learning Tools

The following learning tools may also be helpful as you prepare your Personal Financial Plan:

6. Retirement Planning Needs

This Excel spreadsheet helps you determine how much you must save each month to achieve a specific lifestyle at retirement based on the following estimates: years until retirement, expected return, inflation, and tax rates.

25. Retirement Planning Ratio Forecasts

This Excel spreadsheet helps you determine where you are in your progress towards achieving your retirement goals. By inputting the relevant information, you can determine whether you are on track for reaching your retirement goals based on your age and your income.
Chapter 27. Retirement Planning 2: Social Security

Review Materials

Terminology Review

**Average Indexed Monthly Earnings (AIME).** The average lifetime earnings indexed for inflation is your top 35 highest earning years up to age 60. It entails adjusting each year’s earnings total to reflect its value in the year in which eligibility is requested.

**Bend Points.** Calculating your PIA from AIME is divided into three calculations called “bend points” because the formula, when graphed, appears as a series of line segments joined at these amounts. These bend points change year to year.

**Child’s Benefit.** Any child who is under 18 (19 if still in high school), is eligible for a benefit of 50% of the retired workers PIA, subject to a family maximum. Child’s benefits terminate at age 18, marriage, or death. The dependent child of a fully or currently insured worker will receive a benefit of 75% of the worker’s PIA (subject to family maximum) if the child is under age 18 (or age 19 is a full-time high school student), or is over age 18 and has been disabled since before age 22, and is not married.

**Currently Insured Status.** To be “currently insured”, you must have at least 6 quarters of coverage in the previous 13 quarter period. Currently insured is adequate for eligibility for survivor benefits paid to children and for a surviving spouse caring for a qualifying child. Eligibility for other benefits generally requires fully insured status or 40 quarters of coverage.

**Delayed Retirement Credit.** Delaying payment beyond full retirement age results in a benefit increase for each year of delay. With a delay the worker’s PIA is not increased and the benefits to family members is not increased.

**Disability Benefits.** Workers who qualify for disability benefits are entitled to 100% of PIA until the earliest of the following: disability ends: benefits are terminated in the second month after the end of disability, or the workers dies: benefits are terminated in the month prior to the month the worker dies. If the worker attains full retirement age: disability benefits convert to retirement benefits.

**Disabled Child.** The disable child of a retired or disable worked is entitled to benefits past age 22 if the disability began before age 22.

**Full Retirement Age (FRA).** This is the age at which a retiree will receive 100% of their entitled benefits. Receiving benefits prior to FRA will result in a reduction in benefits. Receiving benefits after FRA will result in an increase of benefits.
Insured Worker. A worker is only entitled to receive benefits if that worker is fully insured. Workers are considered fully insured if they have worked forty quarters of work (a quarter is three months) and earned a specific amount of money per quarter.

Low Income Filer. This is a single filer with provisional income below $25,000 or married filing jointly (MFJ) with income below $34,000. None of the benefits are taxable.

Lump Sum Benefit. A lump sum of $255 is available to the surviving spouse, nonresident spouse, or to children eligible for the monthly benefits (for 2016).

Maximum Family Benefit. When benefits are payable to more than one family member, a family maximum applies. This includes all benefits paid to the family. For disability, the family maximum is the lesser of 150% of the workers disability benefit or 85% of the AIME used to calculate the benefit, but is not less than the benefit paid to the worker. When the worker is living, and benefits exceed the family maximum, the worker’s benefit is not adjusted; rather, the reduction is made in other beneficiaries’ payments.

Medicare Benefits. Medicare hospital insurance (HI) portion of Medicare, also known as Part A, is largely funded by the 2.9% HI tax on earnings. Part A is compulsory. Individuals at least age 65 and eligible for Social Security retirement benefits on their own behalf are entitled to coverage under Medicare Part A. If the individual has applied for Social Security (SS) retirement benefits, no separate application is required.

Middle Income Filer. This is a single with income from $25,000 to $34,000 and MFJ with income from $32,000 to $44,000. Up to 50% of social security benefits are taxable.

Mother’s or Father’s Benefit. The surviving spouse of a fully or currently insured worker is eligible to receive a benefit of 75% of the worker’s PIA if they are caring for a child who is under age 16 or who was disabled before age 22 (subject to family maximum).

OASDI – HI (Old Age, Survivors, and Disability Insurance and Hospital Insurance). This is payment for Social Security and Medicare taxes. The employee and employer each pay (assuming your Adjusted Gross Income (AGI) is less than $250,000: Social security tax (OASDI) of 6.20%, Medicare tax (HI) of 1.45%, for a total of 7.65% each. Self-employed individuals pay the whole 15.30%. OASDI-HI taxes are on taxable wages including wages, salaries, bonuses, commissions, value of employer provided meals/lodging, sick pay during first 6 months, employer paid group life insurance premiums in excess of $50,000, salary reduction from 401k, 403b, 457 plans, non-qualified deferred compensation no longer at risk, non-qualified stock options, vacation pay, and severance pay.
Primary Insurance Amount (PIA). Your PIA is the basic unit used to express the amount of a worker’s benefit if they received benefits at their full retirement age (FRA). The calculation of PIA is based on the workers AIME, which is split into three segments and multiplied by specific percentages for each segment and summing the parts.

Retirement Benefits. Retirement benefits can either be reduced or increased depending on your PIA, your FRA and the date when benefits begin. You can begin receiving benefits as early as age 62. Benefits that begin 3 years before FRA will be reduced by a maximum of 20% (or 5/9% of 1% per month for each month benefits begin before FRA or 6.67% per year). Additional reductions of 5% per year are effective when FRA exceeds age 65.

Social Security. Social security is a government provided retirement, survivor, and disability benefits. Franklin D Roosevelt signed the Social Security Act in 1935 to Aid the displaced and out of work. Social Security is a pass-through account, which means that FICA taxes being paid by current workers provided the money for benefit payments to current retirees.

Spouses benefit. A fully insured worker’s spouse age 65 (FRA) is eligible to receive a retirement benefit of 50% of the worker’s PIA subject to the family maximum. This benefit is reduced by 25/36% of 1% for each of the first 36 months that the spouse is under FRA (25% for 3 years). Once the FRA > 65, a reduction of 5/12 of 1% is imposed for each month beyond 36 months the spouse is under the FRA. The reduction of benefit from early retirement will not affect the amount of the spouses benefit. Disability benefits for spouses are 50% of the worker’s PIA, reduced if the spouse is under FRA, subject to a family maximum amount.

Supplemental medical insurance. The SMI portion of the Medicare program (Part B) is financed by premiums paid by participants and by federal government funding. Participation in Part B is voluntary.

Survivor Benefits. Deceased worker must had had fully insured status; other survivor benefit (mother’s or fathers’ child’s lump sum) will be paid to eligible survivors of a fully or currently insured worker.

Upper Income Filer. These are singles with income above $34,000 and MFJ with income above $44,000. 85% of Social Security benefits are taxable.

Widow(er)’s Benefits. A benefit of up to 100% of the deceased, fully insured PIA will be paid to the surviving spouse who is at least age 60 and who was married to the worker for 9 months. The surviving spouse is generally eligible if he or she is not remarried and is not entitled to retirement benefits (due to his or her covered employment) of at least the amount of the deceased workers PIA. A widowers benefit terminates at death or at eligibility for an equal or greater retirement benefit.
Chapter 27. Retirement Planning 2: Social Security

Review Questions

1. What is the primary source of income for adults 65 and older? Is this a reliable source for the future?
2. What two people/entities finance Social Security and Medicare? What percentage does each pay?
3. What does it take to be fully insured in the Social Security program?
4. To which four classes of people are retirement benefits available?
5. Why is it advantageous to wait until you are 70 before withdrawing money from your social security account?

Case Studies

Case Study 1

Data
Bill was born in 1940. He plans to retire and begin receiving Social Security benefits at age 70 and 6 months. His PIA is $1,200 and he knows that his PIA will be increased by 7% for each year beyond FRA he takes retirement benefits. His FRA is 65 and 6 months.

Calculations
What is his retirement benefit at five years beyond FRA?

Case Study 1 Answers
Since Bill was born in 1940, his full retirement age is 65 years and 6 months. At 70 years and 6 months, he would be five years beyond his FRA. He would have a benefit of 7.0 percent per year for waiting beyond his FRA to retire. His retirement benefit is 5 * 7.0% = (35% + 1) * $1,200 = ? He would receive $1,620 per month for a retirement benefit.

Case Study 2

Data:
Steve was born in 1960 and is thinking about perhaps retiring at age 62. He knows that his full retirement age is 67. He also knows that if he begins retirement 3 years before his FRA his AIME will be reduced by 20% and for each year before that, it will be reduced by 5%.

Calculations:
A. How much in percentage terms would his PIA be reduced if he was to begin receiving Social Security benefits at age 62?
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B. If his PIA was $1,300, how much would he receive each month if he retired at age 62?
Case Study 2 Answers
Bill’s benefits would be reduced by 5/9 percent per month for the first 36 months prior to
age 67 (20 percent for three years) and 5/12 percent for each month after those three
years (5 percent per year for each year after that).
A. Calculate the benefit Bill would receive if he was to retire at age 62:
5/9 percent x 36 months =
20%
5/12 percent x 24 months =
10%
Total reduction in payments =
30%
B. Bill would receive 1,300 x .7 (1 – 30%) or $910 each month.
Case Study 3
Data

Sam was born in 1955 (FRA is 66 and 2 months), and his wife Ann was born in 1958
(FRA is 66 and 8 months). They plan to both begin receiving Social Security benefits
when Ann reaches full retirement age (Sam will be three years beyond FRA; the
percentage increase is 8 percent per year beyond FRA).

Calculations
A. Assuming Sam’s PIA is $1,500, and Ann’s PIA, because she has worked in the home,
is only $600, how much would each receive at retirement?
B. What would is the combined amount they would receive each month?
Case Study 3 Answers
A. Since Sam was born in 1955, his full retirement age is 66 years and 2 months. At
Ann’s FRA of 66 and 8 months, Sam would be three years beyond his FRA. He
would have a benefit of 8 percent per year of for waiting beyond his FRA for
retirement.
His retirement benefit is 3 * 8.0% = (24% + 1) * $1,500 = ? or $1,860 per month. His
wife would receive the higher of half her spouse’s PIA (before the increase) of $1,500
/ 2 or $600, whichever was higher, subject to the family maximum. In this case she
would take the $750.
B. Their combined benefit would be $1,860 + $750, or $2,610, per month.
Case Study 4
Data

561


Jenny and Steve were married for 10 years when Steve passed away. They have four children, all under age 12. Steve was a currently insured worker and had a PIA of $1,200 when he passed away. The family maximum amount was $2,450.

Calculations

A. How much would Jenny receive from Social Security survivor benefits to help her raise her children after Steve’s death?

B. How much would the children receive?

Case Study 4 Answers

A. Since Steve was a currently insured worker, Jenny would receive 75 percent of his PIA regardless of her age as there are children in the home under age 18. Jenny’s survivor benefit would be 75 percent of Steve’s PIA of $1,200, or $900 per month.

B. The children’s benefit would also be 75 percent of Steve’s PIA. However, because Jenny had already received $900, the four children would only receive together the difference up to the family maximum of $1,550 ($2,450 family maximum less the $900 for Jenny), rather than 75 percent per child.

Case Study 5

Data

Jenny and Steve are both beyond FRA and received $11,000 in social Security benefits in 2016. Their AGI (taxable pensions, wages, interest and dividends) was $22,500. They had $1,500 in tax-exempt interest income from a mutual fund. (Remember provisional Income (PI) is your AGI (before Social Security) + tax-exempt interest + 50% of your Social Security benefits)

Calculations:

• A. Calculate their provisional income (Married Filing Jointly)
• B. How much of that $11,000 is taxable?

Case study 5 Answers

Low Income: Benefits not taxable
  Single filer with PI < $25,000 ($32,000 MFJ)
Middle Income: Up to 50% of benefits taxable
  Single filer with PI from $25,000 to $34,000 ($32,000 to $44,000 MFJ)
Upper Income: 85% of benefits taxable
  Single filer with PI > $34,000 ($44,000 MFJ)

Their provisional income is $22,500 + $1,500 + ($11,000/2) = $29,500
Since they are married filing jointly, the $29,500 is less than the $34,000 base amount. Therefore, none of the benefits are taxable.

Case Study 6
Data:
Bob has an AIME of $5,200 per month.

Calculations
a. Based on 2016 bend points of $856 and $5,157, what would Bob’s PIA be (his PIA is calculated from his AIME)? Remember the weights are 90% of the first bend point, 32% of the second and 15% of the remainder.

Case Study 6 Answers
a. Calculating Bob’s PIA from his AIME in 2016 is divided into three calculations called “bend points”
1. 90% of the amount for the first $856
2. 32% of earnings from $856 - $5,157, and
3. 15% of earnings above $5,157
Since Bob’s AIME was $5,200 per month, the amount is:
90% of $856 $770.40
32% of $5,157 - $856 ($4,301*.32) $1,376.32
15% of $5,200 - $5,157 ($43*.15) $6.45
Bob’s total PIA would be $2,153.17.
This is the sum of each of the bend calculations

Case Study 7

Data:
Bob has a PIA of $2,153 per month.

Calculations
a. Based on 2016 family bend points of $1,093, $1,578, and $2,058, what would his family maximum be (the family maximum is calculated based on his PIA)? (For calculating family maximums, the weights are 150% of the first bend point, 272% of the second, 134% of the third, and 175% over the third bend point using the PIA).

Case Study 7 Answers
a. Calculating Bob’s family maximum benefits from his PIA is divided into four calculations
1. 150% of the amount for the first $1,093
2. 272% of earnings from $1,578 - $1,093
3. 134% of earnings from $2,058 - $1,578, and
4. 175% of earnings over $2,058
Since Bob’s PIA was $2,153, his family maximum would be:

- 150% of $1,093 ($1,093 * 1.5) = $1,639.50
- 272% of $1,578 - 1,093 ($485 * 2.72) or $1,319.20
- 134% of $2,058 - 1,578 ($480 * 1.34) = $643.20
- 175% of $2,153 - 2,058 ($95 * 1.75) or $166.50
- His family maximum amount would be $3,768.45

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Introduction

Employer-qualified retirement plans, also called employer-sponsored retirement plans, are the second source of income you should consider when planning for retirement. You can think of the payouts from these plans as a series of delayed payments you will receive during retirement for work you performed prior to retirement. There are many varieties of employer-qualified retirement plans; these plans can be an important part of your overall retirement plan.

A qualified retirement plan is a retirement plan that allows a company to make tax-deductible contributions to employees through either a defined-benefit plan or a defined-contribution plan. Some of these plans require no employee contributions, and some require employee contributions that are employer matched. Employer-qualified retirement plans provide free money, which should be the highest priority for your retirement and investment funds.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Explain employer-qualified retirement plans
2. Explain defined-benefit plans
3. Explain defined-contribution plans

Explain Employer-Qualified Retirement Plans

There are many reasons why companies offer qualified retirement plans, including a desire to be competitive. Since most companies offer a qualified retirement plan, a company that does not is at a disadvantage. Most companies must offer benefits to attract and retain qualified personnel.

Money set aside in qualified plans has specific tax advantages. These tax advantages make retirement plans especially attractive to companies. Companies may be motivated to offer qualified retirement plans because the company owner may wish to use them to save money for retirement in a tax-efficient manner. These funds offer tax advantages to the company and may be tax-deferred for the employee as well.
Concern for employees may also be a reason that companies offer qualified retirement plans. Companies may reason that the better prepared for retirement employees are, the better the employees will perform their work.

There are two main types of employer-qualified retirement plans: defined-benefit plans and defined-contribution plans. Defined-benefit plans provide a predetermined payout based on specific employee data, such as years of employment and annual salary. With defined-benefit plans, the company bears most of the risk associated with funding a specific amount each year. Defined-contribution plans are investment plans in which both the employee and the employer contribute funds to the plan; the amount contributed by the employer is generally fixed. With defined-contribution plans, the employee bears most of the risk involved in funding the plan. Table 1 lists the major types of defined-benefit and defined-contribution plans.

Table 1. Retirement Plan Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Defined-Benefit</th>
<th>Defined- Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer’s contribution</td>
<td>Actuarially determined</td>
<td>Specified by formula</td>
</tr>
<tr>
<td>Benefit amount</td>
<td>Certain</td>
<td>Uncertain</td>
</tr>
<tr>
<td>IRC limit applicable</td>
<td>Maximum</td>
<td>Contributions</td>
</tr>
<tr>
<td>Types of benefits funded</td>
<td>Defined-benefit</td>
<td>Profit sharing</td>
</tr>
<tr>
<td></td>
<td>Cash balance</td>
<td>ESOP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stock bonus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target benefit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Money purchase</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employee contribution</td>
</tr>
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</table>

Because of the tax advantages, there are limits to the amounts of money that may be contributed to defined-benefit and defined-contribution plans. These limits are set forth in Code 415 of the Internal Revenue Code. See Table 2 for the Code 415 contribution limits for 2016.

Table 2. Internal Revenue Code Limits in 2016

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Participant Limit</th>
<th>Employer Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defined-contribution:</td>
<td>100% or $53,000 (indexed) if less</td>
<td>25% of participant’s total compensation</td>
</tr>
<tr>
<td>Defined-benefit:</td>
<td>100% or $210,000 (indexed) if less</td>
<td>Amount necessary to fund compensation</td>
</tr>
<tr>
<td>Profit-sharing:</td>
<td>100% or $53,000</td>
<td>25% of participant’s</td>
</tr>
</tbody>
</table>
There are also limits to the types of retirement plans that can be used by different types of business entities. For a list of types, see Chart 1.

In recent years, there has been a significant shift away from defined-benefit plans and toward defined-contribution plans. Even companies that continue to offer defined-benefit plans have tried to reduce their risk by reducing benefits. This change suggests that companies are shifting the responsibility of retirement planning onto individual employees. Because of this change, it is critical that you understand qualified retirement plans and make retirement planning an important part of your personal investment plan.

**Chart 1. Business Forms and Retirement Plans**

<table>
<thead>
<tr>
<th>Entity</th>
<th>Defined Benefit Plans</th>
<th>Cash Balance</th>
<th>Profit Sharing</th>
<th>Stock Options</th>
<th>Bonus</th>
<th>ESOP</th>
<th>Money Purchase</th>
<th>Target Benefit</th>
<th>Thrift Savings</th>
<th>Simple</th>
<th>TSA</th>
<th>401k</th>
<th>403b</th>
<th>457 Plan</th>
<th>SEP-IRA</th>
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<tr>
<td>Public School</td>
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<td>Yes</td>
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<td>Yes</td>
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<tr>
<td>S/L Govt.</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Explain Defined-Benefit Plans**

A defined-benefit plan (DBP), also called a pension plan, is a retirement plan funded entirely by an employer; the employee does not contribute to this type of plan. At retirement, the employee is promised a specific payout amount that is calculated using a formula set by the company.

**Advantages and Disadvantages**

One advantage of defined-benefit plans is that they often pay out a large percentage of an employee’s final salary—as much as 30 to 50 percent—thereby making a significant contribution to that employee’s retirement plan. Since you as the employee do not contribute to the plan, you bear no investment risk. Sometimes the benefits of these plans can even be extended to a spouse, depending on the type of retirement payout you choose.
There are also disadvantages of defined-benefit plans. One disadvantage is that the payout benefits are considered taxable income, and taxes can significantly diminish your net benefit. Another disadvantage is that your company can change its plan policies over time—even after you retire—so there is no guarantee your benefits will remain constant. Moreover, most plans require you to stay with the company for a specific length of time to become fully vested, or in other words, fully eligible for benefits. If you quit or lose your job before retirement, you may lose your benefits.

It is important for you to remember that 9 out of 10 defined-benefit plans do not provide for a cost of living adjustment (COLA). This means that inflation could significantly reduce your purchasing power during retirement. You should also be aware that some plans are unfunded, which means the company does not put aside the money to pay retirement benefits but instead pays retirement benefits out of the company’s current profits. If the company does not make the necessary profits, you may not get your retirement benefits. Finally, if you die before retirement, your surviving spouse will likely receive a reduced benefit.

**Payout Formulas**

With a defined-benefit plan, the company uses a payout formula to determine how much you will receive at retirement. This formula usually includes variables such as retirement age, average salary, and years of employment.

The following example shows a payout formula used by XYZ Corporation. Assume XYZ Corporation uses the following steps to calculate an employee’s annual retirement payout:

1. Averages the employee’s five highest annual salaries within the last 10 years
2. Determines the employee’s total years of employment
3. Multiplies the average salary by 1.5 percent and by the total years of employment—a maximum of 33 years

Bill Smith has worked for XYZ Corporation for 25 years. The average of his five highest salaries over the last 10 years is $60,000. Using this information, XYZ Corporation calculates his retirement benefit as follows: $60,000 * 0.015 * 25 = $22,500.

When Billretires at the end of next month, he will begin receiving $22,500 each year for as long as he lives. This means that Bill will receive 37.5 percent of his average salary each year throughout his retirement.

**Time and Salary**

One reason a company might provide a defined-benefit plan is to encourage employees to stay with the company over the long term. In most cases, it is easier to retain a good employee than to hire and train a new employee. Providing a good retirement program is an important means by
which companies retain good employees. Table 3 shows the payouts of a pension plan based on the amount of time an employee has stayed with a company; the payout is shown for two different salary levels.

**Cash-Balance Plans**

A cash-balance plan is a type of defined-benefit plan that credits your retirement account based on a certain percentage of your salary each year (usually between 4 and 7 percent) plus a predetermined rate of interest. Employees have no control over the way this money is invested. The difference between cash-balance plans and plans based on a formula is that cash-balance plans grow at a predetermined rate regardless of how much money is in the account.

**Table 3. Payouts Based on Time and Salary**

<table>
<thead>
<tr>
<th>Years of Employment</th>
<th>Average Salary</th>
<th>Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 years</td>
<td>$55,000</td>
<td>$8,250</td>
</tr>
<tr>
<td></td>
<td>$72,000</td>
<td>$10,800</td>
</tr>
<tr>
<td>20 years</td>
<td>$55,000</td>
<td>$16,500</td>
</tr>
<tr>
<td></td>
<td>$72,000</td>
<td>$21,600</td>
</tr>
<tr>
<td>30 years</td>
<td>$55,000</td>
<td>$24,750</td>
</tr>
<tr>
<td></td>
<td>$72,000</td>
<td>$32,400</td>
</tr>
</tbody>
</table>

There are several advantages of cash-balance plans. First, like basic defined-benefit plans, these plans are noncontributory, which means that, as the employee, you do not contribute funds to this plan. Funds contributed to a cash-balance plan are free money. Second, the rate of return on a cash-balance plan is constant and guaranteed. Third, your retirement benefits are much easier to calculate because you know all of the variables and the guaranteed rate of return. Fourth, cash-balance plans are portable. If you are fully vested, you can take your principal and earnings with you when you move to another company. Fifth, cash-balance plans are much cheaper for the company because the percentage of your salary and the guaranteed rate of return are generally low; funding these plans is not as much of a financial burden or risk to the company. One major disadvantage to employees is that the actual payouts are generally lower than the payouts of basic defined-benefit plans.

**Payout Options**

When you retire, you must choose from among several options of how you would like to receive your distributions. These options determine how long you will receive payments, how long your spouse or beneficiary will receive payments after you die (not all options allow this), and how much you will receive each month or year. Table 4 shows several payout options that may be offered by your company. Since different options insure more people and have guaranteed
payments, the conversion factor relates the present value of the estimated payments compared to the standard benefit. For example, if you chose the Joint and Survivor 100-percent annuity (10-year certain), you would receive 88 percent of the standard payment but would have the guarantee that both you and your spouse would receive payments for the rest of your lives, with a minimum 10 years guaranteed even if you both died within 10 years.

The standard benefit gives you equal monthly payments for as long as you live. If you die within 10 years of the date you retire, payments will continue to your beneficiary until the 10 years are up. If you choose the 20-year certain and life option, payments are guaranteed for 20 years. A life annuity guarantees payments only for as long as you live.

If you are married when you retire, federal law requires that, at a minimum, your benefit be paid according to the qualified joint and survivor annuity payment option. This option provides equal payments for as long as you live, and 50 percent payments to your spouse for as long as he or she lives. A surviving spouse may also be eligible to receive a 10-year certain or a 75 or 100 percent annuity, but, if you die before retirement, your spouse will usually be restricted to the qualified joint and survivor annuity option.

### Table 4. Payout Options and Conversion Factors

<table>
<thead>
<tr>
<th>Payout Option</th>
<th>Conversion Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard benefit (10-year certain and life)</td>
<td>1.00</td>
</tr>
<tr>
<td>20-year certain and life</td>
<td>0.92</td>
</tr>
<tr>
<td>Life annuity</td>
<td>1.02</td>
</tr>
<tr>
<td>Qualified joint and survivor annuity (50 percent and no-term certain)</td>
<td>0.95</td>
</tr>
<tr>
<td>Joint and survivor 50 percent annuity (10-year certain)</td>
<td>0.95</td>
</tr>
<tr>
<td>Joint and survivor 75 percent annuity (10-year certain)</td>
<td>0.91</td>
</tr>
<tr>
<td>Joint and survivor 100 percent annuity (10-year certain)</td>
<td>0.88</td>
</tr>
</tbody>
</table>

### Learning about Your Company’s Plan

You should ask a number of questions when investigating your company’s retirement plan or when considering new employment. You should also get it in writing, as benefits may change over time. The following are questions you should ask about your company’s plan:

1. Does the company provide a defined-benefit plan?
2. Is the payout based on your average salary, your final annual salary, or some other amount?
3. How long is the vesting period?
4. What formula does the company use to calculate benefits?
5. What is the normal retirement age?
6. What happens to your payout amount if you retire earlier than the normal retirement age?
7. Is there any advantage to working past age 65?
8. Will the payout include a cost of living adjustment (COLA)?
Defined-benefit plans can be an important part of your retirement plan. However, you must understand the plan—its benefits, drawbacks, and requirements—so that you can receive the maximum amount at retirement.

**Explain Defined- Contribution Plans**

With a defined-contribution plan (DCP), your employer contributes a specific amount to your retirement plan while you are working; when you retire, your employer is absolved of any further responsibilities. In a defined-contribution plan, both you and your employer generally contribute to the fund. Your pension is determined by how much both you and your employer invest each year, how fast the investment grows, and how many years your investment is able to grow.

**Advantages and Disadvantages**

For employees, the advantages of defined-contribution plans include that they have strong growth potential, they are portable, and they provide you with greater control. These plans are also tax-advantaged in the sense that the contributions and earnings are tax-deferred money. The main disadvantage of these plans is that there is no guarantee as to the actual amount of money you will receive at retirement; in other words, defined-contribution plans shift the risk from your employer to you.

For employers, defined-contribution plans are advantageous because they are easier to manage, they have fewer government regulations, they provide a greater number of investment choices, and they come in many different types. The disadvantage to employers is that these plans take time and resources to manage.

**Types of Defined- Contribution Plans**

There are three types of defined-contribution plans: discretionary (or optional) contribution plans, fixed contribution plans, and salary-reduction plans. In discretionary contribution plans, contributions are made at the discretion of the employer. In fixed contribution plans, contributions are fixed by the employer. And in salary-reduction plans, employees’ contributions are made on a before-tax basis. Contributions to a salary reduction plan reduce the amount of the employees’ taxable income and remain tax-deferred until retirement. In salary-reduction plans, you can direct your funds into various investment options, including fixed-income securities, equities, money market funds, and guaranteed investment contracts (GICs).

There are three main types of discretionary contribution plans:

- **In a Profit Sharing Plan**, the employer’s contribution varies from year to year depending on the firm’s profitability. There may be no contributions made if the company has an unprofitable year.
Stock Bonus Plans are a type of profit-sharing plan in which employer contributions are made in the form of employer-owned shares of stock. Employee stock-ownership plans (ESOPs) and leveraged ESOPs (LESOPs) are the most common types of stock-bonus plans. In an employee stock-options plan, retirement funds are invested in company stock. This is a very risky and non-diversified plan because both your retirement and your job are dependent on the same company. Since you are already an employee of the company, if the company does well, you will also likely do well, i.e., keep your job. If the company does poorly, you may lose your job, and the value of your company stock is likely to decline as well.

In a Money Purchase Plan, the employer contributes a percentage of the employee’s salary each year.

There are two main types of fixed contribution plans:

In a Thrift and Savings Plan, the employer matches a percentage of the employee’s contributions. These contributions are free money.

A Target Benefit Plan is a defined-contribution plan that has a required contribution level so that the employee will be able to meet a target level of benefits. Employers set this target level when an employee is hired, and the employer contributes to the plan each year to help the employee reach that level.

There are several types of salary-reduction plans. These plans are categorized according to the type of company that installs the plan and whether the plan uses before-tax or after-tax dollars for funding. The main types of salary reduction plans are 401(k) plans, Roth 401(k) plans, 403(b) plans, Roth 403(b) plans, and 457 plans.

401(k) plans are set up by a private company. In a 401(k), you contribute a percentage of your salary up to a specified amount ($18,000 in 2016 or $24,000 if you are over age 50, see Table 6), and the money grows in a tax-deferred account until you retire. Your employer may or may not contribute a matching amount (free money). Because this money is tax-deferred, you do not have to pay taxes on the money until you withdraw it after you reach age 59½.

In Roth 401(k) plans, you contribute a percentage of your salary. The maximum contribution amount is the same as for 401(k) plans (see Table 6). Roth 401(k) plans are unique in that you contribute to the fund using after-tax dollars, or money on which you have already paid taxes. These plans are beneficial because the money grows until you retire, and you never need to pay taxes on the earnings and capital gains again if you withdraw it after age 59½.
403(b) plans are basically the same as a 401(k) plan; however, 403(b) plans are specifically designed for employees of nonprofit, tax-exempt companies and institutions (for example, schools). The maximum contribution amount is the same as for 401(k) plans (see Table 6).

Roth 403(b) plans are basically the same as a Roth 401(k) plan; however, they are specifically designed for employees of nonprofit, tax-exempt companies and institutions. Contributions are made with after-tax dollars, and individuals are not required to pay taxes on withdrawals after individuals reach age 55. The maximum contribution amount is the same as for 401(k) plans (see Table 6).

457 Plans are basically the same as a 401(k) plan, but they are specifically designed for state and municipal workers. The maximum contribution amount is the same as for 401(k) plans (see Table 6).

Matching Plans

In a matching plan, the employer matches all or a percentage of the contributions you make to your retirement fund. Less than 80 percent of all 401(k) plans include a matching component. Note that with a Roth 401(k) or Roth 403(b) plan, the employer contribution is made on a before-tax basis and not an after-tax basis. Funds the employer provides as a match are held in a separate tax-deferred account; taxes must still be paid on the matched amount at retirement.

Vesting Requirements

Vesting is the process through which your employer’s contributions to your retirement fund become your property. You will typically become fully vested, or gain full ownership of the contributions, after you have worked for the company for a certain number of years. For example, you may own 60 percent of the employer’s contribution after two years, 80 percent after three years, and 100 percent after four years. Vesting schedules vary depending on the company. Matching contributions must be vested according to the cliff schedule, which means that after a specific number of years, you are immediately vested, or to the graded schedule, which means you are partially vested after a specific number of years, and the vesting increases each year (see Table 6).

Contribution Limits

An annual contribution limit is the maximum amount you can invest in a particular retirement vehicle each year. In a 401(k) plan, you cannot contribute more than 25 percent of your before-tax income, and this amount cannot exceed the annual limits in Table 7. Employer contributions may exceed this limit. Annual contribution limits gradually increase each year. In addition to the limits listed in Table 7, a “catch-up” limit is available for those over age 50. If you are over age
50, your annual contribution limits are the normal contribution limit (i.e., $18,000 in 2016) plus the additional catch up contribution limit of $6,000, which adds up to $24,000.

### Table 5. Vesting Schedule for Matching Plans

<table>
<thead>
<tr>
<th>Year</th>
<th>401(k) Plans</th>
<th>403(b) Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cliff</td>
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<tr>
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<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>7</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Table 6. Annual Contribution Limits for 401(k) Plans, 403(b) Plans, and 457 Plans**

<table>
<thead>
<tr>
<th>Year</th>
<th>Contribution Limit</th>
<th>Catch-Up Contribution Limit*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
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<td>2014</td>
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<td>2015</td>
<td>$18,000</td>
<td>$6,000</td>
</tr>
<tr>
<td>2016</td>
<td>$18,000</td>
<td>$6,000</td>
</tr>
</tbody>
</table>

* Catch-up contribution is for those over age 50.
** 457 plan participants also have the option of increasing their deferrals to the lesser of twice the normal limit ($36,000 in 2016) or the normal limit not applied in previous years; this option may be exercised in the final three years before retirement.

### Tax Implications of Defined- Contribution Plans

If your company offers a defined-contribution plan, there are several tax implications you should be aware of:

- Retirement income is taxed as ordinary income.
- If you make withdrawals from your defined-contribution plan before age 59½, you will be charged a 10 percent penalty to principal and earnings (there are some exceptions).
- There is a 20 percent withholding requirement on withdrawals made before age 59½ from qualified plans. This means that if you withdraw $20,000 before age 59½, you will only receive $16,000. The pension plan will keep the remaining 20 percent to submit to the Internal Revenue Service for tax purposes.
- Certain loan provisions may apply.
- Mandatory annual distributions begin after age 70½.
Chapter 28. Retirement Planning 3: Employer-qualified Plans

**Required Minimum Distributions**

When saving for retirement, remember that the benefit of deferred taxes is offset by the fact that you must eventually pay taxes on your principal and earnings. Defined-contribution plans that defer taxes require that minimum distributions must begin by April 1 of the year following age 70½. The distribution amount is calculated by dividing the account balance on December 31 of the previous year by the life expectancy. Note that there is a 50 percent penalty on minimum distributions that are not taken (see Table 7).

**Payout Options**

Payout options are the ways you can receive your money at retirement. You can receive a lump-sum distribution, an annuity, periodic payments, or you can roll the money into an individual retirement account (IRA).

A **Lump Sum Distribution** gives you full control over future investing and spending. The disadvantage is that taxes are due immediately on the full amount of the distribution. In addition, this type of distribution will not necessarily provide you with income throughout your retirement.

### Table 7. Life Expectancy and Age

<table>
<thead>
<tr>
<th>Age</th>
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<tbody>
<tr>
<td>70</td>
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<tr>
<td>71</td>
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<td>77</td>
<td>21.2</td>
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<tr>
<td>78</td>
<td>20.3</td>
</tr>
</tbody>
</table>

An **Annuity**, which may be purchased either through an investment company or through an outside company, provides fixed payments, usually for life. However, an annuity does not usually provide a cost of living adjustment (COLA), and you must pay taxes on the amount you receive each year.

**Periodic Payments** provide you with fixed payments at regular intervals. However, this type of distribution does not ensure that you will receive income throughout your retirement because the money may eventually run out if you live longer than your planned periodic payments. Also, if payments are large, your tax rate may be quite high.

**Rolling into IRA** allows you to continue to defer taxes until you make withdrawals. Once the money is in an IRA, you can direct the investment of the funds even more than when the funds
were in a 401(k) plan. The only disadvantage of this option is that you must begin making withdrawals at age 70½ or you will incur a penalty.

**Making Use of Your Defined-Contribution Plan**

Once you know which investment vehicle is available to you through your employer’s defined-contribution plan, the next step is to choose the appropriate financial assets to include in this plan. Most people invest about 75 percent of their retirement assets in equities; in general, mutual funds provide good diversification opportunities. Refer to the unit on investing for help in determining which assets to include in your retirement vehicle. Most company plans offer about 10 investment options, although some plans offer significantly more.

As you make investment decisions, it is important to remember the principles of successful investing, the priorities of money, your investment horizon, your financial goals, and your risk-tolerance level. You should also consider other important issues, such as annual expenses, administration expenses, transfer fees, and reallocation options and costs.

**Summary**

There are three main types of employer-qualified retirement plans: defined-benefit plans, defined-contribution plans, and salary-reduction plans. Defined-benefit plans provide a predetermined payout based on specific employee data, such as years of employment and annual salary. Defined-contribution plans are investment plans in which both the employee and the employer contribute funds to the plan; the amount contributed by the employer is generally fixed. In salary-reduction plans, employees contribute a percentage of their salary to retirement vehicles each period.

A defined-benefit plan (DBP), also called a pension plan, is a retirement plan funded entirely by an employer; the employee does not contribute to this type of plan. At retirement, the employee is promised a specific payout amount that is calculated using a formula set by the company.

With a defined-contribution plan (DCP), your employer contributes a specific amount to your retirement plan while you are working; when you retire, your employer is absolved of any further responsibilities. Both you and your employer generally contribute to the fund. Your pension is determined by how much both you and your employer invest each year, how fast the investment grows, and how many years your investment is able to grow. With salary-reduction plans, employees’ contributions are made on a before-tax basis. Contributions to a salary reduction plan reduce the amount of the employees’ taxable income and remain tax-deferred until retirement. In salary-reduction plans, you can direct your funds into various investment options, including fixed-income securities, equities, money market funds, and guaranteed investment contracts (GICs).
Financial Plan Assignment

If you have an employer-qualified plan, talk to your employer. Find out as much information as you can regarding your plan. What type of plan is it? Is it a defined-benefit plan or a defined-contribution plan, or does your employer offer both?

If your company offers a defined-benefit plan, what are the requirements for the plan? What factors are included in the payout formula (number of years working, average salary, percentage of salary, etc.)? How long must you be with the company to receive benefits? At what age can you begin receiving benefits? Based on today’s earnings, how much will you receive each month during retirement?

If your company offers a defined-contribution plan, what type of plan is it? Does it have a company matching option (free money)? Are you getting your full company match each year? How much do you currently have in the plan? Where is that money allocated? Is the allocation consistent with your risk level and the fact that the funds are long term? Have you followed the principles of successful investing in terms of diversification, low costs, low risk, and other key factors? Are you rebalancing back to your target allocations in a timely manner? Become aware of this information because it is important to your retirement planning.

Learning Tools

The following Learning Tools may also be helpful as you prepare your Personal Financial Plan.

6. Retirement Planning Needs

This Excel spreadsheet helps you determine how much you must save each month to achieve a specific lifestyle at retirement based on the following estimates: years until retirement, expected return, inflation, and tax rates.

25. Retirement Planning Ratio Forecasts

This Excel spreadsheet helps you determine where you are in your progress toward achieving your retirement goals. By inputting the relevant information, you can determine whether you are on track for reaching your retirement goals, based on your age and income.

28. Roth versus Traditional: Which Is Better?

This Excel spreadsheet helps you determine whether the traditional IRA or the Roth IRA is a better investment vehicle for you to use in saving for retirement.
Note that this spreadsheet only considers the factor of future taxes when making the decision.

Review Materials

Terminology Review

401k Plans or Roth 401k Plans. These are defined contribution plans where employees contribute a percent of salary up to a specified amount. Employers may contribute a matching amount (free money) to encourage participation.

403b Plans or Roth 403(b) Plans (also called Tax Sheltered Annuities). These are defined contribution plans, and are the same as 401k but for non-profit tax-exempt companies and institutions (i.e., schools).

457 Plans. These are defined contribution plans, the same as 401k plans but for state and municipal workers and tax-exempt organizations.

Average compensation. The average of the years of salary considered in making the defined benefit calculation.

Cash-Balance Plans. A type of DBP in which provides specific annual employer contribution (generally 4-7%) each year, plus a low but guaranteed rate of investment earnings. Accounts grow at a predetermined rate, regardless of how much is in the account. Employees do not make any investment decisions.

Defined Benefit Pension Plans. A Defined Benefit Pension Plan is a DBP where payments are based on a benefit payout formula. The formula is based on your salary, years worked and a company determined factor to calculate how much you will get each year. Employees do not contribute and bear no risk.

Defined Contribution Plan (DCP). A retirement plan where the employer contributes a specific amount to the employee’s retirement funds while the employee is working and then has no responsibilities once the employee retires. Employer contributes to a fund, and then has no additional obligation when the employee retires. Employee may also contribute to the fund. Pension is determined by how much is invested by both the employer and employee, and how fast it grows.

Discretionary contribution plans. Retirement plans where contributions are at the employer’s discretion. These include profit sharing plans, stock bonus or ESOP plans, and money purchase plans.

Distribution/Payout Options. These are options as to how you will take the benefits over your retirement.
• Life Annuities (guaranteed for the “certain” period). You receive benefits for as long as you live or for a certain guaranteed period, whichever is longer.
• Joint and Survivor Annuities (percent relates to the amount the spouse receives). You receive payment for as long as you live or for a certain guaranteed period, whichever is longer, and your spouse, after you die, receives that percent of your payment for as long as they live.
• Special Joint and Survivor Annuity (if there is a death in the marriage the benefit decreases). You receive payment for as long as you live or for a certain guaranteed period, whichever is longer, and your spouse, after you die, receives a percentage of that payment for as long as they live.

**Employee Contribution** (or Salary Reduction Plans). These are defined contribution plans where employees contribute before tax dollars reducing their taxable income and earnings accumulate tax deferred. The major plans are Roth or Traditional 401k and 403b plans and 457 plans. Employees direct the funds into different financial asset options provided by the company including mutual funds, index funds, fixed income, equities, money market funds, and GICs (guaranteed investment contracts). Companies have their list of approved investment assets. Employees choose where to invest their assets subject to the company list, and employees are not allowed to invest outside of approved investment assets.

**Employer Qualified Retirement Plans**. These are retirement plans, established by a company, that have specific tax and other benefits to both the company and the employee. Benefits include competition, tax shelters, personal retirement for the owners, and personal retirement for the employees. They can be either defined benefit or defined contribution plans.

Fixed contribution plans. These are defined contribution plans where contributions are fixed by the employer. Examples are thrift and savings plans and target benefit plans.

**Immediate Annuity Distribution**. You can use your defined contribution plan to purchase an immediate annuity, either from your retirement Plan provider or from others outside the Plan.

IRA Rollover distribution (Be careful and don’t touch the funds). You can roll over your distribution into an IRA. The benefits are you can defer taxes until you withdraw the funds, you can direct investment to different assets and asset classes, and you can continue to enjoy tax-deferred growth. The risks are that there is no guarantee that funds will last a lifetime and you must begin withdrawals at 70½ or 50% penalty is incurred.

**Lump Sum Distribution**. This is taking the entire retirement account at retirement. You are responsible to ensure this amount lasts your entire life. The benefits are you can take the money out as you need it, and can invest/gift/use it elsewhere. The risks are that
plans only allow distributions every 3 months, taxes are incurred immediately, and if you do not plan well, may not have sufficient money for retirement.

**Money Purchase Plans.** These are defined contribution plans where the employer contributes a percentage of employee salary each year, not dependent on company profits. Employees do not contribute.

**Periodic Payments distribution.** With this distribution, you can plan for regular payments at regular intervals, and can ensure that payments are available for a specific period of time. However, there is no assurance of lifetime income, and your tax rate may be high due to the amount of money withdrawn.

**Profit Sharing Plans.** These are defined contribution plans where employer contributions vary year-to-year depending on firm profitability (it may be zero if the firm is not profitable in that year).

**Required minimum distributions.** For tax deferred retirement plans, the government requires that a certain percentage of assets must begin by April 1st of the year following age 70½. The distribution is the account balance on Dec. 31 of the previous year (age 69) divided by the life expectancy from the table below. There is a 50% penalty on minimum distributions not taken.

**Roth.** These are defined contribution plans where distributions of contributions can be made without penalty and without tax after 5 years. Roth plans do not have mandatory distributions (if they are rolled over into Roth IRAs at retirement), and matching employer contributions with Roth plans go into traditional plans (not Roth plans). Roth plans allow you to save more money (as taxes are paid outside the retirement vehicle).

**Stock Bonus Plan.** These are defined contribution plans where employer contributions are made with employer shares of stock. Employee stock ownership plans (ESOPs) and leveraged ESOPs (LESOPs) are the most common.

**Target Benefit Plan.** These are defined contribution plans that establish a required contribution level to meet a specific target level of benefits at retirement.

**Thrift /Savings Plans (TSP).** These are defined contribution plans where the employer matches a percentage of employee contributions to a specific amount (i.e., free money). This program is for employees of federal civil service.

**Vesting period.** This is the period required before the promised benefits are considered yours.
Chapter 28. Retirement Planning 3: Employer-qualified Plans

Review Questions

1. What is a qualified retirement plan?
2. What are the three major types of employer-qualified retirement plans?
3. What is the general trend in regard to qualified retirement plans, or what types of plans are most companies shifting away from, and what types of plans are most companies shifting toward?
4. What are the three types of defined-contribution plans?
5. In relation to an employer’s contributions to your retirement fund, what does “vesting” mean? Why is it important to know the vesting requirements of your employer?

Case Studies

Case Study 1

Data
Bill, married with two kids, will be graduating in April with his bachelor’s degree and has two similar offers from companies located in San Francisco, California. Both are companies he would be content to stay with for 30 years. Company A has a 401(k) with a 100 percent match up to 4 percent of his salary. Company B has a 401(k) with no match but has a defined-benefit plan with the formula based on average salary, a factor of 1.5 percent, and years of service up to 30 years.

Calculations/Application
A. Assuming the salary is $50,000 for each firm, which has the more attractive retirement package for Bill?
B. Can Bill participate in other retirement plans?

Case Study 1 Answers

A. This is a difficult question to answer and depends on (1) Bill’s plans, (2) Bill’s forecast for the company, and (3) Bill’s view of company policy.

(1) Bill’s Plans. How long is he planning to be with either company? Is he going back to graduate school soon? How portable is the defined-benefit plan? The answer to this question is really based on the assumptions Bill has regarding how long he plans to stay with either company. Since a defined-benefit plan generally requires you to stay for an extended period, that benefit will only be valuable if Bill is committed for a long period of time.

(2) Bill’s Forecast for the Company. Is the company viable, particularly company B? Will Company B be around for as long as Bill wants it to? Are the products of both companies viable?
(3) Bill’s View of Company Policy. Will either company change its retirement policies after Bill retires? Have the companies historically taken good care of their employees? Are the plans consistent with similar companies? What is Company B’s defined-benefit formula? If Bill stays until retirement at B, what is the annual benefit? Assuming a reasonable interest rate, what is the present value of the annual benefit to Bill? What is the value of the company match over the same period?

B. Bill can have other plans, as long as his salary is below specific IRS-determined limits. Based on the information provided, he could also invest in either a Roth or traditional IRA, or if he had a small business, he may be able to invest in a small business plan, such as a SEP IRA.

Case Study 2

Data

Greg is 50 years old and has been working for 10 years with a company that has a defined-benefit plan. The formula is the average of the five highest annual salaries within the last 10 years multiplied by a company-determined factor of 1.5 percent multiplied by years in service (to a maximum of 33). Assume Greg stays with the company until his retirement at age 65 and his highest annual salaries for five years average $60,000.

Calculations

A. How much can Greg expect to receive annually at retirement?
B. What is the percent of his final five-year average salary?

Case Study 2 Answers

A. Greg can expect to receive the following:
   $60,000 * .015 * 25 years = $22,500
   B. This is $22,500 / $60,000, or 37.5 percent, of his final salary.

Case Study 3

Data

Adam is 55 and plans to retire in 10 years. He is working for a company with a tax-sheltered annuity (TSA, or 403(b) Plan).

Calculations

A. How much can he contribute, assuming his salary is below the IRS-determined limits, into his company’s Roth 403(b) plan in 2016?
B. If his company has a matching program, what impact will that have on Adam’s contribution?
Case Study 3 Answers

A. Contribution limits for the 401(k), Roth 401(k), 403(b), Roth 403(b), and 457 Plan annual contribution limits are:

<table>
<thead>
<tr>
<th>Year</th>
<th>Contribution Limit</th>
<th>Catch-Up Contr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>17,500</td>
<td>5,500</td>
</tr>
<tr>
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</tr>
<tr>
<td>2016</td>
<td>18,000</td>
<td>6,000</td>
</tr>
</tbody>
</table>

Since Adam is over 50 years old, he could contribute $18,000 plus a $6,000 catch-up contribution in 2016, for a total of $24,000.

B. The company match will have no impact on the amount Adam can contribute.

Case Study 4

Data

Adam retired on his 60th birthday and did not use any of his traditional IRA balances. On December 31 of his 69th year, he had $250,000 in his 401(k) plan.

Calculations

A. How much would he be required to take out of his account the next year, the year he turns 70.5?
B. How much would he be required to take out if this was a Roth 401(k)?

Case Study 4 Answers

A. From the table, his life expectancy at age 70 is 27.4 years. Adam will be required to take a distribution of his 401(k) plan of $250,000 / 27.4, or $9,124, the next year.
B. If this was a Roth 401(k), he would still have to take the required distributions. However, if, once he retired, he rolled his Roth 401(k) over to a Roth IRA, there would be no required distributions.

Case Study 5

Data

Sam graduated last year and has already begun his retirement program. He has invested enough in his company 401(k) plan to get the company match this year and has found out that his company has a Roth 401(k) plan as an option. He is discussing with a friend the benefits of the Roth 401(k) versus the traditional 401(k).

Application

A. Which vehicle, the Roth or traditional 401(k), should Sam select and why?
B. What are the assumptions that would impact Sam’s choice of retirement vehicle?
Case Study 5 Answers

A. Which vehicle Sam chooses should be based on his goals, objectives, and assumptions for the future.
B. His assumptions should relate to five key areas:
   1. *Sam’s projected tax rate in retirement.* If Sam expects his tax rate to be higher (or lower) in retirement, the Roth (or traditional) is preferred. Make sure Sam takes into account child tax and other credits when determining his current tax rate.
   2. *Sam’s need for the tax break now.* If the reduction in AGI is important for Sam to reduce his current tax bill, he would likely choose the traditional.
   3. *His cash flow situation.* If he has additional money to invest for retirement, he can invest more in the Roth than the traditional, due to taxes.
   4. *His possible need for principal.* If Sam might need some of the money in the account (just in case), with the Roth he can take out principal after five years without penalty or taxes, as principal has already been taxed. He cannot, however, take out earnings and interest without penalty.
   5. *His desire to have more money saved for retirement.* If Sam wants to put more money in for retirement, since he pays taxes outside the retirement vehicle with a Roth vehicle, he is actually saving more for retirement. For example, if he puts both $5,000 into both a Roth and traditional IRA, the Roth will be worth more at retirement after taxes as Sam must pay taxes on the traditional IRA when he takes out the money.

Introduction

Whether you work for a large or a small company or are self-employed, you need to plan for retirement. This chapter will discuss your third priority regarding money when saving for retirement: individual retirement accounts. I will explain how you can plan for retirement if you work for a small company or are self-employed. Even if you already have a qualified retirement plan with your company, you may still be eligible to contribute to an individual retirement plan and save even more for your retirement goals. The key is to understand the retirement vehicles available to you and how you can utilize these vehicles to help you achieve your goals.

Objectives

When you have completed this chapter, you should be able to do the following:

1. Describe individual retirement accounts
2. Explain when it is beneficial to convert a traditional IRA to a Roth IRA
3. Describe retirement plans designed for small businesses and individuals who are self-employed

Understanding individual and small-business retirement plans is an important part of retirement planning.

Describe Individual Retirement Accounts

Because of the Taxpayer Relief Act of 1997, there are now three main types of individual retirement accounts (IRAs): the traditional IRA, the Roth IRA, and the education IRA. In addition to these three main types of IRAs, there are many other types of IRAs you should learn about as you prepare for retirement.

Traditional IRAs

A traditional IRA is a retirement account in which you can contribute up to $5,500 in 2016 if you are under age 50; if you are over age 50, you can contribute $6,500 (see Table 1). This account may or may not be tax-deferred, depending on your income level and whether or not you are a participant in another employer-sponsored retirement plan (ESRP). To contribute to a traditional IRA, you must be younger than 70½ years, and you or your spouse must have earned income the year you contribute.
Contributions to a traditional IRA are tax-deductible if you meet certain conditions. If you are single and are not an active participant in an ESRP, or if you are married and neither spouse is an active participant in an ESRP, your traditional IRA contributions are tax-deductible regardless of your income level. If you or your spouse is an active participant in an ESRP, you can deduct contributions only if your income is below a certain level (see Table 3). For example, in 2016, if you are below age 50, you can deduct the full $5,500 contribution on your income tax return if you do not have an ESRP. You can also deduct the full $5,500 if you have an ESRP but your modified adjusted gross income (AGI) is $96,000 or less for a joint return or $60,000 or less for a single return (see Table 3).

**Table 1. Traditional and Roth IRA Annual Contribution Limits**

<table>
<thead>
<tr>
<th>Year</th>
<th>Contribution Limit</th>
<th>Catch-Up Contributions*</th>
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<td>2016</td>
<td>$5,500</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

* The catch-up contribution is for individuals over age 50.

You can take withdrawals from a traditional IRA after you reach age 59½ and you can use the money for any purpose. Before you reach this age, your withdrawals are subject to federal penalties of 10 percent unless you use the withdrawals to pay for your first home (limit $10,000), death or disability expenses, annuity payments, or medical expenses greater than 7.5 percent of your AGI.

Traditional IRA plans that defer taxes require that you begin taking minimum distributions by April 1 of the year after you turn age 70½. You can always take out more. This required minimum distribution amount is calculated by dividing the total account balances of all tax-deferred IRA retirement plans on December 31 of the previous year by the individual’s current life expectancy (see Table 2). Note that there is a 50 percent penalty on minimum distributions that are not taken.

**Table 2. Life Expectancy and Age**

<table>
<thead>
<tr>
<th>Age</th>
<th>Life Expectancy (LE)</th>
<th>Age</th>
<th>LE</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>27.4</td>
<td>75</td>
<td>22.9</td>
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<tr>
<td>71</td>
<td>26.5</td>
<td>76</td>
<td>22.0</td>
</tr>
<tr>
<td>72</td>
<td>25.6</td>
<td>77</td>
<td>21.2</td>
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<td>73</td>
<td>24.7</td>
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<td>20.3</td>
</tr>
<tr>
<td>74</td>
<td>23.8</td>
<td>79</td>
<td>19.5</td>
</tr>
</tbody>
</table>
**Roth IRAs**

A Roth IRA is a type of individual retirement plan in which contributions are made with after-tax dollars. Because you make contributions with after-tax dollars, your contributions are not tax-deductible. However, this plan provides a unique benefit that is not available with any other retirement plan: all earnings and capital gains are tax-free when you or your beneficiaries make withdrawals at retirement.

You can contribute to a Roth IRA even if you have an ESRP and even if you are over age 70½. In 2016, each individual can contribute up to $5,500 (see Table 1).

A big advantage of a Roth IRA is that you can withdraw your initial contributions at any time without incurring taxes or penalties (check your state’s tax rules for more information); however, this benefit does not apply to earnings. Earnings are tax-free if your Roth IRA has been in place for at least five years and if you are at least 59½ when you make withdrawals. You can contribute to both a traditional IRA and a Roth IRA in a single year, but you cannot exceed the yearly contribution limits for the combined contributions to your traditional and Roth IRAs. With Roth IRAs, you are not required to receive distributions by age 70½.

The disadvantages of a Roth IRA include that there are income limits above which you cannot invest in a Roth IRA (see Table 3), and you must hold your account for at least five years before you can make earnings withdrawals without penalty.

If you make withdrawals before age 59½ and you have had the account for fewer than five years, earnings are subject to ordinary income taxes. Earnings are also subject to an early withdrawal penalty of 10 percent unless you use the money to purchase your first home or to pay for death or disability costs.

If you make withdrawals after age 59½ but you have had the account for fewer than five years, earnings are subject to ordinary income taxes but not to early withdrawal penalties.

If you make withdrawals after age 59½ and you have had the account for five years or more, all contributions and earnings can be withdrawn tax-free. There are no minimum withdrawal requirements.

**Education IRAs or Coverdell Education Savings (ESA) Accounts**

An education IRA is an investment tool you can use to prepare for the cost of your children’s education. You can set up a separate IRA for each child and make contributions to these accounts until the child reaches age 18. The annual contribution limit for education IRAs in 2016 is $2,000 per child; your total contributions into different ESA accounts can equal no more than $2,000 per child. These contributions and their earnings can be withdrawn tax-free if they are used to pay for qualified educational expenses related to enrollment at eligible elementary, secondary, post-secondary, and higher-education facilities. All savings must be withdrawn by the
time the child reaches age 30, but any amount left over after you pay for one child’s education can be rolled into another child’s account. You also cannot take a Hope education credit on your tax return the same year in which you withdraw money from your education IRA. One disadvantage of an Education IRA is that there are income limits above which you cannot invest in an education IRA (see Table 3).

**Other IRAs**

The spousal IRA is funded by a married taxpayer in the name of his or her spouse. Normally, participants in IRAs must have earned income. However, it is not necessary for the spouse to have earned income with the spousal IRA.

In a nondeductible IRA, contributions are made with after-tax dollars, and earnings grow tax-deferred; taxes are paid on the earnings when they are withdrawn at retirement. Even if your modified adjusted gross income (MAGI) is greater than allowable limits, you may still find it useful to look into this type of IRA.

An individual retirement annuity is set up with a life insurance company through the purchase of an annuity contract. This annuity ensures a certain dollar amount of funds will be paid to the owner each period of the contract after retirement.

The employer and employee association trust account IRA is set up by employers, unions, and associations.

The rollover IRA is a traditional IRA that is set up specifically to receive distributions from a qualified retirement plan, such as another 401(k), IRA, or other plan.

An inherited IRA is acquired by the non-spousal beneficiary of a deceased IRA owner.

The simplified employee pension IRA (SEP IRA) is a traditional IRA set up by a small-business owner for the company’s employees. This type of IRA will be discussed later in this chapter.

The savings incentive match plan for employees IRA (SIMPLE-IRA) is a traditional IRA set up by a small-business employer for the company’s employees. This type of IRA will be discussed later in this chapter.

**Deductibility and Contribution Limits**

Individuals whose modified adjusted gross income (MAGI) is below the ranges listed in Table 3 can take the full deduction for contributing to a traditional IRAs or make a full contribution to a Roth IRA or education IRA. Your MAGI is calculated by taking your adjusted gross income and adding certain items such as deductions for foreign income, foreign-housing, student-loans, IRA-contributions, and for higher-education costs. If your MAGI is between the ranges indicated, you can take only a partial tax deduction on your contribution or make only a partial contribution to the indicated IRA account.
Which Is Better: The Traditional IRA or the Roth IRA?

The decision of whether you should invest in the traditional IRA or the Roth IRA should be based mainly on these five factors: (1) your need to reduce current taxes through tax deductions, (2) your anticipation of tax rates when you retire, (3) your availability of money to pay the necessary taxes on the money contributed to a Roth IRA, (4) your need for investment flexibility, and (5) your need for estate planning to transfer assets to your heirs.

If you need tax deductions now, the traditional IRA is the best choice. Note, however, that since you are taking a deduction now, you will have to pay taxes on your entire traditional IRA balance (principal and earnings) when you retire. Remember that tax-deferred vehicles have the disadvantage of converting capital gains income (which is taxed at a lower rate, generally 15 percent) into ordinary income (which is taxed at your higher marginal tax rate).

Table 3. IRA Deductibility and Contribution Limits

<table>
<thead>
<tr>
<th>Traditional IRA- Deductibility Limits</th>
<th>Year</th>
<th>Single Range</th>
<th>Married Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$58,000–$68,000</td>
<td>$92,000–$112,000</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>$59,000–$69,000</td>
<td>$95,000–$115,000</td>
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<tr>
<td>2014</td>
<td>$60,000–$70,000</td>
<td>$96,000–$116,000</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>$61,000–$71,000</td>
<td>$98,000–$118,000</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$61,000–$71,000</td>
<td>$98,000–$118,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Roth IRA- Contribution Limits</th>
<th>Year</th>
<th>Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$110,000–$125,000</td>
<td>$173,000–$183,000</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>$112,000–$127,000</td>
<td>$178,000–$188,000</td>
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<td>2014</td>
<td>$114,000–$129,000</td>
<td>$181,000–$191,000</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>$116,000–$131,000</td>
<td>$183,000–$193,000</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$117,000–$132,000</td>
<td>$184,000–$194,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coverdell (Education IRA)- Contribution Limits</th>
<th>Year</th>
<th>Range</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>2012</td>
<td>$95,000–$110,000</td>
<td>$190,000–$220,000</td>
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<tr>
<td>2013</td>
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<td>$190,000–$220,000</td>
<td></td>
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<tr>
<td>2014</td>
<td>$95,000–$110,000</td>
<td>$190,000–$220,000</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>$95,000–$110,000</td>
<td>$190,000–$220,000</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$95,000–$110,000</td>
<td>$190,000–$220,000</td>
<td></td>
</tr>
</tbody>
</table>

If you expect your tax rates to be lower in the future, the traditional IRA is usually the best choice. If you expect tax rates to be higher in the future, the Roth IRA is usually the better choice. To see the impact of tax rates on retirement savings, see Learning Tool 27: Roth versus Traditional—Which Is Better?
If you currently have the money available to pay taxes on your retirement plan contributions, your best choice is likely the Roth IRA. If you pay taxes now on the principal, you will never have to pay taxes on any of the earnings again if you withdraw funds after age 59½ and have held the fund for at least five years. In addition, you can theoretically contribute more to the Roth IRA than to the traditional IRA. Remember that the Roth is an after-tax contribution fund—this means that to make the $5,500 contribution in 2016, you must earn $5,500 plus any taxes you must pay on your income. If your average tax rate is 15 percent, you would, in essence, be contributing $6,471 in earnings ($5,500 / (1 – .15)) before taxes.

If you need investment flexibility, which in this case means that you think you may need to withdraw some of your retirement funds before retirement (and you would like to withdraw funds without a penalty), the Roth IRA is the better choice. Since you have already paid taxes on the principal you contribute to the Roth IRA, you are allowed to withdraw the principal at any time without having to pay any penalties or taxes.

Finally, if you want to leave your retirement money to your heirs, the Roth IRA is usually the better choice. Since taxes are paid up front on the Roth IRA, the money can be left to heirs without the imposition of additional estate or inheritance taxes on distribution. Assets from a traditional IRA require the payment of taxes before distribution to your heirs.

**Explain When It Is Beneficial to Convert a Traditional IRA to a Roth IRA**

Converting your traditional IRA into a Roth IRA may be a smart choice under the following circumstances: (1) you think your tax bracket will stay the same or go up after you retire, (2) you plan to wait at least five years before withdrawing money, (3) you have sufficient funds from other savings or investments to pay the taxes on the conversion; (4) you won’t move into a higher tax bracket during the year by converting, or (5) you want to avoid a minimum-distribution requirement from your retirement savings at age 70½.

To convert to a Roth IRA, you take the money from your traditional IRA, 401(k), 403(b), or 457 plan and pay the taxes on these accounts before moving the funds to a Roth IRA. For the money to accumulate tax-free in the Roth account, both the 5-year rule and the 59½-year rule still apply.

Transfers are allowed in three ways: (1) by accepting a payment from your traditional IRA and re-depositing it within 60 days, (2) by requesting a trustee-to-trustee direct transfer, or (3) by changing the account designation to a Roth with the account’s trustee. The direct transfer is the simplest and safest way to convert. If you use the 60-day rollover option, remember that a 10 percent penalty tax will be withheld at distribution, and you will have to replace the withheld taxes with other funds when the money is deposited into the Roth account. Moreover, the 10 percent early withdrawal penalty applies if you use IRA funds to pay income taxes at conversion. Direct transfer is the simplest and safest way to convert funds from one type of account to another.
Describe Retirement Plans Designed for Small Businesses or Individuals Who Are Self-Employed

Just as there are retirement plans available to employees of large businesses, there are also retirement plans available to employees of small businesses and to individuals who are self-employed. These plans have some of the same tax advantages as the plans available to larger businesses, and some are even more generous. Some of these plans allow you to invest even if you already have another retirement plan through another employer. If you are self-employed (either full- or part-time), or if you work for a small business, you can invest money in a simplified employee pension plan (SEP IRA), a Keogh plan, or a new savings incentive match plan for employees (SIMPLE IRA).

There are two categories of small-business retirement plans. The first category includes plans funded by the small-business employer, for example, SEP IRAs and Keogh plans. The second category includes plans funded by both the small-business employer and the employee: mainly the SIMPLE IRA and SIMPLE 401(k) plans.

Plans Funded by Your Employer

The SEP IRA (simplified employee pension individual retirement account) allows a small-business employer to contribute to employees’ retirement funds. The employer usually contributes the same percentage of income for each eligible employee. In 2016, employers could contribute a maximum of either 25 percent of an employee’s salary or $53,000, whichever was less. The limits on the amount of money that can be contributed to this defined-contribution account are set in Code 415 of the Internal Revenue Code (see Table 4). There are no minimum contribution requirements on the amount the employer can contribute to these plans, and they are generally best for companies with few employees. If you have one of these accounts, you can still have other qualified individual retirement accounts. Contributions are tax-deductible for the employer, earnings grow tax-deferred for the employee, and the individual employees own the plans.

Table 4. Section 415 Funding Limits

<table>
<thead>
<tr>
<th>Year</th>
<th>$ Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>49,000</td>
</tr>
<tr>
<td>2012</td>
<td>50,000</td>
</tr>
<tr>
<td>2013</td>
<td>51,000</td>
</tr>
<tr>
<td>2014</td>
<td>52,000</td>
</tr>
<tr>
<td>2015</td>
<td>53,000</td>
</tr>
<tr>
<td>2016</td>
<td>53,000</td>
</tr>
</tbody>
</table>

SEP IRAs are easiest to set up and maintain, and they do not require annual filings. They allow larger contributions than traditional IRAs ($53,000 versus $5,500 in 2016). This is the best type of retirement plan for businesses with no or only a few employees.
The major disadvantages of a SEP IRA include that you cannot borrow against the retirement plan and that early withdrawals (withdrawals made before age 59½) incur a 10 percent penalty in addition to ordinary income taxes.

**Keogh Plans** (also called HR 10 plans) are set up by a sole proprietor or partnership. These plans allow small businesses to make tax-deductible contributions to employees’ retirement plans. Plans can either be defined-benefit plans or defined-contribution plans, but most Keogh plans are defined-contribution profit-sharing plans or defined-contribution money-purchase plans.

Employers usually contribute the same percentage of income for each eligible employee. As an employee, you can also contribute up to 20 percent of your income (to a maximum of $53,000 in 2016) into your Keogh plan. As with many other retirement plans, Keogh investments grow tax-deferred.

There are three unique options that make Keogh plans flexible: two are defined-contribution plans and one is a defined-benefit plan. These options make Keogh plans somewhat similar to the defined-benefit plans and defined-contribution plans offered by larger companies. (For more complete details on these plans, see Internal Revenue Service, Publication 560: Retirement Plans for Small Businesses: SEP, SIMPLE, and Qualified Plans at [http://www.irs.gov/pub/irs-pdf/p560.pdf](http://www.irs.gov/pub/irs-pdf/p560.pdf).)

There are two types of Keogh defined-contribution plans: profit-sharing plans and money-purchase plans. Profit-sharing plans allow employers to share company profits with employees by contributing to employee retirement plans. Contribution limits for profit-sharing plans are more flexible than limits on other plans. Money-purchase plans have a fixed contribution limit that is not based on company profitability. A Keogh defined-benefit plan is any plan that is not a defined-contribution plan.

In a defined-contribution plan, the maximum amount an employer can contribute in 2016 is either 100 percent of an employee’s average salary for the past three years or $53,000, whichever is less. In a defined-benefit plan, the maximum amount an employer can contribute in 2016 is either the employee’s average salary for the past three years or $210,000, whichever is less. Because of these higher contribution maximums, Keogh plans are especially helpful for those trying to catch up on retirement savings.

Possible disadvantages of Keogh plans include that they require more administrative work than SEP IRAs, they cannot be borrowed against, and they must be established by December 31 of each year.

**Plans Funded by Both You and Your Employer**

The most popular plans that are funded by both the employer and employee are the SIMPLE plans. SIMPLE plans, or savings incentive match plans for employees, are tax-sheltered retirement plans for small businesses (businesses with fewer than 100 employees) or for
individuals that are self-employed. In SIMPLE plans, an employer matches some employee contributions; SIMPLE plans are similar to company-matching 401(k) plans. There are two different types of SIMPLE plans: SIMPLE IRAs and SIMPLE 401(k) plans.

In a SIMPLE IRA, both you and your employer take part in funding your retirement. To be eligible for a SIMPLE IRA, you cannot have another qualified plan at the same time. In 2016, you can contribute up to 100 percent of your annual income, up to a maximum of $12,500, in tax-deferred funds (see Table 5). Since contributions are tax-deferred, there is a penalty for early withdrawals. Money withdrawn within two years of establishing the account incurs a 25 percent penalty, and money withdrawn before you reach age 59½ incurs a 10 percent penalty and is taxed as ordinary income.

With a SIMPLE IRA, your employer must match your contributions (usually up to two to three percent of your annual income) unless you make non-elective or optional contributions. The employer is required to make a minimum contribution of two percent of your annual income to your SIMPLE IRA each year. Any contributions you or your employer makes to your SIMPLE IRA are tax-deductible. Compared with other small-business plans, SIMPLE IRA plans are easy to set up and administer.

Table 5. SIMPLE IRA/401(k) Plan Contribution Limits

<table>
<thead>
<tr>
<th>Year</th>
<th>Contribution Limit</th>
<th>Catch-up*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
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</tr>
<tr>
<td>2012</td>
<td>$11,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>2013</td>
<td>$12,000</td>
<td>$2,500</td>
</tr>
<tr>
<td>2014</td>
<td>$12,000</td>
<td>$2,500</td>
</tr>
<tr>
<td>2015</td>
<td>$12,500</td>
<td>$3,000</td>
</tr>
<tr>
<td>2016</td>
<td>$12,500</td>
<td>$3,000</td>
</tr>
</tbody>
</table>

* Catch-up contributions are available for those over age 50.

A SIMPLE 401(k) plan is very similar to a SIMPLE IRA and has the same contribution limits and matching requirements. However, a SIMPLE 401(k) plan requires more time and resources to establish. If you are making contributions to a SIMPLE 401(k) plan, your employer must match one to three percent of your elective annual contributions or contribute at least two percent of your annual income as a non-elective contribution.

Summary

It is important to plan for retirement. Because of the Taxpayer Relief Act of 1997, there are now three main types of individual retirement accounts (IRAs): the traditional, the Roth, and the education. There are also many other types of IRAs that you should learn about as you plan for retirement. Individuals who are self-employed or employed by small businesses have access to unique retirement plans that can help them reach their retirement goals. It is important for you to understand and use the investment vehicles available to you.
A traditional IRA is a retirement account in which you can contribute up to $5,500 each year (in 2016) if you are under age 50 or up to $6,500 if you are over age 50 (see Table 1). This account may or may not be tax-deferred, depending on your income level and whether you or your spouse are participating in an employer-sponsored retirement plan (ESRP). To contribute to a traditional IRA, you must be younger than 70½ and you or your spouse must have earned income. Contributions to a traditional IRA are tax-deductible if you meet certain conditions.

A Roth IRA is a type of individual retirement plan in which your contributions are made with after-tax dollars. Your contributions are not tax-deductible, but all earnings and capital gains are tax-free when you or your beneficiaries make withdrawals at retirement.

A Coverdell Education Savings Account, or education IRA, is an investment tool you can use to prepare for the cost of your children’s education. You can set up a separate IRA for each child and make contributions into these accounts until the children reach age 18. The annual contribution limit for education IRAs in 2016 is $2,000 per child. These contributions and their earnings can be withdrawn tax-free if they are used to pay for qualified educational expenses related to enrollment at eligible elementary, secondary, post-secondary, and higher-education facilities.

In addition to the traditional IRA, Roth IRA, and education IRA, there are a number of other IRAs you should learn about. These IRAS include the spousal, nondeductible, individual retirement annuity, employer and employee association trust account, rollover, inherited, simplified employee pension (SEP IRA), and savings incentive match plan for employees IRAs (SIMPLE IRA).

The decision of whether to invest in the traditional IRA or the Roth IRA should be based mainly on five factors: (1) your need to reduce current taxes with tax deductions, (2) your anticipation of tax rates when you retire, (3) your availability of money to pay the necessary taxes on the Roth IRA, (4) your need for investment flexibility, and (5) your need for estate planning to transfer assets to your heirs.

There are special retirement plans available to employees of small businesses and individuals who are self-employed. These plans have some of the same tax advantages as the plans available to larger businesses and may be even more generous. Some of these plans allow you to invest even if you already have another retirement plan through another employer. For example, if you are self-employed, either full- or part-time, or if you work for a small business, you can invest money in a simplified employee pension plan (SEP IRA), a Keogh plan, or a new savings incentive match plan for employees (SIMPLE IRA).

There are two categories of small-business retirement plans. The first category includes plans funded by the small-business employer, such as SEP IRAs and Keogh plans. The second category includes plans funded by both the small-business employer and the employee, mainly the SIMPLE IRA and SIMPLE 401(k) plans.
Assignments

Financial Plan Assignments

Do you have a small-business retirement account or an individual retirement account? If so, who do you have the plan with? What are your annual fees for the account? Is there a way to minimize those fees?

Where are your assets invested? Are they invested in a manner that is consistent with the asset-allocation targets detailed in your financial plan and the fact that they are longer-term assets?

Learning Tools

The following Learning Tools may be helpful as you prepare your Personal Financial Plan:

6. Retirement Planning Needs

This Excel worksheet helps you determine how much you must save each month to achieve a specific lifestyle at retirement based on the following estimates: years until retirement, expected return, inflation, and tax rates.

25. Retirement Planning Ratio Forecasts

This spreadsheet includes an Excel template that can help you determine where you are in your progress toward achieving your retirement goals. By inputting the relevant information, you can determine whether you are on track for reaching your retirement goals, based on your age and income.

27. Roth versus Traditional—Which Is Better?

This spreadsheet includes an Excel template to help you determine whether the traditional or the Roth IRA is a better investment vehicle to help you save for retirement. Note that this spreadsheet considers only the factor of future taxes when making this decision.

Review Materials

Terminology Review

Education IRA. An Education IRA, also called a Coverdell ESA, is an investment vehicle for planning for the future cost of a child's education. The plan allows after-tax contributions each year for each child until age 18. Contributions and their subsequent earnings are tax-free when withdrawn to pay for qualified secondary and post-secondary education expenses.
Individual Retirement Accounts. These are retirement accounts created with the Taxpayer Relief Act of 1997. While there are over a dozen different individual retirement accounts, the three major types of Individual Retirement Accounts are Traditional IRA, Roth IRA, and Education IRA, which is also called a Coverdell Education Savings Account (ESA).

Individual Retirement Annuity: An IRA set up with a life insurance company through purchase of an annuity contract.

Inherited IRA: An IRA acquired by the non-spousal beneficiary of a deceased IRA owner.

Keogh Plan. This is a small business retirement plan set up by a sole proprietor or partnership (not incorporated) which allows employers to make tax-deductible payments to retirement plans, similar to pension or profit-sharing plans. Plans can be either a defined benefit or defined contribution, but most commonly are DC profit sharing or money purchase plans. Contributions are tax deductible, earnings grow tax-deferred, and employers may borrow from the Plan.

Non-deductible IRA. Individuals may contribute to a non-deductible IRA. The benefits are that money is contributed after-tax, and investment earnings grow tax-deferred. No taxes are paid on the investment earnings until the earnings are withdrawn at retirement. Accurate record keeping is required to pro-rate the nondeductible portion of any subsequent distribution.

Non-deductible IRA: An IRA with contributions made after-tax, and earnings grow tax-deferred, with taxes paid when withdrawn at retirement.

Required Minimum Distributions. This is a legal requirement of many tax-deferred retirement vehicles which require savers to distribute a specific amount each year after age 69 of total plan assets. It is calculated by dividing the total amount in accounts by a specified number given.

Rollover IRA: A traditional IRA set up to receive a distribution from a qualified retirement plan.

Roth Conversion. This is the process of converting a traditional individual retirement account to a Roth account.

Roth IRA. This is an individual retirement account which provides no deduction for contributions but provides that all earnings and capital gains are tax free upon withdrawal after retirement. You are actually investing more with a Roth, since your investments are after-tax, and contributions can be withdrawn tax/penalty free. Earnings grow tax-free if the Roth IRA is in place for at least 5 years, and you are 59½ years old.
SEP-IRA. The Simplified Employee Pension (SEP-IRA) is an Individual Retirement Account which allows a small business employer to contribute to the retirement of the employees. Employer contributes the same percentage to all employees, and no required annual contribution. Contributions are tax deductible, earnings grow tax-deferred, and employees own the plans.

SIMPLE 401k. This is a small business qualified retirement plan that provides some matching funds by the employer. Employees can have no other qualified plan, and may contribute up to the specific amount each year. Contributions are tax deferred and grow tax-free, and there is a penalty for early withdrawal. The employer is “required” to either contribute at least 2% or to match employee contributions, usually 1-3%.

SIMPLE IRA. This is one of the SIMPLE retirement plans where Employees can participate. Contributions are tax deductible, it is easy to set up and administer (compared with a traditional 401(k)). A small business qualified retirement plan that provides some matching funds by the employer.

SIMPLE Plans. These are Savings Incentive Match Plans (SIMPLE) that provides matching funds by the employer. It can be established as an IRA or as part of a 401k plan. Employees can have no other qualified plan, and can contribute up to 100% of compensation to a maximum limit each year. The employer is “required” to either contribute at least 2% or to match employee contributions, usually 1-3%.

Spousal IRA. A Spousal IRA is an IRA contribution for a non-earning spouse. If one spouse is an active participant, the non-earning spouse can contribute to a Spousal IRA. Limits are the same as the traditional and Roth IRA.

Traditional IRA. An individual retirement account in which an individual can contribute up to a specific amount annually which is tax-deferred. Eligibility and amounts depend on the contributor’s income level and whether they have other retirement plans. The contribution is tax deductible and earnings grow tax-deferred.

Review Questions

1. What are the three main types of individual retirement accounts?
2. If your marginal tax rate is low now and you believe it will continue get larger as you grow older, which type of IRA should you most likely make contributions into?
3. What is the 2016 annual contribution limit per individual for a traditional IRA? Roth IRA? Education IRA?
4. If you currently need a tax deduction, which type of IRA is preferable to contribute to?
5. What are two types of small business/self-employment retirement plans that are funded by the employer?
Chapter 29. Retirement Planning 4: Individual and Small Business Plans

Case Studies

Case Study 1

Data
You-Jin graduated last year and has already begun her retirement program. She has invested enough in her company 401(k) plan to get the company match this year, and she has an additional $5,000 to invest for retirement above and beyond her other goals. She was discussing with a friend the benefits of the Roth IRA versus the traditional IRA.

Application:

a. Which should You-Jin select and why?
b. What are the assumptions that would impact her choice of IRA vehicle?

Case Study 1 Answers

a. You-Jin’s answer will depend on her assumptions and how she answers the five questions below.
b. You-Jin’s assumptions should relate to five key areas:
   1. What is her projected tax rate in retirement? If she expects her tax rate to be higher (or lower) in retirement, the Roth (or traditional) is preferred. Make sure she takes into account the child tax and other credits when determining her current tax rate.
   2. What is her need for the tax break now? If the reduction in AGI is important for her to reduce her current tax bill, then she would likely choose the traditional IRA.
   3. What is her cash flow situation now? If she has additional money to invest for retirement, she can invest more in the Roth IRA than in the traditional IRA. Because she pays her taxes on the Roth money outside of her investment account, she can actual put more money into the Roth IRA due to taxes.
   4. What is her possible need for principal? If she might need some of the money in the account (just in case), with the Roth IRA she can take out principal after five years without penalty or taxes because the principal has already been taxed. She cannot, however, take out earnings and interest without penalty.
   5. Does she desire to have more money saved at retirement? If she wants to put more money in for retirement, since she pays taxes outside the retirement vehicle with a Roth vehicle, she is actually saving more for retirement (after taxes). For example, if she puts both $2,500 into both a Roth and traditional IRA, the Roth will be worth more as she must pay taxes on the traditional IRA when she pulls out the money.

Case Study 2

Data
Bill has money in a traditional and a rollover IRA. He retired on his 60th birthday and did not use any of his traditional IRA balances. On December 31 of his 69th year, he had $150,000 in his traditional IRA.
Chapter 29. Retirement Planning 4: Individual and Small Business Plans

Calculations:
How much is he required to take out of his account the next year?

Case Study 2 Answer
Bill will be required to take a distribution of $150,000 / 27.4 (from the life expectancy table), or $5,474.45, the next year.

Case Study 3
Data
Steve is considering a traditional IRA. He is married, and his modified adjusted gross income is $115,000 per year.

Application
Can Steve contribute to a traditional IRA? Why or why not?
Can he contribute to any other IRAs?
If neither Steve nor his wife have an employer sponsored retirement plan at work, could he still contribute to a traditional IRA and get the tax deduction?

Case Study 3 Answers
a. Steve will not be able to contribute to a traditional IRA because his income is beyond the MAGI phase-out limits of $98,118,000 in 2016.
b. He could, however, contribute to a Roth IRA as he is below the phase out limits, or a non-contributory IRA which is a traditional IRA with no initial tax benefits.
c. If neither Steve nor his wife are covered by an employer sponsored retirement plan at work, they can both contribute to a traditional IRA regardless of MAGI limits. If only one spouse is covered by a retirement plan at work, the traditional IRA limits are expanded to the limits of the Roth IRA.

Case Study 4
Data
Sam and his wife just turned 60, and they are very concerned about retirement. All their kids are grown, and they have additional money they want to contribute toward retirement in 2016. Their modified adjusted gross income is $120,000 this year, and they feel they can save 30 percent for retirement this year. Their company has a 401(k) plan without a match.

Application
Which vehicles can they use, and how much can they save for retirement?
Case Study 4 Answers

Sam is eligible for not only the 401(k) (limit of $18,000 in 2016), but also the $6,000 catch up contribution.

Both he and his wife are also eligible for the $5,500 Roth IRA contribution, as well as the $1,000 catch up limit, as they are not beyond the phase-out limits for the Roth IRAs ($13,000 total). They are, however, beyond the limits for the traditional IRA to get the deduction.

Overall, they could invest $24,000 in their 401(k) and $13,000 in their IRAs for a total of $37,000 saved in 2016.
30. Estate Planning: Understanding the Basics

Introduction

Estate planning is the process of planning for the accumulation, conservation, and distribution of estate assets. This process should be used to help you accomplish your personal and family goals. Every estate is eventually planned, either through planning done by an individual for his or her estate or by default through rules established by the state and local governments. The purpose of estate planning is to ensure that you—and not others, such as the government or lawyers—choose who will inherit your wealth. Through proper estate planning, you can take care of those you love even after you die. The LDS Church’s family guidebook states the following:

Brigham Young once said, “A fool can earn money; but it takes a wise man to save and dispose of it to his own advantage.” . . . Estate planning is the way we manage our major financial resources and properties to “dispose of it to [our] own advantage.” . . . This kind of planning, begun early in life, can help provide financial security for a family throughout several generations.¹

Objectives

When you have completed this chapter, you should be able to do the following:

1. Understand the principles of proper estate-planning
2. Understand the importance and goals of estate planning
3. Understand the estate-planning process
4. Know how trusts can be used to your advantage in the estate-planning process
5. Understand the importance of wills and probate planning

Understand the Principles of Proper Estate-Planning

The following are a few important principles of estate planning:

1. Understand Yourself

What are your personal and family goals? What are you trying to accomplish with estate planning? Make sure what you are planning to do is in the best long-term interest of those you love.
What is your budget and balance sheet? Is what you are planning to do reasonable in light of your available resources? Will it still allow you to live in an acceptable manner for the rest of your life?

2. Understand the Estate-Planning Process and All Applicable Laws

Once you understand what you want to accomplish, you must next understand the estate-planning process and applicable laws. Make sure what you are doing is legal. Recognize the tax consequences of your actions and plan for adequate liquidity to meet your tax needs.

3. Start Early and Seek Qualified Legal Help

Start estate planning early. Once you are married, write a will to make sure your assets will go to who you want. Once you have children, make sure you articulate who you want to be the guardian of your children and executor of your will. As your assets reach a critical mass, determine how you want to dispose of those assets, and do so in a way that is consistent with your goals and objectives.

Seek qualified legal help in this process. Make sure the legal documents are well written and will accomplish the goals you want to accomplish. Realize that if you have assets in multiple states, you may need legal help in each state.

4. Remember the Key Principles of Finance

Remember the key principles of finance: Ownership: none of what we have is ours. Stewardship: we are stewards over all God has and will bless us with. Agency: the gift of choice is one of God’s greatest gifts. And accountability: we will be held accountable for all of our choices, including our financial ones.

Understand the Importance and Goals of Estate Planning

The purpose of estate planning is to help us achieve our personal and family goals even after we die. Estate planning ensures that your wealth will go to those you want it to go to, so you can achieve your personal goals even after you are gone. Proper estate planning can even significantly reduce the taxes paid to Uncle Sam, thus ensuring that your heirs get a larger inheritance.

There are five main goals of estate planning:

1. Live Life Fully

To live life fully, you must provide for yourself as well as for others for whom you are responsible. You must account for the possibility that you may die prematurely. One of the main ways of managing the risk of premature death is to buy life insurance, which we discussed earlier. There are two main types of life insurance. Term life insurance provides a simple death
benefit with no accumulation of cash value but significantly lower premiums. Cash-value policies offer a death benefit plus a cash-value component that grows, tax-deferred, over time and cannot be canceled. For more information on life insurance, see Chapter 13. Insurance 3: Health, Long-Term Care, and Disability Insurance.

In order to live life fully, you also need to plan for the possibility that you may become unable to provide for yourself. Medical-advance directives cover this possibility by allowing you to establish a living will and/or designate the special power of attorney for health-care, which gives someone else the power to make medical decisions for you should you become unable to make them for yourself. Exercise caution when establishing powers of attorney, such as durable power of attorney, special power of attorney, or general power of attorney. Someone who has your power of attorney can do anything you can do, including sell your house and your car and enter into agreements. An example of a medical-advance directive is found in Learning Tool 14: Utah Advance Health Care Directive.

2. Pass Property at Death According to Your Desires

There are four ways to designate how property should be divided after you die: by will, by law, by contract, or by trust.

*Pass on property at death by will:* A will is a legal document that specifies your desires at the time of your death and allows your desires to be enforced. Wills permit you to appoint a personal representative to act on your behalf, appoint guardians for your minor children, appoint conservators for the assets of your minor children, and provide for disposition of your property at death. In some states, wills allow you to keep a separate updated list of tangible personal property dispositions, so you do not have to write a new will each time you decide to give something to someone else.

Current wills can revoke or change earlier wills. A will is necessary to disinherit a presumed heir, and a will can create a testamentary trust, a trust that is to be set up when you die. Unfortunately, creating a will does not avoid probate, even if the will creates a testamentary trust.

Some states, including Utah, consider holographic wills to be valid. A holographic will must be made completely in your own handwriting. It must include the date at the top and your signature at the bottom. Within the holographic will, you must name a guardian, alternate guardians, and how you would like your assets divided among your heirs. It is not necessary to have either a notary or witnesses. Be careful if you decide to create a holographic will, however. You should consider consulting an attorney about the language, and you should use a holographic will only if you do not have significant assets or a complicated family situation. Remember that a will does not avoid probate.
Chapter 30. Estate Planning Basics

*Pass on property at death by law:* If you fail to write a will, the state will write your will for you upon your death. Through this process, known as intestacy, the state tries to determine what your will would have been had you written a will for yourself.

For example, in Utah, if a deceased person with no will has no children, the surviving spouse is given 100 percent of the deceased’s assets. If the deceased has children by a prior relationship, the surviving spouse gets the first $50,000 and half of the remaining assets. If there is no surviving spouse, the assets go to each of the children on a per capita basis at each generation. If there are no children, the assets go to parents, then to the parents’ descendants, and so on.

*Pass property at death by contract:* Third-party contracts and deeds are two examples of contracts to disperse property upon death. Examples of third-party contracts include insurance, pay-on-death accounts, IRAs, and pension plans. Contractual deeds can either be in the form of joint tenancy, which grants rights of survivorship (i.e., the property goes to the surviving tenant), or tenancy-in-common, which grants no such rights of survivorship (i.e., the property goes to whoever is stated in the contract). Although contracts do avoid probate, they do not avoid tax consequences.

Having a contractual deed for joint-tenancy with a non-spouse may not be a good idea because it circumvents will and trust provisions. This contract creates a gift for tax purposes when a non-spouse’s name is added. A joint-tenancy contract postpones probate only until the second joint-tenant dies. It also may create problems for the new tenant because of taxes on capital gains income. Additional problems may occur if one joint-tenant becomes incompetent because the asset cannot be sold or disposed of under this contract. Creating a joint-tenancy with a person who is not your spouse causes loss of control.

*Pass on property at death by trust:* There are many advantages to passing on property by way of trusts. Trusts are legal entities that are allowed, by law, to hold assets. Specific types of trusts may reduce or eliminate estate taxes, allow for privacy, and facilitate advanced planning. Trusts may be used as a means of handling complex family situations.

3. Provide for Guardianship of Minor Children

For most parents, the most important part of estate planning is providing for guardianship of children who are still minors. You must answer the question, if your spouse and you were to die, who would take care of your children and raise them the way you would want them to be raised? In addition, you must ask yourself, who would take care of your children’s assets until the children are old enough and wise enough to manage these assets themselves?

4. Avoid Probate If Desired, or Use Probate Strategically

Probate is the legal process by which an asset’s title is transferred after an individual’s death. One concern many individuals have regarding probate is that the records of the assets, including
information about who owns the assets, are open to public view. Anyone who reviews the public records gains access to the information.

Probate is not necessarily bad, and it is often necessary to pass on an asset’s title. However, if it is important that information about ownership not be available to the public, advance planning and the use of various estate-planning tools can be helpful in avoiding probate.

5. Avoid Taxes

The final reason for estate planning is to avoid taxes. There are many legal ways to save substantially on estate and gift taxes. A few ideas will be discussed later.

Understand the Estate-Planning Process

There are four steps in the estate-planning process:

1. Determine how much your estate is worth.
2. Choose your heirs and decide which assets they will receive.
3. Determine the cash needs of the estate and calculate your estate taxes.
4. Select and implement estate-planning techniques to maximize the money going toward your personal and family goals and to minimize taxes.

Estate planning helps you use your assets wisely in order to achieve your personal goals even after your death. If you prepare well before you die, there is a greater chance you will be able to achieve your personal and family goals even after your death.

Step 1: Determine What Your Estate Is Worth

The worth of an estate is basically the difference between the value of the estate’s assets and the value of the estate’s liabilities. However, there are a number of steps for calculating the value of your estate.

First, calculate the gross value of the estate. This is the combined value of all estate assets, including pensions, investments, and any real or personal property. The gross value also includes life insurance proceeds payable to your estate or, if you own the policy, to your heirs; the value of certain annuities payable to your estate or heirs; and the value of certain properties you have transferred within three years of your death. The government counts assets gifted to others in the last three years of your life as part of your estate.

Second, calculate the taxable estate. This is equal to the gross value of the estate minus estimated funeral and administrative expenses, debts, liabilities, taxes, and any marital or charitable deductions.

Third, calculate the gift-adjusted taxable estate. This is equal to your taxable estate plus any taxable lifetime gifts (the cumulative total of all gifts over the annual limit). This will be
discussed later. The adjusted taxable gifts are the total amount of the taxable gifts you made after 1976 that are not included in the gross value of your estate.

**Step 2: Choose Your Heirs and Decide What They Will Receive**

In making these decisions, remember the long-term goals for you and your family and use your financial resources to help you achieve these personal goals. Make these decisions with much thought and prayer.

**Step 3: Determine the Cash Needs of Your Estate and Calculate Your Estate Taxes**

Determining the cash needs of the estate is the process of making sure there will be sufficient cash available to pay the necessary debts, bills, and taxes. If the estate is large, there must be sufficient liquid assets available to pay the required estate taxes, which may be high.

Estate taxes are equal to the gift-adjusted taxable estate multiplied by the appropriate tax rate. To determine the net tax owed, calculate the total tax owed and subtract the unified gift-tax and estate-tax credit (this is discussed in more detail later in the chapter). Ensure that you have adequate liquidity available to your heirs. Term or cash-value life insurance may be used as a tool to ensure sufficient liquidity for paying estate taxes.

**Step 4: Select and Implement Your Estate-Planning Techniques**

If you prepare well before your death, your estate will do well after you have died. Generally, qualified legal help is critical to help you determine and implement the best estate-planning vehicles. Remember that these vehicles are not useful until they are funded.

**Four Key Taxes on Estates**

There are four key taxes on estates:

1. **Estate taxes**, or inheritance taxes, are taxes that must be paid on an estate that has a value greater than a government-determined exclusion amount. An estate tax return for a U.S. citizen or resident needs to be filed only if the gross estate value exceeds the exclusion amount that has been determined by the government in the year of the citizen or resident’s death (see Table 1). For example, if John Smith died in 2016 and his estate was valued at less than $5.45 million, John’s estate would not be required to pay estate taxes because its value is less than the estate tax exclusion amount for 2016.

2. **Gift taxes**: Gift taxes apply to the transfer of any property, including money, in the form of a gift. If you sell something at less than its full value, if you make an interest-free or reduced-interest loan, or if you allow the free use of your property or income from your property, you may be giving a gift. Gift taxes are taxes paid on gifts of property or money that exceed the annual exclusion, which is $14,000 per individual (or $28,000 per couple) in 2016. This amount
can be divided and given to an unlimited number of people without incurring federal gift taxes. In the future, the $14,000 exclusion amount will be indexed to account for inflation; the exclusion amount will increase in $1,000 increments. A gift tax must be paid on all transfers to others (other than a spouse) that are in excess of the maximums listed in Table 4.

### Table 1. Estate Tax Limits

<table>
<thead>
<tr>
<th>Year</th>
<th>Exclusion Amounts</th>
<th>Top Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2003</td>
<td>$1,000,000</td>
<td>50%, 49%</td>
</tr>
<tr>
<td>2004-2005</td>
<td>$1,500,000</td>
<td>48%, 47%</td>
</tr>
<tr>
<td>2006-2008</td>
<td>$2,000,000</td>
<td>46%, 45%, 45%</td>
</tr>
<tr>
<td>2010</td>
<td>Eliminated</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>$5,000,000</td>
<td>35%</td>
</tr>
<tr>
<td>2012</td>
<td>$5,120,000</td>
<td>35%</td>
</tr>
<tr>
<td>2013</td>
<td>$5,250,000</td>
<td>40%</td>
</tr>
<tr>
<td>2014</td>
<td>$5,340,000</td>
<td>40%</td>
</tr>
<tr>
<td>2015</td>
<td>$5,430,000</td>
<td>40%</td>
</tr>
<tr>
<td>2016</td>
<td>$5,450,000</td>
<td>40%</td>
</tr>
</tbody>
</table>

In 2016, an estate tax rate of 40 percent will be assessed on estates valued in excess of the tax-free transfer threshold. The top tax rate declined from 50 percent in 2002 to 40 percent in 2016. Small-business and family-farm owners receive special treatment regarding estate tax rates.

### Table 2. Unified Estate Tax and Gift Tax Rates

<table>
<thead>
<tr>
<th>If Amount Is Over</th>
<th>But Not Over</th>
<th>Tax on Column A</th>
<th>Rate on Excess Over A</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$10,000</td>
<td>$0</td>
<td>18%</td>
</tr>
<tr>
<td>$10,000</td>
<td>$20,000</td>
<td>$1,800</td>
<td>20%</td>
</tr>
<tr>
<td>$20,000</td>
<td>$40,000</td>
<td>$3,800</td>
<td>22%</td>
</tr>
<tr>
<td>$40,000</td>
<td>$60,000</td>
<td>$8,200</td>
<td>24%</td>
</tr>
<tr>
<td>$60,000</td>
<td>$80,000</td>
<td>$13,000</td>
<td>26%</td>
</tr>
<tr>
<td>$80,000</td>
<td>$100,000</td>
<td>$18,200</td>
<td>28%</td>
</tr>
<tr>
<td>$100,000</td>
<td>$150,000</td>
<td>$23,800</td>
<td>30%</td>
</tr>
<tr>
<td>$150,000</td>
<td>$250,000</td>
<td>$38,800</td>
<td>32%</td>
</tr>
<tr>
<td>$250,000</td>
<td>$500,000</td>
<td>$70,800</td>
<td>34%</td>
</tr>
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<td>$500,000</td>
<td>$750,000</td>
<td>$155,800</td>
<td>37%</td>
</tr>
<tr>
<td>$750,000</td>
<td>$1,000,000</td>
<td>$248,300</td>
<td>39%</td>
</tr>
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<td>$1,000,000</td>
<td>$1,250,000</td>
<td>$345,800</td>
<td>41%</td>
</tr>
<tr>
<td>$1,250,000</td>
<td>$1,500,000</td>
<td>$448,300</td>
<td>43%</td>
</tr>
<tr>
<td>$1,500,000</td>
<td>$2,000,000</td>
<td>$555,800</td>
<td>45%</td>
</tr>
</tbody>
</table>
Chapter 30. Estate Planning Basics

Table 3. Unified Estate Tax Exclusion Amounts

<table>
<thead>
<tr>
<th>Amounts Above</th>
<th>Year</th>
<th>Tax on Column A</th>
<th>Rate on Excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000,000</td>
<td>2002–2003</td>
<td>$345,800</td>
<td>50%, 49%</td>
</tr>
<tr>
<td>$1,500,000</td>
<td>2004–2005</td>
<td>$555,800</td>
<td>48%, 47%</td>
</tr>
<tr>
<td>$2,000,000</td>
<td>2006–2008</td>
<td>$780,800</td>
<td>46%, 45%, 45%</td>
</tr>
<tr>
<td>$3,500,000</td>
<td>2009</td>
<td>$780,800</td>
<td>45%</td>
</tr>
<tr>
<td>$0</td>
<td>2010</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>$5,000,000</td>
<td>2011</td>
<td>$1,750,000</td>
<td>35%</td>
</tr>
<tr>
<td>$5,120,000</td>
<td>2012</td>
<td>$1,792,000</td>
<td>35%</td>
</tr>
<tr>
<td>$5,250,000</td>
<td>2013</td>
<td>$2,100,000</td>
<td>40%</td>
</tr>
<tr>
<td>$5,340,000</td>
<td>2014</td>
<td>$2,136,000</td>
<td>40%</td>
</tr>
<tr>
<td>$5,430,000</td>
<td>2015</td>
<td>$2,172,000</td>
<td>40%</td>
</tr>
<tr>
<td>$5,450,000</td>
<td>2016</td>
<td>$2,180,000</td>
<td>40%</td>
</tr>
</tbody>
</table>

Table 4. Gift Tax Exclusion Amounts

<table>
<thead>
<tr>
<th>Year</th>
<th>Maximum Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982–2002</td>
<td>$10,000</td>
</tr>
<tr>
<td>2003–2005</td>
<td>$11,000</td>
</tr>
<tr>
<td>2006–2008</td>
<td>$12,000</td>
</tr>
<tr>
<td>2009–2012</td>
<td>$13,000</td>
</tr>
<tr>
<td>2013-2016</td>
<td>$14,000</td>
</tr>
</tbody>
</table>

Gifts in excess of the annual exclusion limit are subject to taxes and are subtracted from your lifetime gift limit of $5.45 million in 2016. The following are exempt from this limit: gifts less than the exclusion amount in any of the previous years; tuition payments made directly to the school or medical expenses paid directly to the hospital for others; and gifts to spouses, political organizations, or charities. While a gift for one year may be greater than the annual exclusion and requires you to file a gift tax return (Form 409), you may not have to pay a gift tax if you apply the unified credit to your gift tax.

Table 5. Gift Tax

<table>
<thead>
<tr>
<th>Year</th>
<th>Gift Tax Exemption Equivalent</th>
<th>Gift Tax Unified Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002–2010</td>
<td>$1,000,000</td>
<td>$345,800</td>
</tr>
<tr>
<td>2011</td>
<td>$5,000,000</td>
<td>$1,750,000</td>
</tr>
<tr>
<td>2012</td>
<td>$5,120,000</td>
<td>$1,792,000</td>
</tr>
<tr>
<td>2013</td>
<td>$5,250,000</td>
<td>$2,100,000</td>
</tr>
<tr>
<td>2014</td>
<td>$5,340,000</td>
<td>$2,136,000</td>
</tr>
<tr>
<td>2015</td>
<td>$5,430,000</td>
<td>$2,172,000</td>
</tr>
<tr>
<td>2016</td>
<td>$5,450,000</td>
<td>$2,180,000</td>
</tr>
</tbody>
</table>
3. Unlimited marital deductions: There is no limit on the value of an estate that can be passed tax-free to a spouse who is a U.S. citizen. However, the unlimited marital deduction does not apply to spouses who are not U.S. citizens. The limit on tax-free gifts that can be made beyond the tax-free transfer threshold per year to non-citizen spouses is $148,000 in 2016 (see Table 6).

Table 6. Tax-Free Gifts to Non-Citizen Spouses

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$136,000</td>
</tr>
<tr>
<td>2012</td>
<td>$139,000</td>
</tr>
<tr>
<td>2013</td>
<td>$143,000</td>
</tr>
<tr>
<td>2014</td>
<td>$145,000</td>
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<tr>
<td>2015</td>
<td>$147,000</td>
</tr>
<tr>
<td>2016</td>
<td>$148,000</td>
</tr>
</tbody>
</table>

4. Generation-skipping taxes (GSTT): In addition to the regular estate tax, a tax is imposed on any wealth or property transfers made to a person two or more generations younger than the donor. The GSTT is designed to allow tax-free transfers to spouses and children but imposes taxes on transfers going to grandchildren and others who are two or more generations away from the person making the transfer. The tax is 40 percent of the value of the property transferred in 2016 (see Table 7). There are exceptions to this tax. The $14,000 gift-tax exclusion applies, as do the education-tax exclusion and medical-expense gift-tax exclusion. In addition, up to $5.45 million per individual ($10.9 million per couple) may be passed on to grandchildren in 2016 without incurring taxes.

Know How Trusts Can Be Used to Your Advantage in the Estate-Planning Process

Trusts give you professional management of your assets and provide for confidentiality. They may allow you to reduce your personal assets by transferring ownership to the trust, thus helping you avoid estate taxes. They may also allow you to avoid probate.

Table 7. Generation Skipping

<table>
<thead>
<tr>
<th>Year</th>
<th>Generation-Skipping Transfer Tax Exemption</th>
<th>Tax Rate of Amount Over Exemption</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>2011</td>
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<td>35%</td>
</tr>
<tr>
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<td>40%</td>
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<tr>
<td>2014</td>
<td>$5,340,000</td>
<td>40%</td>
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<tr>
<td>2015</td>
<td>$5,430,000</td>
<td>40%</td>
</tr>
<tr>
<td>2016</td>
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<td>40%</td>
</tr>
</tbody>
</table>
Other benefits of trusts include that they may allow you to more clearly specify your desires regarding your assets, since they are much more difficult to challenge than wills. They may allow you to specify which assets should go to which children (particularly children from a previous marriage). Finally, trusts can be used to provide for children with special needs or to hold money until a child reaches maturity.

If any of the following conditions apply to you, you should seek professional advice regarding the ways a trust could benefit you:

1. Your total estate is larger than the estate tax-exemption amount, which was $5.45 million in 2016.
2. You want to avoid probate.
3. You have specific desires or goals for the management and disbursement of your assets.
4. You want to leave an inheritance to children from a prior marriage.
5. You have a child with a handicap or a relative who requires specialized care because of a disability.

**Trust Assets**

Once a trust is established, it is critical to transfer the assets to the trust; a trust is worthless until assets have been transferred into it. Trusts can hold all types of assets, including real property assets, such as a home; real estate assets; land tracts and out-of-state properties; liability and title insurance assets; property taxes; transfer taxes; and rental real estate.

Trusts can also hold credit cards, notes you owe, mortgages, loans, checking accounts, savings accounts, pay-on-death accounts, certificates of deposit, credit union accounts, safe deposit boxes, stocks, bonds, mutual funds, and savings bonds.

Trusts can hold real assets such as boats, automobiles, motorcycles, recreational vehicles, and other vehicles. In addition, they can hold life insurance and other self-provided insurance.

Businesses may be included in trusts if they are sole proprietorships, limited partnerships, closely held corporations, S corporations, limited liability companies, or general partnership interests.

Other assets that may be included in trusts include personal untitled property, copyrights, patents, royalties, oil and gas interests, club memberships, and foreign assets.

**Types of Trusts**

There are two different types of trusts: living trusts and testamentary trusts. A living trust is a trust in which assets are placed while you are still living. With a testamentary trust, assets are placed in the trust after you die. This trust is created after probate, according to your instructions.

1. **Living trusts:** There are two different types of living trusts: revocable living trusts and irrevocable living trusts.
A revocable living trust allows for unlimited control by the trust owner because the owner retains the title to all the assets in the trust. The advantage of a living trust is that the assets in the trust do not pass through probate when the owner dies. In addition, a living trust provides greater ease of distribution and greater privacy upon death. The disadvantage to a living trust is that it does not provide any tax advantages. The entire amount of the living trust is considered an asset for estate tax purposes.

An irrevocable living trust cannot be changed by the owner once established because the trust becomes a separate legal entity that owns all the assets it contains and pays taxes on the assets and the gains they produce. The advantage of an irrevocable living trust is that the assets are not subject to estate taxes, since they are not part of the owner’s estate. Additionally, assets in the trust do not pass through probate. The disadvantage to an irrevocable living trust is that the owner no longer has the title to or use of any of the assets.

2. Testamentary trusts: A testamentary trust is a trust in which assets are placed only after the owner dies. The trust is created after probate, according to the desires of the owner, and the assets are transferred into the trust. There are different types of testamentary trusts, including standard family trusts, qualified terminable interest property trusts (Q-TIP trusts), and sprinkling trusts.

Standard family trusts hold the assets of the first spouse who dies until the second spouse dies. The surviving spouse has access to income from the trust, or the trust principal, if necessary. Standard family trusts reduce the size of the estate for the second spouse, which reduces estate tax liability.

A Q-TIP trust provides a means of passing on income to a surviving spouse without turning over control of the assets. These trusts ensure that assets will be passed on to your children upon the death of your surviving spouse.

A sprinkling trust distributes assets to a designated group of beneficiaries on an as-needed basis rather than in accordance with a preset plan.

Setting Up a Trust

In order to establish a trust, you must understand the following terminology:

- **Grantor:** The person who creates the trust.
- **Trustee:** The person who will manage the trust.
- **Successor trustee:** The person who will succeed the trustee should the trustee be unable to manage the trust.
- **Beneficiaries:** The recipients of the trust’s earnings or assets.
- **Children’s trusts:** Trusts created for underage children.
- **Guardian:** The person who raises children in lieu of their parents.
- **Children’s trustee:** The person who manages children’s assets in lieu of their parents.
A qualified estate-planning lawyer or financial planner can help you establish a trust. Be sure to consult with a lawyer or financial planner who is not trying to sell you any products. Insist on seeing identification and a description of your consultant’s qualifications, education, and expertise in estate planning. Seeking advice from a good, qualified consultant is important, especially if the size of the trust is significant and if there may be questions as to how assets should be distributed.

Do not allow yourself to be rushed. Ask for time to consider your decision, and report high-pressure tactics, misrepresentations, or fraud immediately to the Better Business Bureau. Always ask for a copy of any documents you sign, and know your cancellation rights. Finally, be wary of home solicitors who insist on receiving confidential and detailed information. If any concerns arise, call the Better Business Bureau and report the solicitors.

Be aware of the costs of establishing and managing a trust. The costs will vary from lawyer to lawyer, but they should include the costs of reviewing your assets and their present titles, discussing your estate plan, preparing your trust, and supervising the execution of the trust and the transfer of assets.

Understand the Importance of Wills and Probate Planning

A will is a legal document that indicates how the state should distribute your assets upon your death. The legal term for someone who dies without a will is “intestate.” When someone dies intestate, or without a will, the state determines, based on specific state laws, which assets will go to which individuals, regardless of the intentions of the deceased. That is why it is so critical to have a will.

Having a will ensures that state law will not dictate the distribution of your assets, the custody of your children, or the care of those under your responsibility who have special needs. A will also allows you to avoid the costs associated with having a court-appointed administrator.

The following are key terms related to wills that you should be familiar with:

- **Will**: A legal document that transfers an estate after death.
- **Beneficiaries**: People who receive the deceased’s property and assets.
- **Executor or personal representative**: The person responsible for carrying out the provisions of the will.
- **Guardian**: The person who cares for minor children of the deceased and manages the children’s property.

Wills

Wills can be handwritten, computer-generated, or oral. It is safest to have a will drawn up by a lawyer. Most wills (holographic wills being the exception) must be signed, witnessed by two or more people, and notarized.
Wills should be stored in a safe place; however, a safe-deposit box is not always a good place to store a will because it may be sealed upon your death. Always tell someone you trust where your will is so it can be found upon your death.

In order to have a valid will, a person must have mental competence and must not be under undue influence from another person. For a will to be valid, it must also conform to the laws of the state in which it is written.

An amendment to a will (a codicil) institutes minor changes to the original will. To be effective, a codicil must be signed, witnessed, and attached to the original will. However, if the changes are major, a new will should be drafted.

**Probate**

Probate is the process of distributing an estate’s assets. The probate process includes appointing an executor if one is not named, validating the will, allowing for challenges to the will, overseeing the distribution of assets, filing a report with the court, and closing the estate.

There are numerous costs and fees involved in the probate process, including legal fees, executor fees, and court fees; these fees can be from one percent to eight percent of the estate’s value. Additionally, the probate process can be quite slow, especially if there are challenges to the will or tax problems.

**Ways to Avoid Probate**

You can avoid probate in the following ways:

**Have joint ownership:** There are several different options for joint ownership of property that help you avoid probate. You can have tenancy by the entirety, joint tenancy with the right of survivorship, tenancy in common (where the will controls distribution of the deceased’s share of the property), or community property (where state law and a will control distribution of the property). Each of these methods does not require probate for the transfer of titled property.

**Make gifts (with the exception of life insurance policies):** You can take advantage of unlimited gift-tax exclusions on payments made for medical and educational expenses. However, you must make the payments directly to the hospital or college. Money donated to charities is also eligible for gift-tax exclusions.

**Name beneficiaries in contracts such as life insurance:** In most cases, ownership of contracts such as life insurance passes to the beneficiaries upon death of the owner without the contract having to be probated.

**Use trusts:** Two types of trusts allow you to avoid probate: a living trust, which takes effect before death, and a testamentary trust, which takes effect upon death.
Other Estate-Planning Documents

There are a number of estate-planning documents you should be aware of:

**Durable power of attorney:** This document allows someone to act on your behalf if you should become mentally or physically incapacitated. This document is separate from the will and goes into effect before your death. A durable power of attorney should be very specific as to which legal powers it transfers.

**Living will:** A living will is a document that states your wishes regarding medical treatment in the event of a terminal illness or injury.

**Health-care proxy:** A health-care proxy designates someone to make health-care decisions for you if you should become unable to make them yourself.

**Summary**

Estate planning is the process of planning for the accumulation, conservation, and distribution of estate assets; this process can help you accomplish your personal and family goals. Every estate is planned, either by the individual or by default through rules established by the state and local governments. The purpose of estate planning is to ensure that you—and not others, such as the government or lawyers—choose who will inherit your wealth.

There are four steps in the estate-planning process: (1) determine how much your estate is worth, (2) choose your heirs and decide on the assets they will receive, (3) determine the cash needs of the estate and calculate your estate taxes, and (4) select and implement estate-planning techniques to maximize goals and minimize taxes. Estate planning can help you use your assets wisely in order to achieve your personal goals even after you die. The four key taxes on estates are estate taxes, gift taxes, unlimited marital deductions, and generation-skipping taxes.

When you create a trust, you enter into a legal contract that gives you professional management of your assets and provides for confidentiality. Trusts may allow you to reduce your personal assets by transferring ownership to the trust, thus helping you avoid estate taxes. They may also allow you to avoid probate. Other benefits include that they may allow you to more clearly specify your desires regarding your assets, since trusts are much more difficult to challenge than wills. They may allow you to specify which assets should go to specific children (particularly children from a previous marriage). Finally, trusts can be used to provide for children with special needs or to hold money until a child reaches maturity.

A will is a legal document that indicates the way the state should distribute your assets upon your death. Someone who dies without a will is “intestate.” When someone dies intestate, the state determines, based on specific state laws, which assets will go to which individuals, regardless of the intentions of the deceased. Having a will ensures the state law will not dictate the distribution of your assets, the custody of your children, or the care for those under your responsibility with
special needs. A will also allows you to avoid having a court-appointed administrator and the associated costs.

**Assignments**

**Financial Plan Assignments**

First, review the goals you made in Chapter 2. Do you have specific goals that may extend beyond your lifetime and would require a trust? If so, what would you like to do about these goals? Are they feasible given your current financial condition? Review your net worth (discussed in Chapter 3). Does your current net worth exceed the estate tax threshold established by the IRS? How close are you to the threshold? If you are close, you should get qualified help.

Second, do you have a will? If you have children, a will is critical because it states your wishes regarding who should take care of your children should you pass away. Your choice is either to write your own will or let the government determine how you would have wanted your assets distributed. If you have few assets and you reside in a state that allows holographic wills, write one immediately. At least write your wishes regarding who is to take care of your children. If you are beginning to acquire assets, it is recommended that you visit a legal attorney who can, for a fee, help you write up a will that is valid for your state. Wills should be reviewed every three to five years, or more often if your situation changes.

Finally, are you concerned that your wishes regarding health-care might not be made known to medical personnel should something happen to you and you are unable to communicate your wishes? Filling out Learning Tool 14: Sample Advance Directives to Physicians will allow you to state your intentions for medical care in the event of an emergency in which you are unable to make your wishes known.

**Review Materials**

**Terminology Review**

**Advanced Health Care Directive.** This document, also known as a living will or personal or advance directive, is a legal document where a person specifies what actions should be taken for their health care if they are no longer able to make decisions for themselves due to illness or other reasons.

**Beneficiaries.** The people who receive the property or assets.

**Children’s Trustee.** The person who manages the assets for the children.

**Children’s Trusts.** Trusts specifically for underage children.
Codicil. A document which institutes minor changes in the original will. Must be signed, witnessed, and attached to the original will.

Community Property. A form of ownership is equal and only between partners. Lifetime control is shared by both spouses, consent from both is required to sell, income is shared between owners, and testamentary control in the one-half interest is unlimited unless property has right of survivorship feature (applicable in some states).

Durable power of attorney. This provides for someone to act on your behalf in the event you should become mentally or physically incapacitated. This document is separate from the will and goes into effect before death. This document should be very specific as to which legal powers it transfers.

Estate planning. The process of anticipating and arranging for the disposal of your resources to accomplish your personal and family goals after you pass away.

Estate Taxes. These are taxes, paid to the government, due on passing of an individual. Estate taxes are equal to the gift-adjusted taxable estate multiplied by the appropriate tax rate. To determine the net tax owed, calculate the total tax owed and subtract the unified gift and estate tax credit.

Estate transfer. This is the process that property interests are legally transferred from one to another, either during the person’s lifetime or at death.

Exclusion Amount. This is the amount of estate value that is excluded from the estate tax.

Executor or personal representative. This is the person who is responsible for carrying out the provisions of the will.

Generation-Skipping Tax. This is a tax on revenue lost when wealth is not transferred to the next generation, but to a succeeding generation. It is a flat tax, in addition to the regular estate tax, imposed on any wealth or property transfers to a person two or more generations younger than the donor.

Gift Tax Exclusions. A gift tax must be paid on all transfers to others (other than a spouse) that are in excess of the maximums specified. The maximum specified is your exclusion.

Gift-Adjusted Taxable Estate. This is equal to your taxable estate plus any taxable lifetime gifts, which is the cumulative total of all gifts over the annual limit.

Gross Estate. This is the value of all your assets, including life insurance, pensions, investments, and any real or personal property.
Guardian. The person who cares for minor children and manages their property.

Health care proxy. A health care proxy designates someone to make health care decisions should you be unable to do so for yourself.

Holographic Will. A will and testament that is entirely handwritten and signed by the testator. Traditional wills require signatures of witnesses as well as the testator’s signature and intent. Holographic wills are treated equally with witnessed will and need only to meet minimal requirements in order to be probated.

Intestate. The process whereby the state essentially writes the will for a person because they did not prepare a will during their lifetime.

Irrevocable Living Trust. A trust that cannot be changed by the owner once established, because the trust becomes another legal entity which owns all the assets contained in the trust and pays taxes on the assets and gains they produce. The assets are not subject to estate taxes since they are not part of your estate and assets in the trust do not pass through probate.

Issue. These are children.

Joint Tenancy with Right of Survivorship (JTWROS). Ownership is shared equally and lifetime control is shared, income is shared between owners, testamentary control is absent, and then right of survivorship is key.

Lifetime transfers. Methods of transferring property including the sale or gifting of one asset to another.

Living Trust. A trust where assets are placed in the trust while you are still living. You can take them out and move them according to what you want to do before you die.

Living will. It is a legal document that details your end-of-life wishes for health care. It is used when you are still alive but unable to make health care decisions for yourself. A living will states your wishes regarding medical treatment in the event of a terminal illness or injury.

Non-probate transfers. These are “will substitutes,” and include state law, right of survivorship, beneficiary designations, and gifts causa mortis.

Personal Representative (Executor). This is the person who fulfills the requirements of the trust or will.

Probate. Probate is the process of distributing an estate's assets after death. Probate is a matter of state law. It is the matter of administering the portion of the person’s estate that
is disposed of in either by will provisions, for those with a valid will, or by intestate succession, for those who die without a will.

**Q-TIP (Qualified Terminable Interest Property) Trust.** A Q-TIP Trust is a testamentary trust which provides a means of passing income to the surviving spouse without turning over control of the assets. These trusts ensure that assets will be passed to your children upon the death of the surviving spouse.

**Revocable Living Trust.** It is the most common type of living trust. It is a trust which allows for unlimited control by the trust’s owner, because the owner retains title to all the assets in the trust. They do not pass through probate. They provide greater ease and privacy of distribution upon death.

**Sole ownership.** Ownership where ownership and control is absolute in one individual. Income belongs to sole owner and testamentary control is absolute.

**Sprinkling Trust.** A Sprinkling Trust is a testamentary trust that distributes assets on a needs basis rather than according to some preset plan to a designated group of beneficiaries.

**Standard Family trust.** This is a testamentary trusts which hold the assets of the first spouse to die until the second spouse dies. The spouse has access to income from the trust, or the trust principal, if necessary. They reduce the estate of the second spouse so that the estate taxes can be reduced.

**Stepped Up Basis.** This is the process of the value of an asset being stepped up, or changed from the original value when purchased, to the current value when the person dies and it is transferred to heirs.

**Successor Trustee.** This is the person to succeed the trustee should the trustee not be able to manage the trust.

**Taxable Estate.** This is equal to the gross value of your estate, less estimated funeral and administrative expenses, debts, liabilities, taxes and any marital or charitable deductions.

**Tenancy by the entirety.** Ownership is shared equally and limited to spouses, lifetime control is shared by both spouses, consent from both is required to sell, income is shared between owners, testamentary control is absent, and the right of survivorship is key.

**Tenancy in Common.** Ownership is shared, with each owning an undivided fractional interest that may be unequal, lifetime control is unlimited, income is shared between owners in relation to fractional interest, and testamentary control is unlimited.

**Testamentary transfers.** Methods by which property is transferred at death.
Testamentary Trust. The process where assets are placed in trust after you die. The trust is created after probate according to your will.

Trust Grantor. The person who created the trust.

Trustee. The person who will manage the trust.

Trusts. A trust is a legal contract. When you create a trust you are simply creating another legal entity. Trusts avoid probate and are more difficult to challenge than wills. They may reduce estate taxes, allow for professional management, provide for confidentiality, can be used to provide for children with special needs, can be used to hold money until a child reaches maturity, and can assure that children from a previous marriage will receive some inheritance in the future.

Unlimited Marital Deduction. There is no limit on the value of an estate that can be passed tax-free to a U.S. citizen spouse. This does not apply to non-U.S. citizen spouses. The tax-free maximum gift per year to non-citizen spouses is specified.

Will. A legal declaration by which a person provides for the disposition for their property and other assets at death.

Review Questions

1. What is estate planning?
2. What are the five main goals of estate planning?
3. What are four ways to designate where property should go after you die?
4. What are the four steps of the estate-planning process?
5. What are the four taxes that may be imposed on an estate?

Case Studies

Case Study 1

Data

Jonathan, a single man, passed away in December 2016. The value of his assets at the time of his death was $6,155,000. He also owned an insurance policy with a face value of $315,000 (which was not in an irrevocable trust). The cost of his funeral was $19,750, and estate administrative costs totaled $67,000. As stipulated in his will, he left $154,000 to charities. Also, for each of the years 2007 to 2009, Jonathan provided his niece Suzy with $20,000 per year for college tuition. Of this $20,000, $5,000 was paid directly to the college for tuition and fees, and the remaining $13,000 was paid to his niece to cover her living expenses while she was going to school, and $2,000 was for clothes. In addition to paying for his niece’s schooling, he also gave her $25,000 as a late graduation present in 2010 for a down payment on a new house.
Calculations

Determine the value of Jonathan’s gross estate, his taxable estate, his gift-adjusted taxable estate, and his year 2016 estate tax. The annual tax-free gift limits are as follows: 2013-2016: $14,000; 2012–2009: $13,000; 2008–2006: $12,000.

Case Study 1 Answers

What is the gross value of Jonathan’s estate?
Gross Estate = assets + life insurance policies not in irrevocable trusts
Gross Estate = $6,155,000 + $315,000 = $6,470,000

Determine the value of his taxable estate?
Taxable Estate = Gross Estate – liabilities – funeral expenses – administrative expenses – charitable deductions
Taxable Estate = $6,470,000 – $19,750 – $67,000 – $154,000 = $6,229,250

Determine his gift-adjusted taxable estate
Gift-Adjusted Taxable Estate = Taxable estate + gifts in excess of the annual allowance
Gift-Adjusted Taxable Estate = $6,229,250 + $8,000 + $12,000 = $6,249,250

Of the $20,000 each year, $5,000 was paid directly to the school, so the $5,000 is not counted in the tax-free gift. Only the payments of $15,000 are counted. After the limits are reached of $12,000 in 2007 and 2008, and 13,000 in 2009, there is a excess of $8,000. Of the $25,000 in 2010, $13,000 was the tax-free exclusion, resulting in $12,000 to be added in excess of the allowance. Total to add back is $20,000.

Determine his estate tax liability for 2016 on gift-adjusted tax of $6,249,250.

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<th>Tax on Column A</th>
<th>Rate on Excess</th>
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</thead>
<tbody>
<tr>
<td>$5,450,000 2016</td>
<td>$2,180,000</td>
<td>40%</td>
</tr>
</tbody>
</table>

Two ways to calculate the tax
a. ($6,249,250 – $5,450,000) * 40% = $319,700
b. ($6,249,250 * 40%) – $2,180,000 = 319,700
The unified credit amount in 2016 is $2,180,000.

The estate tax is the difference between tax owed and the unified credit

Case Study 2

Data
The value of Bill’s estate plus taxable gifts is $6.7 million at the time of his death in 2016.
Chapter 30. Estate Planning Basics

Calculations:
A. What is his estate tax liability?
B. How would the estate tax liability change if $1.7 million of his estate was held in an irrevocable trust?

**Case Study 2 Answers**

A. Calculating federal estate tax requires calculating Bill’s estate tax and then subtracting his unified credit. On an estate of $6.7 million, the amount in 2016 would be:

<table>
<thead>
<tr>
<th>Amount Above</th>
<th>Year</th>
<th>Tax on Column A</th>
<th>Rate on Excess</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,450,000</td>
<td>2016</td>
<td>$2,180,000</td>
<td>40%</td>
</tr>
</tbody>
</table>

($6,700,000 - $5,450,000) * 40% = $508,000
($6,700,000 * 40%) - $2,180,000 = $508,000

The unified credit amount in 2016 is $2,180,000.

The tax is the difference between tax owed and the unified credit: $508,000

B. Assuming that $1.7 million is held in an irrevocable trust, the taxable estate drops to $5.0 million, which is less than the exemption equivalent of $5.45 million in 2016, so estate taxes would be $0.

**Case Study 3**

Data
In 2016, Dave and Sally gave $32,000 to their son for a down payment on a house.

Calculations:
A. How much gift tax will Dave and Sally owe?
B. How much income tax will their son owe?
C. List three advantages of making this gift.
D. How could they have avoided the gift tax?

**Case Study 3 Answers**

A. There will be a gift tax in 2016 as the amount is $4,000 in excess of the $28,000 maximum transferable each year ($14,000 per individual in 2016). They will need to fill out a gift-tax form. The gift tax before exclusions will be $4,000 * .18 = $720.

B. Their son will not have to pay any income tax because recipients of a gift do not have to pay tax on the gift. Recipients do have to pay tax on future income generated by the gift but not directly on the gift.

C. Advantages include (1) providing needed income to a family member, (2) reducing the donor’s estate taxes (the recipient is not taxed), and (3) helping avoid probate as gifted assets no longer belong to the donor.
D. They could have eliminated this need for a gift tax by splitting the gift over two years. One idea would be to give their son $28,000 in cash in 2016, and give him a loan for $4,000 for the remainder. Then in 2017, they gift him another $4,000 to repay the loan.

Case Study 4

Data
Anne Smith had a $5,500,000 net worth at the time of her death in 2016. In addition, she had a $250,000 whole life policy with $40,000 of accumulated cash value; her niece was the beneficiary. She also had a $150,000 pension plan benefit.

Calculations
A. What was the gross value of Anne’s estate?
B. How much of her estate is taxable?
C. How much estate tax will need to be paid?
D. How much of her estate must pass through probate?

Case Study 4 Answers
A. Anne’s estate is calculated by adding to her net worth (estate taxes minus debts) the value of her life insurance death benefit plus death benefits associated with her employer retirement plan. Note that cash value is not distributed (unless with an insurance rider).
$5,500,000 + 250,000 + 150,000 = $5,900,000

B. All of Anne’s $5,900,000 estate is taxable.

C. Anne will need to pay ($5,900,000 - 5,450,000) * 40% = $180,000 in estate taxes

D. Any of the $5,500,000 that passes to the heirs must go through probate.

Case Study 5

Data
Suzanne and Steve Smith have $2.2 million of assets in 2016: $600,000 in Steve’s name, $600,000 in Suzanne’s, and $1,000,000 of jointly owned property. Their jointly owned property is titled using joint-tenancy with right of survivorship. Suzanne also co-owns a $400,000 beach house with her sister Emily as tenants-in-common.

Application
A. What is the maximum amount of estate value that can be transferred by the Smiths free of estate tax in 2016?
B. What do the Smiths need to do to reduce their expected tax liability?
C. Who would receive Suzanne’s half-share in the beach house if she were to die?
Case Study 5 Answers

A. The Smiths could jointly transfer a total of $10,900,000 before incurring federal estate tax in 2016.
B. The Smiths should re-title their ownership of the property and put it in a trust to take advantage of taxes. In this way they can take advantage of a standard family trust and gift-giving.
C. Suzanne’s half-share of the beach house would go to whomever she names in her will. If she dies intestate, state law will determine how her share in the beach house is transferred.

1 “Preparing for Emergencies,” Ensign, Dec. 1990, 59
31. Family 1: Understanding Money and Marriage

Introduction

This discussion on the family is the first of a three-part series. The first chapter, “Money and Marriage,” discusses how money impacts the relationship between couples. The second chapter, “Teaching Children Financial Responsibility,” discusses ideas on teaching children about personal finance. Finally, the third chapter, “Saving for Children’s Education and Missions,” discusses methods of saving for your children’s missions and education. Each of these areas is critical if we are to be successful in our challenge to be good parents and spouses and wise financial stewards.

We know the family is the most important societal unit both now and in the hereafter. We also have also been counseled, “No success in life can compensate for failure in the home.”1 How does money relate to this important assignment to be successful in our homes?

Please note that many of the ideas from this first chapter are from “The Family: A Proclamation to the World”2 and Bernard E. Poduska’s For Love and Money: How to Share the Same Checkbook and Still Love Each Other.3

Objectives

There are three objectives from this chapter that you should remember:

1. Understand the 10 key principles of money and marriage
2. Understand why money may be an issue in relationships
3. Understand a few recommendations for money and marriage

Deciding now that your family is your most important priority and developing an understanding of the key principles of money and marriage and the reasons money may be an issue in marriage are the keys to working toward achieving shared personal and financial goals.

Understand the 10 Key Principles of Money and Marriage

There are principles of money and marriage that can help us to be happier and to better take care of our blessings. While the following 10 principles are not exclusive, they provide a great starting point as you ponder how to best manage money in your marriage.

1. The Family Is Ordained of God


“The Family: A Proclamation to the World,” a document from the leadership of the LDS Church, states, “The family is ordained of God. Marriage between man and woman is essential to His eternal plan. Children are entitled to birth within the bonds of matrimony, and to be reared by a father and a mother who honor marital vows with complete fidelity.”

Gordon B. Hinckley also stated “We must work at our responsibility as parents as if everything in life counted on it, because in fact everything in life does. If we fail in our home, we fail in our lives. No man is truly successful who has failed in his home.”

Clearly the family deserves to be considered your highest priority. As such, it deserves to be given the time and attention necessary.

2. Your Spouse Is Your First Priority

David O. McKay said:

Let me assure you, Brethren, that some day you will have a personal priesthood interview with the Savior, Himself. . . . I will tell you the order in which He will ask you to account for your earthly responsibilities. First, He will request an accountability report about your relationship with your wife. Have you actively been engaged in making her happy and ensuring that her needs have been met as an individual?

If the first question our Savior will ask us concerns our relationship with our spouse, does that not tell us something about the primary importance of that relationship? Our relationship with our spouse should be the most important thing for us to work on.

3. Marriage Partners Are Equal

The Family Proclamation states: “By divine design, fathers are to preside over their families in love and righteousness and are responsible to provide the necessities of life and protection for their families. Mothers are primarily responsible for the nurture of their children. In these sacred responsibilities, fathers and mothers are obligated to help one another as equal partners.”

Equal partners mean that both the mother and the father are responsible for all areas of the marriage and the family relationship. Neither partner is better than the other—even if one has more knowledge or experience in a specific area. In fact, if one partner has more knowledge, he or she should teach the other, so both are edified and both contribute to the decision-making processes of the family.

4. Marriage Partners Should Seek the Best Interests of the Family

The LDS Family Relations manual states, “When a husband and wife work together to manage their finances, they become unified in an important effort to set their home in order. Some of the most serious problems in marriage arise when financial resources are not managed carefully and in the best interest of the family.”
We should follow the example of Christ. Nephi commented on Christ when he said: “He doeth not anything save it be for the benefit of the world; for he loveth the world.”7 We likewise should do everything for the benefit of the family because we love our families.

5. Financial Problems Are Usually Behavioral Problems Not Money Problems

The Lord shared a parable in which He explained: “For the kingdom of heaven is as a man travelling into a far country, who called his own servants, and delivered unto them his goods. And unto one he gave five talents, to another two, and to another one . . . But he that had received one [talent] went and digged in the earth, and hid his lord’s money.”8

In this parable, it wasn’t money but the servants’ use of that money that affected their standing in the Lord’s eyes. All three servants had the same opportunity to make the most of the talents they were given.

The Lord expects the same from us with our financial obligations in marriage—it isn’t money but our use of that money that will make a difference in our marriages. Marvin J. Ashton commented:

How important are money management and finances in marriage and family affairs? Tremendously. The American Bar Association recently indicated that 89 percent of all divorces could be traced to quarrels and accusations over money. . . . May I at this time hasten to emphasize the fact that these marriage tragedies are not caused simply by lack of money, but rather by the mismanagement of personal finances.9

6. Change Is Necessary to Improve

Change is critical if you are to improve. As the saying goes, “If you always do what you’ve always done, you will always get what you’ve always got!” The scriptures say, “For whatsoever a man soweth, that shall he also reap.”10

These sayings are applicable in the world of marital finances:

- If you continue to spend instead of save, you will continue living from paycheck to paycheck.
- If you continue to borrow to support a lifestyle you cannot afford, you will continue to sink further into debt.
- If you continue to save and invest wisely, you will likely continue to achieve your personal and family goals.

Despite challenges and setbacks that will inevitably occur, there is peace in knowing we are doing the best we can—which should be a key personal and family goal. Some personal and family goals are best measured by our efforts, which we can control, rather than the outcome,
which we often cannot control. We must be willing to change if we are to make progress in becoming better financial stewards.

7. **Money Spent on What You Value Leads to Satisfaction and Accomplishment**

Matthew 6:24, 31–33 states, “seek ye first the kingdom of God, and his righteousness; and all these things shall be added unto you.”

If you know your goals, you will spend your money on those things you value. If you do not, you will spend your money and your resources trying to determine what is important to you and what makes you happy, things that your goals should help to articulate.

8. **Financial Freedom Is More the Result of Decreased Spending than Increased Income**

Psalms 21:20 states, “There is treasure to be desired and oil in the dwelling of the wise; but a foolish man spendeth it up.” This implies that there is a crucial difference between financial independence and financial freedom: financial independence is the acquisition of enough wealth to enable you to sustain a high standard of living without further effort, while financial freedom is having enough discretionary income to enable you to make the financial choices that are important to you.

For most of us, financial freedom is the goal. This freedom is usually achieved through decreased spending.

9. **Spouses Are to Leave Their Parents and Become One**

We have been commanded: “Therefore shall a man leave his father and his mother, and shall cleave unto his wife: and they shall be one flesh.”\(^\text{11}\) After being married, the newlyweds are to leave their parents to work with their partner (not their parents, friends, or bank accounts) to become one: one in purpose and goals.

We should leave behind the things our parents have done incorrectly or things that could have been improved on. After being married, you have the opportunity, together with your spouse, to set new goals and ways of doing thing, to put your family financial houses in order, giving you two the freedom to set up a budgeting style and goals that work for your unique partnership. This means that the things that work (or didn’t work) for your parents may or may not work for the two of you. The important thing is to be unified regarding your partnership’s financial approach and goals.

10. **The Best Things in Life Require No Money**

The Lord counsels us to “Seek not for riches but for wisdom, and behold, the mysteries of God shall be unfolded unto you, and then shall you be made rich. Behold, he that hath eternal life is rich.”\(^\text{12}\)
Chapter 31. Family 1: Money and Marriage

The things that are truly the most important to us and that will make a difference in our lives are not those things that cost money but those that bring us closer together as families and communities, both temporally and spiritually.

**Understand Why Money May Be an Issue in Marriage**

James E. Faust commented, “Money itself seems neither to make a couple happy, nor the lack of it, necessarily, to make them unhappy, but money is often a symbol of selfishness.”¹³ To minimize money problems in marriage, we should recognize potential problem areas and understand how to eliminate them.

In a survey conducted by *Worth* magazine, couples admitted to fighting about money more than anything else. A staggering 57 percent of those surveyed agreed with the statement, “In every marriage, money eventually becomes the most important concern.”¹⁴

The following are five of the most common financial problems in marriage and tips to eliminate or minimize the impact of these problems.

**1. Lack of Financial Knowledge**

The reasons people lack knowledge regarding personal finance are the same reasons people go into debt: ignorance, indifference, compulsiveness, and pride.

**What can be done?**

- **Ignorance:** To address ignorance, you must learn about finance. Finish this series. Make learning a lifelong process. Write out your personal and family goals and complete your Personal Financial Plan. Learn what you need to do and then set goals to get your financial house in order.

- **Indifference:** To correct indifference, you must become exact in all you do. Keep good records of your income and spending and get on a budget. Keep learning about the principles of personal finance. Develop and follow a budget—it is the most important financial tool you will ever use. Most importantly, take responsibility for your spending because no one else will.

- **Compulsiveness:** To counteract compulsiveness, do not give in to your natural inclinations. The apostle Paul wrote, “the natural man receiveth not the things of the Spirit of God: for they are foolishness unto him: neither can he know them, because they are spiritually discerned.”¹⁵ Learn to live a disciplined life. Jason Payne, CFP, encourages his clients to ask the following question: “Does this action get me closer to or farther from my personal and family goals?”¹⁶ If it brings you closer to your goals, do it. If not, don’t.
• **Pride:** To address pride, the key is to put God first in your life. Ask yourself, “Does this action bring me closer to God through obedience to His commandments or take me farther away?” The truth is that people will never truly love you simply because you have more toys. Destroying yourself financially to maintain a lifestyle you cannot honestly support is a classic example of attempting to serve both God and man. It doesn’t work.

2. **Lack of Communication**

Communication between spouses is critical; it is one sign of respect. A lack of communication between spouses, especially in areas of finance, may indicate a lack of respect for each spouse’s financial goals and attitudes.

**What can be done?**

Make communication a priority. Be willing to understand, discuss, and reconcile financial attitudes early in your relationship. Commit to resolving financial misunderstandings before they escalate and to implementing family processes that promote trust and mutual discussion.

Develop a communication plan where the two of you can meet regularly—ideally daily or weekly—to discuss important issues. Set up a weekly stewardship meeting where you discuss budgets, investments, and other financial matters. This should be among your most important meetings, with church meetings, family home evening, temple attendance, and weekly dates. L. Tom Perry calls this a family executive committee meeting. He wrote:

> There are two areas I would determine to improve if that privilege were granted to me to have young children in our home once again. The first would be to spend more time as husband and wife in a family executive committee meeting learning, communicating, planning, and organizing to better fulfill our roles as parents. The second wish I would like, if I could have those years over, would be to spend more family time. This includes more consistent, meaningful family home evenings.\(^\text{17}\)

3. **Differences in Financial Personality Types and Family Baggage**

You and your spouse were likely brought up differently. How you were brought up plays a major role in shaping your financial personality—your attitudes and beliefs about personal finance, including how money is handled, how planning is done, and who pays the bills. Common financial personality types include the following:

• **The Miser** usually pays cash for everything. Money is power, and so the miser is in control—he or she insists on paying the bills and keeping the books. The family never talks about money, and there is no financial planning as a family. The family also never knows where they are financially—only the miser knows.
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- **The Spender**’s motto is “shop ’til you drop.” The spender always feels that things will work out, so there is no need to plan. There is no budgeting or planning for major purchases or for the future. The spender jokes that if he or she can’t take it to heaven, then the spender isn’t going!

- **The Selfish Provider:** The selfish provider says that because he or she earns the money, it is his or her privilege to decide where the money goes. The spouse has to ask whenever money is needed. There are no goals, no budget, and no plan for large purchases or future retirement or education—all of these will be delivered by the selfish provider. The spouses are not equal partners, and there is no planning for the future.

- **The Sleeper:** The sleeper always feels that disasters and crises happen to other people. The sleeper does not need to plan because things always work out. There is no planning and no communication of goals and objectives because of the sleeper believes that goals and objectives aren’t needed.

- **The Wise Steward:** The wise steward always pays the Lord first. He or she saves a part of everything he or she earns. The wise steward shares basic financial information with his or her family, including with children. He or she plans for the future, saves in the present, and teaches children to do the same.

**What can be done?**

Understanding financial personality types is an important step in becoming unified as a couple. Recognize that you and your spouse grew up differently. Accept it and work on becoming wise stewards together. While you cannot control how you were brought up, you can control how you work together and the example you will be to your children.

Work together as equal Christ-like partners to become wiser financial stewards. Work through communication problems and develop common goals. Know what you both want to accomplish in life and work together as a team.

Robert D. Hales said, “If the example we have received from our parents was not good, it is our responsibility to break the cycle. . . . Each person can learn a better way and in so doing bless the lives of family members now and teach correct traditions for the generations that follow.”

**4. Lack of Shared Goals**

One of the major reasons for problems in marriage is the lack of shared goals. Both partners have ideas of what is important to them. If those goals are not shared, then bad feelings can exist when one spouse puts a higher priority on a goal than another.

**What can be done?**
Take some time apart to individually write down your goals. Next, as a couple, discuss each other’s goals with the sole purpose to understand one another. At this point, don’t evaluate or criticize your spouse’s goals but simply seek to understand why they are important to him or her. Then, as a couple, develop and prioritize your family’s goals and write your Family Financial Plan, incorporating both your family and personal goals. Work together toward the most important goals for your family. Finally, write down other family goals, such as starting your family, educating your children during secondary school and college, charitable giving, owning a business, saving for a big purchase, or enjoying recreation and vacations. While these other family goals may not appear to be financial in nature, they will have a direct impact on your family’s finances. Incorporate these other family goals into your long-term Family Financial Plan.

Remember to always keep your priorities in order. Pay the Lord first—an honest tithe (10%) and generous offerings. Pay yourself second through savings, and invest your money wisely. Get out of debt and stay out. Prepare for emergencies with cash reserves, food storage, and adequate insurance. Save for your children’s education and missions and for your retirement. Allocate funds wisely for other personal and financial goals.

5. Lack of Gospel Maturity

Problems arise when spouses fail to live their lives consistently with the way they know they should live. One spouse may have a greater desire to serve in the church and give to others, while the other may desire other more worldly things. Views of what it means to be a disciple of Jesus Christ may be different.

What can be done?

As you study, ponder, pray, and live Christ’s teachings, you are worthy to be influenced by the Spirit. You then can have strength and inspiration to recognize your weaknesses and to know what you need to do. With that knowledge, you can work so that your weaknesses can be made strengths with God’s help (see Ether 12:27).

Gospel maturity is doing those things necessary to bring us back to God’s presence. King Benjamin gave us the method for becoming mature in the gospel:

For the natural man is an enemy to God, and has been from the fall of Adam, and will be, forever and ever, unless he yields to the enticings of the Holy Spirit, and putteth off the natural man and becometh a saint through the atonement of Christ the Lord, and becometh as a child, submissive, meek, humble, patient, full of love, willing to submit to all things which the Lord seeth fit to inflict upon him, even as a child doth submit to his father. 19

Remember your ultimate goal: “Behold he that hath eternal life is rich.” 20 Remember David O. McKay’s statements on an interview with Christ. Work on those things that will be asked first,
particularly your relationship with your spouse. Choose wisely, for you are God’s steward and will be held accountable to Him for your choices.

Understand Recommendations for Money and Marriage

The following are a few ideas that have been helpful in my marriage. Please note that I am not a family therapist or expert in family matters but am only a teacher with a few ideas.

1. Delegate Action but Share Responsibility

It’s not unusual for one spouse to play the primary role in managing the finances, but it is critical that both are involved and aware. Make sure both are involved. If one partner has more knowledge, it is his or her responsibility to teach the other. Remember Marvin J. Ashton’s counsel, “Control of the money by one spouse as a source of power and authority causes inequality in the marriage and is inappropriate. Conversely, if a marriage partner voluntarily removes himself or herself entirely from family financial management, that is an abdication of necessary responsibility.”

Don’t hide your spending, assets, or liabilities from each other. Be certain you can clearly articulate all assets and liabilities and locate the necessary back-up documentation. Remember, if you are ever unable to meet your financial responsibilities, your spouse will have to do the work.

Managing the various dimensions of your partnership is a shared mutual responsibility. While some financial decisions may be delegated, major decisions must be agreed upon beforehand. I recommend setting a limit, such as $20, and discussing any purchases over this limit beforehand. This limit may increase as the value of your assets and income increase.

2. Develop Individual and Family Goals

Develop and work on specific family goals as a couple. Agree on and write down your family goals. Saving should be a weekly or monthly activity. Opinions should be discussed freely and openly without fear of ridicule. Agree to disagree agreeably.

If you have concerns about your partner’s spending, financial decisions, or your delegated role in managing money, make sure you express those thoughts and opinions in a Christ-like manner. Memorize and follow Doctrine and Covenants 121:34–46, which is great advice for couples.

3. Separate Real from Imagined Problems

Too often, arguments over money are about entirely different things. Separate out the real from the imagined problems. Finances and the things you own are tangible assets, and hence it is easy to project emotional issues onto these money matters.

Think carefully before discussing these concerns. Make sure there isn’t a larger problem at the core. Set up a time when you can discuss spending. Avoid discussing finances at a time or place
that may cause stress. Remember the HALT principle—important discussions may need to be delayed if either spouse is Hungry, Angry, Lonely, or Tired.

4. Keep the Romance Alive

L. Tom Perry counseled, “Perhaps it would also be appropriate to have a date with our wives each week, to remind us of the great blessing they are in our lives.” I further encourage time alone with your spouse, without the kids, each quarter and each year. After all, when the kids are grown, there will still be the two of you.

Summary

If “no other success can compensate for failure in the home,” then the family should be our most important priority. There are 10 key principles of marriage and money that are helpful. They are:

1. The family is ordained of God.
2. Nothing and no one is more important than your spouse.
3. You and your spouse are equal partners in all areas, including your financial and parental responsibilities.
4. Partners should seek the best interests of the family in their actions.
5. Financial problems are usually behavioral problems, not money problems.
6. Change is necessary. Since
7. Money spent on things you value leads to satisfaction and accomplishment.
8. Financial freedom is more the result of decreased spending than increased income.
9. Spouses are to leave their parents and become one.
10. The best things in life require no money.

Five common problems regarding finance in marriage are:
1. Lack of financial knowledge.
2. Lack of communication.
3. Differences in financial personality types and family baggage.
4. Lack of shared financial goals.
5. Lack of gospel maturity.

Suggestions for improving your marriage include:
1. Delegate action but share responsibility.
2. Develop individual and family goals.
3. Separate real from imagined problems.
4. Keep the romance alive.
Assignments

Financial Plan Assignments

This section of your financial plan deals with relationships and money. First, try to understand how your parents handled their personal finances. This can be done either through discussions with your parents or through reviewing your memories of how you were brought up. Read through Learning Tool 21: Key Questions on Money and Relationships and answer the first three questions on the family. How was personal finance modeled and taught in your family? Continue to answer the questions regarding savings, education and missions, retirement, and investing.

The harder questions are the descriptive ones. As you think through these areas, think about how you should manage your finances as a couple and how money should be handled in your family. Set goals regarding how you want to manage your money and things you and your spouse will and will not do so you can be an example to your children of the proper way for a couple to manage money.

Learning Tools

The following Learning Tools may be helpful to you as you prepare your Personal Financial Plan:

21. Key Questions on Money and Relationships

This document asks important questions that should be considered when thinking about money and marriage.

Review Materials

Terminology Review

Family Baggage. This refers to the way an individual was brought up in their understanding and management of their finances.

Financial Personality Types. This relates to the different ways people manage their finances. They can be divided into various types: miser, spender, unequally yoked, selfish provider, sleeper, and wise steward.

Proclamation on the Family. An inspired document from a living prophet on the importance of the family unit both in this life and in eternity.
Chapter 31. Family 1: Money and Marriage

Review Questions

1. What are the 10 major principles of money and marriage? Why are they so important?
2. What are the five major issues in money and marriage discussed in this chapter? Why are they so important?

1 David O. McKay, General Conference, Apr. 1964
5 Robert D. Hales, “Understandings of the Heart,” BYU Devotional, Mar. 15, 1988
6 “Lesson 8: Managing Family Finances,” Marriage and Family Relations Instructor’s Manual, 35
7 2 Nephi 26:24
8 Matt 25:14–18
9 “One for the Money,” Ensign, Jul. 1975, 72
10 Galatians 6:7
11 Genesis 2:24
12 Doctrine and Covenants 6:7, 11:7
13 “The Enriching of Marriage,” Ensign, Nov. 1977, 9
14 Eric Tyson, Personal Finance for Dummies, IDG Books Worldwide, 2000, 10
15 1 Cor. 2:14
16 Interview, Nov. 26, 2006
17 “Therefore I Was Taught,” Ensign, May 1994, 36
18 “How Will Our Children Remember Us?” Ensign, Nov. 1993, 10
19 Mosiah 3:19
20 Doctrine and Covenants 6:7
22 “Family Traditions,” Ensign, May 1990, 19
23 David O. McKay, General Conference, Apr. 1935, p. 116
32. Family 2: Teaching Children Financial Responsibility

Introduction

To a large degree, parents hold the destiny of their children in their hands. The lessons they teach both by precept and example may have eternal consequences for their children. To illustrate this point, N. Eldon Tanner shared a verse that he learned as a child.

I am the child.
You hold in your hand my destiny.
You determine, largely, whether I shall succeed or fail.
Teach me, I pray, those things that make for happiness.
Train me, I beg, that I may be a blessing to the world.¹

This verse discusses two important questions: (1) what are those things that will make for happiness and (2) what must children learn to become a blessing to the world?

As I have thought through this first question, I have determined that we must teach the things that bring happiness both in this life—the temporal things—and in the hereafter—the spiritual things. The Family Proclamation teaches “Happiness in family life is most likely to be achieved when founded upon the teachings of the Lord Jesus Christ.”²

As I thought about the second question, I thought about this counsel from Robert D. Hales: “Teach our children by example how to budget time and resources. Help them learn self-reliance and the importance of preparing for the future.”³

Teaching children financial responsibility is the parents’ job. Joseph B. Wirthlin commented:

Too many of our youth get into financial difficulty because they never learned proper principles of financial common sense at home. Teach your children while they are young. Teach them that they cannot have something merely because they want it. Teach them the principles of hard work, frugality, and saving.⁴

Clearly both the spiritual and temporal are both important parts of the teaching process. We must begin this process when our children are small, but it is never too late to start.

Please know that I write from the position of a father and not as one who has been trained in counseling. When I was first married, I had seven theories about raising children. Now, 26 years later, I have seven children and no theories. However, the following are a few ideas that may be helpful in teaching your children financial responsibility.
Objectives

There are three objectives from this chapter that you should remember:

1. Understand the importance of teaching your children
2. Understand the principles of teaching children financial responsibility
3. Know when to teach children financial responsibility

Understand the Importance of Teaching Your Children

The following are a few ideas that I have found helpful as I have worked to teach our seven children.

1. **Teach your children to deny themselves.** Joe J. Christensen commented:

   In our day, many children grow up with distorted values because we as parents overindulge them. . . . We as parents often attempt to provide children with almost everything they want thus taking away from them the blessing of anticipating, of longing for something they do not have. One of the most important things we can teach our children is to deny themselves. Instant gratification generally makes for weak people. How many truly great individuals do you know who never had to struggle?

2. **Teach your children to work for what they want.** Youth should be paid according to their work, and not according to their whining. Neal A. Maxwell commented:

   A few of our wonderful youth and young adults in the Church are unstretched. They have almost a free pass. Perks are provided, including cars complete with fuel and insurance—all paid for by parents who sometimes listen in vain for a few courteous and appreciative words. What is thus taken for granted . . . tends to underwrite selfishness and a sense of entitlement.

3. **Teach your children that un-tempered wants will never be satisfied.** Joe Christensen quoted Fred Gosman, a noted child psychologist, when he said:

   Children who always get what they want will want as long as they live. And somewhere along the line it is important for the character development of our children to learn that “the earth still revolves around the sun” and not around them. Rather, we should train our children to ask themselves the question, how is the world a better place because they are in it?

These are important steps in helping your children become both temporally and spiritually responsible.
Understand the Principles of Teaching Children Financial Responsibility

Much has been written about the best ways to teach children about finance. The following are a few ideas I have found helpful:

1. **Teach by Example Individually**

   N. Eldon Tanner counseled on the importance of our actions when he stated:

   "It is most important, therefore, that we are always on the alert, remembering that one teaches more effectively by example than by precept. Let us never forget the old axiom: ‘Your actions speak so loudly that I cannot hear what you say.’"

   Teaching by example should always be our starting point as we seek to teach others, and especially as we seek to teach our own children.

2. **Teach by Example as a Couple**

   In his “Guide to Family Finance,” Marvin J. Ashton commented:

   In the home, money management between husband and wife should be on a partnership basis, with both parties having a voice in decision- and policy-making. When children come along and reach the age of accountability, they too should be involved in money concerns on a limited partnership basis. Peace, contentment, love, and security in the home are not possible when financial anxieties and bickering prevail.

   The article then proceeds to outline five ways to involve children in money matters on a limited partnership basis:

   1. Pay an honest tithe and generous offerings.
   2. Teach family members early the importance of working and earning.
   3. Teach children to make money decisions in keeping with their capacities to understand.
   4. Teach family members to contribute to the total family welfare.
   5. Teach family members that paying financial obligations is part of developing integrity and honesty.

3. **Pay an Honest Tithe and Generous Offerings**

   As a wise steward, it is important that you pay the Lord first in all you do. Ashton advised, “If our tithing and fast offerings are the first obligations met following the receipt of each paycheck, our commitment to this important gospel principle will be strengthened and the likelihood of financial mismanagement will be reduced.”

4. **Teach Family Members Early the Importance of Working and Earning**
Working and earning are critical skills for our children. The scripture, “In the sweat of thy face shalt thou eat bread”\textsuperscript{11} is not outdated counsel. It is basic to personal welfare. Ashton commented “One of the greatest favors parents can do for their children is to teach them to work.”\textsuperscript{12}

\textbf{5. Teach Children to Make Money Decisions in Keeping with Their Capacities to Understand}

Help your children become wise financial stewards. Ashton counseled:

Based upon appropriate teaching and individual experience, children should be responsible for the financial decisions affecting their own money and suffer the consequences of unwise spending. “Save your money” is a hollow pronouncement from a parent to a child. “Save your money for a mission, bicycle, doll house, trousseau, or car” makes understandable sense.\textsuperscript{14}

\textbf{6. Teach Family Members to Contribute to the Total Family Welfare}

The “Guide to Family Finance” further counsels:

Help family members understand the family financial situation. As children mature, they should understand the family financial position, budget, and investment goals and their individual responsibility within the family. Encourage inexpensive, fun projects, understandable to the children that contribute to a family goal or joy.\textsuperscript{14}

\textbf{7. Teach Family Members That Paying Financial Obligations Is Part of Developing Integrity and Honesty}

Ashton stated: “[Those] who ignore or avoid their creditors are entitled to feel the inner frustrations that such conduct merits, and they are not living as Latter-day Saints should!”\textsuperscript{13}

We should teach family members and others that as disciples of Jesus Christ, we should be honest in all of our dealings.

\textbf{Know When to Teach Children Financial Responsibility}

The Lord has stated, “The glory of God is intelligence, or, in other words, light and truth. Light and truth forsake that evil one. But I have commanded you to bring up your children in light and truth.”\textsuperscript{14}

Bringing up children in light and truth is a big responsibility. What do you teach your children? When do you teach them? How do you teach them?

Following are ideas for teaching children financial responsibility, divided into age groups.
Chapter 32. Family 2: Teaching Children Financial Responsibility

1. Teaching Young Children

We should teach our children both religious and financial truths. From a religious perspective, we should teach young children the following:
- To know they are children of God
- To pray
- To love their family and friends
- To share with and have compassion for others
- To be thankful for their blessings

At the same time, from a temporal framework we should teach them to set and achieve goals and to learn to save for things they want.

2. Teaching Pre-Teenagers

What do you teach pre-teens? Pre-teens are older and are starting to develop a sense of what money is and what it can purchase. The Lord has said, “Behold, ye are little children and ye cannot bear all things now; ye must grow in grace and in the knowledge of the truth.”\(^\text{15}\) How do you grow in grace and in the knowledge of the truth?

Religious truths we should teach pre-teens include:
- To recognize that all things come from God and that everything is His
- To understand that we are stewards over everything we have
- To always pay the Lord first

At the same time, you should also teach pre-teens the following temporal truths:
- To save and pay themselves second
- To be disciplined and frugal
- To recognize that there are many things more important than money

3. Teaching Teenagers

Teenagers are on the cusp of becoming men and women. Alma, in speaking to his sons, gave the wonderful counsel, “O, remember my son, and learn wisdom in thy youth. Yea, learn in thy youth to keep the commandments of God.”\(^\text{16}\) How do you learn to keep the commandments of God when it comes to finances?

Religious truths we should teach teenagers include:
- To be accountable for their actions
- To serve and to give
- To not covet
- To recognize the Lord’s hand in their lives
At the same time, teenagers should also learn the following temporal truths:
- To differentiate between income and wealth
- To differentiate between good and bad liabilities and assets
- To spend less than they earn
- To develop and live on a budget

4. Teaching College Students and Older Children

Alma further counseled his sons, “Counsel with the Lord in all they doings, and he will direct thee for good”17 How do we get closer to God? And how does doing so help with our challenges?

Religious truths to teach this group of young adults include:
- To counsel with the Lord in all they do
- To be thankful for their blessings
- To continue to learn to serve and give
- To expect financial setbacks and challenges, but to know that setbacks and challenges produce growth of character and strength

At this age, young adults should also be ready to learn the following temporal truths:
- To develop habits of frugality and discipline
- To save and invest wisely
- To further commit to setting goals, budgeting, and earning as much as they can

When helping children financially with their education, give them money for necessities, rather than for consumption spending, and hold them accountable for the money given.

5. Teaching Married Children

Teaching married children is the most challenging of all. Perhaps the best counsel is from Doctrine and Covenants 121:41, which states:

No power or influence can or ought to be maintained by virtue of the priesthood, only by persuasion, by long-suffering, by gentleness and meekness, and by love unfeigned; By kindness, and pure knowledge, which shall greatly enlarge the soul without hypocrisy, and without guile.

Once your children are married and are establishing their own family units, you will need to alter your teaching style. Rather than teaching specific truths, I recommend applying the following principles:
• Teach by example. Be a good example of a wise financial steward by having your priorities in order.
• Realize that your own retirement planning comes first, and helping your children with money problems comes second.
• Minimize discussions of what children and grandchildren will inherit or receive as gifts.
• Minimize gifts of cash to adult children as part of a negotiation strategy.
• Help adult children recognize when they need financial help and to accept it graciously.
• Stay out of your adult children’s family matters.
• Assure your children that they will not receive any inheritance until they have established a mature, disciplined, and adult lifestyle and profession.

Summary

To a large degree, parents hold the destiny of their children in their hands. The lessons they teach both by precept and example may have eternal consequences for their children. This chapter addressed two important questions: “What are those things that will make for happiness?” and “What must children learn to become a blessing to the world?” I delineated these as the spiritual and temporal things we should teach our children as we teach them about financial responsibility.

It is critically important to teach children financial responsibility. As parents, we have the responsibility to teach our children; if you do not teach your children, who will? Key things we should commit to teaching our children include:

• To deny themselves
• To stretch for what they want
• To recognize they will not get everything they want
• To obey the commandments
• To appreciate what they have

We then discussed seven principles of financial responsibility. While these are not the only principles, they are among the most important. They include:

• Teach by example individually
• Teach by example as a couple
• Pay an honest tithe and generous offerings
• Teach family members early the importance of working and earning
• Teach children to make money decisions in keeping with their capacities to understand
• Teach family members to contribute to the total family welfare
• Teach family members that paying financial obligations is part of developing integrity and honesty
Chapter 32. Family 2: Teaching Children Financial Responsibility

The final area discussed when to teach financial responsibility to young children, pre-teenagers, teenagers, college students and older children, and married children. Each of these five chapters outlined important spiritual and temporal truths that each age group should learn.

Assignments

Financial Plan Assignment

Teaching children financial responsibility is a lifetime process, not something that occurs once and then they know it for the rest of their lives. It is challenging and time consuming, but it also can be a somewhat predictable process. Determine first how your parents taught you financial responsibility. Then determine how you want to teach your children financial responsibility.

Review Materials

Terminology Review

Limited Partnership Basis. A process of teaching children about finance based on their age and consistent with their ability to learn.

Review Questions

1. What are the seven principles of teaching children responsibility? Are these the only principles?
2. What should you teach young children about personal finance?
3. What should you teach married children about financial responsibility?

1 “Teaching Children of God,” Ensign, Oct. 1980, 2
3 “Strengthening Families: Our Sacred Duty,” Ensign, May 1999, 32
5 “Greed, Selfishness, and Overindulgence,” Ensign, May 1999, 9
6 “Sharing Insights from My Life,” BYU Devotional, Jan. 12, 1999
7 Joe J. Christensen, “Greed, Selfishness, and Overindulgence,” Ensign, May 1999, 9
8 “Teaching Children of God,” Ensign, Oct. 1980, 2
9 Liahona, Apr. 2000, 42
11 Genesis 3:19
13 “One for the Money,” Ensign, Jul. 1975, 72
14 Doctrine and Covenants 93:40
15 Doctrine and Covenants 50:40
16 Alma 37:35
17 Alma 37:37
33. Family 3: Financing Children’s Education, Missions, and Other Goals

Introduction

In the LDS faith, in addition to education goals, single young men ages 18–25 and single women ages 19–25 are encouraged to have another goal: to serve a mission. A mission is an opportunity for service as they go to a place assigned by Church leaders and serve for 24 months for men and 18 months for women. These young men and women put school and dating on hold during this service and work full-time in the service of their Savior Jesus Christ. The cost is covered by the young men or women individually or with help from the family if available. I served in Taipei, Taiwan nearly 40 years ago, two daughters served in the Washington, D.C. South and Rome Italy, a son served in the Arkansas Little Rock, my parents served in Manchester England, and my brother and his wife served in Nauvoo Illinois. When we talk of missions, we are referring to this service opportunity.

L. Tom Perry commented on the challenge facing families for financing education and missions. He wrote:

> Today a long-range family financial plan is clearly needed if children are to have the blessings of missions and education. It would need to be carefully worked out and prepared to meet these requirements. The avoidance of debt is essential; living within [your] income, fundamental.¹

Clearly, a long-range family financial plan is needed. But how do you plan for the large expenses that educations, missions, and other goals entail?

We have a responsibility to continually improve ourselves so we can be a blessing to ourselves, our families, and the world around us. Education can help us fulfill that responsibility. Gordon B. Hinckley said the following about the importance of education:

> It is so important that you young men and you young women get all of the education that you can. The Lord has said very plainly that His people are to gain knowledge of countries and kingdoms and of things of the world through the process of education, even by study and by faith. Education is the key which will unlock the door of opportunity for you. It is worth sacrificing for. It is worth working at, and if you educate your mind and your hands, you will be able to make a great contribution to the society of which you are a part, and you will be able to reflect honorably on the Church of which you are a member.²
Regarding serving missions, Spencer W. Kimball said:

The question is frequently asked: Should every young man fill a mission? And the answer has been given by the Lord. It is “Yes.” Every young man should fill a mission.

Clearly, both education and missions are important, whether for yourself or for your children. For parents, the challenge is knowing how to prepare a family financial plan today to help pay for the steadily rising costs of education and missions. This chapter offers a few ideas to help you as you put that plan together.

**Objectives**

When you have completed this chapter, you should be able to do the following:

1. Decide how education relates to your financial goals
2. Understand the principles of financing education and missions
3. Understand the process of selecting investment vehicles for financing education and missions
4. Recognize how to save for your children’s education
5. Recognize how to save for your children’s missions
6. Know how to reduce the cost of education and apply for aid

**Decide How Education Relates to Your Financial Goals**

The following table depicts the average earnings and estimated lifetime earnings according to level of education in 2012. While the absolute numbers have changed slightly since 2012, the relative importance of education has not (see Table 1).

**Table 1. Annual and Lifetime Earnings by Level of Education**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Annual Earnings*</th>
<th>Lifetime Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not a high school graduate</td>
<td>$24,325</td>
<td>$973,000</td>
</tr>
<tr>
<td>High school graduate</td>
<td>$30,600</td>
<td>$1,304,000</td>
</tr>
<tr>
<td>Two-year vocational</td>
<td>$38,675</td>
<td>$1,547,000</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>$43,175</td>
<td>$1,727,000</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>$56,700</td>
<td>$2,268,000</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>$66,775</td>
<td>$2,671,000</td>
</tr>
<tr>
<td>Doctorate</td>
<td>$81,330</td>
<td>$3,252,000</td>
</tr>
<tr>
<td>Professional</td>
<td>$91,200</td>
<td>$3,648,000</td>
</tr>
</tbody>
</table>

*Annual earnings is lifetime earnings divided by 40 years.

Generally, as a person’s level of education increases, so does his or her potential for higher lifetime earnings. But why obtain a college education rather than a vocational degree? And is education a good investment? Gordon B. Hinckley said:
You young people, the little decisions that you make can so affect your lives. Shall I go to school or not? Shall I continue on with my education? That is a big decision for some of you. Our doctrine suggests, although there may be some circumstances that would affect that decision . . . that the more education you receive, the greater will be your opportunity to serve. That is why this Church encourages its young people to get the schooling that will qualify them to take their places in the society in which they will become a part. Make the right decisions. Take a long look.5

Understand the Principles of Financing Education and Missions

While education is important, it is costly. The average costs for schooling are high and are steadily rising. However, the cost of ignorance is even higher. How can you save funds for your own education or your children’s education?

There are two parts to saving for education. The first is the actual saving. How do you save for education in the least painful manner? The second part is the investing of that money wisely so you can eliminate or minimize taxes, leaving more money for your children’s education when it is needed.

There are five important principles of financing education and missions:

1. Teach Your Children to Be Financially Responsible

Parents should teach their children to be financially responsible. Teach them to work and to earn in a manner consistent with their age and abilities, particularly during summer months. Help them see the joy that comes from a job well done.

Teach them to share the things they have. Remind your children that none of what they have is their own; all they have belongs to God. Teach them the principles of using wealth wisely: ownership, stewardship, agency, and accountability.

Teach your children to be accountable for their spending. Help them learn to save some percentage, as much as 20 to 50% of everything they earn, for their goals, including missions and education.

Teach them that they earn money based on their working, not their whining. Work is a critical part of success in this life. Teach them to work and to enjoy it.
2. Help Your Children to Save Consistent with Their Abilities to Earn

Encourage your children to set savings goals that will help them save for their own missions and education. Goals are critical for children at every age. Many of the goals I set as a child are the same goals I have today—my age has not changed my goals.

Set up investment or savings accounts for your children and encourage them to contribute their savings to these accounts as they are able. Help them by contributing to these accounts on a monthly basis as well. Give your children opportunities to earn money that is earmarked, after paying the Lord, specifically for their missions and education.

3. Develop a Savings Plan Consistent with Your Personal Goals and Budget

Nothing happens without a plan. Develop a savings plan to help save for your children’s education and missions. Plans that require work and contributions by children have a better chance of teaching the principles discussed than those that rely solely on parental contributions. Share your savings plan with your children as to what you will do and what you expect your children to do in saving for their education and missions. Then follow through on your plan.

4. Start Saving for Your Children’s Education and Missions Early

The best time to begin saving for your children’s education and missions is now. Begin early. In our family, once a child was born we immediately opened an education and mission account. Saving earlier and saving more has been a blessing in our children’s lives.

5. Invest Wisely and Tax-Efficiently

Use wisdom in your investments as you save for your children’s missions and education. Follow the process of selecting investment vehicles discussed earlier in the chapters on Investments. Carefully think through your decisions and write a good Investment Plan for your assets—then follow that plan (see the chapters in this course on Investments). Decide now not to use the money in these accounts except for their assigned uses.

I recommend setting aside investment accounts specifically labeled “Mission Fund” or “Education Fund” for each child. With personal finance software, such as Quicken, it is easy to manage multiple accounts for different children at multiple financial institutions.

Understand the Process of Selecting Investment Vehicles for Financing Education

In financing education, there are some sources of money that should be used before other sources. Following the correct priority refers to the process of determining the least costly sources of money for education and taking advantage of these sources first. The following list outlines the process of selecting investment vehicles for financing education:
1. **Free Money**

Free money does not need to be paid back and consists of scholarships, grants, and tax savings. Free money is the best type of money for education.

**Scholarships** are generally awarded based on merit and do not need to be repaid. Encourage your children to keep their grades high and to apply for as many scholarships as they can. Remind them that every dollar they receive in scholarships is a dollar they do not need to earn themselves.

To receive scholarships from schools and private sources, students must complete an additional application, which may be completed online or in hard-copy form. Use a scholarship search engine to learn which scholarships and grants your children are eligible for, and apply for each individually. Inquire at local recruiting offices about how to obtain armed forces scholarships. Use the Internet to view additional scholarship information—reliable sources that offer this information free of charge are provided at the end of this chapter. Do not pay for scholarship information, and be aware that you may get lots of advertisements selling scholarships—if you have to pay money to get a scholarship, it is usually a scam.

**Grants** are generally awarded based on financial need. Encourage your children to apply for grants and scholarships—even if they don’t think they have a chance. They may be surprised. Pell Grants are federal grants that are awarded based on need; the amount students receive varies from $626 to $5,775 per year for the 2015–2016 school year. In order to apply for a Pell Grant, students must fill out a FAFSA (free application for federal student aid) form at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Applying online streamlines the application process considerably.

**Tax savings** are given by states to encourage investment in education. For example, some states, such as Utah, allow parents to take a percentage of their contributions to the state’s 529 Savings Plan as a tax credit from their state taxes. For 2016 in Utah, if parents sign up for the 529 Savings Plan before their child turns 19, parents, grandparents, or other relatives (the account owners) can deduct five percent of their contribution to the 529 Savings Plan from their state taxes per child, up to $1,900 per individual ($3,800 if married filing jointly). If parents and grandparents contribute $3,800 a year at a five percent tax credit, that equates to $190 in free money ($3,800 × 5 percent) to save for your children’s or grandchildren’s education in 2016. 529 Plans will be discussed in greater detail later in this chapter.

2. **Personal and Family Savings**

Personal and family money is that contributed from your children’s personal savings and any other help contributed by parents, grandparents, and other relatives.

**Personal savings** consists of your children’s personal money. Generally, if your children help pay for their own education, they will use their resources more wisely. Start the process of teaching your children to become financially self-reliant as soon as you can, and help your children to finance as much of their own education as possible.
**Family savings:** Saving for your children’s education should be a family activity. After you have started saving for your retirement, find ways to save for your children’s education.

- **Tax-eliminated investing** involves investing money for your children’s education in investment vehicles for which you pay no taxes on the earnings from your investment savings. Examples of these investment vehicles include 529 Savings Plans, which offer the broadest category of things that can be purchased with these funds; Coverdell Education Savings Accounts, or Education IRAs, which are the next best alternative; and certain types of U.S. savings bonds, which are highly restrictive. Investment earnings on these vehicles are not taxed.

- **Tax-efficient investing** means saving for your children’s education in a tax-efficient and wise manner. Invest in mutual funds that are no-load, have low expense ratios, are diversified, and have low turnover ratios. Keep your money in these funds until needed.

- **Tax-deferred investing** means saving for your retirement and using some of your retirement money to help pay for your children’s education. While I do not recommend this alternative, you can take up to $10,000 of your retirement 401(k) and Roth 410(k) for your children’s education without the normal 10 percent penalty. However, if you take the money from a tax-deferred account, such as a 401(k), you will have to pay taxes on the distribution as ordinary income.

**3. Employment**

Have children work when possible to offset educational expenses. Most colleges offer federal work-study programs to help with education costs. Some universities provide thousands of student employment opportunities from their own school funds.

Studies show that working fewer than 20 hours per week will not typically have a negative impact on grades. I recommend that undergraduate students enrolled in 12 or more credit hours should work no more than 20 hours per week. This should help cover rent and food expenses.

**4. Loans**

Loans are debt. If you must use loans to help cover your educational expenses, borrow only the amount you need and not the amount you may be eligible to receive. Use loans wisely and pay them off quickly.

There are five key questions you should ask about any loan:

1. Does the borrower or the government pay the interest on the loan during school?
2. Do you have to start repaying the loan immediately or after graduation?
3. Do the students or the parents take out the loan?
4. Is the interest rate fixed or variable? If it is variable, what is the highest rate you would potentially pay over the life of the loan?
5. What are the costs and loan fees? Are they negotiable?

There are three main types of loans. The most cost-effective type is a subsidized loan, where someone else pays the interest while the student is in school. Generally, these have lower interest rates as well. The next-best loan is an unsubsidized loan, where the borrower pays the interest while the student is in school. Unsubsidized loans also tend to offer lower interest rates. The third type is a private, or alternative, loan, which are not recommended because of their substantially higher costs.

**Subsidized loans** are those where the interest payments are made by the sponsoring institution until the student graduates or leaves school. The following is for the 2015–2016 school year:

- **Subsidized federal loans** are subsidized by the U.S. federal government, which pays the interest while the student is in college. As a general rule, federal loans are generally less expensive than private, non-federal loans and a better choice, as federal loans enjoy some tax-payer subsidy. A federal loan recipient must be a citizen, permanent resident, or eligible non-citizen with a valid social security number. Recipients must also have a high school diploma or a GED equivalent; be admitted as a regular student in an eligible degree or certificate-seeking program; register or have registered for Selective Service for males; complete the FAFSA; be making satisfactory academic progress (SAP); and not be in default on a federal student loan or grant.

- **Direct Subsidized federal Stafford loans** are low-interest loans that the student begins to repay six months after he or she graduates or drops below half-time enrollment for a full six months. Therefore, the student controls when repayment begins. The government pays the interest on the loan while the student is in school. A Stafford loan is signed in the student’s name, and the student is responsible for repayment. Annual loan limits are based on class standing and range from $100 to $5,500 for undergraduate students.

  For the 2015–16 school year, the interest rate on Stafford loans is fixed at 4.29 percent, and there is a 1.073% origination fee. An independent student (a student who doesn’t have to provide parent information on the FAFSA), may be eligible for even more loan money.

- **Subsidized university loans**: The college or university a student attends may have its own institutional short-term loan program. For example, loans available to BYU students include short-term loans that are used to cover tuition. These loans are taken out in the student’s name and must be repaid the same semester they are borrowed. They charge no interest but do require a $20 processing fee and a credit check.

  Sometimes specific university departments offer loan programs as well. These university-sponsored, long-term, subsidized loans are similar to the subsidized Stafford loan in that
interest does not accrue on the loan until the student begins to repay the loan 9 months after he or she graduates. These loans are in the student’s name and require a cosigner. The interest rate on repayment is 6.5 percent and they are generally paid off in 120 months.

Federal unsubsidized loans are loans where borrowers are responsible for the paying the interest while they are in school.

- **Direct Unsubsidized Stafford loans** are low-interest loans that a student must begin to repay six months after he or she drops below half-time enrollment and stays below for a full six months—regardless of whether or not he or she has graduated. With unsubsidized Stafford loans, interest grows while the student is in school. The student may either choose to pay the interest while in school or let it accumulate and be added to the original amount borrowed. An unsubsidized Stafford loan is signed in the student’s name and the student is responsible for repayment. Annual loan limits are based on class standing and range up to $12,500 for undergraduate students and $20,500 for graduate students. A fixed interest rate of 4.29 percent for undergraduates and 5.84 percent for graduates applies, with a 1.073 percent origination fee.

- **Direct Parental Loans for Undergraduate Students (Direct PLUS)** are available to the parents of undergraduate students to help with school-related expenses. In this type of loan, the parent is the borrower, receives the loan funds, and is responsible for repayment. To apply, students must complete the FAFSA. Interest rates on the PLUS loan are fixed at 6.84 percent. The parent can borrow the amount of the cost of attendance minus any other financial aid the student is receiving. Repayment begins six months after the student graduates, discontinues, or drops below half-time status. A 4.292 percent origination fee applies, so these are more expensive.

- **Grad PLUS loans** are available to graduate students as a supplement to the Stafford loan. The Grad PLUS loan is based on credit worthiness and does not require a cosigner. This loan is especially helpful for expensive graduate programs because students can borrow any amount up to the full cost of attendance minus other financial aid received. The 6.84 percent fixed interest rate makes it less expensive than private or alternative loans, although there is a 4.292 percent origination fee. Repayment begins six months after the student graduates, discontinues, or drops below half-time status.

Private alternative loans (also referred to as alternative loans) should be avoided. They are based on credit worthiness and may require a cosigner. They are much more expensive than federal unsubsidized loans. Currently, many of these loans have a 14.5 percent variable interest rate, which means the interest rate could rise above an already high rate. Private alternative loans have higher interest rates and may have up-front or back-end fees. Interest starts to accrue on the loan immediately. While the student does not have to begin repayment until he or she graduates, the interest accrues while he or she is in school. If the student did not pay the 14.5 percent annual
interest on the loan while he or she studied for five years, the loan amount borrowed could double in size. Read the fine print carefully before signing for this type of loan.

As a general rule, federal loans are less expensive that private, non-federal loans and a better choice if borrowing is necessary. Federal loans enjoy some tax-payer subsidy and more flexible payment options. Be aware of aggressive marketing campaigns of private-alternative loans. They are very expensive and often catch the unprepared or unaware.

5. Individual Development Accounts (IDA)

Individual development accounts provide matched savings to low income savers. The Utah plan is a public-private partnership funded by a broad spectrum of community partners to encourage savings. They match $3 for every dollar students save up to a maximum of $4,500. For example, if a student saves $1,500 over 24 months ($62.50 per month), the program will match the savings up to $4,500 for the program. They can also save lesser amounts. To be eligible for this match, students must be in the program for 12 to 36 months, attend a basic money management course (the BYU Finance 418 Financial Planning course meets this criteria), have income to save, and meet the income eligibility criteria (see Table 2). Participants must have no more than $10,000 in net assets excluding one car and one house. Proceeds from the account may be used to purchase one of four productive assets: first homes, business start-ups, post-secondary education including vocational training, and assistive technology for work related activities. More information can be found at www.uidan.org or at (877) 787-0727.

Table 2. Individual Development Account Earning Limits

<table>
<thead>
<tr>
<th>Family size</th>
<th>Income</th>
<th>Family Size</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$22,540</td>
<td>5</td>
<td>$56,820</td>
</tr>
<tr>
<td>2</td>
<td>$30,860</td>
<td>6</td>
<td>$65,140</td>
</tr>
<tr>
<td>3</td>
<td>$40,180</td>
<td>7</td>
<td>$73,460</td>
</tr>
<tr>
<td>4</td>
<td>$48,500</td>
<td>8</td>
<td>$81,780</td>
</tr>
</tbody>
</table>

* For families with more than 8 children, add an addition $8,320 for each person.

6. Credit Cards and Payday Loans

Although you may be tempted to use credit card funds to finance education, credit cards are a very expensive way to borrow money. I strongly discourage you from using them to cover tuition or other school expenses. This is one of the worst and most expensive way to finance schooling and is most often the result of poor planning.

The worst way to finance your education is through Payday Loans. These are short-term loans of two weeks, and should NEVER NEVER even be considered.
7. Parent’s Retirement Accounts

Taking money from your (or your parents) retirement accounts is absolutely not recommended to help pay for your children’s education. Your first priority is to save for retirement for you and your spouse. Then and only then, if you have resources available, should you help your children with their education. Try to find other alternatives. Taking from your retirement accounts is expensive and not tax-efficient. Do not consider this as an option.

Recognize How to Save for Your Children’s Education

There are a number of different financial vehicles and financial assets that can help you save for your children’s education. The key is to begin saving as soon as you possibly can, setting aside a certain amount of money each month and investing that money wisely.

The following are investment vehicles or accounts that can help you save for your children’s education; the first three have tax benefits while the final two do not.

1. Series EE and Series I Bonds

Series EE and Series I bonds are issued by the U.S. government. These bonds are generally taxable, can be purchased by anyone with a social security number, and are available in amounts up to $5,000 per year for paper bonds and $5,000 per year for online bonds. A benefit of purchasing these bonds for educational purposes is that the earnings are tax-free if the principal and earnings from these bonds are used to pay for qualified educational expenses (these expenses are restrictive and include only tuition and required fees). If the earnings are used for other purposes, the interest from the bonds will not be taxed until the bonds are cashed and then the earnings will be state tax-free. I bond rates are 0.26% and EE bond rates are 0.1% until October 31, 2016 and reset every 6 months (see Charts 1).

These bonds have competitive interest rates that change every six months and can be purchased in small denominations (as low as $25) online at www.treasurydirect.gov. They have a minimum maturity of five years; if they are cashed before that time, there is a three-month interest penalty. (Savings bonds are discussed in more detail in Chapter 5: Cash Management).

<table>
<thead>
<tr>
<th>Year</th>
<th>Filing Single</th>
<th>Married Filing Jointly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$72,850–87,850</td>
<td>$109,250–139,250</td>
</tr>
<tr>
<td>2013</td>
<td>$74,700–89,700</td>
<td>$112,050–142,050</td>
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<tr>
<td>2014</td>
<td>$76,000–91,950</td>
<td>$113,950–143,900</td>
</tr>
<tr>
<td>2015</td>
<td>$77,200–92,199</td>
<td>$115,751–145,749</td>
</tr>
<tr>
<td>2016</td>
<td>$77,550–92,550</td>
<td>$116,300–146,300</td>
</tr>
</tbody>
</table>
It is important to note that if your modified adjusted gross income is above specified limits in the year bonds are cashed, you cannot exclude the interest income from your income taxes. These limits are listed in Table 3.

Your modified adjusted gross income is your adjusted gross income, adding back certain items such as foreign income, foreign-housing deductions, student-loan deductions, IRA-contribution deductions, and deductions for higher-education costs.
2. Coverdell Education Savings Account, or Education IRA

An Education IRA is a type of individual retirement account that allows parents to save money for their children’s secondary and higher education. Funds in an Education IRA accumulate interest tax-free, and the account creator determines how to invest the funds and how the funds will be spent. Eligible expenses include college tuition, elementary school tuition, secondary school tuition, and the purchase of books and supplies. If the money is withdrawn for expenses that are not related to education, federal taxes will be incurred at the creator’s tax rate and the creator must pay a 10 percent penalty charge.

A Coverdell Education IRA has a contribution limit of $2,000 per year in 2016, which may be phased out as your income increases beyond specific limits (see Table 4). While funds must be used by the time a child reaches age 30, they can be transferred to other children.

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
<th>Single Range</th>
<th>Married Filing Jointly Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$2,000</td>
<td>$95,000–$110,000</td>
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<td>2012</td>
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<td>2015</td>
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<td>2016</td>
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Your modified adjusted gross income is your adjusted gross income, adding back certain items such as foreign income, foreign-housing deductions, student-loan deductions, IRA-contribution deductions, and deductions for higher-education costs. Earnings beyond these limits ($95,000 single and $190,000 jointly) result in a phase-out of allowable interest deductions, which totally phase out at $110,000 and $220,000.

3. 529 Plans

529 plans are college savings plans created by state governments. These differ from state to state and from year to year. Their purpose is to help parents and others prepare for the future costs of education or to prepay tuition costs for a specific in-state university. In Utah, parents can save up to a maximum of $418,000 per child in these accounts in 2016. There are two major types of 529 plans: 529 Prepaid Tuition Plans and 529 Savings Plans.

With a 529 Prepaid Tuition Plan, parents pay a specific amount of money in exchange for a promise that tuition is guaranteed to be paid when the child enters college. The advantage of having this plan is that you know tuition will be covered, regardless of increases in tuition cost. This plan may be useful if you think your child will not be eligible for financial aid by the time he or she is ready to enter college.
The disadvantage of this plan is that it may not be offered in the state where your child wants to attend school. Additionally, it does not allow you to choose your investments. Given your different investment options when your children are young, you could be more aggressive with your money and gain higher returns. Also, remember that having assets in this plan reduces your child’s eligibility to receiving financial aid.

With a 529 Savings Plan, the control of the funds resides with the parent, who chooses the investments from among a set of approved investment alternatives that are set up in each state. Earnings are tax-free if the principal and earnings are used for approved higher-education expenses, which are generally quite broad in scope. Some states may even offer tax deductions on contributions made to your local 529 funds; check the guidelines in your state. Assets in these plans are not considered the student’s funds, which increases a student’s eligibility for financial aid. Most investment advisors would agree that this is the best way to save for your children’s education.

A disadvantage of the 529 Savings Plan is that it may not cover all college expenses. Also, since you choose the investments, there is a risk of loss involved. Parents can save up to a maximum of $418,000 per child in 2016.

4. Tax-Efficient Investing

Tax-efficient investments do not offer any tax advantages to help you save for education expenses. Wise investors know they will have to pay taxes and transaction fees on any investment they make, so they work to minimize these costs as much as possible. They also monitor their investments’ performance by comparing their returns after taxes and transaction fees to the appropriate benchmarks. The following are five important suggestions for investing tax-efficiently and wisely to save for your children’s education.

- **Know the impact of taxes.** As an investor, you must be particularly concerned about the effects of taxes because they represent one of the largest expenses you will have to pay when you invest. To invest in a tax-efficient manner, you must understand how taxes influence your returns (capital gains, dividends, and interest). You can use the following formula to calculate your after-tax return:

  \[
  \text{Return after tax} = \text{Return before tax} \times (1 - \text{marginal tax rate})
  \]

  Your after-tax return is equal to your before-tax return multiplied by the result of one minus your marginal tax rate. It is important for you to know your marginal tax rate. Your marginal tax rate encompasses your federal, state, and local taxes and is the tax rate you pay on your last dollar of earnings. (See the chapters on Tax Planning for a more in-depth explanation).

  You want to invest in assets with the highest after-tax return. Remember that different types of earnings are taxed differently. Bond interest is taxed at your marginal tax rate,
stock dividends are taxed at 15 percent, and unrealized capital gains (the capital gains on an asset that has not been sold yet) are not taxed until the asset has been sold. To understand the impact of taxes, you must calculate the estimated after-tax return of each asset you are considering. Remember that just even though an asset may have some tax advantages, it may not be the best asset to invest in for future education expenses.

- **Replace ordinary income with long-term capital gains.** Long-term capital gains are taxed at a much lower rate than ordinary income. Earn as much of your income as possible in the form of long-term capital gains. Spend your time picking good, diversified, and tax-efficient mutual funds, and then hold those funds for a long time.

- **Minimize turnover and taxable distributions.** Every time you sell an asset, you set up a taxable event (a transaction that has tax consequences). Using a buy-and-hold strategy minimizes the impact of taxes and reduces your transaction costs.

  You can also minimize turnover and taxable distributions by selecting your mutual funds wisely. Invest in those funds that do not have a history of trading actively (i.e., funds that have low turnover or trading, such as index funds or low turnover mutual funds). These funds will reduce the amount of taxes you must pay each April.

- **Replace interest income with stock dividend income.** Changes in the tax law made in 2004 have reduced taxes on dividends from individual company stocks or stock mutual funds to 15 percent. However, interest earned on bonds or bond mutual funds is taxed at your ordinary income rate. If you put more emphasis on stock dividend income than interest income, you will potentially increase your portfolio’s return and pay less in taxes as well. These steps should only be taken if they are appropriate for your risk-tolerance level.

- **Invest tax-free.** If you are in a high marginal tax bracket, you can invest in assets that do not require you to pay federal or state taxes. For example, municipal bonds are federal tax-free and may also be state tax-free if you are a resident of the state that is issuing the bonds. Treasury bonds are state tax-free, and certain government savings bonds, such as Series EE and Series I bonds, are both federal and state tax-free if the proceeds are used for tuition expenses.

### 5. Custodial Accounts

Custodial accounts are set up by parents or grandparents with the help of a brokerage house or bank for their children or grandchildren. These accounts have the benefit of the estate and gift tax exclusion that allows individuals to give $14,000 per year ($28,000 per couple) in 2016 to any number of recipients without any effect on the giver’s estate tax threshold amount. (This concept is discussed further in the chapter on estate planning). Parents, friends, and others can put money in these accounts to help children save for education or other personal goals.
An advantage of this type of account is that the funds can be invested in all types of financial assets: stocks, bonds, mutual funds, and so on. Money from these accounts can also be used to pay for many purchases not covered by other types of education savings vehicles, including miscellaneous fees, travel costs, and so on.

However, this type of account has no tax advantages, and the money is considered the child’s money as soon as he or she is of age, so the issuer cannot take the money back to use it for other purposes. Also, since this money is considered the child’s money, it may reduce the amount of additional financial aid that is available to the child. Based on these disadvantages, I do not recommend the use of custodial accounts.

**Recognize How to Save for Your Children’s Missions**

While there are a number of different investment vehicles with specific tax advantages to help you save for your children’s education, there are no similar vehicles to help you as you save for your children’s missions. For most families, the two main investment strategies for saving for your children’s missions will be using tax-efficient, wise investing and using custodial accounts.

**Tax-Efficient, Wise Investments**

Since there are no tax advantages to help you save for mission expenses, it is critical that you invest wisely and tax-efficiently. Wise investors know they will have to pay taxes and transaction fees on any investment they make, so they work to minimize these costs as much as possible. They also monitor their investments’ performance by comparing their returns after taxes and transaction fees to the appropriate benchmarks. See the five suggestions for investing tax-efficiently on the previous pages.

**Custodial Accounts**

See previous section entitled “Custodial Accounts.”

**Know How to Reduce the Cost of Education and Apply for Aid**

The following list outlines some ways you can reduce the cost of your children’s education and apply for financial aid:

1. As discussed previously in this chapter, begin early. I recommend parents begin saving for their children’s education and missions as soon as the children are born.

2. Fill out the FAFSA on the Internet at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) during your child’s junior or senior year of high school. Follow the instructions and take action early (usually after your federal tax forms are completed). To have your federal aid in place by fall semester, it is wise to submit the FAFSA by January 1, unless you are planning to marry. Make an appointment with a counselor if you have questions.
3. Talk with the financial aid representatives at your child’s preferred college during his or her senior year of high school. These representatives will guide you through the application process and help you determine your child’s eligibility for aid.

4. If you are going to BYU, contact your OneStop Counselor (D-148 ASB) at 801-422-7075.

5. Look on the Internet for other sources of available aid. The following are some helpful websites that offer information about financing your education:

**BYU specific:**
- [www.onestop.byu.edu](http://www.onestop.byu.edu) — BYU’s website for commonly accessed student services (D-148 ASB). Call their direct line for an appointment at 801-422-7075.
- [www.scholarships.byu.edu](http://www.scholarships.byu.edu) — BYU’s scholarship guide.
- [Financialaid.byu.edu](http://Financialaid.byu.edu) — BYU’s financial aid guide.
- [nsfp.byu.edu](http://nsfp.byu.edu) — National Scholarships, Fellowships, and Programs office.

**Other:**
- [www.fafsa.ed.gov](http://www.fafsa.ed.gov) — The Free Application for Federal Student Aid form must be filled out to apply for any federal financial aid.
- [www.nslds.ed.gov](http://www.nslds.ed.gov) — Provides the student a centralized, integrated view of their Title IV loans and grants.
- [www.fastweb.monster.com](http://www.fastweb.monster.com) — Matches student profiles to a database of scholarships.
- [www.collegeboard.com](http://www.collegeboard.com) — Connects student profiles to a database of scholarships, internships, and loans.
- [www.srnexpress.com](http://www.srnexpress.com) — Contains resources on scholarships, fellowships, internships, and loan forgiveness programs.
- [www.wiredscholar.com](http://www.wiredscholar.com) — Provides good information on college preparation.
- [www.finaid.org](http://www.finaid.org) — Contains comprehensive information on loans, scholarships, and savings plans.

**Summary**

Education is important. Generally, as a person’s level of education increases, his or her amount of lifetime earnings increases as well. There are many different ways to finance an education; reduce the cost of education as much as possible by utilizing available investment vehicles and financial assets.

There are five important principles of financing education and missions: (1) teach your children to be financially responsible, (2) help your children save consistent with their abilities to earn,
Chapter 33. Family 3: Financing Children’s Education, Missions and Other Goals

(3) develop a savings plan consistent with your personal goals and budget, (4) start saving for your children’s education and missions early, and (5) invest wisely and tax-efficiently.

In financing education, there are some sources of money that should be used before other sources. Following the process refers to determining the least costly sources of money for education and taking advantage of these sources first. The following list outlines the priority investment vehicles for financing education:

1. Free money
2. Personal and family savings
3. Employment while attending school
4. Loans
5. Individual development accounts
6. Credit cards (strongly discouraged)
7. Retirement accounts (very strongly discouraged)

There are several ways to reduce the cost of education and apply for financial aid. Begin the process early, fill out the FAFSA form, talk with financial aid representatives at your child’s preferred college, and look on the Internet for other types of aid available.

Assignments

Financial Plan Assignments

Helping finance your children’s education and missions is an important part of helping your children prepare for life. Whether you can help out a lot or just a little, every little bit helps. The key is to save wisely using available investment vehicles and to save the most you can in the most tax-efficient manner.

Your assignment is to review the investment vehicles you can use to save for your children’s education. What are your priorities of money for education? Which vehicles should you use first and why?

Review the investment vehicles you can use to save for your children’s missions. Which vehicles should you use first and why?

Planning now for your children’s education and missions and following through on that plan will go a long way to helping make sure the resources are available when your children go to school and on missions.

If you or a child will attend BYU in the coming two years, go to go financialpath.byu.edu and map out your or your child’s customized financial plan for college and see whether you are on track to graduate financially well-positioned for life, or whether you may be on a path to graduate with excessive debt.
Review Materials

Terminology Review

529 Prepaid Tuition Plan. This is an education plan where you can prepay tuition for a child and you know tuition will be covered, regardless of raises in costs of tuition. May be useful if you think your children will not be eligible for financial aid.

529 Savings Plan. This is an education plan where you can put money aside after tax and it grows tax free if principle and earnings are used for qualified educational expenses. Control of the funds resides with the contributor, who chooses the assets within options provided.

Custodial Accounts (UGMA/UTMA). These are investment vehicles that are managed for the child until the child turns a certain age. They can be invested in all types of financial assets, stocks, bonds, mutual funds, etc. UTMA (Uniform Gift to Minors Account) has fewer restrictions and may include real estate. These can be used for any educational or other expenses, including missions. The risks are there are no tax advantages and it is considered the child’s money as soon as the child is of age—it cannot be taken back by the issuer. I prefer a tax-efficiently invested account.

Direct PLUS Loan. These are loans available for parents of undergraduate, dependent students to help with school-related expenses, and the parent is responsible for interest during school. Repayment begins six months after student graduates, discontinues, or drops below half time, and the parent is the borrower.

Direct Subsidized Loans. These are loans direct from the Federal government. The government pays interest while student is enrolled in school at least half-time, and repayment begins 6 months after student graduates or drops below half-time enrollment.

Education Savings Account (Coverdell or Education IRA). The investment vehicle is similar to a Roth IRA where you invest in this account with after tax dollars, and if you use the proceeds for qualified educational expenses, distributions are tax-free. You choose your investments and the proceeds can be used for eligible elementary, secondary and post-secondary education expenses.

Employment. This is working during college to help offset the cost of educational expenses.

Family Money. This refers to the use of personal savings and help from parents or other family.

Find out which ones you are eligible for on a scholarship search engine and apply for each
Free Application for Federal Student Aid (FAFSA). This is the application form for obtaining government student aid.

Free Money. This is money you do not physically work for and is not paid back. It includes scholarships and grants.

Grad PLUS Loan. These are loans available for graduate students to help with school-related expenses. The student is responsible for interest during school, repayment begins six months after student graduates, discontinues or drops below half time, and the graduate student is the borrower.

Grants. Money given to individuals for education on the general basis of need.

Individual Development Accounts (IDA). These are matching resources from local and other sources to encourage saving for specific goals including education. They must be used for education, or home purchase, or to start a business, you must be in the program for 12 to 36 months maximum, and must attend a basic money management class (Fin418 and MBA620 both count), reside in Utah, be 18 or older, have income to save and meet needs criteria.

Modified Adjusted Gross Income. This is your adjusted gross income adding back certain items such as foreign income, foreign-housing deductions, student-loan deductions, IRA-contribution deductions and deductions for higher-education costs.

Pell Grant. A type of government grant to help students attend college.

Private Alternative Loans. These unsubsidized loans are much more expensive than federal unsubsidized loans, interest starts immediately and accrues, and you must begin paying the loan back immediately. The student is the borrower. These have higher up-front fees and may require a cosigner. Read the fine print VERY CAREFULLY.

Scholarships. Money given to promising students because of their shown abilities in specific areas. There are many scholarships available, but you have to find and apply for them individually.

Series EE and Series I Bonds. US savings bonds with the special tax advantage that earnings on the bonds are tax-free if used for paying tuition and fees.

Subsidized Loans. Loans where another party pays the interest while the student is in school. Interest begins 6 months after the student graduates or drops below half-time enrollment.

Subsidized University Loans. These are loans offered by the university to students attending school.
Unsubsidized Federal Loans. These are loans for both grads and undergrads where the student responsible for interest during school, repayment begins six months after student graduates, discontinues, or drops below half-time enrollment for a continuous 6 months. The interest is not subsidized.

Review Questions

1. What is the general trend of education costs?
2. What is the relationship between education level and annual earnings?
3. What are the recommended priorities of money for financing an education?
4. What are some examples of “free money”?
5. What is the most important part of saving for your children’s education and missions?

Case Study 1

Data

Anne and Bryan, ages 35 and 38, are planning for their children’s educations. They are looking at the Education IRA, Series I bonds, and the 529 Savings Plan. They have three children, ages 2, 4, and 7, and earn a combined income of $50,000 per year. They save 20 percent of their income for their goals, of which 3 percent is earmarked for their children’s education. They would like any tax breaks they can receive, as their cash flow situation is tight. Since they live in Utah, the Utah 529 Plan allows participants a 5 percent tax credit on contributions (up to $1,900 for individuals and $3,800 filing jointly in 2016) on their Utah State taxes.\(^5\)

Application

Which education vehicle should they use, and how much will they save in taxes?

Case Study 1 Answers

If their intent is to save money, the preferred vehicle is the Utah 529 Savings Plan. They can contribute up to a maximum of $418,000 total per child (aggregate maximum) in 2016. For current benefits, they can receive a 5% tax credit on contributions up to $1,900, totaling $95 ($3,800 and $190 for married filing jointly in 2016). Assuming they put the entire planned amount in the 529 Savings Plan ($50,000 * 3%), they can contribute $1,500 total, or $500 per child. They would be able to deduct the $1,500 * 5%, or $75, as a tax credit from their Utah state taxes and save that $75 as free money.

The Education IRA and Series I bonds have no current tax advantages, but they will save money on taxes in the future if principle and earnings are used for qualified education expenses.
1 “For Whosoever a Man Soweth, That Shall He Also Reap,” Ensign, Nov. 1980, 7
2 “Inspirational Thoughts,” Liahona, Jun. 1999, 3
3 “When the World Will Be Converted,” Ensign, Oct. 1974, 8
5 Pocatello, Idaho, Regional Conference, Idaho State University, Jun. 4, 1995
34. Learning to Give: A Critical Component

Introduction

We have spent a significant amount of time together during this course working on goals and learning about budgets, credit, debt, insurance, investing, retirement, and other important subjects. These topics are critical to self-reliance and getting our financial houses in order. However, there are two more important areas we have not yet discussed. These topics are often left out of traditional personal finance courses, but they are critical to a complete study on personal finance. The last two chapters in this manual discuss learning to give and deciding to decide.

We all wrestle with learning to give. This chapter will discuss our covenantal obligations to share with others. It has been said, “We make a living by what we get, but we build a life by what we give.”1 Any discussion on giving takes us back to the first chapter of this course, where we discussed the key principles of personal finance. There are four pillars you need to understand in order to learn how to give:

1. **Ownership:** Since everything we have belongs to God, our material blessings should be seen as both privileges and responsibilities. The things we are given are not really ours; they are on loan.

2. **Stewardship:** God does not simply give us things; He makes us stewards. We must remember that we will someday have to give an account of our mortal stewardships, including our financial resources, to a loving Heavenly Father and His Son.

3. **Agency:** The Lord gave us our agency, our right to choose. This is one of the greatest gifts God has given us. We should use it well and choose wisely.

4. **Accountability:** We have been given the right to choose between different courses of action, and we will be held accountable for the choices we make, including our financial choices.

Once we understand these pillars, giving becomes easier. I also find comfort in the scripture “See that ye love one another; cease to be covetous; learn to impart one to another as the gospel requires.”2 We are not born as givers; rather, we learn to give as we become more committed Christians. We also come to understand that giving is not a one-time event but a Christ-like attribute. Mark E. Petersen wrote the following:

Instead of taking *from* our fellowmen, we must learn to *give*—to be good Samaritans in very deed; to share with our less fortunate neighbors, and in reality show love for our
Chapter 34. Learning to Give

fellowmen. So He said: “Remember the poor, and consecrate of thy properties for their support . . . And inasmuch as ye impart of your substance unto the poor, ye will do it unto me.”

Picture 1. Introduction to Candy Making

Picture 2. Candy Heaters
An Illustration of Giving

A while ago I took the some young men from church to the Peppermint Place in Alpine, Utah. The owner of the store, Taz Murray, is a good friend and colleague of mine. Taz invited us to bring the young men aged 12–18 to his store so he could spend time talking with the young men about careers, potential jobs at the candy store, and other topics, including marketing, finance, production, and human resources (see Picture 1).

Taz gave the young men instructions to put on their hairnets and shoe mitts to protect the production floor and products and took them to the various parts of the factory: the candy heaters (see Picture 2), the cutting machines, the drying rack (see Picture 3), and the packing tables (see Picture 4).

The highlight of the trip came when Taz showed the young men the retail side of the candy store (see Pictures 5 and 6). Here he gave them instructions about what they should and should not do. He said the young men could eat any candy he made in his factory. Any candy or related products that he did not make in his factory were off-limits because he had to purchase them. Then he gave each of the young men a bag and said, “Fill them up.” He warned the youth that if they put things in their bags that were off-limits, they would be escorted outside until the other youth were done.

The youth had a great time. They were so excited. They filled their bags with gumdrops, chocolate-covered nuts and raisins, gumballs, gummy candies, and suckers (see Picture 7).
Chapter 34. Learning to Give

**Picture 4. The Packing Tables**

![Image of people packing tables in a factory setting.]

**Picture 5. The Candy Store**

![Image of a candy store filled with various treats.]

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Chapter 34. Learning to Give

As I have thought about the subject of giving, I have decided that life is like Taz Murray’s candy store. We each fill our own bags—our lives—with the experiences we have while here on earth. We have been given instructions as to what is good and what is bad. If we choose wisely, we will be able to enjoy the good things in life. If we fail to choose wisely, we must reap the consequences of our actions. Interestingly enough, the more we share with others, the greater our joy will be later on.

**Objectives**

When you have completed this chapter, you should be able to do the following:

1. Understand the five myths of giving
2. Know what the scriptures say about money and giving
3. Understand the principles of wise giving
4. Understand why we should give
5. Understand how to give effectively
6. Understand how to create your individual/family giving plan.

There are five myths of giving that need to be recognized:
Chapter 34. Learning to Give

1. Giving Makes Us Poorer

While people who give to others may initially have less financially, giving really makes them richer in the long term. Givers are happier. Research has shown that happy people make more money, have better marriages, and contribute more to society. Givers are also healthier. Research has shown that when people are happier, they put less stress on their bodies and hence tend to live longer. Finally, leaders give. Research has shown that those who give are perceived to be leaders by those who observe.⁴

Picture 7. Youth in the Candy Store

Understand the Five Myths of Giving

2. People Are Naturally Selfish

Selfishness is a learned behavior. Arthur Brooks said: “People are selfish, it’s true, but they’re not naturally selfish; people are unnaturally selfish. When we are our best selves, when we are in equilibrium, when we are where we’re supposed to be cognitively, neuro-chemically, and spiritually, then we are giving people.”³

3. Giving Is a Luxury

Giving is not a luxury. Brooks also said “[Giving is] a necessity—the first 10 percent, not the last 10 percent. And the reason is that if we want to be better, we have to give.”³
As Christians, we have been commanded to give, yet we know it is something we need to learn. “Every man shall give as he is able, according to the blessing of the Lord thy God which he hath given thee.”

4. The Government Provides Assistance, So We Do Not Need to Give

The purpose of giving is not just to help those in need, it is also to help us. We need to give as much as others need to receive. Remember the words of Mosiah: “When ye are in the service of your fellow beings, ye only in the service of your God.”

Brooks said, “The day the government takes over for you in your private charity is the day we become poorer, unhappier, and unhealthier. We must demand to take our place as givers and support the communities and people who need the services we can provide.”

5. You Must Have Money to Give

Giving doesn’t depend on the checkbook but on the heart. What you do is more important than what you have. I believe that if you don’t learn to give when you are poor, it will be very difficult for you to give when you are rich.

Know What the Scriptures Say about Money and Giving

Much is written in the scriptures about money and giving. The following scriptures illustrate the principles Jesus taught about material wealth during his earthly ministry.

Luke 12:34 states, “For where your treasure is, there will your heart be also.” Mark 8:36–37 adds, “For what shall it profit a man, if he shall gain the whole world, and lose his own soul? Or what shall a man give in exchange for his soul?”

Matthew 6:31–33 gives us insights about the priority of our pursuits:

Therefore take no thought, saying, what shall we eat? or, What shall we drink? or, Wherewithal shall we be clothed? (For after all these things do the Gentiles seek:) for your heavenly Father knowest that ye have need of all these things. But seek ye first the kingdom of God, and his righteousness; and all these things shall be added unto you.

Think about Christ and His parables. Many of these parables concern money or similar topics, such as property or wealth. As you review the scriptures, it becomes apparent that these topics were as important in Jesus’ day as they are today. By consulting the following list of money-related parables in the books of Matthew and Luke, we see that 8 of the 10 parables in Matthew and 9 of the 12 parables in Luke are related to money in some way (see Table 1).

It has been said, “Money doesn’t change us. It just reveals us to ourselves.” What does your use of money reveal about you?
Vaughn J. Featherstone has counseled:

Determine to serve one another. Listen to the spirit when your flesh is weak. For truly the Master said, “Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me” (Matt. 25:40). The blessings are tenfold when we do those good, kindly acts of Christian service when it is inopportune or not convenient.\(^7\)

**Table 1. Parables of Christ**

<table>
<thead>
<tr>
<th>Parables in Matthew (8 of 10)</th>
<th>Parables in Luke (9 of 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Hidden Treasure</td>
<td>The Two Debtors</td>
</tr>
<tr>
<td>The Pearl of Great Price</td>
<td>The Good Samaritan</td>
</tr>
<tr>
<td>The Drawn Fishing Net</td>
<td>The Importuned Friend</td>
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<tr>
<td>The Unmerciful Servant</td>
<td>The Rich Fool</td>
</tr>
<tr>
<td>The Laborers in the Vineyard</td>
<td>The Lost Piece of Silver</td>
</tr>
<tr>
<td>The Two Sons</td>
<td>The Prodigal Son</td>
</tr>
<tr>
<td>The Ten Virgins</td>
<td>The Unjust Steward</td>
</tr>
<tr>
<td>The Talents</td>
<td>The Pharisee and the Publican</td>
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<tr>
<td></td>
<td>The Ten Pieces of Money</td>
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</tbody>
</table>

**Understand the Principles of Wise Giving**

There is a different type of accounting done in heaven—not an accounting of dollars and cents, but an accounting of our capacity and willingness to give. Lynn G. Robbins said: “The truer measure of sacrifice is not so much what one gives to sacrifice as what one sacrifices to give.”\(^8\)

The following are a few principles we should remember as we give:

1. **We Are to Give Out of Love**

We must give to those in need because we have a concern for their well-being and happiness. We should not give out of pride because we have abundance. We are to give out of gratitude for all God has done for us. Paul said, “And though I give all my goods to feed the poor, and though I give my body to be burned, if I have not love, it profits me nothing.”\(^9\)

2. **We Are to Give Sacrificially**

Joseph Smith taught: “A religion that does not require the sacrifice of all things never has power sufficient to produce the faith necessary unto life and salvation.”\(^10\) Giving should be a sacrifice where our pocketbooks show where our hearts really are.

3. **We Are to Give Wisely**

We are to give wisely and within our capacity. King Benjamin gave the following counsel:
And again, I say unto the poor, ye who have not and yet have sufficient, that ye remain from day to day; I mean all you who deny the beggar, because ye have not; I would that ye say in your hearts that: I give not because I have not, but if I had I would give. And see that all these things are done in wisdom and order; for it is not requisite that a man should run faster than he has strength. And again, it is expedient that he should be diligent, that thereby he might win the prize; therefore, all things must be done in order.  

4. We Are to Give of Our Abundance

As mentioned earlier, there is a different type of accounting done in heaven. Luke records:

And he [Christ] looked up, and saw the rich men casting their gifts into the treasury. And he also saw a certain poor widow casting in thither two mites. And he said, Of a truth I say unto you, that this poor widow hath cast in more than they all: For all these have of their abundance cast in unto the offerings of God: but she of her penury hath cast in all the living that she had.

Robert D. Hales stated, “You have received much in your life; go forth and freely give in the service of our Lord and Savior. Have faith; the Lord knows where you are needed. The need is so great, brothers and sisters, and the laborers are so few.”

5. We Are to Give Freely According to What We Have Been Given

We are to give of our own free will. Alma counseled:

The people of the church should impart of their substance, every one according to that which he had; if he have more abundantly he should impart more abundantly; and of him that had but little, but little should be required; and to him that had not should be given. And thus they should impart of their substance of their own free will and good desires towards God, and to those priests that stood in need, yea, and to every needy, naked soul.

Understand Why We Should Give

We should give for many different reasons. I think the following five reasons are important:

1. We Have Been Commanded to Give

Gordon B. Hinckley stated the following, “Without sacrifice there is no true worship of God . . . ‘The Father gave his Son, and the Son gave his life,’ and we do not worship unless we give—give of our substance . . . our time, strength, talents, faith, [and] testimonies.”

Moreover, King Benjamin gave the following counsel:
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I would that ye should impart of your substance to the poor, every man according to that which he hath, such as feeding the hungry, clothing the naked, visiting the sick and administering to their relief, both spiritually and temporally, according to their wants.\textsuperscript{16}

Note that King Benjamin is not talking about unlimited giving but about every man giving according to his ability to give. We must use wisdom and order when we give to others.

\textbf{2. Giving Shows Our Love for God}

It is important to remember that we do not give because God needs the money. We give to show the world and ourselves that we love Him. Carol B. Thomas gave the following comment:

\begin{quote}
Sacrifice is an amazing principle. As we willingly give our time, talents, and all that we possess, it becomes one of our truest forms of worship. It can develop within us a profound love for each other and our Savior, Jesus Christ.\textsuperscript{17}
\end{quote}

I like the idea that willingly giving is one of the truest forms of worship.

\textbf{3. Giving Helps Others}

The Lord has said, “Wherefore, be faithful; stand in the office which I have appointed unto you; succor the weak, lift up the hands which hang down, and strengthen the feeble knees.”\textsuperscript{18}

\textbf{4. Giving Helps Us Become More Like Christ}

Marion G. Romney taught, “The Lord doesn’t really need us to take care of the poor, but we need this experience; for it is only through our learning how to take care of each other that we develop within us the Christ-like love and disposition necessary to qualify us to return to his presence.”\textsuperscript{19}

It is necessary for us to give if we are to become like Christ; we must become like Christ so we can return to His presence and live with Him and our families in heaven.

\textbf{5. Giving Helps Us Repay an Inestimable Debt}

We owe an inestimable debt to God that we can never truly repay. While we can never repay this debt, we can try. King Mosiah said:

\begin{quote}
I say unto you, my brethren, that if you should render all the thanks and praise which your whole soul has power to possess, to that God who has created you . . . I say unto you that if ye should serve him who has created you from the beginning, and is preserving you from day to day, by lending you breath . . . I say, if ye should serve him with all your whole souls yet ye would be unprofitable servants.\textsuperscript{20}
\end{quote}
Understand How to Give Effectively

Understanding the principles of wise giving is important for making your donations as effective as possible. The following are some ways you can make the most of your charitable donations:

**Set Principles to Help You Select Your Charities**

The principles I follow when donating to a charity are as follows:

- I support charities that are in harmony with my personal goals and values.
- I support charities that help people worldwide and make the world a better place.
- I support charities that are effective in their use of “the widow’s mite.” These charities will make wise use of my funds and make sure most funds go to the recipients, not marketing and administrative expenses.

Outlining principles to follow when selecting a charity will help you ensure that you are making effective and wise donations.

**Commit to Giving a Fixed Percentage**

When we consider charitable giving as a percent of income, we see some surprising data. The following statistics from 1991 depict the average amount individuals gave to charity, according to salary brackets:

- Individuals earning $20,000 to 30,000 gave $1,207, or 4.8 percent.
- Individuals earning $30,000 to 40,000 gave $1,318, or 3.8 percent.
- Individuals earning $50,000 to 100,000 gave $1,837, or 2.5 percent.

Why did those who earned more money give half as much (in percentage terms) as those who made less? Why should our giving decrease as our blessings increase? Although the data is old, the trend has not changed much in the succeeding years.

The decision as to how much we should give should be made individually or as a family. C. S. Lewis made an interesting comment on this subject:

> I am afraid the only safe rule is to give more than we can spare . . . If our charities do not at all pinch or hamper us . . . they are too small. There ought to be things we should like to do and cannot do because our charitable expenditure excludes them.\(^2\)

One thought that has been helpful to my family has been the habit of giving in percentage terms rather than in dollar terms when trying to determine the amount we should give. For many people, paying tithing is easy but making other contributions is much harder. If you put your contributions in percentage terms, God will know that regardless of how great or how small your financial blessings, the amount you give will always be the same. Remember, do not let your giving decline as your income increases. The amount you are able to give should increase over time.
Gordon B. Hinckley commented:

You know, as I know, that when you pay your honest tithes and offerings, the windows of heaven are opened and blessings are showered down upon you. That which you give is never missed; it becomes not a sacrifice but an investment under the wondrous powers of the Almighty to bless you.\textsuperscript{22}

**Things to Look For and Avoid When Giving to a Charity**

Before you decide to give a penny to any charity, there are some important steps you should take to ensure that your giving will be the most beneficial. The Better Business Bureau (BBB) recommends the following tips for in deciding to give to a charity:\textsuperscript{23}

1. **Ask for the charity’s full name and address.** Ask for identification from the solicitor. Do not be fooled by names that look impressive or that closely resemble the names of well-known organizations. Make sure you want your money to go to this specific charity.

A good source of information on charities is the BBB’s Wise Giving Alliance, available at [www.give.org](http://www.give.org). The alliance rates over 400 different charities. Another good charity website is the Charity Navigator at [www.charitynavigator.org](http://www.charitynavigator.org). This institution works to advance a more efficient and responsive philanthropic marketplace by evaluating the financial health of America’s largest charities. Their website can give a good deal of information about various charities that file a Form 990 with the IRS. However, note that they do not include information on religious organizations listed as “church or convention or association of churches,” which are exempt from filing a Form 990.

2. **Ask if the charity is licensed by state and local authorities.** Registration or licensing is required by most states and many communities. If the charity is not licensed, it may not be a credible organization.

3. **Ask whether your contributions are tax-deductible.** The group must be a 501(c)(3) organization for your contributions to be tax-deductible. While it is not necessary to get a tax deduction for your giving, it does not hurt to get a deduction.

4. **Check out the organization with the Better Business Bureau.** Find out what percentage of the organization’s donations go to pay for programs, fundraising, and administration. The BBB recommends the following:

   A. At least 50 percent of the charity’s total income should be spent on programs discussed in the organization’s literature.
   
   B. No more than 35 percent of contributions should be spent on fundraising.
   
   C. No more than half of the charity’s total income should be spent on administrative costs.
Realize that if you support causes that do not follow all three of these guidelines, you may not be making the best use of your funds.

5. **Watch out for statements such as “all proceeds will go to the charity.”** This phrase can mean that the money left after expenses (such as the cost of written materials and fundraising efforts) will go to the charity. These expenses can have a big impact on the way your donations will be used, so check carefully. Make your giving go as far as possible and help as many people as possible.

6. **Don’t worry about unordered merchandise.** If unordered items such as key rings, greeting cards, or pens are enclosed with an appeal letter, remember that you are under no obligation to pay for or return the merchandise.

7. **When you are asked to buy candy, magazines, cards, or tickets to a dinner or a show to benefit a charity, be sure to ask what the charity’s share will be.** You cannot deduct the full amount paid for any such items because the IRS considers only the amount in excess of the fair-market value of the item to be a charitable contribution. For example, if you pay $10 for an $8 box of candy, you can only deduct $2 for tax purposes.

Once you decide to give to a specific charity, beware of the following pitfalls:

1. **Do not give cash.** Always contribute by check, and make your check payable to the charity, not the individual collecting the donation.

2. **Keep records of your donations (receipts, canceled checks, and bank statements) so you can document your charitable giving at tax time.** Although the value of your time as a volunteer is not deductible, out-of-pocket expenses (including transportation costs) directly related to your volunteer service are deductible at 14 cents per mile in 2016.

3. **Don’t succumb to pressure to give money on the spot or allow a “runner” to pick up a contribution.** The charity that needs your money today will welcome a donation just as much tomorrow. Often the tactic of pressuring an individual to give money on the spot is a way to get around postal regulations.

4. **Call your local BBB if a fundraiser uses pressure tactics like intimidation, threats, or repeated and harassing calls or visits.** Such tactics violate the BBB’s recommended Standards for Charitable Solicitations.

**Dealing with Unwanted Solicitations**

Now that you have learned what to look for in selecting a charity, how do you handle different solicitations, including mail, telephone calls, and door-to-door solicitations?
1. **Unwanted mail**: Do you ever wonder what to do about unwanted mail? It seems like the more you give, the more likely you will be on other mailing lists and the more likely you will be solicited for donations. What should you do?

I suggest you decide in advance which charities you want to support, then discard appeals from all other groups. Do not ever feel guilty about not supporting all the groups that write to you. Physically and financially, you cannot support them all. However, you can help the causes that are most important to you. If you stop giving to all of the organizations that mail you solicitations, these organizations will eventually stop soliciting you.

2. **Unwanted phone and door-to-door solicitations**:

My suggestion is to implement a family policy about unwanted solicitations. Decide in advance what your family policy is and stick with it. I personally tell solicitors the following policy that my wife and I implemented:

> We have a family policy that we do not give to over-the-phone or to door-to-door salespeople over 12 years old. If you will send material about your charity, I will be happy to review it later and make a decision.

Interestingly, I rarely get taken up on my request to be given information in response to our family policy.

**My Personal Priorities of Giving**

Although there are many wonderful charities, the last part of this chapter is an overview of my personal giving priorities. Please note that since I am a member of the Church of Jesus Christ of Latter-day Saints, my giving tends toward this organization. Your giving will likely be the same and will largely be directed toward your church or synagogue. This list is not all inclusive, but it is provided as a good place to start.

1. **Tithing**. Tithing is my first priority. Tithing is a debt of thankfulness for all that the Lord has given me. God has given me everything—He is my most important creditor.

I firmly believe in the blessings of paying an honest tithe. Doctrine and Covenants 64:23 teaches us the following: “Behold, now it is called today until the coming of the Son of Man, and verily it is a day of sacrifice, and a day for the tithing of my people; for he that is tithed shall not be burned at his coming.”

To me, tithing is not a sacrifice: it is an investment. As it has been humorously pointed out, “the returns are out of this world.”

2. **Fast Offerings**. Fast offerings are offerings given from the practice of fasting for 24 hours once each month and giving the money you would have paid for food to the Church to care for those in need. Fast offering is my second giving priority. I believe that fast offerings are a form of payment for the blessing of living on this earth. Paying these offerings is a covenental
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obligation I made of my own free will and choice. Marion G. Romney made the following statement:

Caring for the poor is a covenantal obligation. It follows, then, that we look after our poor and distressed not only because it is convenient, or exciting, or socially acceptable; we should do it first and foremost in fulfillment of our covenant with the Lord that we will do so.24

The Lord gave the following counsel in Doctrine and Covenants 42:30: “And behold, thou wilt remember the poor, and consecrate of thy properties for their support that which thou hast to impart unto them, with a covenant and a deed which cannot be broken.”

Remember, at some point in the future, we will be accountable to Heavenly Father and Jesus Christ regarding the way we have used our financial resources.

3. LDS Charities (Humanitarian Services/Perpetual Education Fund). LDS Charities helps with humanitarian aid throughout the world, regardless of the recipient’s religious orientation. They are among the first to help with natural and other disaster aid. The Perpetual Education Fund gives very low-cost loans to individuals to help with education expenses. With LDS Charities and the Perpetual Education Fund (PEF), every penny of every dollar you give goes to those in need. LDS Charities gives to everyone, whether they are Church members or not, and the PEF gives to returned missionaries from other countries to help them gain an education.

4. Ward, Stake, and Church-Wide Missionary Funds. I believe the Lord helps those who help missionaries who preach His gospel. I have found that when I am trying to help in the service of the Lord, through both personal, family, and financial efforts, not only are others’ lives blessed but my life and the lives of my family are blessed as well.

5. Deseret Industries, Goodwill, and the Salvation Army. What better way is there to get rid of belongings that are still good than to allow someone else to use them? Give the best you have to offer to help the Lord’s poor.

6. Other Charities. Other good charities include college annual funds, university scholarships, Boy Scouts of America, United Way, and Habitat for Humanity.

Understand how to create your individual/family “Giving Plan”

As a final part of this class and textbook on personal finance, I recommend we all put together an individual or family “Giving Plan.” We have plans for insurance, budgets, investing, retirement, and estate planning, should we not also include plans for how we will give back and make the world a better place?

There is no required or even suggested format for your Giving Plan. However, I would hope you would think through how you will give, both institutionally, which is through your Church and
other institutional contributions, as well as personally, which entails more direct personal and family contributions and service. I believe both types of giving are important. As a final part of this plan, think through how you intend to teach your children to give, for your children learn from you, and unless you teach them, it may be difficult for them to learn.

Giving is an intensely personal act. As such, it is not reported to me nor handed in, but I do recommend that you develop your Giving Plan individually and with your spouse if married. Build it consistent with your Mission, Vision, and Values statement. Make it meaningful, because next to what we do with our families, this will likely be one of the most meaningful things we will do over our lifetime.

As you put it together, visualize how you will feel at the end of your life as you accomplish the things you are planning. Is this truly what you want to do? Then make this Plan part of your personal and family goals, and work toward them as hard as you do your other goals.

As I think of giving, I think of both institutional (or indirect) and personal/individual (or direct) giving.

I think of institutional giving as giving through my Church, through organizations set up to do good, and to help and serve in times of emergency and need. It is indirect giving, but giving none-the-less. This giving to me is giving of tithes, fast and other offerings, supporting missionaries, supporting 501(c)(3) organizations, helping financially in emergency situations, and helping financially with local food kitchens and other good causes.

I think of personal giving as giving directly to those in need, which includes personal and family contributions and service. This includes helping families in need, helping my friends, helping at Christmas time with Christmas giving, quarterly family service projects, helping at soup kitchens and other food drives, donating time at local genealogy libraries to find ancestors, participating in Church pageants and other faith-building activities, and providing service in local congregations and scout troops to help youth.

As you notice, it is important that we give both institutionally and personally. I like to think that whereas most goals are what you want to accomplish, giving is what you want to give back. I recommend you talk this over with your spouse and children. Help get them engaged and involved in the things you are doing to give back. Try to make this Giving Plan the culmination of your Personal Finance Plan. Use it to tie in your goals and values with your actions and efforts you are willing to give. Then finally, include in it how you will teach your children to give.

**Summary**

We all wrestle with learning to give. This chapter discusses our covenantal obligations to share with others. Any discussion on giving takes us back to the first chapter of this course, where we discussed the four key principles of personal finance: ownership, stewardship, agency, and
accountability. An important part of learning to give is developing an understanding of these four principles.

There are five myths of giving that are incorrect:

1. Giving does not make us poorer. Those who give are happier and healthier and are considered leaders by others.
2. People are not naturally selfish. Selfishness is a learned behavior. When we are at our best, we are givers.
3. Giving is not a luxury; it is a necessity. We need to give to be the best people we can be.
4. The government provides assistance, so we do not need to give. We must demand to take our place as givers and support the communities and people who need the services we can provide.
5. You do not need money to give. Giving is a state of your heart, not a state of your checkbook.

Much is written in the scriptures about money and giving. A number of parables in Matthew and Luke illustrate the principles Jesus taught about material wealth during his earthly ministry.

There is a different type of accounting done in heaven—not an accounting of dollars and cents but an accounting of our capacity and willingness to give.

Before you decide to give a penny to any charity, there are important steps you should take to ensure that your giving will be the most effective and in line with your personal goals. Set principles to help you select your charities, and commit to giving a fixed percentage of your income.

Remember we each fill our lives with our experiences. We have been given instructions as to what is good and what is bad. If we choose wisely, we will be able to enjoy the good things in life. If we fail to choose wisely, we must reap the consequences of our actions. The more we share with others, the greater our joy will be later on.

Assignments

Financial Plan Assignments

Your financial plan is not complete until you have determined the ways in which you are going to share your blessings with others. How well are you using your resources in your families to help build the kingdom? What goals will you set regarding how you will bless the lives of those around you? Think about the goals you wrote down in an earlier chapter, particularly in response to the question, “What does Heavenly Father want me to do or to be?” What can you do to achieve these goals?

Learning Tools

The following Learning Tool may be helpful to you as you learn to give:
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8. Tithing Share Transfer Example

This document is an example of a form you can use to pay your tithes and other offerings with appreciated stocks or mutual funds.

Review Materials

Terminology Review

Family Giving Plan. A family plan which states how the family will give, to whom it will give to, as well as what the family will or will not do or give to.

Giving Plan. A plan on your thoughts on your personal and family giving. It discusses how you will handle both your institutional (through Church and other institutional contributions) and personal (personal and family contributions and service) giving.

www.charitynavigator.org, a website on information about various charities which file Form 990 with the IRS. However, they do not include religious organizations listed as “church or convention or association of churches” which are exempt from filing Form 990.

Review Questions

1. Learning to give takes us back to the four pillars of personal finance. What are the four pillars of personal finance?
2. A large majority of the parables in the New Testament are related to what topic?
3. What are at least five different reasons for giving?
4. Based on the quote from C. S. Lewis, what is the only safe rule of giving?
5. When you give to charities, it is important to give wisely and to know where that money is going. What are two resources you can use to learn more about different charities?

2 D&C 88:123.
3 Honesty, a Principle of Salvation,” Ensign, Dec. 1971, 72
5 Deut. 16:17
6 Mosiah 2:17
9 1 Corinthians 13:3
10 Lectures on Faith, comp. N. B. Lundwall, Salt Lake City: Bookcraft, n.d., 58
11 Mosiah 4:24, 27
12 Luke 21:1–4

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14 Mosiah 18:27–28
15 *Teachings of Gordon B. Hinckley*, 1997, 565
16 Mosiah 4:26
17 Thomas, Carol B. “Sacrifice: An Eternal Investment.” *Ensign*, May 2001, 63
18 Doctrine and Covenants 81:5
20 Mosiah 2:20–21
21 *Mere Christianity*, 1952, 67
24 Romney, Marion, G. Caring for the Poor—A Covenantal Obligation,” *Ensign*, Nov. 1978, 87
Introduction

This has been a lengthy course on personal finance. If you have completed all of the previous chapters, you have spent over 40 hours getting your financial house in order, and you have dedicated even more time to working on your Financial Plan. The purpose of this last chapter is to help you realize that your financial future begins now and that there are critical decisions you must make today that will impact your life throughout eternity. As you come to understand these important topics, you will be better prepared to achieve your personal and financial goals. This chapter also serves as a review of the topics we have discussed in this series. The main theme for this chapter is taken from a talk by Spencer W. Kimball in which he said the following:

We hope we can help our young men and young women to realize, even sooner than they do now, that they need to make certain decisions only once. . . . We can push some things away from us once and have done with them! We can make a single decision about certain things that we will incorporate in our lives and then make them ours—without having to brood and re-decide a hundred times what it is we will do and what we will not do. . . . My young brothers [and sisters], if you have not done so yet, decide to decide!

After all the work you have completed thus far, the challenge now is to decide to decide. What are the important decisions you must make now to help you achieve your personal and family goals?

Objectives

When you have completed this chapter, you should be able to do the following:

1. Realize that your future begins today
2. Understand some of the key decisions you must make to be truly successful in life
3. Understand what wise financial stewards know
4. Learn about resources for additional readings on the subject of personal finance

You can make important decisions now, and will never have to question them. From the inspired words of Spencer W. Kimball, now is the time to decide to decide!

Realize That Your Future Begins Today

You have many challenges ahead of you. For students, some of these challenges may include going to graduate school or paying back student loans and credit card debt. For other individuals, challenges might include budgeting, spending, saving, investing, getting married, having
children, serving in your communities, sending your children on missions, going on missions yourself, and retiring. With so many challenges ahead of you, it is critical that you keep your priorities and your personal and financial goals in order.

**A Look Back On This Course**

As you look back on this course, I hope you feel it has helped you better understand the importance of having a gospel perspective on personal financial issues. There are more important things than money.

This course was also intended to help you in three important areas:

- **Knowledge:** This course was intended to give you an increased understanding and knowledge of how financial decisions affect your lifestyle.
- **Planning:** This course was intended to give you a greater understanding of the importance of preparing for the financial challenges and changes of life.
- **Wisdom:** This course was intended to help put personal finance in a correct perspective, as not separate from but part of the gospel of Jesus Christ. True wisdom is learning and using our resources to do what Christ would have us do.

The proper application of these three areas will help you make personal and financial decisions more wisely.

**Keys to Financial Success**

There are shelves full of books about the keys to financial success. How do the truly rich become truly rich rather than simply monetarily wealthy? As I have evaluated the situations of those around me, I have made a few observations that may be helpful.

My first observation is that the truly rich have their priorities in order. Their first priority is having hope in Christ. They follow the counsel of the prophet Jacob, who said:

> But before ye seek for riches, seek ye for the kingdom of God. And after ye have obtained a hope in Christ ye shall obtain riches, if ye seek them; and ye will seek them for the intent to do good—to clothe the naked, and to feed the hungry, and to liberate the captive, and administer relief to the sick and the afflicted.\(^2\)

The truly rich first establish their hope in Christ and then seek the wealth of this world, if that wealth is important to them. The truly rich also seek this wealth for the right reasons, not to build themselves up or for prideful purposes but to bless the lives of their families, their friends, and others.

My second observation is that the truly rich understand the difference between income and wealth. Remember, income is the money you earn; wealth is the money you keep after expenses,
taxes, and inflation. They truly rich pay the Lord first and then themselves. They invest their money wisely and quickly convert their earned income into passive and portfolio income. They do not spend more than they have and they live within their income and their budget. Living within your income is not dependent on salary but on your attitudes toward money and the gospel. The truly rich pay with cash when possible, and they earn interest instead of paying it.

Finally, the truly rich live like the millionaires next door. In other words, they practice discipline and frugality in their financial affairs. Frugality sets the stage for personal financial success. It helps you spend less on the purchases you do not care about and more on the purchases you do. Frugality helps you say “no” to current desires in order to say “yes” to more important future goals. It helps you realize that money and the things money can buy do not bring happiness.

**Understand Some of the Key Decisions You Must Make to Be Truly Successful in Life**

In this course, we have discussed many critical decisions that I hope you will be well equipped to make as you decide to decide. The following are some key decisions I believe you must make to be truly successful in life: decide to believe, learn, work, set goals, budget, protect yourself, save and invest wisely, give, and above all else, to maintain these habits throughout your life.

It is not enough to know what to do. You must do it!

1. **Decide to Believe**

Believe in God and believe in yourself. Believe that God is interested in you as an individual, that He has a plan and a mission for you individually and believe that He is anxious for you to succeed. He has provided the sure pattern for ultimate success in the gospel of His son, Jesus Christ. When our lives are consistent with His gospel, we are given confidence through His Spirit that allows us to meet our daily challenges. We can say, along with Nephi, that “The Lord is able to do all things according to his will, for the children of men, if it so be that they exercise faith in him . . . Wherefore, let us be faithful to him.”

2. **Decide to Learn**

Make learning a lifelong commitment. Gain both temporal and spiritual knowledge. Temporal knowledge makes it easier to avoid financial pitfalls and helps you recognize bad advice. Temporal knowledge also helps you handle the inevitable surprises that life will bring. Spiritual knowledge helps you discern what is truly important and helps you keep your priorities in order. Spiritual knowledge also helps you understand what God would have you do.

Plan for a lifetime of learning. Be sure to take the time to polish and upgrade your skills; the only true insurance you have is your ability to continue improving yourself and your job skills. To prepare for future job security, make sure your talents and skills are in demand. Continue to educate yourself and be the best employee you can possibly be.
3. Decide to Work

Hard work is necessary for you to reach your goals. J. Paul Getty, who was at one time considered to be one of the world’s wealthiest men, gave this formula for success: “Rise early, work late, and strike oil!”

Decide now to work, and decide to work as hard and efficiently as you can. Pray for God’s help as you work that you might work beyond your natural abilities, for we receive what we ask for which is right.

4. Decide to Set and Achieve Goals

Set goals. Spencer W. Kimball said that it is appropriate for men and women “to quietly, and with determination, set some serious personal goals in which they will seek to improve by selecting certain things that they will accomplish within a specified period of time.”

Goals are the things that allow us to say “no” to the temptations of today in order to say “yes” to things in the future. Decide now to set good, timely, and well-thought-out goals. Then work toward them. As you set your personal and family goals, keep a long-term perspective on your goal-setting. Remember to include your Giving Plan in your goals, the things you will do to give back and make the world a better place.

5. Decide to Budget

Always spend less than you earn. Change your attitudes about spending and money. Eliminate the “I deserve this” mentality, and truly separate needs from wants. Learn to save for your wants.

Decide now to budget; decide to keep your priorities in order. Always pay the Lord first and pay yourself second. By doing this, you will learn to manage your finances instead of allowing your finances to manage you.

6. Decide to Protect Yourself

Realize that you are not indestructible. Get insurance for those you love. Having too little liability coverage can ruin your financial future. What types of insurance do you need? Life insurance? Sometimes—life insurance is a necessity if you are married with dependents. Disability insurance? Perhaps. Home and auto insurance are likewise necessary when you purchase a home and a car. Health insurance? Definitely.

However, your best and most important form of insurance is obeying the commandments and living the teachings of Jesus Christ. Decide now to protect yourself, your loved ones, and your belongings. Be sure you have sufficient insurance.
7. Decide to Save and Invest Wisely

Before you invest, review the top of the investment hourglass and answer the questions posed by the hourglass (see Chart 1). If you can agree with each of the statements, you are ready to invest. As you invest, consider not only the risks you are willing to take but the order in which you should make investments. Make sure your priorities are in order.

As you begin to save and invest, review the bottom of the investment hourglass (see Chart 2). Start with the basics: build your emergency fund and food storage, then work up the pyramid.

Chart 1. The Top of the Investment Hourglass

1. Have your priorities in order and are “square” with the Lord
2. Have adequate life and health insurance
3. Be out of major credit card and consumer debt
4. Know your personal goals, budget, and have an investment plan

If you can answer these affirmatively, you are ready to invest.

Chart 2. The Bottom of the Investment Hourglass

- **Taxable Assets**
  1. Basics: Emergency Fund and Food Storage
  2. Core: Broad Market Index or Core Mutual Funds
  3. Diversify: Broaden and Deepen your Asset Classes
  4. Opportunistic: Individual Stocks and Sector Funds
- **Retirement Assets**
Chapter 35. Decide to Decide

8. Decide to Give

Learn to give now. Many people say they will give more and serve more when they become rich. They want the miracle without having the faith, the fruit before the seed, the reaping before the sowing. But faith must precede the miracle.

Decide now to give. I recommend that you think about your giving in percentage terms. Learn to give a certain percentage of your income so you will never truly change the amount you give no matter what your income is or what you are blessed with.

9. Decide to Remember

Remember your blessings. Let us not be like the Nephites of old, who were admonished:

Ye do not remember the Lord your God in the things with which he hath blessed you, but ye do always remember your riches, not to thank the Lord your God for them; yea, your hearts are not drawn out unto the Lord, but they do swell with great pride, unto boasting, and unto great swelling, envyings, strifes, malice, persecutions, and murders, and all manner of iniquities.5

We need to remember our blessings and how much we truly have.

Decide to remember the Lord’s blessings in your life, decide to always remember Him, and decide to give Him the only thing that is truly ours to give.

10. Decide to Maintain Good Habits Throughout Your Life

You have done much over the course of this series: You have developed solid financial skills, you have learned to live on a budget, and you know your financial situation. You have evaluated your tax situation; your cash-management system; and your life, health, auto, disability, and liability insurance. You have developed an Investment Plan, a retirement plan, and an estate plan, and you have written a will. You have developed good habits that will allow you to be financially self-reliant. Now you must decide to keep these good habits for the rest of your life. Dallin Oaks’ final comments in his “The Dedication of a Lifetime” talk represent the lessons I most hope you will take from this course:

The “dedication of a lifetime” requires one to be tranquil and steady, steadfast and immovable. That is our standard and our goal. This steadfast standard requires us to avoid extremes. Our performance should be the steady 100 percent of a committed servant, not the frenzied and occasional 120 percent of the fanatic.14

My purpose and hope for this course on personal finance is that we can become the 100 percent committed servant of our Savior as we get our financial houses in order.
Understand What Wise Financial Stewards Know

In the more than 15 years I have taught courses in personal finance, I have realized that certain principles are critical for developing good financial habits. Following are the 10 things I believe we should know about personal finance as we strive to follow Jesus Christ, become wiser financial stewards, to return with our families to His presence, and to accomplish our divine missions for which we were sent here to earth.

1. Wise Stewards Recognize Their Stewardship

They realize that personal finance is simply living the gospel of Jesus Christ. They understand that perspective is based on the principles of ownership, everything they have is the Lord’s; stewardship, they are stewards over all God has blessed them with; agency, the gift of choice is one of God’s greatest gifts; and accountability, they will be held accountable for all their choices, including their financial choices.

Wise stewards recognize that nothing they have is their own—it is all God’s. They plan and act accordingly.

2. Wise Stewards Have Their Priorities in Order

They seek first the kingdom of God and His righteousness. They know that the best things in life are free: families, relationships, and the teachings of Jesus Christ.

Wise stewards’ first goal in life is not wealth, power, or gratification, things that the world seeks, but the gift of eternal life with their families. They seek the true riches first—the kingdom of God and the gift of eternal life. Then they seek the other riches, if they desire them, but it is with the intent to do good—to help and bless their families and others.

3. Wise Stewards Plan Their Future Early and Live Their Plan

They follow Ezra Taft Benson’s counsel when he said: “Plan your financial future early, then live your plan.” They prayerfully plan their lives, establish their goals, live worthy of the companionship of the Spirit, and with God’s help achieve their goals. They prayerfully develop a budget and follow it closely. They live on less than they make. They avoid debt. They build a reserve and save for their goals.

Wise stewards seek God’s help in all aspects of their lives, including planning and achieving goals, developing and living on a budget, avoiding debt, building a reserve, and saving for retirement and education.

4. Wise Stewards Know It Is What They Become That Is Most Important

They know that money is a tool to teach principles and help them become like their Savior. They realize it is not what they earn, but what they save, that helps them acquire wealth. But more
importantly, wise stewards know that it’s not what they save, but what they become, that makes them more like Jesus Christ.

5. Wise Stewards Know Money Cannot Buy Happiness

They know what money can do, which is to eliminate a lot of financial and other problems in life. They know that money can provide security for them and their families. But they know it cannot buy them happiness. They must find happiness on their own.

Wise stewards use money to reduce their financial difficulties, be secure in their families, and bless the lives of others. Then they find happiness in the gospel of Jesus Christ, their families, and serving others. They know money is only a tool, but an important one, in helping them to learn important lessons in life and become more like Jesus Christ.

6. Wise Stewards Understand Assets and Liabilities

Assets are things that have value. They are either income-generating (investments, savings, or rentals) or income-consuming (cars, toys, or houses). They know their choice of assets will largely determine how they will live their lives.

Liabilities are things they have borrowed to attain. Except for an education and a modest home, liabilities should be eliminated.

Wise stewards maximize income-generating assets, minimize income-consuming assets, and eliminate liabilities.

7. Wise Stewards Understand Income

Earned income is income they earn from their job or vocation. It is a good type of income. Passive income is income they earn from their investments, generally businesses or real estate. While they generally need to do work to earn and maintain this income, it is generally less work than they put into their earned income. Portfolio income is income they earn from their other investments. They do not need to do any work to earn income from these investments.

Wise stewards realize that the best income is not earned income but portfolio and passive income.

8. Wise Stewards Know They Are Responsible

In the book Rich Dad Poor Dad, Robert Kiyosaki and Sharon Lechter write:

You were given two great gifts: your mind and your time. It is up to you to do what you please with both. With each dollar bill that enters your hand, you and only you have the power to determine your destiny. Spend it foolishly, you choose to be poor. Spend it on liabilities, you join the middle class. Invest it in your mind and learn how to acquire assets and you will be choosing wealth as your goal and your future. The choice is yours.
and only yours. Every day with every dollar, you decided to be rich, poor, or middle class.⑨

Wise stewards choose to be responsible.

9. Wise Stewards Know They Make a Living by What They Earn, but They Make a Life by What They Give

Wise stewards know that life is not measured by what they have or earn but by what they give. They know there is more to life than money—they learn to give more. “For what shall it profit a man, if he shall gain the whole world, and lose his soul?”⑩

Wise stewards follow the example of the greatest giver of all time, Jesus Christ.

10. Wise Stewards Remember the Three Critical “Ifs”

Wise stewards remember three critical “ifs.” These are not just the things they must know, but things they must do.

1. The scriptures make us wise, IF we learn to read them and obey the commandments. It is not enough to read the scriptures—we must obey the commandments: “O remember, my son, and learn wisdom in thy youth; yea, learn in thy youth to keep the commandments of God.”⑪ We must learn wisdom in this life.

2. The Savior makes us holy, IF we repent. It is not enough to have a Savior—we must repent and take advantage of His atonement: “For, behold, the Lord your Redeemer suffered death in the flesh; wherefore he suffered the pain of all men, that all men might repent and come unto him. And he hath risen again from the dead, that he might bring all men unto him, on conditions of repentance.”⑫

3. The storms make us strong, IF we learn the lessons God wants us to learn. It is not enough to have storms in our lives—we must learn from them. Nephi counseled “Nevertheless, . . . thou knowest the greatness of God; and he shall consecrate thine afflictions for thy gain.”⑬

The prophet Ether counseled:

And if men come unto me I will show unto them their weakness. I give unto men weakness that they may be humble; and my grace is sufficient for all men that humble themselves before me; for if they humble themselves before me, and have faith in me, then will I make weak things become strong unto them.⑭

The brother of Jared knew about storms. When he came to the ocean on his way to the promised land, he had two problems: light and navigation. The Lord helped the brother of Jared with both problems. The Lord touched the stones, which gave light to the ships. The Lord also sent the storms, to blow Jared and his family toward the promised land. The storms He sends (whether
economic, financial, health-related, spiritual, or otherwise) will take us where He wants us to be so we can return and live with Him. The Lord is in our storms. He is trying to teach us those things that will take us to our promised land, to return to His presence.

If we will learn the lessons He is trying to teach us, we will become stronger, more valiant in the testimony of Jesus Christ, more willing and able to serve, and more ready for the next storm that will come. If we fail to learn the lessons from the storm, the Lord will need to teach us these lessons some other way. It may take even more severe storms for us learn what we need to know.

At the beginning of this course, I talked about how doctrine was the key to lasting change, whether it is in our families, our work, or our finances. I shared the following quote from Boyd K. Packer: “True doctrine, understood, changes attitudes and behavior. The study of the doctrines of the gospel will improve behavior quicker than a study of behavior will improve behavior.”

Now, at the end of this course, I add one final recommendation. The key to making permanent change for good in your family, your work, or your finances was given by Richard G. Scott when he said, “The best way to make a permanent change for good is to make Jesus Christ your model and His teachings your guide for life.”

Learn about Resources for Additional Readings on the Subject of Personal Finance

The following is a list of readings I recommend in addition to readings previously listed in this course. These readings may be helpful in your quest for greater financial understanding.

General Finance


Investing

Chapter 35. Decide to Decide

General Budgeting


Marriage and Money


Summary

In the first chapter, we discussed the need to decide, educate, commit, believe and achieve. These are important parts of our work in personal finance.

**Decide.** You had to decide “why” you are doing this. Why did you want to learn personal finance? What did you expect personal finance to bring into your life? What did you hope it will help you accomplish? I hope you have come to more fully understand the “whys” of personal finance and its place in helping us come to Christ, accomplish our divine missions, return with our families back to Heavenly Father’s presence, and to be wiser stewards.

**Educate.** You needed to educate yourself to your available options. This is the “what” of personal finance. I hope you have learned a lot of important information and how that information can impact your life. Realize that much of this information changes every year, so you will need to stay abreast of developments including tax rates, tax tables, contribution limits for retirement, contribution limits for education savings, estate tax limits and percentages, etc. It may be a challenge, but it is doable.

**Commit.** Once you knew the “why” of your actions and the “what” that you need to do, it came down to choice. I hope you have determined your individual and family goals that will most likely take you to where you want to be. I also hope that you have realized the importance of those goals so you will really commit to accomplish them.

**Believe.** I have tried to help you to see who you really are, to believe that you can accomplish the things you set out to accomplish with God’s help. You must develop the vision to know that you can accomplish these things if you are willing to put in the effort, work, and prayer. I believe that God will help us accomplish our goals if we seek His help in setting and committing to our personal and family goals, and then trusting in His promises to us as we willingly work toward them.
Chapter 35. Decide to Decide

Achieve. Finally, you must work to achieve the goals that you have set. You must be willing to make the necessary sacrifices. But we must also be sure that we keep balance in our goals and it our lives, ensuring that we accomplish all our goals in a consistent manner.

Assignments

Financial Plan Assignments

You have come to the end of this course. We have discussed many important topics related to putting your financial house in order. What are the important ideas you will take away from this series of discussions? What are the ideas you have been impressed with regarding personal finance? What should you decide to decide? Write these decisions down in the goals section of your financial plan so that you do not need to remake those decisions.

Finally, put all the sections of your Personal Financial Plan together. Put each section under its respective tab. Make your plan something you are proud of. Put a picture of your family on the cover and put it in a place where you will be able to easily find it. Review your financial plan often.

The purpose of this course has been to help you plan for your financial future. Now it is up to you to follow your plan.

Review Materials

Review Questions

1. What is the main focus of this concluding chapter, taken from Spencer W. Kimball’s quote?
2. In Jacob 2:18–19, Jacob tells us that we will obtain riches (if we seek them) only after we have done what?
3. According to Spencer W. Kimball, what should every family decide to maintain?
4. As a review, what are the four questions on the top half of the hourglass that you should ask yourself before you start investing?

1 Kimball, Spencer W. “Boys Need Heroes Close By.” Ensign, May 1976, 45, emphasis added
2 Jacob 2:18–19
3 1 Nephi 7:12
4 Ensign, May 1976, 46
5 Helaman 13:22
6 Matthew 6:33
7 Jacob 2:18-19
10 Mark 8:36.
11 Alma 37:35.
12 D&C 18:11-12.

13 2 Nephi 2:2.
14 Ether 12:27
% Rank in Category. This is the number the fund ranks in its category or versus the benchmark. It is the top percentile, i.e., the lower the number the better.

12-b1 fees. These are fees paid by the shareholders to market the fund to other possible shareholders. These are just marketing fees. Avoid them.

401k Plans or Roth 401k Plans. These are defined contribution plans where employees contribute a percent of salary up to a specified amount. Employers may contribute a matching amount (free money) to encourage participation.

403b Plans or Roth 403(b) Plans (also called Tax Sheltered Annuities). These are defined contribution plans, and are the same as 401k but for non-profit tax-exempt companies and institutions (i.e., schools).

457 Plans. These are defined contribution plans, the same as 401k plans but for state and municipal workers and tax-exempt institutions.

529 Prepaid Tuition Plan. This is an education plan where you can prepay tuition for a child and you know tuition will be covered, regardless of raises in costs of tuition. May be useful if you think your children will not be eligible for financial aid.

529 Savings Plan. This is an education plan where you can put money aside after tax and it grows tax free if principle and earnings are used for qualified educational expenses. Control of the funds resides with the contributor, who chooses the assets within options provided.

60% Solution budgeting method. A process of budgeting where you determine your gross salary each month, take 60% of that amount and only spend that amount each month. Do not spend beyond that amount. This leaves 20% of your salary for long-term goals and 20% of your salary for taxes at year-end.

Account maintenance fees. These are fees for maintaining your account.

Account Transfer Fees. These are charges for moving assets either into our out of an existing account.

Account Transfer Fees. These are charges for moving assets either into our out of an account.

Accountability. This is a principle is that states we are accountable for every choice we make. We do not make choices with no consequences or accountable; rather, we will be held accountable for the decisions and choices we make.

Accumulation Stage (of retirement). This first stage of retirement begins when you first begin to work and is the time where you accumulate assets which you will later use for retirement needs.

Accumulation strategies. These are possible strategies to use while you are in the accumulation stage of retirement. They could include to save 20% of every dollar you earn after school, with 10% into the company 401k (or Roth 401k), 5% into the taxable account for retirement, and 5% into children’s mission and education funds; save 20% of every dollar, with the priority of maxing out the Roth IRA for both yourself and your spouse, 3% into education IRAs for kids, etc.; or convert funds from traditional 401k and IRA accounts into Roth accounts with a minimum tax impact if financially viable.

Action Plan. This is your plan to accomplish our individual and family goals.

Active management. Active management is the process of trying to beat market returns by the active buying and selling of mutual funds and stocks.

Active portfolio management. It is the process of using publicly available data to actively manage a portfolio in an effort to beat the benchmark after all transactions costs, taxes, management, and other fees. However, to do this successfully you must do this consistently year-after-year, and not just from luck.

Actively managed funds. These are funds where the portfolio managers try to beat the performance of a benchmark through the active purchase and sell of securities in their asset class. Actively managed funds generally have higher management fees which must be overcome through higher returns.

Adjustments. Adjustments are deductions from total income allowed by the IRS to get your Adjusted Gross Income (AGI). These include (among others):qualified medical savings contributions (flexible spending accounts), contributions to individual retirement accounts (IRA), contributions to Health Savings Accounts (HSAs), student loan...
interest and tuition and fees deduction (IRS 970) (within limits), one-half self-employment tax, etc. Losses include net capital losses (up to $3,000), sole proprietorship losses, and active participation real estate losses.

**Advanced Health Care Directive.** This document, also known as a living will or personal or advance directive, is a legal document where a person specifies what actions should be taken for their healthcare if they are no longer able to make decisions for themselves due to illness or other reasons.

**After-tax return.** This is your return after you pay taxes. It is calculated as: after-tax return = before-tax * (1 – marginal tax rate) and your marginal rate includes both your federal, state and local (if any) taxes.

**Agency bonds.** Bonds issued by government agencies which were authorized by Congress including the Federal National Mortgage Association (FNMA), Federal Home Loan Banks (FHLB), and Government National Mortgage Association (GNMA).

**Agency.** This principle is that we have choice in our lives. We are agents of will, who can make choices consistent with our beliefs and values. Moreover, the gift of “choice” is man’s most precious inheritance, and we should protect it carefully.

**Annual Percentage Rate (APR).** The APR is a rate that is generated from a precise calculation specified in Regulation Z. It only takes into account the fees going into the loan and does not take into account the time value of money.

**Annuities.** These are financial products developed and sold by insurance companies designed to accept and grow funds, and then, upon annuitization, pay out a stream of payments for a specified length of time. Annuities can be structured in many different ways, such as payments for life for annuitant or spouse (i.e., for life of both), duration of payments (i.e., 20 years certain or life, whichever is longer), the type of payments (i.e., fixed or variable), etc. The different ways in which annuities can be structured (they are insurance products) provide the flexibility to construct an annuity contract to meet your needs. However, it also increases expenses.

**Annuitization.** The process of determining what percent of retirement assets should be annuitized to ensure sufficient funds for the recipient’s life.

**Annuity types.** These are the different types of annuities.

**Application.** Application is the “how” of how we do things. It is how we apply the doctrines and principles in our lives.

**Appreciating assets.** These are assets which may or which have historically appreciated in value.

**Asset allocation funds.** These are mutual funds which rotate asset classes among stocks, bonds, and cash for the best return. Asset allocation funds invest the fund’s assets in the asset classes expected to perform the best over the coming period of time.

**Asset allocation.** This is the process of managing risk in your investment portfolio. Asset allocation is the process of allocating assets between various asset classes. It determines the risk of the portfolio and is the percentage allocated to each of the different asset classes.

**Asset backed bonds.** Bonds backed by specific holdings of the issuing company, such as equipment or real estate.

**Asset classes.** Asset classes are broad categories of investments with specific (and similar) risk and return characteristics. Asset classes are distinguished by characteristics specific to particular groups of securities, such as type of financial instrument, market capitalization, maturity, geographic location, etc. The major asset classes are cash and cash equivalents, fixed income, and equities.

**Assets under management.** This is another way an investment advisor is paid. It is calculated as a percentage of your assets under management, i.e., if you have $500,000 with an advisor and their fee is 1.0% per year, you will pay them $5,000 per year.

**Assets.** These are things that you own that have value.

**Auto Loans.** Auto loans are consumer loans that are secured with an automobile. Because they are secured, they have a lower interest rate than an unsecured loan or credit card. They normally have a maturity length of 2 to 6 years. The risk is that you will often be left with a vehicle that is worth less than what you owe on it.

**Automobiles and Other Vehicles.** These are depreciating assets, such as cars, trucks, and RVs that normally must be inspected and licensed.
**Average Amount Borrowed.** This is the average amount borrowed over the life of the loan. In leasing, it is the \((\text{Net capitalized cost} + \text{residual})/2\).

**Average compensation.** The average of the years of salary considered in making the defined benefit calculation.

**Average Daily Balance (ADB):** A common way of calculating interest to charge. Computed by adding each day’s balance for a billing cycle and then dividing by the number of days in the cycle.

**Average Indexed Monthly Earnings (AIME).** The average lifetime earnings indexed for inflation is your top 35 highest earning years up to age 60. It entails adjusting each year’s earnings total to reflect its value in the year in which eligibility is requested.

**Average Monthly Interest Rates.** This is the Annual Percentage Rate (APR) divided by 12.

**Average tax rate.** This is the average amount of every dollar you earned that was paid for federal income taxes. It is generally calculated at income taxes paid divided by AGI or Total income.

**Baby bonds.** A bond with a par value of less than $1,000.

** Backend bonus:** These are bonuses paid to the mortgage broker by the lender if they get a higher interest rate on your loan than what the lender requires. Your goal should be to minimize this bonus and keep more money for yourself and your goals.

**Balance sheet (personal).** This is a financial snapshot of your financial position on a given date.

**Balanced funds.** These are mutual funds which purchases both stocks and bonds generally in a specific percentage or relationship, i.e. 60% stocks and 40% bonds. Their benefit is that they perform the asset allocation, stock selection, and rebalancing decision for the investor.

**Balloon loans.** These are loans which payments including interest and principle are not sufficient to pay off the loan at the end of the loan period, but require a large “balloon” payment at some point in the future to fully pay off. This type of loan is not recommended.

**Balloon Mortgages.** These are mortgage loans whose interest and principal payment won’t result in the loan being paid in full at the end of the term. The final payment, or balloon, can be significantly large. These loans are often used when the debtor expects to refinance the loan closer to maturity.

**Bankruptcy Chapter 13.** This process prepares a repayment plan in which the court binds both the debtor and the creditors to terms of repayment. The debtor retains property and makes regular payments to a trustee out of future income to pay creditors over the life of the bankruptcy plan.

**Bankruptcy Chapter 7.** This process liquidates assets and uses them to pay creditors according to precedence in the Bankruptcy Code. It is the quickest, simplest and the most frequently selected (75%) kind of bankruptcy filing. Certain debts cannot be waived by Chapter 7 bankruptcy such as child support, student loans, drunk driving fines, etc.

**Basic Health Insurance.** This is basic health coverage which covers hospital, surgical and physician expense insurance. It covers hospital insurance, which is hospitalization expenses including room, board, nursing, and drug fees; surgical insurance, which is the direct costs of surgery including the surgeon’s and equipment fees; and physician expense insurance, which covers physicians’ fees including office, lab, X-ray, and fees for other needed tests.

**Bearer bonds.** Bonds with coupons attach that pay interest only to the bearer upon surrender of the coupons.

**Behavioral finance.** Behavioral finance is an upcoming field of financial theory that attempts to further understand securities prices through understanding investor behavior. It came about because the assumptions which Finance makes, that people make rational decisions and people are unbiased about their predictions of the future are not always valid. Behavioral finance tries to incorporate “personal behavior” in an effort to extend finance beyond its narrow assumptions.

**Benchmark.** This is the relevant index for the specific category tracked by Morningstar or other fund monitoring company.

**Bend Points.** Calculating your PIA from AIME is divided into three calculations called “bend points” because the formula, when graphed, appears as a series of line segments joined at these amounts. These bend points change year to year.

**Beneficiaries.** The people who receive the property or assets.
**Bidding and the Winner’s Curse.** Bidding may lead to a suboptimal result when you bid your fair value. Assuming everyone else has the correct value, if you won you overpaid.

**Blend stocks.** These are stock that are a part of both value and growth.

**Bond interest and bond fund distributions.** These are taxed at your Federal and state Marginal Tax Rate.

**Bond mutual funds.** Bond mutual funds are funds which invest a majority of their assets in bonds of specific types of companies or institutions. These funds generally have a specific objective, i.e. “corporate,” “government,” “municipals,” “growth,” etc. which relates to the types of bonds the mutual fund invests in. In addition, most have a specific maturity objective as well, which relates to the average maturity of the bonds in the mutual fund’s portfolio.

**Bond rating companies.** A private sector company that evaluates the financial condition of the bond issuing company, its revenues, profits, debt, and other critical areas, and gives the company a rating which indicates the relative safety of the bond. They only rate corporate and municipal bonds. They include: Standard & Poor’s, Moody’s, and Fitch’s.

**Bond ratings.** Bond ratings are measures of the riskiness of a company. Ratings run from “AAA” (Standard & Poor’s) or “aaa” (Moody’s) for the safest to “D” for the extremely risky. Ratings categorize bonds by default risk, the risk of the company being unable to repay the bond.

**Book-entry bonds.** Bonds which are registered and stored electronically, similar to stock purchases.

**Breakeven Analysis.** This is a form of loan analysis that does not take into account the time value of money, but is simple to calculate. You calculate all new costs and fees for the new loan, and savings in principle and interest over the old loan. You then divide all new costs by monthly savings which will give you your breakeven point in months. If your breakeven point is less than 4 years, it may be a good idea, 5-7 years, it might be considered, or greater than 7 years, be careful. You may likely move before 7 years.

**Budgeting Process.** These are the steps you take to create your budget. It includes: 1. Know what you want to accomplish, 2. Track your spending (your expenses), 3. Develop your cash budget, 4. Implement your budget, 5. Compare it to actual expenses, then make changes where necessary to achieve your goals.

**Budgeting the Better Way.** This is a budgeting process where you pay the Lord first, and yourself second, then pay your bills. This makes paying yourself a higher priority.

**Budgeting the Old Way.** This is a budgeting process where whatever was left at the end of the month went into savings. The challenge is that there is never anything left at the end of the month.

**Business risk.** Risk that the bond’s value will decline due to problems with the company’s business.

**Buyer’s broker.** This is a realtor that works specifically for the buyer and is paid by the buyer. The have a fiduciary responsibility to the buyer and not the seller which is different from the traditional buyer seller broker relationship.

**Buying on margin.** Buying on margin is borrowing money to invest. You borrow money from your broker and use it to purchase financial assets. If the stock goes up and you sell the stock, you make a profit due to leverage. Be careful as you can lose much more than your original investment.

**Calendar Effects.** The impact of tax and reporting is not consistent with theory. Behaviorists point out that returns are a function of cash flows, which tend to be concentrated around calendar turns. Institutions tend to “window dress,” i.e., sell unwanted and buy desired stocks for period-end reports.

**Call provision.** A provision that allows the issuer to repurchase the bonds before the maturity date. Deferred calls provide more protection.

**Callable bonds.** Bonds which can be called, i.e. redeemed, before maturity at the option of the issuer.

**Capital gains taxes.** Capital gains are realized earnings from selling a financial asset at a profit. It is the sale price less the purchase price, and are divided into short-term and long-term. Short-term capital gains are gains from the sale of an asset where the asset was held for less than 366 days and is taxed at your marginal tax rate. Long-term capital gains are gains on the sale of an asset where the asset was held for more than 366 days and is taxed at a preferential federal rate. These are taxes you pay on assets held a specific period of time.
**Capital gains.** Capital gains are the best type of earnings as capital gains at the share level are not taxed until you sell your mutual fund shares. You decide when to be taxed. This is the difference between what you paid for the bond and what you sold it for, or the par value if you held the bond to maturity.

**Capitalized cost reduction:** Any reductions in capitalized cost, such as rebates, down payment, dealer incentives, trade-in, etc.

**Capitalized cost:** The cost to which you agree or negotiate when purchasing a vehicle.

**Captive brokers.** These are brokers whose company is part of a group which owns a mutual fund company. These brokers may be encouraged to sell company mutual funds which may not be the best fit for the investor but are in the interest of the company.

**Carelessness.** A reason for debt. We understand its costs, but we become lazy.

**Cash accounts.** This is money with the broker which you use to pay for purchases or receive any cash. There is a specific time between notification of purchases and when the purchases must be paid.

**Cash Advance:** Using a credit card to obtain cash, such as through an ATM or over the counter at a bank. This is an extremely expensive way to borrow, and carries several pricy fees.

**Cash and Cash Equivalents.** Cash and cash equivalents is an asset class whose major goal is liquidity and to preserve capital. Cash includes CDs, money market funds, T-bills, and commercial paper, etc. It also includes short-term interest-bearing investments such as treasury bills and savings bonds, loans to the U.S. government, commercial paper, and loans to corporations. It is a good investment asset class for money you plan to use in less than 3-5 years and don’t want to take risks. It is less attractive as medium-to-long-term investments (> 5 years) as returns on cash and cash equivalents are unlikely to keep up with inflation.

**Cash Dividends.** Theory has shown that dividends are irrelevant in the absence of taxes and transactions costs. Behaviorists suppose that dividends can be justified by “mental accounts” which increase current income at the expense of “higher self-control” equity accounts. Older high-net worth investors value dividends more highly and concentrate in high income securities (preferred habitat) theory.

**Cash-Balance Plans.** A type of DBP in which provides specific annual employer contribution (generally 4-7%) each year, plus a low but guaranteed rate of investment earnings. Accounts grow at a predetermined rate, regardless of how much is in the account. Employees do not make any investment decisions.

**Category.** These are all funds in the same category as established by Morningstar.

**CD Laddering:** the process of getting a higher interest rate by buying longer term CDs and purchasing them more often. For example, 1 month CD rates are too low, but you like 6 month rates. Take the amount of money you want to invest, divide it by 6 (or any number), then invest 1/6 of your money every month in a 6 month rate. You are creating a ladder of CDs, and every month you have money coming in. You would then reinvest that in another 6 month CD.

**Child’s Benefit.** Any child who is under 18 (19 if still in high school), is eligible for a benefit of 50% of the retired workers PIA, subject to a family maximum. Child’s benefits terminate at age 18, marriage, or death. The dependent child of a fully or currently insured worker will receive a benefit of 75% of the worker’s PIA (subject to family maximum) if the child is under age 18 (or age 19 is a full-time high school student), or is over age 18 and has been disabled since before age 22, and is not married.

**Children’s Trustee.** The person who manages the assets for the children.

**Children’s Trusts.** Trusts specifically for underage children.

**Class A Shares:** These shares commonly have a front-end or back-end load to compensate for the sales person’s commissions. Because of the front-end loads, they usually have lower management fees.

**Class B Shares:** These shares commonly only have a back-end load that is paid only when the shares are sold. This load traditionally declines over time. Class B shares generally have higher expense ratios when compared to Class A shares.

**Class C Shares:** These shares generally have a lower front- and back-end load fees, but higher management fees.
Class R Shares: These shares are generally for retirement purposes. Check the loads and management fees which may be substantial.

Class Y Shares: These are shares with very high minimum investments, i.e., $500,000, but which have lower management fees and waived or limited load charges. These are generally for institutional investors.

Class Z Shares: These are shares only available for employees of the fund management company.

Closed-end mutual funds. These are mutual funds with a specific number of shares outstanding. Individuals must purchase shares from existing shareholders, and shares may trade at a premium to (more than) or discount (less than) the underlying Net Asset Value (NAV). These premiums or discounts may be based more on investor demand than the underlying share value.

CLUE Report. A report, prepared by insurance companies that keep a record of all payments by insurance companies to individuals and institutions. Under the FACT Act (Fair and Accurate Credit Transactions Act of 2003) you can obtain the following Comprehensive Liability Underwriting Exchange (CLUE) reports each year: CLUE Auto: A 5-year loss history report of your automobile claims (if a loss was filed against your automobile insurance policy and if the insurance company reported the information to CLUE); and CLUE Personal Property: A 5-year loss history report of your homeowners claims.

Codicil. A document which institutes minor changes in the original will. Must be signed, witnessed, and attached to the original will.

Collateralized mortgage obligations (CMOS). More complex and specialized versions of mortgage backed bonds.

Commission costs. These are the cost associated with trading of bonds. While all bond trades incur commission costs, some newly issued bonds are sold without commission cost as the issuer absorbs the costs. Most trades however, incur commission costs, which are paid to the broker who arranged the trade.

Commissions. Commissions are the way a broker or investment advisor is paid. It is either a percentage of every buy or sell order (e.g., 20 bps per trade), or a specific charge for a trade (e.g., $9.99).

Community Property. A form of ownership is equal and only between partners. Lifetime control is shared by both spouses, consent from both is required to sell, income is shared between owners, and testamentary control in the one-half interest is unlimited unless property has right of survivorship feature (applicable in some states).

Compulsiveness. A reason for going into debt. We lack the self-control to discipline our purchases.

Computer Software budgeting method. This process uses commercially available budgeting software such as such as Mint.com (free), Quicken, Mvelopes, or others. Determine your gross salary and take home each month after taxes and other deductions, determine spending by category, and budget each category. Work to within your budget for each spending category. You will obtain receipts and credit card information directly via internet from financial institutions.

Conventional loans. These are loans that are neither insured nor guaranteed. They are below the maximum amount set by Fannie Mae and Freddy Mac of $417,000 in 2016 (single family). They require Private Mortgage Insurance (PMI) if the down payment is less than 20%.

Convertible bond. Bond which gives the holder the right to convert the bond to company stock instead of getting the cash repayment.

Convertible loans. These loans begin as a variable-rate loan and can be locked into a fixed-rate loan at the then current interest rate at some predetermined time in the future (for a specific cost).

Cooperation and Altruism. The process where we work with others and are concerned about them, not just ourselves and what we want. Cooperation may be a viable investment strategy. People’s motives may lead to actions different than conventional rationality, i.e. individual selfishness, would suggest.

Corporate Bonds. (1)Bonds secured corporate debts by collateral or real property liens. (2) Debt instruments issued by corporations to fund the requirements of the companies.

Cost. These are the fees and expenses you pay to own a mutual fund or asset. Invest low cost. In a world where investment returns are limited, investment costs of any kind reduce your returns. We recommend you invest in no-load mutual funds to reduce costs.
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**Counseling: non-profit credit counseling agencies.** These are agencies set up specifically to help people reduce the credit-card debt load in their lives. The non-profit companies have arrangements with many of the credit companies. Working with them, they can reduce or even eliminate your interest payments with specific creditors.

**Counseling: For-profit credit counseling agencies.** These are companies whose goal is to make money through helping people get out of debt. They often consolidate debt into a single loan with a lower rate, or get homeowners into an interest-only home loan and use the excess cash to pay down debt.

**Coupon interest rate** (or interest rate). The percentage of the par or face value that will be paid annually to the holder in the form of interest.

**Covenants, Conditions and Restrictions** (CCRs). These are legal documents that can affect what you can do with any potential homes. These can be quite restrictive as to what you can and cannot do with your home including exterior, landscaping, and other requirements. If you cannot live with the CCRs, don’t buy there.

**Credit Bureau**: Private organizations which maintain credit information on individuals, which it allows subscribers to access for a fee. The three major credit bureaus to know are: Equifax, Experian, and Trans Union.

**Credit Card**: A financial instrument that allows the holder to make purchases through an open line of credit.

**Credit Counseling Agencies (CCAs)**. These may be either non-profit or for-profit agencies to help you get out of debt. You should use these with caution.

**Credit Limit**: The maximum amount that one can borrow on a single credit card. This amount is often influenced by one’s credit score.

**Credit Report**: Information collected by credit bureaus from subscribers, creditors, public court records, and the consumer.

**Credit Score**: A numerical evaluation of your credit based on specific criteria determined by the credit scoring company.

**Credits**: Credits are dollar for dollar reductions in your taxable liability. Credits are worth significantly more than deductions.

**Current ratio**. This is your monetary assets divided by your current liabilities. This ratio tells you how many times you could pay off your current liabilities with your liquid cash on hand.

**Current Yield**: It is the ratio of annual interest payments to the bond’s market price.

**Currently Insured Status**. To be “currently insured”, you must have at least 6 quarters of coverage in the previous 13 quarter period. Currently insured is adequate for eligibility for survivor benefits paid to children and for a surviving spouse caring for a qualifying child. Eligibility for other benefits generally requires fully insured status or 40 quarters of coverage

**Custodial Accounts (UGMA/UTMA)**. These are investment vehicles that are managed for the child until the child turns a certain age. They can be invested in all types of financial assets, stocks, bonds, mutual funds, etc. UTMA (Uniform Gift to Minors Account) has fewer restrictions and may include real estate. These can be used for any educational or other expenses, including missions. The risks are there are no tax advantages and it is considered the child’s money as soon as the child is of age—it cannot be taken back by the issuer. I prefer a tax-efficiently invested account.

**Custody (or annual) fees**: These are fees the brokerage house charges to hold the mutual funds or ETFs in your account. May be a minimum amount for small accounts ($15 per year), a specific charge per holding (8 basis points per security), or a percentage of assets for large accounts (25 basis points on assets under management).

**DALBAR**. DALBAR is a private company that does research on investor returns. It puts out an annual survey in a book titles “Quantitative Analysis of Investor Behavior.” It discusses how average equity fund investors have done versus benchmarks over the past 20 years in the equity, fixed income, and balanced categories.

**Day orders**: These are orders to buy and sell securities which are good only until the end of the trading day.

**Day trading**: It is the process of an individual giving up all his spare time in an area in which he has little or limited competence, in an attempt to consistently beat the market and other professionals after taxes, costs and fees.
Debenture. A long-term unsecured bond. It can have a hierarchy of payment, with unsubordinated and subordinated debentures. These are bonds backed by the credit of the issuing company.

Debit Card: Unlike credit cards, debit cards act like a personal check. When used, money is taken straight from the connected account to pay for the purchased item.

Debt Cycle. It is the process of why and how we go into debt.

Debt Elimination: Expensive Debt First. This is one of the personal strategies. The logic is to pay off your most expensive debts first.

Debt Elimination: Smallest Debt First. This is one of the personal strategies. The logic is to pay off the smallest debts first. Then take the money saved to pay off all your other debts. You have success early on as you pay off the smallest debts first.

Debt Obligations or Back-end Ratio. This housing affordability ratio calculates what percent of your income is used for housing expenses plus debt obligations. It should not exceed 36% of your monthly gross income. The formula is: Monthly PITI and other debt obligations/ monthly gross income < 36%. Debt obligations include mortgage payments, credit card, student loan, car, and other loan payments. PITI = Principal, interest, property taxes, and property insurance

Debt ratio. This is your total liabilities divided by your total assets. This ratio tells you whether you could pay off all your liabilities if you liquidated all your assets. This represents the percentage of your assets financed with borrowing.

Debt Reduction Strategies. These are strategies for reducing debt. It is a six-step process: 1. Remember perspective, the “why’s” and “what’s.” Accept that you have a debt problem; 2. Write down your goals so you know where you want to be. Stop incurring new debt; 3. See where you are by making a list of all your bills and debts. Admit the need to change your habits and lifestyle if being debt free is important; 4. Look for one-shot ways of reducing debt; 5. Organize a debt repayment Plan; and 6. Follow through on the Plan until total debt elimination.

Debt. It is the process of borrowing something with the expectation to pay it back in the future with interest.

Deductions. Deductions are IRS allowed reduction amounts (standard deduction) or taxpayer determined amounts (itemized deductions) to get taxable income from your Adjusted Gross Income.

Deep-discount and on-line brokers. These are brokers who are even cheaper than discount brokers. They do only trading, but at a 90% discount to full-service brokers. On-line can even be cheaper with other services.

Deferred. Payments are deferred until the specified time the investor elects to begin receiving the payments.

Defined Benefit Pension Plans. A Defined Benefit Pension Plan is a DBP where payments are based on a benefit payout formula. The formula is based on your salary, years worked and a company determined factor to calculate how much you will get each year. Employees do not contribute and bear no risk.

Defined Contribution Plan (DCP). A retirement plan where the employer contributes a specific amount to the employee’s retirement funds while the employee is working and then has no responsibilities once the employee retires. Employer contributes to a fund, and then has no additional obligation when the employee retires. Employee may also contribute to the fund. Pension is determined by how much is invested by both the employer and employee, and how fast it grows.

Delayed Retirement Credit. Delaying payment beyond full retirement age results in a benefit increase for each year of delay. With a delay the worker’s PIA is not increased and the benefits to family members is not increased.

Dental and Eye Insurance. This is insurance which covers only dental work and expenses relating to the eyes and teeth. Generally, it is only partial costs of eye exams, glasses, contact lenses, dental work, and dentures. Know your coverage, as the amount covered varies by plan provider. These plans are generally expensive, unless they are provided as part of an employer plan.

Depreciating assets. These are assets which depreciate. Often, the minute you take ownership of these assets, i.e. drive these assets off the car lot, they drop in value.

Direct PLUS Loan. These are loans available for parents of undergraduate, dependent students to help with school-related expenses, and the parent is
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responsible for interest during school. Repayment begins six months after student graduates, discontinues, or drops below half time, and the parent is the borrower.

Direct Subsidized Loans. These are loans direct from the Federal government. The government pays interest while student is enrolled in school at least half-time, and repayment begins 6 months after student graduates or drops below half-time enrollment.

Disability Benefits. Workers who qualify for disability benefits are entitled to 100% of PIA until the earliest of the following: disability ends: benefits are terminated in the second month after the end of disability, or the workers dies: benefits are terminated in the month prior to the month the worker dies. If the worker attains full retirement age: disability benefits convert to retirement benefits.

Disabled Child. The disable child of a retired or disable worked is entitled to benefits past age 22 if the disability began before age 22.

Discount bonds. A bond that is sold at a discount to its par value. Generally, upon maturity the accrued interest and original investment add to the bond’s par value.

Discount Points: These are payments made by the lender to reduce the interest rate on the loan. They are somewhat similar to prepaid interest. You pay more upfront in points but you will pay less on interest costs in the future. Your challenge is to minimize your overall interest costs, i.e., your effective interest rate.

Discount-service brokers. These are brokers who only perform trading, but usually at a 50% to 70% discount to full-service costs.

Discretionary accounts. These are accounts where you authorize a broker or investment advisor to make trades for you and your account. Exercise caution with this as the broker can buy and sell securities at will and you are responsible for all taxes and commission costs.

Discretionary contribution plans. Retirement plans where contributions are at the employer’s discretion. These include profit sharing plans, stock bonus or ESOP plans, and money purchase plans.

Distribution Options. This is the decision as to how a distribution or payout is to be received. Make sure you understand the tax consequences of any payout or distribution option chosen.

Distribution/disposition/decumulation Stage (of retirement). This stage begins after you have retired. This is your plan as to how best take distributions from your remaining retirement and taxable accounts to minimize taxes and maximize the availability of your assets.

Distribution/disposition/decumulation strategies. These strategies help you set up a framework where you will not outlive your assets. Recommendations include taking out maximum distribution of 3.6% of total assets each year; only taking out maximum earnings from investments of previous year; or during your later years which income is less, i.e., during missions, transfer money from your tax-deferred to tax-eliminated accounts.

Distribution/Payout Options. These are options as to how you will take the benefits over your retirement.

Distributions. These are distributions of interest, capital gains, and dividends by a mutual or index fund while you own the underlying shares. Even though you have not sold the shares, you are responsible to pay taxes on this distributions because the mutual fund is a pass-through vehicle and the taxes on these distributions are paid at the shareholder level.

Diversification. Diversification is the process of allocating your assets so they are not concentrated in a single asset class. It is “not putting all your eggs in one basket”. Having a diversified portfolio in many different asset classes is your key defense against risk.

DNAH-ial Budgeting Method. This is a method many people use. It stands for DNAH ial - Do nothing and hope. It is not recommended.

Doctrines. Doctrines are the reasons behind why we do things. They answer the “why” questions of our lives, which are generally the most difficult questions to answer.

Down payment. This is the amount that you pay on the house to reduce the cost of the loan. Generally, lenders like a significant down payment as that indicates that the borrower is not likely to walk away from the loan. Different loans require different down payment amounts, i.e Conventional loans – 20 % recommended (but you can get in with 5%), FHA
loans – 3.5%, and VA loans – 0% down payment required.

**Downgrade.** A situation where a bond rating company reduces the bond rating of a bond generally due to a deterioration in the company’s financial condition.

**Dread Disease and Accident Insurance.** This is a special insurance to cover a specific type of disease or accident. Generally it provides only for ‘specific’ illnesses or accidents on the “covered” list, and it provides a set maximum dollar amount of reimbursement. This insurance is generally expensive, unless included in your company’s total health plan. Generally, concentrate on making your health coverage as comprehensive as possible.

**Durable power of attorney.** This provides for someone to act on your behalf in the event you should become mentally or physically incapacitated. This document is separate from the will and goes into effect before death. This document should be very specific as to which legal powers it transfers.

**Earnings multiple approach.** This is one approach for determining the amount of life insurance required. The goal is earnings replacement. The earnings multiple approach seeks to replace the annual salary stream of a bread winner for X years, normally 10 – 15 times gross salary.

**Education investment vehicles.** These are investment vehicles with the purpose to help you save for your children’s education, i.e., Education IRA, 529 plans.

**Education IRA.** An Education IRA, also called a Coverdell ESA, is an investment vehicle for planning for the future cost of a child's education. The plan allows after-tax contributions each year for each child until age 18. Contributions and their subsequent earnings are tax-free when withdrawn to pay for qualified secondary and post-secondary education expenses.

**Education Savings Account** (Coverdell or Education IRA). The investment vehicle is similar to a Roth IRA where you invest in this account with after tax dollars, and if you use the proceeds for qualified educational expenses, distributions are tax-free. You choose your investments and the proceeds can be used for eligible elementary, secondary and post-secondary education expenses.

**EE Bonds:** US government savings bonds where the interest rate is set every 6 months and tied to current market interest rates.

**Effective Interest Rate.** This is the precise interest rate you are paying, after all costs and fees (regardless whether they are paid in the loan or out of the loan). The goal of a good loan is to have the lowest effective interest rate, which takes into account the time value of money.

**Effective marginal tax rate.** This is the average amount of every dollar you earned that paid for all local, state, and federal income taxes.

**Emerging Market stocks and emerging market mutual funds.** These are stocks or mutual funds of companies that trade in the countries not considered developed by the IMF. These are often smaller companies in smaller markets. International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets.

**Employee Contribution** (or Salary Reduction Plans). These are defined contribution plans where employees contribute before tax dollars reducing their taxable income and earnings accumulate tax deferred. The major plans are Roth or Traditional 401k and 403b plans and 457 plans. Employees direct the funds into different financial asset options provided by the company including mutual funds, index funds, fixed income, equities, money market funds, and GICs (guaranteed investment contracts). Companies have their list of approved investment assets. Employees choose where to invest their assets subject to the company list, and employees are not allowed to invest outside of approved investment assets.

**Employer Qualified Retirement Plans.** These are retirement plans, established by a company, that have specific tax and other benefits to both the company and the employee. Benefits include competition, tax shelters, personal retirement for the owners, and personal retirement for the employees. They can be either defined benefit or defined contribution plans.

**Employment.** This is working during college to help offset the cost of educational expenses.

**Endowment Effect.** Sometimes we perceive that an asset’s value increases by virtue of our ownership.
Once you own something, its value hasn’t increased or changed.

**Envelope budgeting method.** A process of budgeting where you prepare divide spending each month into categories, create envelopes for each category of spending, and once a bill comes, take the money from the corresponding envelope and pay the bill.

**Equities (or Stocks).** Equities are an asset class that provides growth and earns returns in excess of inflation. Over longer periods of time, the stock market historically has been the only major asset class to consistently outpace inflation. Equity ownership is ownership in a businesses’ earnings and assets. Equity asset classes are delineated by market capitalization (which is shares outstanding multiplied by the stock’s current market price), type of company (growth versus value), and geographic area. The benchmarks for equity asset classes can be generally defined as capitalization: Large, mid, and small; type: Growth, blend, and value; or geographic area: US, international, global and emerging markets. Equities have offered the highest return of the major asset classes historically and have been a good investment for long-term investing—they have consistently beat inflation over the long-term. However, they offer less stability of principal than other asset classes, and subject to short-term price fluctuations (so very risky for short-term investments).

**Equivalent Taxable Yield:** This is the yield you would need to earn on a fully taxable security to give the same after-tax return that you receive on a tax advantaged security, i.e., a security that has specific tax advantages (i.e., tax free for Federal or State or both).

**Estate planning.** The process of anticipating and arranging for the disposal of your resources to accomplish your personal and family goals after you pass away.

**Estate Taxes.** These are taxes, paid to the government, due on passing of an individual. Estate taxes are equal to the gift-adjusted taxable estate multiplied by the appropriate tax rate. To determine the net tax owed, calculate the total tax owed and subtract the unified gift and estate tax credit.

**Estate transfer.** This is the process that property interests are legally transferred from one to another, either during the person’s lifetime or at death.

**Euro Bonds.** Bonds issued by U.S. companies and sold outside of the U.S. in U.S. dollars.

**Exchange rate risk.** Risk that changes in exchange rates will impact profitability for firms working internationally.

**Exchange traded funds (ETFs).** These are portfolios of stocks similar to mutual funds which trade on organized exchanges. ETF’s trade like stocks, are purchased with all the transaction/custody costs, are priced throughout the day (rather than at day’s end like mutual funds), and can be sold short and purchased on margin. ETFs can be either in a unit investment trust (UIT) format or an open-end mutual fund structure. The UIT structure does not allow for reinvestment of dividends.

**Excise “sin taxes” and state sales taxes.** These are taxes imposed when goods are purchased.

**Exclusion Amount.** This is the amount of estate value that is excluded from the estate tax.

**Exclusive Provider Organization (EPO).** These are similar to an HMO, but operates through an insurance company. It is funded through an insurance company, with health care provided by contracted providers. Only care received from contracted providers is covered (unless in an emergency situation).

**Executor or personal representative.** This is the person who is responsible for carrying out the provisions of the will.

**Exemptions.** An exemption is an amount of money set by the government that you can deduct for each qualifying person in your household.

**Expenses.** This is where your money goes. There are two types of expenses: fixed expenses, which are expenses you don’t directly control; and variable expenses, which are expenses you can control.

**Family Giving Plan.** A family plan which states how the family will give, to whom it will give to, as well was what the family will or will not do or give to.

**Family Money.** This refers to the use of personal savings and help from parents or other family.

**Fee for-service (or traditional indemnity plans).** These are health care plans where the doctor bills the patient directly, and the patient is reimbursed, to a specific percentage, by the insurance company. They
provide the greatest flexibility for choosing doctors and hospitals, they define the percent of each claim the policy will cover, and they define the amount the insured must pay before a claim is eligible for reimbursement. Generally these plans are more expensive and require more paperwork.

**FHA Loans.** These are Federal Housing Administration (FHA) Insured Loans. The FHA does not originate any loans, but insures the loans issued by others based on income and other qualifications. There is lower PMI insurance, but it is required for the entire life of the loan (1.5% of the loan). While the required down payment is very low, the maximum amount that can be borrowed is also low.

**FICO Score:** This is the most commonly used credit score. It ranges from 300 to 850.

**Fill or kill orders.** These are orders which must be either filled or canceled immediately. Most often these are market orders.

**Financial assets/instruments.** These are different types of securities that are sold in financial markets.

**Financial Goals.** Financial goals are personal goals with a cost attached.

**Financial markets.** Markets in which financial securities or assets are bought and sold.

**Financial Planning.** This is the process of helping yourself and others to use their resources more wisely to achieve their personal and family goals. It should help determine where you are, where you want to be, and how you will get there.

**Financial Ratios.** These are ratios that can help you to analyze your spending.

**Financial risk.** How the firm raises money could affect the financial performance of the firm and the value of the bonds.

**Fixed contribution plans.** These are defined contribution plans where contributions are fixed by the employer. Examples are thrift and savings plans and target benefit plans.

**Fixed Income.** Fixed income is an asset class that attempts to provide income and to earn returns in excess of inflation. There are two different types of fixed income assets: Taxable bonds. Taxable bonds include U.S. Treasuries, corporate bonds and agency issues (bonds issued by U.S. government agencies, like Ginnie Mae). Tax-free bonds include revenue or general obligation bonds issued by local or state governments and agencies. Such bonds are generally free from federal and state taxes. Fixed income includes short-term bonds/bond funds, intermediate-term bonds/bond funds, and long-term bonds/junk bonds/bond funds issued by governments or corporations. Fixed income offers greater returns than cash, but with greater risk. It offers good diversification tool when holding a long-term stock portfolio, as bonds move differently than stocks. However, returns have been historically lower than stocks, they are very susceptible to interest rate and other risks, and generally, fixed income assets alone are not good long-term investments because they don’t provide enough growth to beat inflation over long periods of time.

**Fixed rate mortgages (FRMs).** These are mortgage loans with a fixed rate of interest for the life of the loan. These are the least risky from the borrower’s point of view, as the lender assumes the major interest rate risk above the loan rate. These are the most-recommended option for new home buyers.

**Fixed.** Payments are a fixed amount, and are made to the investor until the end of the contract, usually till the investor dies.

**Fixed-rate loans.** Have the same interest rate for the duration of the loan. Normally have a higher initial interest rate as the lender could lose money if overall interest rates increase. The lender assumes the interest rate risk, so they generally add an interest premium to a variable rate loan.

**Floating rate bond.** Bond whose interest payments fluctuate according to a specific benchmark interest rate.

**Free Application for Federal Student Aid (FAFSA).** This is the application form for obtaining government student aid.

**Free money.** This is money that is made available by a company, generally on a matching basis, to encourage greater participation in company sponsored retirement plans, i.e., 401k, Roth 403b, Keogh, etc. It is also money made available through education tax benefits, i.e. 529 plan contributions deductible from state taxes.

**Free Money.** This is money you do not physically work for and is not paid back. It includes scholarships and grants.
**Full Retirement Age (FRA).** This is the age at which a retiree will receive 100% of their entitled benefits. Receiving benefits prior to FRA will result in a reduction in benefits. Receiving benefits after FRA will result in an increase of benefits.

**Full-service brokers.** These are brokers who will give you all the tools, research and other advice to help you trade and invest.

**Fun.** Sometimes we trade for fun and entertainment instead of financial performance. This is OK, but make sure your fun money is no more than 5% of the value of your portfolio—that way you don’t lose too much.

**General Obligation bonds.** Bonds backed by the taxing power of the issuer.

**Generation-Skipping Tax.** This is a tax on revenue lost when wealth is not transferred to the next generation, but to a succeeding generation. It is a flat tax, in addition to the regular estate tax, imposed on any wealth or property transfers to a person two or more generations younger than the donor.

**Gift and estate taxes.** These are taxes imposed when assets are transferred from one owner to another.

**Gift Tax Exclusions.** A gift tax must be paid on all transfers to others (other than a spouse) that are in excess of the maximums specified. The maximum specified is your exclusion.

**Gift-Adjusted Taxable Estate.** This is equal to your taxable estate plus any taxable lifetime gifts, which is the cumulative total of all gifts over the annual limit.

**Giving Plan.** A plan on your thoughts on your personal and family giving. It discusses how you will handle both your institutional (through Church and other institutional contributions) and personal (personal and family contributions and service) giving.

**Global stocks and global stock mutual funds.** These are stocks or mutual funds of companies that contain a mixture of U.S. and foreign or international holdings. International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets.

**Goals.** These are things we would like to accomplish. They are often divided by time, i.e., short-term, in the next 12 months; medium-term, from 2-10 years; and long-term, beyond 10 years. They may also be divided by type, i.e., identity, integrity, and temporal goals. They will take effort and resources, but are things that are important to us and are what we want to accomplish.

**Good Faith Estimates (GFE).** This is an estimate from each lender (not just a Summary) of the likely costs you will likely pay as you complete the loan process. I recommend you get GFEs from each potential lender and compare them.

**Government-Sponsored Health Care Plans.** Government-sponsored health care plans are insurance plans which are sponsored either by the state or the federal government. These plans fall under three headings: Workers' Compensation, Medicare, and Medicaid.

**Grace Period:** The amount of time given by a credit card company to pay a due balance before interest starts to accrue. Normally 20 to 25 days, excluding cash advances. It does not apply if the card already carries a balance.

**Grad PLUS Loan.** These are loans available for graduate students to help with school-related expenses. The student is responsible for interest during school, repayment begins six months after student graduates, discontinues or drops below half time, and the graduate student is the borrower.

**Grants.** Money given to individuals for education on the general basis of need.

**Gross Estate.** This is the value of all your assets, including life insurance, pensions, investments, and any real or personal property.

**Gross Income.** Gross income for tax purposes is all income, unless specifically excluded or deferred.

**Gross Savings Ratio.** This is your income for savings divided by your gross income. This ratio tells you what proportion of your total income is being saved.

**Growth stocks.** These are fast-track companies whose earnings are expected to grow very rapidly. Frequently these are companies developing new technologies or new ways of doing things.

**Guardian.** The person who cares for minor children and manages their property.
Health Care Coverage. Health Care Coverage is divided into four areas: basic health insurance, major medical expense insurance, dental and eye insurance, and dread disease and accident insurance.

Health Care Providers. These are the major providers of health care. They fall into three types: Private health care plans, which are either fee-for-service (or traditional indemnity plans) or managed health care (HMO, PPO); Non-group (individual) health care plans, or Government-sponsored health care plans.

Health care proxy. A health care proxy designates someone to make health care decisions should you be unable to do so for yourself.

Health Maintenance Organizations (HMOs). HMOs are prepaid insurance plans which entitle members to the services of specific doctors, hospitals and clinics. They are the most popular form of managed health care, due to their costs, which are roughly 60% of fee-for-service plans. They provide a system of doctors and hospitals for a flat fee, and emphasize preventive medicine and efficiency, and subscribers pay a relatively small co-pay for services rendered. They provide little choice of doctors and hospitals. As such, service may be less than at other facilities and referrals sometimes difficult to get.

Hedge funds. Hedge funds are less-regulated mutual funds which take much more risk than normal with the expectation of much higher returns. Generally they can take both long positions (where they buy assets) and short positions (where they short-sell assets, i.e., borrow assets and sell them). They hope to later buy back the assets at a lower price before they must return them to the borrower.

Holographic Will. A will and testament that is entirely handwritten and signed by the testator. Traditional wills require signatures of witnesses as well as the testator's signature and intent. Holographic wills are treated equally with witnessed will and need only to meet minimal requirements in order to be probated.

Home Equity Lines of Credit (HELOC). Home equity lines of credit are basically second mortgages which use the equity in your home to secure your loan. These are generally adjustable rate notes that have an interest only payment, at least in the first few years of the note. Interest rates are variable and are generally interest only in the first few years. They have lower rates of interest than other consumer loans.

Home Equity Loans. This is a personal debt strategy. You take out a home equity loan, which is a loan against the equity in your home (the difference between what the home is worth and how much you owe on it) to pay off your debts. Home equity loans are basically second mortgages which use the equity in your home to secure your loan. Normally can borrow up to 80% of your equity in your home.

Home Inspection. This is a service, usually paid for by the buyer, to alert them to potential problems with the home. Many of these problems should be fixed by the seller prior to purchase and so these problems need to be discovered and disclosed. Don’t buy someone’s problems.

Housing Expenses or Front-end Ratio. This is a housing affordability ratio that calculates what percent of your income is used to make mortgage payments. Housing expenses should be less than 28% of your monthly gross income. The formula is: monthly PITI*/monthly gross income <28%. PITI = mortgage principle, mortgage interest, property taxes, and property insurance.

Housing. These are appreciating tangible assets, such as land, dwellings, vacation home, or rental property used for personal goals or capital income.

I Bonds: Inflation linked US government savings bonds, where the rates on the bonds are tied to inflation.

Identity goals. These are goals that relate to our long-term view of who we are and how we see ourselves. These goals help us be better in our long-term view of who we are and what we want to become.

Ignorance. A reasons for going into debt. We don’t understand interest and its costs.

Immediate Annuity Distribution. You can use your defined contribution plan to purchase an immediate annuity, either from your retirement Plan provider or from others outside the Plan.

Impound/escrow/reserve accounts. These accounts are that portion of a monthly payments held by the lender or servicer to pay for: Taxes, Hazard insurance, Mortgage insurance, Lease payments, and Other items as they become due. These are for payments for items above which are over and above
your monthly mortgage payments of principle and interest. These may or may not be required by your lender.

**Inactivity/Minimum balance fees.** These are fees because you did not have account activity during the period or because you failed to keep a minimum balance in your account.

**Inactivity/Minimum balance fees.** These are fees imposed because you did not trade or have account activity during the period or because you failed to keep a minimum balance in your account.

**Income Statement (personal).** This is a financial record your inflows and outflows of cash. It is on a cash basis. The statement is based entirely on actual cash flows, not accruals.

**Income Taxes.** Income taxes are a progressive tax meaning that the more you earn the more you pay.

**Income-consuming assets.** These are assets which require a constant infusion of cash to keep operative.

**Income-generating assets.** These are the best type of assets. These assets generate income or capital gains which may eventually allow you to have income without your having to work.

**Indenture.** A document that outlines the terms of the loan agreement.

**Independent brokers.** These are brokers whose company is not part of a major chain or who own a captive mutual fund company. They may be inclined to give unbiased advice as they do not sell specific mutual funds.

**Independent brokers.** These are brokers whose company is not part of a major chain or who own a captive mutual fund company. They may be inclined to give unbiased advice as they do not sell specific mutual funds.

**Index funds.** Index funds are mutual funds designed to match the returns of a specific index or benchmark. Different Index funds may track many different benchmarks, including the S&P500 (Large-cap stocks), Russell 5000 (small-cap stocks), MSCI EAFE (international stocks), Barclay Aggregate (corporate bonds), DJ REIT (Real estate investment trusts), etc. Index funds are tax efficient since they do little in buying and selling of securities, and their goal is to match the return of their relative benchmarks.

**Index funds.** These are mutual funds or ETFs which hold specific shares in proportion to those held by a specific index, i.e., the S&P 500 or Russell 2000. Their goal is to match the benchmark performance. Index funds have become the standard against which other mutual funds are judged.

**Individual Biases.** The brain does not work like a computer. Instead, it processes information through shortcuts and emotional filters to shorten the analysis time. These filters and shortcuts lead to predictable errors in investing. We must be wise to these prediction errors so we can be better investors and better stewards over our resources.

**Individual Development Accounts (IDA).** These are matching resources from local and other sources to encourage saving for specific goals including education. They must be used for education, or home purchase, or to start a business, you must be in the program for 12 to 36 months maximum, and must attend a basic money management class (Fin418 counts), reside in Utah, be 18 or older, have income to save and meet needs criteria.

**Individual Retirement Accounts.** These are retirement account created with the Taxpayer Relief act of 1997. While there are over a dozen different individual retirement accounts, the three major types of Individual Retirement Accounts are Traditional IRA, Roth IRA, and Education IRA, which is also called a Coverdell Education Savings Account (ESA).

**Individual Retirement Annuity:** An IRA set up with a life insurance company through purchase of annuity contract.

**Inflation risk.** Risk that a rise (decline) in inflation will result in a decrease (increase) in the bond’s value.

**Inherited IRA:** An IRA acquired by the non-spousal beneficiary of a deceased IRA owner.

**Initial public offerings (IPOs).** These are the very first shares ever issued by a company. Investment bankers serve as underwriters or intermediaries for these IPOs.

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**Initial target portfolio.** This your first goal for a target dollar amount as you begin building your portfolio. It is calculated by taking your emergency fund goal and dividing it by your percentage in bonds and cash.

**Installment Loans.** Installment loans are loans which are repaid at regular intervals and where payment includes both principal and interest. These are normally used to finance houses, cars, appliances, and other expensive items. These loans are amortized, which is the process of the payment going more toward principal and less toward interest each subsequent month. These may be secured or unsecured loans, variable-rate or fixed-rate loans.

**Insurance.** Insurance is a tool to help you achieve your personal and family goals. It is a product that transfers the risk of certain types of losses or events from an individual to another institution. By transferring risk, it can help the individuals achieve specific goals if they die, get sick or become unable to work. But it is a tool that needs to be understood and used wisely.

**Insured Worker.** A worker is only entitled to receive benefits if that worker is fully insured. Workers are considered fully insured if they have worked forty quarters of work (a quarter is three months) and earned a specific amount of money per quarter.

**Integrity goals.** Integrity goals relate to the characteristics and standards you want to achieve in the work and service you provide. These goals relate to how we will work and live, what we will and will not do, and characteristics and skills we wish to attain.

**Interest only Option loans.** These are FRMs or ARMs with an option that allows interest only payments for a certain number of years, and then payments are reset to amortize the entire loan over the remaining years. Some will take out an interest only loan to free up principal to pay down other more expensive debt. Once the interest-only period has passed, the payment amount resets, and the increase in payment can be substantial. These are generally not recommended.

**Interest or finance costs.** This is the average amount borrowed times the monthly interest rate. In calculation form, it is the \((\text{Net capitalized cost} + \text{residual value}) / 2 \times \text{your average interest rates which is the APR/12.}\)

**Interest rate risk.** Risk that a rise (fall) in interest rates will result in a decline (rise) in the bond’s value.

**Interest.** The cost of using borrowed money. Interest must always be paid.

**Interest/coupon payments.** These are payments received as part of the contractual agreement to receive interest payments from a bond. Bonds which have preferential interest tax treatment, i.e., muni’s and Treasuries, must still pay capital gains taxes.

**Intermediate-term bonds.** Bonds with a maturity of 2 to 10 years.

**Internal Rate of Return (IRR).** This is a form of loan analysis to determine whether you should refinance or not. The process is to calculate all costs and fees for the loan, calculate the monthly savings, determine the number of months of savings, and set the number of months on the new loan equal to the number of months remaining on the old loan so you are not extending the loan! If your IRR is greater than your risk-free rate, then refinance.

**International Bonds.** Bonds issued by international companies and sold internationally in various currencies.

**International stocks and international mutual funds.** These are stocks or mutual funds of companies based entirely outside the U.S. These can be of any size (small-cap, large-cap), any type (value, growth) and from any part of the world outside the US. International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets.

**Intestate.** The process whereby the state essentially writes the will for a person because they did not prepare a will during their lifetime.

**Investment advisor.** A person or an organization that helps makes the day-to-day decisions regarding a portfolio’s investments for investors.

**Investment Assets.** These assets are stocks, bonds, mutual funds that are invested for the future. These are also income-producing assets used to accumulate wealth to satisfy specific goals.

**Investment Benchmarks.** An investment benchmark is the standard by which to judge your asset performance. You never choose an asset without choosing an investment benchmark. Use
your investment benchmark to determine how well you are doing.

**Investment Constraints.** These are specific needs you have which will constrain how you will invest your portfolio.

**Investment Guidelines.** Your investment guidelines are the general road map on how you will be investing your assets over your life cycle. It integrates your personal goals and your financial goals into a complete financial perspective.

**Investment Horizon.** This is when will you sell the investment.

**Investment Plan** (also called and Investment Policy Statement). Your Investment Plan is the most important document you will prepare in regards to your investing activities. It sets the plan and framework on every investing activity. It states what you will do: what you will and will not invest in, how you will invest, why you will invest, what percentages you will invest, etc. In short, it is the key document that will impact your investment returns most for the rest of your future.

**Investment risk.** This is the risk of who takes responsibility for the investment outcome, the insurance company or the insured.

**Investment vehicles.** The investment vehicle is the tax-law defined framework that has specific tax advantages, i.e., 401k, 403b, Individual Retirement Account (IRA), SEP IRA, Roth IRA, Roth 401k, etc. Investment vehicles have different benefits, i.e., due to matching (free money), tax elimination, tax deferral, or just tax-efficient and wise investing. Investment vehicles are like shopping carts in the grocery store, they are the things you put your groceries, or financial assets, into.

**Investment/financial assets.** Investment or financial assets are the securities that are invested in by the investment vehicles, i.e., stocks, bonds, mutual funds, REITs, MMMFs, CDs, etc. They are like the groceries you put in your shopping cart, which is your investment vehicle.

**IRA Rollover distribution** (Be careful and don’t touch the funds). You can roll over your distribution into an IRA. The benefits are you can defer taxes until you withdraw the funds, you can direct investment to different assets and asset classes, and you can continue to enjoy tax-deferred growth. The risks are that there is no guarantee that funds will last a lifetime and you must begin withdrawals at 70½ or 50% penalty is incurred.

**Irrevocable Living Trust.** A trust that cannot be changed by the owner once established, because the trust becomes another legal entity which owns all the assets contained in the trust and pays taxes on the assets and gains they produce. The assets are not subject to estate taxes since they are not part of your estate and assets in the trust do not pass through probate.

**Issue.** These are children.

**Issuer.** The corporation or government agency that issues the bond.

**Itemized Deductions.** These are allowable deductions (if you itemize) and include: charitable contributions (cash, in kind, and/or mileage), home mortgage interest, medical expenses (>10% AGI), unreimbursed qualified job expenses (> 2% AGI), casualty and theft expenses (> 10% AGI), etc.

**Jensen’s Alpha.** This is a risk-adjusted performance measure. This is the ratio of your portfolio return less CAPM determined portfolio return, or alpha = \( \frac{\text{return}_p - \text{return}_m}{\text{beta}_p} \) where \( \text{alpha} \) = alpha for the portfolio, \( \text{return}_p \) = average return on the portfolio, \( \text{beta}_p \) = Weighted average Beta, \( \text{return}_m \) = average return on market index port. It is portfolio performance less expected portfolio performance from CAPM model.

**Joint and Survivor Annuities** (percent relates to the amount the spouse receives). You receive payment for as long as you live or for a certain guaranteed period, whichever is longer, and your spouse, after you die, receives that percent of your payment for as long as they live.

**Joint Tenancy with Right of Survivorship** (JTWROS). Ownership is shared equally and lifetime control is shared, income is shared between owners, testamentary control is absent, and then right of survivorship is key.

**Jumbo loans.** These are loans in excess of the conventional loan limits and the maximum eligible for purchase by the two Federal Agencies, Fannie Mae and Freddy Mac, of $417,000 in 2016 (some areas have higher amounts). Some lenders also use the term to refer to programs for even larger loans, e.g., loans in excess of $500,000.
**Junk Bonds.** Bonds with very low bond ratings, a higher interest rate and default rate, and are almost always callable.

**Keogh Plan.** This is a small business retirement plan set up by a sole proprietor or partnership (not incorporated) which allows employers to make tax-deductible payments to retirement plans, similar to pension or profit-sharing plans. Plans can be either a defined benefit or defined contribution, but most commonly are DC profit sharing or money purchase plans. Contributions are tax deductible, earnings grow tax-deferred, and employers may borrow from the Plan.

**Large-cap (capitalization) stocks.** Large caps are stocks with a market capitalization greater than roughly $10 billion in the US, and smaller capitalizations for international companies. These are the generally the largest, most well established companies in the US, with a history of sales and earnings as well as notable market share. These are generally mature corporations with a long track record of steady growth and dividends.

**LDS Housing Ratios.** As members of the Church, we have other important obligations that we also pay, i.e., tithing and paying ourselves, i.e., savings. As such, should have smaller houses (at least less expensive), because we pay the Lord first and ourselves second. For a spreadsheet that takes into account the fact that we pay the Lord first and ourselves second within this front-end and back-end ratio framework, see: Maximum Monthly Mortgage Payments for LDS Spreadsheet (from the website).

**Lease cost:** The total cost of a vehicle’s lease.

**Lease term:** The number of months the vehicle is leased.

**Lease:** A contractual arrangement calling for the lessee (user) to pay the lessor (owner) for the use of an asset.

**Leverage.** The decision of using debt to invest. It is not recommended.

**Liabilities.** This is what you owe to others. Liabilities come in two major forms: current liabilities, liabilities that must be paid-off within the next year, and long-term liabilities, liabilities that extend beyond one year.

**Liability Coverage.** Liability is the financial responsibility one person has to another in a specific situation. Liability results from the failure of one person to exercise the necessary care to protect others from harm. Personal liability coverage protects the policyholder from the financial costs of legal liability or negligence. There are two major forms of liability insurance: the liability portions of homeowners and auto insurance and an umbrella liability coverage.

**Life Annuities** (guaranteed for the “certain” period). You receive benefits for as long as you live or for a certain guaranteed period, whichever is longer.

**Life insurance.** This is insurance that provides compensation to your beneficiaries should you die prematurely. It transfers the economic loss of death from an individual to an insurance company by way of a life insurance contract. It can help us take care of our own and extended families should we die.

**Life-cycle funds.** These are funds which change their allocation between stocks and bonds depending on investor age. As an investor ages, life cycle funds reduce their allocation to stocks and increase their allocation to bonds, more consistent with the goals and objectives of an older investor.

**Lifetime transfers.** Methods of transferring property including the sale or gifting of one asset to another.

**Limit orders.** These are orders to sell or buy a specific number of shares at a specific price or better. This is generally the best method in working with brokers.

**Limited Partnership Basis.** A process of teaching children about finance based on their age and consistent with their ability to learn.

**Liquidity risk.** Risk that investors will be unable to find a buyer or seller for a bond when they need to sell or buy.

**Liquidity.** This is the speed and ease with which an asset can be converted into cash.

**Living Trust.** A trust where assets are placed in the trust while you are still living. You can take them out and move them according to what you want to do before you die.

**Living will.** It is a legal document that details your end-of-life wishes for health care. It is used when you are still alive but unable to make health care decisions for yourself. A living will states your wishes regarding medical treatment in the event of a terminal illness or injury.
Loads. Loads are sales charges to compensate the sales force for selling the fund. Loads directly reduce the amount of money invested by the amount of the load. Loads can either be front-end or back-end, depending on when the mutual fund company takes out the load or sales charge. Generally, research has found that the performance of load funds and no-load funds is identical. When the sales charges are included, no-load funds significantly outperform load funds. (Matthew R. Morley, “Should You Carry a Load? A Comprehensive Analysis of Load and No-Load Mutual Fund Out-of-Sample Performance,” Journal of Banking and Finance, vol. 27, nu. 7 (2003), pp. 1245-71.)

Loan term. This is the duration of the loan. It can be 10, 15, 20 or 30 years depending on your goals and your cash flow situation.

Local income taxes. These are uncommon; but some larger cities, for example, New York City, impose such a tax.

Long-term bonds. Bonds with a maturity of greater than 10 years.

Long-term capital gains. These are capital gains where the Fund has owned the assets for more than a year (366 days). These are taxed at a rate dependent on your taxable income.

Long-term Debt Coverage ratio. This is your income available for living expenses divided by long-term debt payments. This ratio tells how long you could make monthly payments on your debt based on the amount of money you have available for living expenses (which is wages less taxes). The inverse of this ratio is the Debt Service ratio.

Loss Aversion. Often losses are given more weight in our minds than potential gains in any position. These weights are more than utility theory would suggest. We should give gains and losses equal weight in your analysis. It is the gains and losses of the overall portfolio that are important, not individual securities.

Low Income Filer. This is a single filer with provisional income below $25,000 or married filing jointly (MFJ) with income below $34,000. None of the benefits are taxable.

Lump Sum Benefit. A lump sum of $255 is available to the surviving spouse, nonresident spouse, or to children eligible for the monthly benefits (for 2016). Lump Sum Distribution. This is taking the entire retirement account at retirement. You are responsible to ensure this amount lasts your entire life. The benefits are you can take the money out as you need it, and can invest/gift/use it elsewhere. The risks are that plans only allow distributions every 3 months, taxes are incurred immediately, and if you do not plan well, may not have sufficient money for retirement.

Lump-sum. You receive a single payment of all principal and interest at retirement that you are responsible to manage.

Maintenance margin. This is money you put up to buy on margin. If your maintenance margin falls below a specific level, you will be required to put up more money. If not, your position will be closed out.

Major Medical Insurance. This is major coverage of medical costs over and above the basic health insurance coverage. It covers medical costs beyond the basic plan. These normally require a co-payment and/or a deductible. There is a stop-loss provision, which limits the total out-of-pocket expenses incurred by the insured to a specific dollar amount and a life-time cap for the insurance company, which limits the total amount the insurance company will pay over the life of a policy.

Managed health care providers. These are insurance companies which provide pre-paid health care plans to employers and individuals. There are four main types of managed care: i. Health maintenance organizations (HMOs), Preferred provider organizations (PPOs), POS Plans (POS), and Exclusive Provider organization (EPOs). They pay for and provide health care services to policy holders and they provide the most efficient payment of bills. However, they limit choices to the doctors and hospitals that participate and they require policy holders to pay a monthly premium and share the cost of care.

Management fees. These are fee charged by the advisor to a fund generally on the basis of a percentage of average assets under management, i.e. 75 basis points or .75% a year.

Manager Style Drift. This is a check on the management style. Make sure the manager’s investment style remains constant. Investment fund managers have no authority to change the asset class. If you purchase a small cap fund, the manager should purchase small cap shares. The fund's prospectus
should clearly define the market size, company, and portfolio style tilt.

**Margin accounts.** These are accounts where you borrow from the brokerage firm to purchase financial assets. This is debt, and can amplify both gains and losses.

**Margin call.** This is a call by the broker to put up more money when your margin declines below a certain level. I recommend you do not buy on margin. It is using debt to invest and you can lose more than your original investment doing this.

**Marginal tax rate.** This is your taxes on each additional dollar of earnings. If you made $1 more this year, at what rate would it be taxed.

**Market capitalization.** It is one measure of the size of a company. It is calculated by multiplying the market price of the stock by the number of shares (i.e. ownership pieces) outstanding. The greater the capitalization, the larger the company. Market capitalization is used to weight companies in various benchmarks and to determine certain classes of companies, i.e. large-cap, mid-cap, small-cap, etc.

**Market orders.** These are orders to sell or buy a specific number of shares at the currently available or market price. Be careful as the market can move quickly and dramatically between when you place the order and order execution time.

**Markup.** This is the difference between the buying price and the calculated selling price.

**Maturity date.** The date when the bond expires and the loan must be paid back.

**Maximum Family Benefit.** When benefits are payable to more than one family member, a family maximum applies. This includes all benefits paid to the family. For disability, the family maximum is the lesser of 150% of the workers disability benefit or 85% of the AIME used to calculate the benefit, but is not less than the benefit paid to the worker. When the worker is living, and benefits exceed the family maximum, the worker’s benefit is not adjusted; rather, the reduction is made in other beneficiaries’ payments.

**Mean Reversion.** Prices tend to correct themselves as investors correct for overreaction. Long-term prices tend to revert to the mean.

**Medicaid.** Medicaid is a medical assistance program, operated jointly by the states and federal government, to provide health care coverage to low income, blind, or aged persons. Medicaid payments may be used to offset the premiums, deductibles, and co-payments incurred with Medicare. There is no guarantee that this plan will be around in its present form.

**Medicare Benefits.** Medicate hospital insurance (HI) portion of Medicare, also known as Part A, is largely funded by the 2.9% HI tax on earnings. Part A is compulsory. Individuals at least age 65 and eligible for Social Security retirement benefits on their own behalf are entitled to coverage under Medicare Part A. If the individual has applied for Social Security (SS) retirement benefits, no separate application is required.

- Medicare Part A is compulsory and covers all hospital related expenses, such as bed and board, operating room costs, and lab tests. Patient pays a deductible and coinsurance payment.
- Medicare Part B is voluntary, with a monthly charge. It covers doctors’ fees and other outpatient treatment. Patient pays a premium, deductible, and 20% of approved charges.
- Medicare Part C (Medicare Advantage) provides three program alternatives: coordinated care plans, private fee-for-service Medicare, and health savings accounts (HSAs).

**Medicare.** This is a health care insurance program for elderly and disabled. Medicare insurance provides medical benefits to the disabled and to those 65 and older who are covered by Social Security. Its cost is covered through Social Security taxes. Individuals can get insurance through Medicare that would be prohibitively expensive through other channels, however, it doesn’t cover all the costs and expenses and individuals must pay certain amounts. In addition, there are limitations to the coverage, such as out-of-hospital prescription drugs and limitations to the number of days in skilled nursing facilities. Medicare is divided into three parts: A, B, C.

**Mental Accounts.** Often investors keep mental accounts rather than viewing individual assets as part of a total portfolio. We do this to try to save ourselves from ourselves.

**Mid-cap or mid-capitalization stocks.** These are stocks with capitalization between roughly $2 billion
and $10 billion. These stocks tend to grow faster than big cap companies, and are generally less volatile than small cap companies. Mid-caps generally perform similar to the small-cap asset class. For asset-allocation purposes, mid-caps are generally not considered a major asset class.

**Middle Income Filer.** This is a single with income from $25,000 to $34,000 and MFJ with income from $32,000 to $44,000. Up to 50% of social security benefits are taxable.

**Minimum purchase amount.** This is the minimum amount the mutual fund company will allow you to purchase in their funds to begin investing.

**Mission Statement.** This can be your individual and family purpose and passion. It can also include other things such as family mottos, family mission statements, what you stand for, etc.

**Modified Adjusted Gross Income.** This is your adjusted gross income adding back certain items such as foreign income, foreign-housing deductions, student-loan deductions, IRA-contribution deductions and deductions for higher-education costs.

**Monetary (or Current) Assets.** This is cash or other assets that can be easily converted into cash. These may be also income-producing assets. They provide necessary liquidity in case of an emergency.

**Money factor:** A way of expressing interest rates, calculated by taking the APR and dividing it by 24.

**Money Market Account** or **Money Market Deposit Account:** A non-financial account that pays interest based on current interest rates in the money markets. They typically require a higher minimum balance to avoid monthly fees and typically have a higher rate of interest.

**Money market mutual funds.** Money market mutual funds are funds which invest the majority of their assets in short-term liquid financial instruments such as commercial paper and government treasury bills. Their goal is to obtain a higher return, after fees and expenses, than traditional bank savings or checking accounts.

**Money Purchase Plans.** These are defined contribution plans where the employer contributes a percentage of employee salary each year, not dependent on company profits. Employees do not contribute.

**Monitor performance.** The process of understanding and reviewing the performance of a portfolio. Unless you monitor performance, you will not know how you are doing in working toward accomplishing your objectives. You need to know how every asset you own is performing, and performing versus its benchmark, so you can determine how well you are moving toward your goals.

**Month’s Living Expenses Covered ratio.** This is your monetary assets divided by your monthly living expenses. This ratio tells you how many months you could survive in the event of the loss of all current income. Your living expenses do not include charitable contributions, taxes or savings.

**Mortality risk.** This is the risk that the insured dies outside the contract period and is therefore not covered by insurance.

**Mortgage-backed bonds.** Bonds backed up by a pool of mortgages.

**Mother’s or Father’s Benefit.** The surviving spouse of a fully or currently insured worker is eligible to receive a benefit of 75% of the worker’s PIA if they are caring for a child who is under age 16 or who was disabled before age 22 (subject to family maximum).

**MSRP:** The price the manufacturer hopes to get for the sale of a product.

**Mutual fund returns.** Mutual fund returns include distributions of dividends, capital gains, and interest, and any NAV appreciation. Your total return: (ending NAV–beginning NAV)+ distributions / beginning NAV. Mutual Fund after-tax returns is your return after all taxes are taken out. Mutual fund before-tax returns is your return before taxes.

**Mutual fund share classes.** These classes of shares vary depending on the loads and management fees paid. While there are differences in classes of shares among investment management companies which charge loads, they generally are:

**Mutual fund supermarkets.** Mutual fund supermarkets i.e., Fidelity Funds Network, Charles Schwab, or Jack White, allows you the benefits of the mutual fund company while you get access to a whole range of mutual fund companies (but not all of them). Mutual fund companies rebate part of their management fees back each month to the “mutual
fund supermarkets” to have them included in their list of funds.

**Mutual fund.** It is a way of holding financial and real investments. It is an Investment company that pools money from investors to buy stocks, bonds, and other financial investments. Investors own a share of the fund proportionate to the amount of their investment divided by the total value of the fund.

**Necessity.** One of the reasons for going into debt. It is we truly cannot feed our families.

**Needs Approach.** This is an approach for determining the amount of life insurance that is required. It determines the total needs of the beneficiaries which includes immediate, debt elimination, transitional, dependency, spousal life income, education, and retirement needs. It is the most detailed of the approaches.

**Negative Amortization Mortgages (NegAm).** These are mortgage loans in which scheduled monthly payments are insufficient to amortize, or pay off the loan. Interest expense that has been incurred, but not paid is added to the principal amount, which increases the amount of the debt. Some NegAm loans have a maximum negative amortization that is allowed. Once that limit is hit, rates adjust to make sure interest is sufficient to not exceed the maximum limit.

**Net capitalized cost (also called adjusted capitalized cost):** The final amount paid. Found by taking the capitalized cost and subtracting capitalized cost reduction.

**Net worth or equity.** This is the difference between your assets, the things you own of value, and your liabilities, what you owe to others.

**New investor bias.** New investors dilute the value of existing investor’s shares. Since new money comes into the fund at Net Asset Value, and since this money must be invested (at roughly 0.5% on average in the U.S.), existing investors are subsidizing new investors coming into the fund

**NMD (New Money / Donations) Addendum.** This is a way to rebalance using either of the rebalancing methods. Rebalance as determined previously, but pay your charitable donations using appreciated assets, and use the money you would have spent on charity to purchase the “underweight” assets, so you do not have to sell and incur transactions costs or taxable events.

**No-load mutual funds.** Mutual funds that are sold without a sales charge and are redeemed without a charge as well.

**No-Load Shares:** These are shares sold without a commission or sales charge. Generally, these shares are distributed directly by the investment management company, instead of going through a sales channel. They may have higher management fees to compensate for the lack of a front- or back-end load.

**Non-deductible IRA.** Individuals may contribute to a non-deductible IRA. The benefits are that money is contributed after-tax, and investment earnings grow tax-deferred. No taxes are paid on the investment earnings until the earning are withdrawn at retirement. Accurate record keeping is required to pro-rate the nondeductible portion of any subsequent distribution.

**Non-group Coverage Plans.** These are health insurance plans which cover individuals on a case-by-case basis and are traditionally the most expensive type of coverage. They provide a custom insurance policy to the purchaser. They are expensive, usually 15% - 60% more expensive than a group policy and may require subscribers to pass a medical exam.

**Non-probate transfers.** These are “will substitutes,” and include state law, right of survivorship, beneficiary designations, and gifts causa mortis.

**Non-refundable credits.** Non-refundable credits include child tax, child and dependent care, elderly and disabled, adoption, hope learning, and lifetime learning and are only good up to the amount of taxes owed.

**OASDI – HI (Old Age, Survivors, and Disability Insurance and Hospital Insurance).** This is payment for Social Security and Medicare taxes. The employee and employer each pay (assuming your Adjusted Gross Income (AGI) is less than $250,000: Social security tax (OASDI) of 6.20%, Medicare tax (HI) of 1.45%, for a total of 7.65% each. Self-employed individuals pay the whole 15.30%. OASDI-HI taxes are on taxable wages including wages, salaries, bonuses, commissions, value of employer provided meals/lodging, sick pay during first 6 months, employer paid group life insurance premiums in excess of $50,000, salary reduction from 401k, 403b, 457 plans, non-qualified deferred compensation no longer at risk, non-qualified stock options, vacation pay, and severance pay.
Open orders (GTC: good till canceled, GTD: good till date specified). These are orders which are good until filled or canceled. Be very careful with open or GTC/GTD orders. If you fail to cancel specific orders, you might have orders filled that you forgot to close out.

Open-end mutual funds. These are mutual funds that can be purchased and sold each day at the fund’s Net Asset Value, which is the fund’s assets less liabilities, divided by the number of shares outstanding.

Option Adjustable Rate Mortgages (Option ARMs). This is an ARM where interest rate adjusts monthly, and payments annually, with “options” on the payment amount, and a minimum payment which may be less than the interest-only payment. The minimum payment option often results in a growing loan balance, termed negative amortization, which has a specific maximum for the loan. Once this maximum is reached, payments are automatically increased and the loan becomes fully amortizing after 5 or 10 years, regardless of increase in payment and must be repaid within the 30 year limit. These are not recommended.

Ordinary dividends. These are stock dividends earned from holding a stock an insufficient number of days within a specific period to be reported as qualified dividends. Ordinary dividends are taxed at a federal marginal or ordinary tax rate.

Organized Exchanges. These are areas used to facilitate trading of financial instruments.

Origination fees: These are the costs and profits made by the mortgage broker for originating the loan.

Overreaction. Many investors assign a probability to asset returns based on past theory. Appropriate reaction to a negative event is to update a prior probability to the most recent event. Overreaction is when they assign too high a value.

Over-the-Counter (OTC) Market. This is an electronic network of dealers used to execute trades without specialists or middle-men.

Ownership. This is the principle that everything we have is the Lord’s, and we do not own the things we have and are. It is based on scripture and helps us to see our blessings as gifts on loan from a loving Father in Heaven.

Par value. The face value or amount returned to the holder of the bond at maturity.

Passive management. Passive management is the process of accepting average returns through purchasing index funds rather than trying to beat the market. It is much cheaper and more tax efficient.

Passive portfolio management. It is the process of buying a diversified portfolio which represents a broad market index (or benchmark) without any attempt to outperform the market or pick stocks. Since most active managers fail to outperform their benchmarks, especially after costs and taxes, investors have realized that if you can’t beat them, join them, so they buy low-cost passive funds which meet their benchmarks consistently and minimize taxes.

Payday Loans. These are short-term loans of 1-2 weeks secured with a post-dated check which is “held” by the lender and then cashed later. These have very high interest rates and fees, APR > 720%. Typical users are those with jobs and checking accounts but who have been unable to manage their finances effectively.

Pell Grant. A type of government grant to help students attend college.

Percentages. We sometimes move in and out of asset classes and stocks instead of keeping specific asset class percentages relatively constant (within our minimum and maximum amounts from our Investment Plan). We get lower returns from increased trading costs and may have more risk than we want.

Percent-range-based rebalancing. This is the process of rebalancing the portfolio every time actual holdings are +/-5% (or +/-10%) from target ratios. Rebalance whenever you are outside this range. It is easy to implement and wider ranges will reduce transactions costs (at the expense of higher tracking error).

Performance evaluation. It is the process of evaluating a portfolio’s performance with the goal of understanding the key sources of return.

Periodic Payments distribution. With this distribution, you can plan for regular payments at regular intervals, and can ensure that payments are available for a specific period of time. However, there is no assurance of lifetime income, and your tax
rate may be high due to the amount of money withdrawn.

**Periodic-based rebalancing.** This is the process of rebalancing where you specify a time period, i.e. bi-annually, annually, etc. After each time period, rebalance the portfolio back to your original asset allocation targets. It is the most simple of the methods, and longer periods have lower transactions and tax costs (but higher tracking error costs).

**Permanent insurance.** Permanent insurance is an insurance contract that is purchased for the entire life of the policy holder with premiums divided between death protection and savings. Provides insurance that cannot be cancelled, may be used for estate retirement, and savings. It is complex, expensive, and not transparent, and unless premiums are paid, it can expire worthless. Please note that certain permanent products are not permanent, i.e. they can lose money.

**Personal Financial Plan.** This is a document that contains all critical areas of your personal financial life. It is your individual and personal roadmap for achieving your personal and family goals. It entails 6 steps: 1: Decide What You Want, 2: Evaluate Your Financial Health, 3: Define your Personal and Financial Goals, 4: Develop a Plan of Action, 5: Implement Your Plan, and 6: Revise Your Plan as Necessary.

**Personal Property.** These are depreciating tangible assets, such as boats, furniture, clothing, etc.

**Personal Representative (Executor).** This is the person who fulfills the requirements of the trust or will.

**Perspective.** Perspective is how we look at things. It is important because it impacts choice. We can take many different perspectives in our view of different aspects of our lives, with the best perspective being the perspective that last the longest—an eternal perspective.

**Piggyback loans.** These are two separate loans, one for 80% of the value of the home and one for 20%. The second loan has a higher interest rate due to its higher risk. The second loan is used to eliminate the need for PM Insurance. With a piggyback loan, PMI is not needed, but these are much harder to get now.

**Point of Service Plans (POS).** These plans have attributes of HMOs, PPOs, and indemnity type programs, and the POS may also have a gatekeeper.

**Points.** Points are fees for a loan. 1 Point is one percent or one hundred basis points of the loan. This money is pre-paid interest, money paid to the mortgage broker (not the lender). It is deducted from the loan proceeds (you still must pay it back), and is essentially another fee for helping you arrange the loan (minimize points). Lenders charge points to recover costs associated with lending, to increase their profit, and provide for negotiating flexibility. You will like have to pay origination points, but buy-down points (to reduce the interest rate on the loan) are purely optional.

**Political or regulatory risk.** Unanticipated changes in the tax or legal environment will have an impact on a company’s bonds.

**Portfolio attribution.** It is the process of separating out portfolio returns into their related components, generally attributable to asset allocation, securities selection, industry, and currency.

**Portfolio evaluation.** The process of monitoring financial asset performance, comparing asset performance to the relevant benchmarks, and determining how well the fund is meeting its objectives.

**Portfolio management.** It is the development, construction, and management of a portfolio of financial assets to attain an investor’s specific goals.

**Portfolio rebalancing.** It is the process of bringing portfolios back into given target asset allocation ratios. Changes in allocation occur due to changes in asset class performance and investor objectives or risk, or introduction of new capital or new asset classes.

**Portfolio reporting.** The process of reviewing portfolio performance with the necessary participants, i.e. your spouse or your investment advisor.

**Potential Cap Gains Exposure.** This is an estimate of the percent of a funds asset’s that represent capital gains. If this is high, the probability is high that these may come to the investor as capital gains.

**Pre-approval.** Pre-approval is the process whereby lenders have pull your credit score, looked at your tax records and approve you for a specific amount of a
Pre-approved loan. Get pre-approved for your loan by a number of lenders (with mortgage loans, you can have multiple loans requested within a 90 period and it’s counted as one loan request). You can borrow up to this pre-approved amount without a problem. Remember however that you do not need to borrow that amount. I recommend you borrow less than that amount.

Preferred Provider Organizations (PPOs). PPOs are insurance plans which are essentially a cross between the traditional fee-for-service and an HMO. PPOs are organizations where in-plan provider’s fees are covered, and out-of-plan providers results in higher fees. Insurers negotiate with a group of doctors and hospitals to provide care at reduced rates, while giving insurers the ability to go to non-plan doctors. PPOs provide health care at a discount to fee-for-service plans. They provide a group of doctors which work at reduced costs to the participants, while assessing an additional fee if the participant uses a non-member doctor or center. PPOs are more expensive than HMOs and use of non-PPO providers results in higher out-of-pocket costs.

Prepayment Penalties. These are penalties enforced by the lender for prepaying a loan too soon. Prepayment penalties have a stated period of time, i.e., 1, 2, or 3 years the prepayment penalty is in effect, a maximum pay down percentage (MPP), i.e., 6% of the principal per year, and a prepayment penalty if you sell it before, i.e., 6 months interest. With a soft prepayment you cannot within the stated period of time without penalty, refinance at all, sell the loan or family members, or pay down more than your MPP each year. The only way to get out of a soft prepayment penalty is to sell the property to an unrelated party. With a hard prepayment, you cannot within the stated period of time without penalty refinance at all, sell the loan to anyone, or pay down more than your MPP each year. There is no way to get out of a hard prepayment penalty before the defined period without paying the penalty.

Prepayment. Prepayment is the process where you repay the loan early, either through paying off the loan or selling the house and the new buying paying off the old loan.

Pre-qualified. Pre-qualified is a process where lenders estimate your credit based on information you tell them. I recommend you get pre-approved, not pre-qualified.

Price. The price that the bond sells for.

Pride. A reason for going into debt. How we look to others is more important than how we look to God.

Primary and Secondary markets. Primary markets are markets for trading newly issued securities. Secondary markets are for trading already issued shares of stocks, bonds, and other securities. Secondary markets consist of organized exchanges and over-the-counter or electronic markets where existing shares are traded.

Primary Insurance Amount (PIA). Your PIA is the basic unit used to express the amount of a worker’s benefit if they received benefits at their full retirement age (FRA). The calculation of PIA is based on the workers AIME, which is split into three segments and multiplied by specific percentages for each segment and summing the parts.

Primary markets. These are markets for trading newly issued securities.

Principles. These are doctrinally based guidelines for how we should live our lives. Whereas doctrines answer the ‘why” questions, the principles are the “what” questions, i.e., what are the things and guideline we should be following and doing.

Priority of money. This is an educational tool to help individuals determine the order of which they should utilize investment vehicles to achieve their personal and family goals.

Private Alternative Loans. These unsubsidized loans are much more expensive than federal unsubsidized loans, interest starts immediately and accrues, and you must begin paying the loan back immediately. The student is the borrower. These have higher up-front fees and may require a cosigner. Read the fine print VERY CAREFULLY.

Private Health Care Plans. These are health care plans sold by private insurance companies to individuals and employers as part of a benefits package.

Private Mortgage Insurance. Insurance paid for by the borrower to ensure that the lender is made whole should the borrower default. If equity in the home is greater than 20%, PMI is not required for conventional loans or VA loans (but is required by FHA loans for the life of the loan).

Probate. Probate is the process of distributing an estate's assets after death. Probate is a matter of state
law. It is the matter of administering the portion of
the person’s estate that is disposed of in either by will
provisions, for those with a valid will, or by intestate
succession, for those who die without a will.

**Profit Sharing Plans.** These are defined
contribution plans where employer contributions vary
year-to-year depending on firm profitability (it may
be zero if the firm is not profitable in that year).

**Psychological biases.** These are views on how the
brain works and affect our investment decision
making process. Poor investment decisions caused
by psychological biases affect your wealth, so we
need to learn to recognize and avoid poor investment
decisions which come from those psychological
biases.

**Q-TIP (Qualified Terminable Interest Property) Trust.** A Q-TIP Trust is a testamentary trust which
provides a means of passing income to the surviving
spouse without turning over control of the assets.
These trusts ensure that assets will be passed to your
children upon the death of the surviving spouse.

**Qualified dividends.** These are stock dividends
earned from holding a stock a minimum number of
days within a specific period. Qualified dividends
are taxed at a federal preferential tax rate depending
on your marginal tax rate.

**Qualified stock dividends.** These are payment of
cash to the Fund by the companies owned where the
company owned the shares for a specific length of
time. These are taxed at a preferential rate depending
on your taxable income.

**Real estate and property taxes.** These are taxes
imposed annually or semi-annually on assets owned.

**Real Goals.** These are goals you really want to
accomplish, and are willing to work hard and seek
Heavenly Father’s help in accomplishing them.

**Realtor or Real Estate Broker.** This is a person
supposedly trained in the process of selling and
buying real estate. You want a realtor that know the
market in the area you are looking at. Remember that
realtors are paid by the seller, so remember that in
your associations. Sellers divide the sales
commission (usually 6-8%) between the listing
realtor and the buying realtor.

**Redemption.** The process of redeeming a callable
bond before its maturity date.

**Refinance.** The process of getting another mortgage
loan on your home and repaying the old loan with a
goal to reducing your interest and other costs overall.

**Refundable Credits.** These are credits paid to the
taxpayer even if the amount of the credits exceeds the
tax liability.

**Required minimum distributions.** For tax deferred
retirement plans, the government requires that a
certain percentage of assets must begin by April 1st
of the year following age 70%. The distribution is
the account balance on Dec. 31 of the previous year
(age 69) divided by the life expectancy from the table
below. There is a 50% penalty on minimum
distributions not taken.

**Required Minimum Distributions.** This is a legal
requirement of many tax-deferred retirement vehicles
which require savers to distribute a specific amount
each year after age 69 of total plan assets. It is
calculated by dividing the total amount in accounts
by a specified number given.

**Residual value:** Expected value of a vehicle at term
do. Often used as purchase price after a lease has
ended.

**Retirement Benefits.** Retirement benefits can either
be reduced or increased depending on your PIA, your
FRA and the date when benefits begin. You can
begin receiving benefits as early as age 62. Benefits
that begin 3 years before FRA will be reduced by a
maximum of 20% (or 5/9% of 1% per month for each
month benefits begin before FRA or 6.67% per year).
Additional reductions of 5% per year are effective
when FRA exceeds age 65.

**Retirement Payout Options.** These are the types of
annuity distribution payouts available at retirement.
Investors and spouses jointly determine the types of
payments at retirement.

**Retirement plans.** These are income-producing
assets, such as pensions, IRAs, 401K, Roths, SEPs.
etc. by you or employer used to accumulate wealth
for retirement.

**Retirement vehicles.** These are a specific type of
investment vehicles which are related to retirement.
These include qualified retirement plans such as both
traditional and Roth 401K, 403b, and 457 plans;
Individual retirement plans such as Roth and
traditional IRAs; and small business plans such as
SEPs, Simple, and Keogh plans.
Retirement vehicles. These are investment vehicles to help you save for retirement. These include for private businesses: 401-k, Roth 401-k plans; non-profit tax-exempt businesses: 403-b/Roth 403-b plans; State and municipalities: 457 plans; Individual retirement accounts: IRA/Roth IRA; and small business plans: SEP IRA, SIMPLE IRA;

Retirement/Annuitization Stage (of retirement). This stage begins when you retire. It is your plan on how your assets will be distributed at retirement. Your goal should be to have sufficient assets for your lifetime to enable you and your spouse to live like you want in retirement.

Retirement/Annuitization strategies. These are strategies to use while you are in the retirement stage. They might include: calculate a minimum acceptable level of retirement income, and annuitize that amount; take out on a specific percentage of assets each year in retirement, etc.

Revenue bonds. Bonds backed by the revenues of a specific project.

Reverse Mortgages. These are mortgage loans whose proceeds are made available against the homeowner’s equity. Financial institutions in essence purchase the home and allow the seller the option to stay in the home until they die. Once they die, the home is sold and the loan repaid, generally with the proceeds. These are typically used by cash-poor but home-rich homeowners who need to access the equity in their homes to supplement their monthly income at retirement.

Revocable Living Trust. It is the most common type of living trust. It is a trust which allows for unlimited control by the trust’s owner, because the owner retains title to all the assets in the trust. They do not pass through probate. They provide greater ease and privacy of distribution upon death.

Risk of Downgrading. Should a bond’s rating be downgraded, the seller would need to reduce the price of the bond (resulting in a lower yield to the seller and a higher yield to the buyer) to make up for the increased risk.

Risk pooling. It is the process where individuals transfer or share their risks with others to reduce catastrophic losses from health problems, accidents, lawsuits, etc.

Risk. Risk is the possibility of having a return different from what was expected, whether it is losing all your money, losing principle, or not achieving a specific rate of return. There are many different types of risk including: inflation, business, interest rate, financial, market, political and regulatory, exchange rate, call, and liquidity risk.

Risk-adjusted Performance. It is the process of determining performance after adjusting for the risk of the portfolio.

Rollover IRA. A traditional IRA set up to receive a distribution from a qualified retirement plan.

Roth Conversion. This is the process of converting a traditional individual retirement account to a Roth account.

Roth IRA. This is an individual retirement account which provides no deduction for contributions but provides that all earnings and capital gains are tax free upon withdrawal after retirement. You are actually investing more with a Roth, since your investments are after-tax, and contributions can be withdrawn tax/penalty free. Earnings grow tax-free if the Roth IRA is in place for at least 5 years, and you are 59½ years old.

Savings Bonds. Bonds issued by the US government with tax advantages to encourage savings.

Savings Ratio. This is your income for savings divided by your income available for living expenses. This ratio tells you what proportion of your after-tax income is being saved.

Scholarships. Money given to promising students because of their shown abilities in specific areas. There are many scholarships available, but you have to find and apply for them individually.

Seasoned new issues. These are new shares being issued by a company that is already publicly traded.

Secondary markets. These are markets for trading already issued securities. Secondary markets trade previously owned shares of stocks, bonds, and other securities. Secondary markets consist of organized exchanges and over-the-counter or electronic markets where existing shares are traded.

Secured Credit Card. Similar to a standard credit card, but is tied to a checking or savings account. The card cannot be used once the money in the account is gone, until more funds are added. Useful for building credit.
Secured loans. Secured loans are guaranteed by a specific asset, i.e. a home or a car, and typically have lower interest rates.

Securities markets or organized exchanges. These are areas used to facilitate trading of financial instruments.

Securities markets. Securities markets are where securities, i.e., financial assets, are traded. The two different types of securities markets are primary and secondary markets.

Seeking Solace (abdicating responsibility). Sometimes we follow newspaper/newsletter advice which we know has been shown to under-perform. We prefer to take other’s advice rather than doing our own homework. That way if the performance goes bad, we can blame others (we don’t have to take responsibility).

SEP-IRA. The Simplified Employee Pension (SEP-IRA) is a retirement plan that provides some matching funds by the employer. Employees can have no other qualified plan, and may contribute up to the specific amount each year. Contributions are tax deductible, earnings grow tax-deferred, and employees own the plans.

Series EE and Series I Bonds. US savings bonds with the special tax advantage that earnings on the bonds are tax-free if used for paying tuition and fees

Sharpe Index. This is a risk-adjusted performance measure. It is the ratio of your “excess return” divided by your portfolio standard deviation, i.e., your (rp – rf)/sp where rp = Average return on the portfolio, rF = your riskfree rate, and sp = Standard deviation of portfolio return. The Sharpe Index is the portfolio risk premium divided by portfolio risk as measured by standard deviation.

Shortfall. This is the difference between what you have now saved for retirement and what you think you need for retirement.

Short-sell. A short-sell is where a lender allows a property to be sold for less than the amount owed on a mortgage and takes a loss. A short sell allows the borrower to avoid foreclosure, which involves hefty fees for the bank and poorer credit outcome for the borrower, and the lender to make “less” of a loss on the property and to not enter foreclosure. A short sell does not necessarily release the borrower from the obligation to pay the remaining balance of the loan.

Short-term bonds. Bonds with maturity usually a year or less.

Short-term capital gains. These are capital gains where the Fund has owned the assets for less than 366 days. These are taxed at your Federal and state “ordinary” or “Marginal Tax Rate (MTR)”

SIMPLE 401k. This is a small business qualified retirement plan that provides some matching funds by the employer. Employees can have no other qualified plan, and may contribute up to the specific amount each year. Contributions are tax deferred and grow tax-free, and there is a penalty for early withdrawal. The employer is “required” to either contribute at least 2% or to match employee contributions, usually 1-3%

SIMPLE IRA. This is one of the SIMPLE retirement plans where Employees can participate. Contributions are tax deductible, it is easy to set up and administer (compared with a traditional 401(k)). A small business qualified retirement plan that provides some matching funds by the employer.

SIMPLE Plans. These are Savings Incentive Match Plans (SIMPLE) that provides matching funds by the employer. It can be established as an IRA or as part of a 401k plan. Employees can have no other qualified plan, and can contribute up to 100% of compensation to a maximum limit each year. The employer is “required” to either contribute at least 2% or to match employee contributions, usually 1-3%.

Single payment (or balloon) loans. These are loans that are repaid in only one payment, including interest. These are generally short-term lending of one year or less, sometimes called bridge or interim loans, often used until permanent financing can be arranged. These may be secured or unsecured.

Sinking fund. Money set aside annually to pay off the bonds at maturity.

Small-cap or small capitalization stocks. Small-cap stocks are companies with a market capitalization less than $2 billion. These are smaller, sometimes newer, US and global companies that are still developing and may have a smaller market share than their large-cap counterparts.

Smart Card: Similar to a debit card, but rather than being connected to a certain bank account, they magnetically store a certain amount of money linked to the card itself.
SMARTER Goals. SMARTER is an acronym for helping you as you strive to set effective goals. It is:
S = specific, M = measurable, A = assignable, R = realistic, T = time-bound, E = evaluated, and R = reassessed.

Social Security or FICA. Social security is a government provided retirement, survivor, and disability benefits. Franklin D Roosevelt signed the Social Security Act in 1935 to Aid the displaced and out of work. Social Security is a pass-through account, which means that FICA taxes being paid by current workers provided the money for benefit payments to current retirees.

Sole ownership. Ownership where ownership and control is absolute in one individual. Income belongs to sole owner and testamentary control is absolute.

Special Joint and Survivor Annuity (if there is a death in the marriage the benefit decreases). You receive payment for as long as you live or for a certain guaranteed period, whichever is longer, and your spouse, after you die, receives a percentage of that payment for as long as they live.

Spousal IRA. A Spousal IRA is an IRA contribution for a non-earning spouse. If one spouse is an active participant, the non-earning spouse can contribute to a Spousal IRA. Limits are the same as the traditional and Roth IRA.

Spouses benefit. A fully insured worker’s spouse age 65 (FRA) is eligible to receive a retirement benefit of 50% of the worker’s PIA subject to the family maximum. This benefit is reduced by 25/36% of 1% for each of the first 36 months that the spouse is under FRA (25% for 3 years). Once the FRA > 65, a reduction of 5/12 of 1% is imposed for each month beyond 36 months the spouse is under the FRA. The reduction of benefit from early retirement will not affect the amount of the spouses benefit. Disability benefits for spouses are 50% of the worker’s PIA, reduced if the spouse is under FRA, subject to a family maximum amount.

Spreadsheet budgeting method. Using a computer and spreadsheets, determine your gross salary and take home each month after taxes and other deductions. Determine spending by categories (rows) and dates (columns), and budget for each category. As bills come in, input the spending on each date (column) and row (category).

Sprinkling Trust. A Sprinkling Trust is a testamentary trust that distributes assets on a needs basis rather than according to some preset plan to a designated group of beneficiaries.

Standard Family trust. This is a testamentary trusts which hold the assets of the first spouse to die until the second spouse dies. The spouse has access to income from the trust, or the trust principal, if necessary. They reduce the estate of the second spouse so that the estate taxes can be reduced.

State taxes. Most states impose an income tax; however, some, like Texas and Nevada do not. Alaska actually pays you to live in that state.

Status Quo Bias. Sometimes individuals prefer the status quo over a new, more preferable position. There is an aversion to change, even if the change is for the better.

Stepped Up Basis. This is the process of the value of an asset being stepped up, or changed from the original value when purchased, to the current value when the person dies and it is transferred to heirs.

Stewardship. This is the principle that we are stewards over all that the Lord has, is, or will share with us. This view helps us realize the things we have are a gift and we should take care of them.

Stock Bonus Plan. These are defined contribution plans where employer contributions are made with employer shares of stock. Employee stock ownership plans (ESOPs) and leveraged ESOPs (LESOPs) are the most common.

Stock dividends. Stock dividends are dividends received from a company from the ownership of the company shares. Stock dividends are of two types, qualified or ordinary/not qualified. A qualified dividend is a dividend paid by a U.S. corporation where the investor held the stock for more than 60 days during the 121-day period that begins 60 days before the ex-dividend date (see Teaching Tool 32). An ordinary dividend is a dividend that is not qualified, i.e., you have not held the stock for a long enough time period to get the Federal preferential tax rate.

Stock Market Secrets. These are supposed shortcuts or secrets that only the professionals know, but they will share them with you for a price. Don’t get taken.
**Stock mutual funds.** These are stock mutual funds are funds which invest a majority of their assets in common stocks of listed companies. These funds generally have a specific objective, i.e. “large-cap,” “small-cap”, “value,” “growth,” etc. which relates to the types of stocks the mutual fund invests in.

**Stockbroker.** A stockbroker is a person who is employed by and solicits business for a commission house or merchant.

**Stop (or stop-loss) orders.** These are orders to sell a specific number of shares if the stock price falls below a certain price or buy a specific number of shares if the stock price rises above a certain price. These are used to set prices to safeguard against major fluctuations.

**Student Loans.** These are loans with low, federally subsidized interest rates used for higher education. Examples include Federal Direct (S) and PLUS Direct (P) available through the school; Stafford (S) and PLUS loans (P) available through lenders. Some are tax-advantaged and have lower than market rates. Payment on Federal Direct and Stafford loans deferred for 6 months after graduation.

**Style analysis.** It is another way of obtaining abnormal returns is by analyzing the investment style pf the portfolio. You can decompose returns by attributing allocation to style, and style tilts and rotation are important active portfolio strategies.

**Subordinated bond.** Bond that will be paid after the other loan obligations of the issuer are paid.

**Subsidized Loans.** Loans where another party pays the interest while the student is in school. Interest begins 6 months after the student graduates or drops below half-time enrollment.

**Subsidized University Loans.** These are loans offered by the university to students attending school.

**Successor Trustee.** This is the person to succeed the trustee should the trustee not be able to manage the trust.

**Supplemental medical insurance.** The SMI portion of the Medicare program (Part B) is financed by premiums paid by participants and by federal government funding. Participation in Part B is voluntary.

**Survivor Benefits.** Deceased worker must had had fully insured status; other survivor benefit (mother’s or fathers’ child’s lump sum) will be paid to eligible survivors of a fully or currently insured worker

**Target Benefit Plan.** These are defined contribution plans that establish a required contribution level to meet a specific target level of benefits at retirement.

**Tax Considerations.** These are how taxes will impact your investment decisions, including your tax position, specifically your marginal and average tax rate; and how tax-free investments may fit into your plan, i.e. municipal versus corporate bonds.

**Tax Cost Ratio.** This is the percent of nominal Fund return attributable to taxes, assuming the fund is taxed at the highest rate. If a fund had an 8.0% return, and the tax cost ratio was 2.0%, the fund took home \((1 + \text{return}) \times (1 - \text{tax cost ratio}) - 1\) or \((1.08 \times 0.98) - 1\) or 5.84%.

**Tax Efficiency.** Invest in taxable funds with an eye to obtaining high returns while keeping taxes low. Taxes reduce the amount of money you can use for your personal and family goals. Watch the historical impact of taxes, for it will likely continue. Remember it is not what you earn, but what you keep after taxes that makes you wealthy.

**Tax Freedom Day.** This is the day you stop working for the government and begin working for yourself.

**Tax Tables.** These are tables to help you calculate how much taxes you owe.

**Taxable accounts.** There are investment vehicles without tax advantages.

**Taxable bonds.** Taxable bonds include U.S. Treasuries, corporate bonds and agency issues (bonds issued by U.S. government agencies, like Ginnie Mae).

**Taxable Estate.** This is equal to the gross value of your estate, less estimated funeral and administrative expenses, debts, liabilities, taxes and any marital or charitable deductions.

**Tax-adjusted Return.** This is your return after taxes

**Tax-advantaged money.** This is the process of using investment vehicles that have specific advantages. There are two types: Tax deferred and tax-eliminated vehicles.

**Tax-deferred money.** This money has the ability to be invested before-tax, with principle and earnings taxed only at retirement (IRA, SEP IRA, etc.). This
money converts long-term capital gains into short-term income for tax purposes.

**Tax-efficient and wise investments.** This is money that is invested tax-efficiently and wisely, consistent with the principles of successful investing discussed earlier.

**Tax-eliminated money.** This money can be used at retirement (or for education) without penalty and without taxes, i.e., a Roth IRA/410k/403b for retirement, and 529 Funds and Education IRA for education. You pay the taxes upfront, and then pay no taxes on earnings or capital gains when you take it out at retirement.

**Taxes (automobile)** (also called government costs). It is the tax on the usage and interest in a lease. It is calculated as (Usage + Interest) times your tax rate.

**Taxes on Distributions.** These are taxes on your distributions which must be taken into account to get the true return of your portfolio but which are not noted on your monthly reports.

**Taxes on mutual funds.** Mutual funds are pass through vehicles, which means that taxes are not paid at the Fund level but are passed through to the individual shareholders who must pay the taxes. Mutual fund taxes are mainly capital gains, stock dividends and interest/coupon payments. They are handled the exact same way as the taxes for stocks and bonds discussed earlier.

**Taxes.** These generally are your largest single annual expense. These may include personal, income, business, transportation and other taxes. Taxes can further be divided into Federal taxes, or taxes we pay the Federal government; State taxes, or taxes we pay the state government, and local taxes, which are taxes we pay the local government.

**Tax-free bonds.** Tax-free bonds include revenue or general obligation bonds issued by local or state governments and agencies. Such bonds are generally free from federal and state taxes.

**Teaser Rates:** Very low introductory interest rates used to attract new customers to a certain credit card. They increase soon after the card is in the user’s hands.

**Temporal goals.** These are goals that relate to the temporal measures of success. It could be money, title, fame, positions at work or in industry, include influence, rank or power, or assets, investments, or possessions.

**Tenancy by the entirety.** Ownership is shared equally and limited to spouses, lifetime control is shared by both spouses, consent from both is required to sell, income is shared between owners, testamentary control is absent, and the right of survivorship is key.

**Tenancy in Common.** Ownership is shared, with each owning an undivided fractional interest that may be unequal, lifetime control is unlimited, income is shared between owners in relation to fractional interest, and testamentary control is unlimited.

**Term Insurance.** Term insurance is insurance protection for the insured over a specific term or time period. They may be renewable or non-renewable policies. It is the least expensive form of insurance and the death benefit coverage is only for a specific term.

**Term or Bond Maturity.** The maturity of the bond.

**Testamentary transfers.** Methods by which property is transferred at death.

**Testamentary Trust.** The process where assets are placed in trust after you die. The trust is created after probate according to your will.

**Thrift/Savings Plans (TSP).** These are defined contribution plans where the employer matches a percentage of employee contributions to a specific amount (i.e., free money). This program is for employees of federal civil service.

**Total Costs Analysis.** This is a form of loan analysis that does not take into account the time value of money, but is simple to calculate. To do this, calculate your total new costs and fees from the loan until it is paid off, your total current monthly principal and interest costs remaining without refinancing, your total refinance monthly principal and interest costs. If you will be paying less overall, think about it, if it is equal or less, it likely does not make finance sense.

**Total expense ratio.** This is the total percentage of assets that are spent each year to manage the fund including management fee, overhead costs, and 12b-1 fees.

**Tracking Error.** This is the return on the fund less the return on the benchmark. This tracking error should be small versus your benchmark. Tracking
error is the historical difference between the return of
a fund (i.e. a mutual fund) and its specific
market/sector benchmark or index. The smaller the
tracking error, the better the performance of the Index
fund relative to the benchmark. However, you won’t
complain if the tracking error is positive (i.e., your
fund had higher returns than the index or
benchmark).

**Traditional IRA.** An individual retirement account
in which an individual can contribute up to a specific
amount annually which is tax-deferred. Eligibility
and amounts depend on the contributor’s income
level and whether they have other retirement plans.
The contribution is tax deductible and earnings grow
tax-deferred.

**Transaction costs.** These are costs of the fund
buying and selling securities, which are not included
in other costs. Mutual funds which turn over the
portfolio often, i.e. buy and sell a lot, will have
higher transactions costs. A good proxy for this is
the turnover ratio.

**Treasury Bills.** A short-term debt obligation issued
at a discount and redeemed at face value upon
maturity in 3, 6, or 12 months.

**Treasury Bonds.** A long-term debt obligation issued
at or near par and interest is paid semiannually.

**Treasury Notes.** An intermediate-term debt
obligation issued at or near par and interest paid
semiannually.

**Treynor Measure.** This is a risk-adjusted
performance measure. This is similar to Sharpe but it
uses the portfolio beta instead of the portfolio
standard deviation, or \((rp - rf)/\beta_p\) where \(rp\) = average
return on the portfolio, \(rf\) = average risk free rate, and
\(\beta_p\) = weighted average b for portfolio. It is the
portfolio risk premium divided by portfolio risk as
measured by beta.

**Trust Grantor.** The person who created the trust.

**Trustee.** The person who will manage the trust.

**Trusts.** A trust is a legal contract. When you create
a trust you are simply creating another legal entity.
Trusts avoid probate and are more difficult to
challenge than wills. They may reduce estate taxes,
allow for professional management, provide for
confidentiality, can be used to provide for children
with special needs, can be used to hold money until a
child reaches maturity, and can assure that children
from a previous marriage will receive some
inheritance in the future.

**Turnover ratio.** This is a measure of trading activity
during the period divided by the fund’s average net
assets. A turnover ratio of 50% means half the fund
was bought and sold during the period. Turnover
costs money and incurs taxes.

**Turnover.** This is the amount of the portfolio that is
bought and sold during a specific period. Keep
turnover low, as turnover is a proxy for fund
expenses and taxes. The costs associated with
turnover are hard to quantify and may not be
disclosed in the prospectus. These costs include
commissions, bid-ask spreads, and market impact.

**Types of Mutual funds.** The types of mutual funds
generally follow the major asset classes, i.e., money
market, stock, and bond mutual funds.

**Underwriting.** Underwriting is the process whereby
the borrower fulfills the requirement of the lender
and the lender funds the loan. It also includes the
lender selling the loan and the loan being syndicated
and sold to investors.

**Un-invested Cash.** This is the amount of cash in the
portfolio. High cash levels in the portfolio are drags
on performance so keep un-invested cash low.

**Unique Needs.** Unique needs are special needs that
may impact your investing decisions.

**Unlimited Marital Deduction.** There is no limit on
the value of an estate that can be passed tax-free to a
U.S. citizen spouse. This does not apply to non-U.S.
citizen spouses. The tax-free maximum gift per year
to non-citizen spouses is specified.

**Unsecured corporate debts.** Bonds not secured by
collateral, and pay a higher return.

**Unsecured loans.** Unsecured loans require no
collateral, are generally offered to only borrowers
with excellent credit histories, and have higher rates
of interest – 12% to 28% (and higher) annually.

**Unsubsidized Federal Loans.** These are loans for
both grads and undergrads where the student
responsible for interest during school, repayment
begins six months after student graduates,
discontinues, or drops below half-time enrollment for
a continuous 6 months. The interest is not
subsidized.
**Upfront costs.** These are cost due at the signing of the loan which include closing costs and points, down payment (3-20 percent of the loan amount), and other closing costs including points (3-7 percent).

**Upgrade.** A situation where a bond rating company improves the bond rating of a bond due generally to an improving financial condition.

**Upper Income Filer.** These are singles with income above $34,000 and MFJ with income above $44,000. 85% of Social Security benefits are taxable.

**US Savings EE Bonds.** Savings bonds issued by the US government that pay a fixed rate of interest with is reset every 6 months.

**US Savings I bonds.** Bonds issued by the U.S. government, and tax deferred until maturity. They are not marketable, but can be redeemed from local banks. Bonds sold at face value, with interest paid at maturity, with the interest rate set to inflation with a fixed component.

**Usage (automobile) (also called depreciation).** This is the amount of the value of the vehicle that is used over the lease life. It is calculated at the Net capitalized cost – residual value.

**VA Loans.** These are Veterans Administration (VA) Guaranteed Loans. These loans are issued by others and guaranteed by the Veterans Administration. They are only for ex-servicemen and women as well as those on active duty. Loans may be for 100% of the home value.

**Value stocks.** These are inexpensive (in terms of low PE and low P/BV ratios), companies that have potential for good long-term return through both appreciation and dividends.

**Values Statement.** These are the values you will live by to help you accomplish your vision and mission.

**Variable or Adjustable Rate Mortgages (ARMs).** These are mortgage loans with a rate of interest that is pegged to a specific index that changes periodically, plus a margin that is set for the life of the loan. Generally the interest rate is lower compared to a fixed rate loan, as the borrower assumes more of the interest rate risk. The may have a fixed rate for a certain period of time, then afterwards adjust on a periodic basis.

**Variable-rate loans.** Have an interest rate that is tied to a specific index (e.g., prime rate, 6-month Treasury bill rate) plus some margin or spread, i.e. 5%). Can adjust on different intervals such as monthly, semi-annually, or annually, with a lifetime adjustment cap. Normally have a lower initial interest rate because the borrower assumes the interest rate risk and the lender won’t lose money if overall interest rates increase

**Vesting period.** This is the period required before the promised benefits are considered yours.

**Vision Statement.** This is your vision of what it is you want to become. It is seeing or visualizing with your mind’s eye what you will be in the future.

**Widow(er)’s Benefits.** A benefit of up to 100% of the deceased, fully insured PIA will be paid to the surviving spouse who is at least age 60 and who was married to the worker for 9 months. The surviving spouse is generally eligible if he or she is not remarried and is not entitled to retirement benefits (due to his or her covered employment) of at least the amount of the deceased workers PIA. A widowers benefits terminates at death or at eligibility for an equal or greater retirement benefit.

**Will.** A legal declaration by which a person provides for the disposition of their property and other assets at death.

**Winning by Losing.** Sometimes we actively trade stocks instead of buying index funds or ETFs which we know are lower cost and take a lot less time to invest. We know index funds generally outperform the actively managed funds, but we try to invest actively anyway.

**Workers’ Compensation.** Workers compensation is state insurance program that insures against work-related accidents and illness. Workers’ Compensation provides insurance to workers injured on the job, regardless of whether they have other health insurance or not. It only covers work-related accidents and illnesses, and coverage is determined by state law and varies state by state.

**www.charitynavigator.org.** a website on information about various charities which file Form 990 with the IRS. However, they do not include religious organizations listed as “church or convention or association of churches” which are exempt from filing Form 990.

**Yankee Bonds.** Bonds issued by international companies and sold in the U.S. in U.S. dollars.
**Yield to Maturity.** This is the true yield received if the bond is held to maturity, which assumes that all interest payments can be reinvested at the same rate as the bond itself.

**Yield.** The annual interest on a bond divided by its price.

**Zero-coupon bonds.** A discount bond which pays no interest until maturity.
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