Advanced Investing Course Manual

A Course in Personal Finance

BYU MARRIOTT
SCHOOL OF BUSINESS

Bryan L. Sudweeks | PhD, CFA | September 2019 | 12th Edition 2019-2020

Introduction by the Dean

Welcome to the BYU Marriott project on personal finance. 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 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 the faculty and staff at BYU Marriott. 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 over time, even as the financial environment around you changes.

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). Think through and write down your vision and 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 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,

Brigette C. Madrian
Dean and Marriott Distinguished Professor
Brigham Young University Marriott School of Business

Author's Note

Welcome to this manual and the accompanying website at http://personalfinance.byu.edu on Personal Finance. We have compiled information on what we consider 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; however, the principles taught can be extended to members of any Christian faith. Readers who are not of the this faith may encounter a few unfamiliar terms within this text. While these terms may provide valuable insights to members of the Church of Jesus Christ, 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://ChurchofJesusChrist.org/topics) for more information.

This manual and website are updated every year for new information, changes to tax laws, improvements in teaching methodologies, etc. 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 Business 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 Business, the faculty, or Brigham Young University.

Bryan L. Sudweeks, Ph.D., CFA

August 2019

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 four 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 influences 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. It is that personal finance is not separate from our Christian lives. Rather, personal finance is simply part of our Christian lives, and part of living the gospel of Jesus Christ. In this course, our perspective on personal finance is based on a long-term view of what truly matters, which will guide you as you make financial choices.

Second, we take a principles, doctrines and applications-based approach to personal finance. This helps us change our perspective on what we are doing. Unlike investment theory, investment vehicles, and financial assets, principles and doctrines never change. A sound understanding of the correct principles and doctrines 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, doctrines and application relate to every aspect of your personal finances. Understanding correct principles and doctrines helps increase our motivation to act and makes it easier to follow and apply the concepts discussed in this manual and website to our personal lives.

Third, we don't just talk about what you can do, we give plans and strategies to help you in creating your own personal plans in 16 important areas. Seeing what others have done and are doing in specific areas can give you ideas and strategies on how you can create your vision in those areas.

Finally, we take an applications-based or creative approach to personal finance. Application is an invitation to learn and create. We discuss the creative process in terms of how we are all creators of our vision, goals and lives. It is not enough to know what you want to do in our lives and families—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 multi-disciplinary companion website at http://personalfinance.byu.edu. As one of the advanced lessons, it includes this book, PowerPoint presentations, learning tools, videos of personal finance classes 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 catch your vision, set goals, and develop plans and strategies to help you 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.

We believe that by changing your perspective, learning the doctrines, principles and applications that support successful financial management, giving examples of visions, goals and strategies in each key area, and then having you apply this knowledge to your own life in creating your own personal Financial Plan with the tools we've provided, will increase your financial literacy and motivation, and will help you achieve the vision and goals that are most important to you and your family. If you do this thoughtfully, carefully and prayerfully, it will help change behavior. Best of luck to you as you begin this wonderful journey to increased financial self-reliance.

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Copyright and Other Restrictions

[1] *The Story of Philosophy*, New York: Simon and Schuster, 1927, 1
[2] "The Power of Correct Principles," *Ensign*, May 1993, 32
[3] Ezra Taft Benson, "To the Elderly in the Church," *Ensign*, Nov 1989, 4.

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1. Building a Strong Foundation: Another Perspective on Wealth[1]

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: happiness and joy. Others have learned how to bring Christ into their finances, learned their available options, determined the key doctrines, principles and applications, applied them in a creative process to their financial habits and goals, and have accomplished the vision and goals that they have set for themselves and their families, including happiness in this life and eternal life 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, and to apply it in your lives.

Objectives

A. Understand how to bring Christ into your finances.
B. Understand the importance of perspective and our perspective for this course.
C. Understand our framework for learning: doctrines, principles and application.
D. Understand the implications of that learning framework.
E. Remember that "Life is Good."

Understand how to bring Christ into your finances

As we have read and studied scriptures, it is apparent that Jesus Christ wants to be a greater part of our lives and finances. He will not barge in and tell us what to do; He cannot, as He will not violate our moral agency. But He will plead, exhort, counsel and guide us back to our Father if we will allow Him more into our lives and finances.

Why do we want to bring Christ more into our finances? M. Russell Ballard reminded us: "In my judgment, we never will have balance in our lives unless our finances are securely under control."[2] Christ can help us bring balance and control into our lives and finances. How do we bring Christ more into our lives and finances?

<u>Seek to learn and love the Savior and His atonement more</u>. We study, pray, learn more about Him, and contemplate His amazing atonement and what it means in our lives. Christ knows us by name and loves us perfectly, and has designed a detailed, individual, and customized curriculum (called life) exactly tailored to our needs, mission and destiny. Managing our finances is one of the pieces of that curriculum, and personal finance is simply part of the gospel of Jesus Christ.[3]

<u>Strive to change daily and become more like Him</u>. God's grace, repentance and the atonement of Jesus Christ are perfect tools to help us change and to become more like our Savior. He has given us everything we need to become more like Him. He has taught through His servants that "a" pattern to change behavior is to understand doctrines and principles, and have them confirmed by the Spirit.[4] Boyd K. Packer 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. . . That is why we stress so forcefully the study of the doctrines of the gospel."[5] However, it is not enough to know the doctrines—we must understand them as well. David A. Bednar commented, "President Packer did not teach that simply knowing true doctrine changes us. Rather, doctrine must be understood. . . Thus, true doctrine confirmed in the heart as true by the witness of the Holy Ghost changes attitudes and behavior.[6] He also reminds us "The answers are always in the doctrines and principles, and the doctrines and principles need to be in us."[7]

<u>Learn to apply His words and create our lives more closely with Him</u>. As we strive to develop and grow, application is an invitation to learn and create.[8] As we do, we become creators with God of ourselves, our families and our lives. We learn important lessons from the creation[9] that we can use in our lives as we remember that "Creation is a spiritual gift."[10] We were born creators, and had our first lessons in creation when as pre-existent spirits we helped create the earth we live on.[11] We create each day in our prayers, families, the environment in our homes, budgets, goals and our lives. We are all creators, and learn best when we learn and follow the Master Creator, even Jesus Christ. Not only does He know the way, He is the way.[12]

<u>Always remember Him</u>. We need Christ's inspiration and guidance daily if we are to return with our families to His presence. We already covenant to "always remember Him" each week in the Sacrament. We must strive to keep those and our other covenants. We must remember that our conduct on our journey is as important as our final destination.[13] We must, like the pioneers, make "a covenant and a promise to keep all the commandments and statues of the Lord"[14] as we daily remember the Savior and follow the covenant path.

To bring Christ more into our finances, we must bring Him more into our lives. If we want to have balance in our lives, we must bring our finances securely under control. We can do this best with Christ's help. We bring Christ into our finances as we seek to learn and love the Savior and His atonement more, work to change and become more like Him, learn to apply and create with the Creator of the World, and always remember Him. Then with His help, we can accomplish all things.

Understand the Importance of Perspective and Our Perspective for this Course

The dictionary defines *perspective* as "one's point of view, the choice of a context for opinions, beliefs, and experiences."[15] The historian Will Durant wrote of the human 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.'"[16]

The challenge then is to see things in a consistent perspective--as they will be 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?"[17]

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? Neal A. Maxwell commented:

> We see the world and the people in it differently, because, as C. S. Lewis observed, it is by the light and illumination of the gospel that we see everything else. . . The gospel is like the lens of a cosmic kaleidoscope that, instead of showing life, man, and the universe as senseless, unconnected fragments, shows us pattern, beauty, and purpose! It is this vision that can give us a special sense of proportion about the things in life that matter most. . . This perspective can make so many differences in so many ways that, unintentionally, we may be unconscious of the implications of our difference in outlook.[18]

The purpose of this section is to articulate "another" perspective on wealth, an 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, we take a different view from the world. We 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.

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*![19]

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 finances.

Our perspective is simple: *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".[20] It is the temporal application of eternal principles.

Understand our Framework for Learning: Doctrines, Principles and Application

Our learning framework for this class is unique. We use the framework for learning used by David A. Bednar in his book "Increase in Learning." It is based on doctrines (the whys"), principles (the "whats"), and application (the "hows"). It brings balance to the things we do. Bednar calls it, "A flexible tool that can be used to enhance our gospel learning and can be a useful aid as we apply the principles of prayerful inquiry and the pattern of asking, seeking, and knocking."[21]

Too often when we encounter problems in life, we are drawn to application as the way to make life better. But is it the best way? Bednar writes:

> Somehow we seem to be drawn to application as the primary way to 'fix" things, to make life better. . . And far too often we emphasize application without the necessary understanding and divorced from the doctrinal content. . . Whatever the reasons, emphasizing the application to the exclusion of fundamental doctrines and principles does not produce spiritual power, protection, and direction. . . Appropriate applications are necessary but can never stand alone. What is needed is a balance among doctrines,

> principles and application. . . *The answers always are in the doctrines and principles*. And the doctrines and principles need to be in us.[22]

This learning framework is unique. It asks three critical questions that can lead us to learning and life. They are:

> 1. Why should we *learn and become better at personal finance*? (this is a "why" or doctrine question).
>
> 2. What are the principles on which how we *learn and become better at personal finance are based*? (this is a "what" or principles question).
>
> 3. How do we *learn about and become better at personal finance*? (this is a "how" or application question).

Doctrines or "Whys" of Personal Finance

Doctrines are the truth about ourselves, our lives, our history, and our relationship to our Father in Heaven and his Son Jesus Christ. Boyd K. Packer 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. . . That is why we stress so forcefully the study of the doctrines of the gospel."[23]

David A. Bednar reminds us,

> President Packer did not teach that simply knowing true doctrine changes us. Rather, doctrine must be understood. The word understanding in the scriptures frequently is linked to and associated with the heart and refers to a revealed result or conclusion. Thus, true doctrine confirmed in the heart as true by the witness of the Holy Ghost changes attitudes and behavior. Knowing true doctrine is necessary but is not sufficient.[24]

Why should we learn doctrines? Doctrines are critical as they give us the perspective, motivation and strength to do the right things even when they are difficult.

We have been counseled to understand the "why" or doctrines of the gospel of Jesus Christ. Dieter F. Uchtdorf said:

> Seek out the majesty, the beauty, and the exhilarating joy of the 'why' of the gospel of Jesus Christ. "The 'what' and 'how' of obedience mark the way and keep us on the right path. The 'why' of obedience sanctifies our actions, transforming the mundane into the majestic. It magnifies our small acts of obedience into holy acts of consecration.[25]

Before we can decide more about wise money management, we must understand and answer the question, "Why should we learn and become better at family finance?"

While there are likely many different "whys", let me share a few thoughts on doctrines of why we 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. While there are an innumerable number of perspectives, these four seem to be important and will be addressed here.

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"[26] and the only way we can have eternal life is through Jesus Christ[27], then the purpose of all mortal experience is to bring us to Christ, who then brings us to the Father. 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.[28]

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 well-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.[29]

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.

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."[30]

Personal finance helps us learn to be wiser financial stewards over the things with which God has blessed us. 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."[31]

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 family and fellow men?"

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 helps us keep our priorities in order. David O. McKay reminded us, "No other success can compensate for failure in the home."[32]

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 family, 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. In short, an eternal perspective on finances can prepare us for eternal marriage, strengthen existing marriages, and be a conduit for positive parenting.

Individual: Personal finance can help us prepare for and accomplish our divine missions. The fourth perspective is individual. 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."[33]

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 we should learn and become better at family finance."

So if money management is part of the gospel of Jesus 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."

Principles or "What's" of Personal Finance

Principles are fundamental laws or doctrines, which, if understood, will allow us to live or act according to truth. 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. 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.[34]

What are those principles or "what's" to which we must adhere whose results are so eternally worthwhile that they merit our every sacrifice? Let me propose a few principles that relate to understanding and using wealth wisely.

Principle 1: Ownership. Everything we have is the Lord's. The Psalmist wrote, "The earth is the Lord's, and the fullness thereof; the world, and they that dwell therein."[35] The apostle Paul, writing to the Corinthians, stated the same message, "For the earth is the Lord's, and the fullness thereof."[36]

We know from scriptures that the Lord was the creator of the earth[37], the supplier of our breath[38], the giver of our knowledge[39], the provider of our life[40], and the giver of all we have and are.[41]

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 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. We are stewards over all that the Lord has, is, or will share with us. 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."[42] 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."[43]

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. The gift of "choice" is man's most precious inheritance. 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."[44]

The prophet Joshua counseled the people about agency when he said, “Choose you this day whom ye will serve; . . . but as for me and my house, we will serve the Lord.”[45]

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.[46]

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 are accountable for every choice we make, including our financial choices. We have been blessed with the 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.”[47]

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 covenants 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.

Neal A. Maxwell put things of this world into a correct perspective when he taught:

> The submission of one’s will is really the only uniquely personal thing we have to place on God’s altar. The many other things we “give,” brothers and sisters, are actually the things He has already given or loaned to us. However, when you and I finally submit ourselves, by letting our individual wills be swallowed up in God’s will, then we are really giving something to Him! It is the only possession which is truly ours to give![48]

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 choose and do.

Application or the “How’s” of Personal Finance

Once we understand the doctrines and principles of finance, it is important to understand how to apply what you are learning to your daily lives. I call this application or the creative process. Question 3 then becomes “How do we learn about and become better at family finance?”

In 2019 we took 24 BYU students to Europe for a Global Finance Investment Internship. One of the companies we visited in Germany was a large sport and apparel manufacturer. I was impressed with their marketing slogan “Calling all Creators.”[49] Their point was we all are creators, which we truly are.

On the importance of creation, Elder McConkie said, “The three pillars of eternity, the three events, preeminent and transcendent above all others, are the creation, the fall, and the atonement.”[50] Why is it so important that we understand the creation? I believe it is because this knowledge will help us to be better creators ourselves. Let me share eight lessons that I have learned from the creation. You will likely have your own lessons from your reading and study.

God is creative. The creation shows that Heavenly Father and His son are very creative beings. We are taught in the scriptures that we are created in the image of Heavenly parents and in Their likeness. As such, we should also very creative beings. We were meant to create, and this capacity is God-given.

Christ worked under the direction of the Father. The restored gospel has helped us to know that Jesus Christ created the heavens and the earth under the direction of the Father. Likewise when we create, we should be under the direction of the Father as well. To really accomplish all we need to in this life, we will need His help.

The earth was created from existing matter. The earth was created, not from nothing, as many suppose; rather, it was organized from existing matter.[51] Likewise, when we create, we are not starting from nothing. We take our existing vision, education, talents, skills and abilities, and match those with the resources and materials we have in our home, neighborhood, community or nation.

Creation is a two-step process. The Lord speaking to Moses said, “For I, the Lord God, created all things, of which I have spoken, spiritually, before they were naturally upon the face of the earth.”[52] Once He created things spiritually, then came the physical creation of everything on the earth. We likewise must create things spiritually through our vision, goals and plans, and then we can create it physically—and we can create with confidence.

There is an order in creation. Notice that there is an order in creation, first the world was organized, and then light came into the world. Next the waters were divided. Clearly there is order in creation and in the universe. Likewise, there is order in our creative processes, and we must learn what that order is.

Creation takes time. The creation of the earth did not happen overnight, but took six creative periods. How long those periods were has not been revealed, but we do know it was a long time. Likewise, when we create, we should realize that this is a time-consuming process.

Creation was a planned event. The creation was planned from the beginning under the direction of Heavenly Parents. The creation, fall and atonement of Jesus Christ were all part of the Father’s plan, “to bring to pass the immortality and eternal life”[53] of His children. We should make sure, as we go through our lives, that we to have a plan on how we will live our lives, so that we can, under the direction of the Father, support His same work and return to His presence.

We create every day of our lives. Some do not think they create; however the reality is that we create every day of our lives. Perhaps a few creations can help make the point.

Prayer. David A. Bednar commented on our spiritual and physical creation of each day. On the subject of prayer, he said,

> We learn from these verses that the spiritual creation preceded the temporal creation. In a similar way, meaningful morning prayer is an important element in the spiritual creation of each day—and precedes the temporal creation or the actual execution of the day. Just as the temporal creation was linked to and a continuation of the spiritual creation, so meaningful morning and evening prayers are linked to and are a continuation of each other.[54]

Family. We are co-creators with God in the creation of our families. We work with Him as creators of our marriages and in which our children are raised. We should make sure, as we work to create the environment in our marriages and in which our children are raised, that we do it as co-creators with Heavenly Father. We are reminded to always, "Create homes filled with love and serenity. Relieve suffering. Create enduring testimonies of eternal truths in ourselves and others."[55]

Vision and Goals. When we set and work toward our vision and goals, it is again the spiritual creation followed by the physical creation. Alma uses different words to describe this spiritual creation, such as "Do you exercise faith," "Do you look forward with an eye of faith," and "Can you imagine to yourselves."[56] God's ultimate goal for us is to learn both the spiritual and physical creation process so we live in such a way as we, with our families and through the Savior's atonement, can return to live with Him eternally.

Finances. Regarding our finances, the preparation of our budgets can be envisioned as the spiritual creation first, followed by the physical creation second as we spend the money. President Kimball said" "Every family should have a budget."[57] Living on a budget does not mean that you do not spend money; rather, you spend money on things that are planned for (the spiritual creation) and that are important to you.

Ourselves. Finally, the reality is that we create ourselves in every day and in everything we do. Our life then is the sum of each of our daily individual creations. As such, we recognize the importance of our daily creations in the creation of our overall lives.

Creation is a wonderful subject for additional study. We were born creators, and had our first lessons in creation when as pre-existent spirits we helped create the earth we live on.[58] David O. McKay taught, "Sculptors of life are we, with our uncarved souls before us. Everyone of us is carving a soul."[59] That we might help create and carve ours and other souls well is our prayer for each of you.

The application or the creative process is how we go from the spiritual creation to the physical creation. It entails five steps. Each of these steps is important to the process, and this process can be applied to all areas of our lives. While it is possible to create without thinking through the creative process and many do exactly that, if we understand and apply this process it can help us to accomplish more and to be even more creative in our lives and our finances.

The Lord speaking to Joseph Smith said, "I will give you a pattern in all things, that ye may not be deceived."[60] David A. Bednar reminds us,

> Interestingly, the Lord gave us "a" and not "the" pattern for all things. I do not believe the Lord is suggesting with the language "a pattern in all things" that He has only one pattern to be used in every situation. Rather, the Lord's way includes a variety of patterns that can be employed to achieve different spiritual objectives.[61]

Let me share one possible pattern.

The Creative Process

Vision: We Catch our Vision. The scriptures teach "Where there is no vision, the people perish."[62] Why is vision so important? Vision is a critical precursor to effective goals, planning, writing, and accomplishing our personal and family goals. The best vision is from the longest perspective. Patricia T. Holland said, "Our prayers ought to be to see as God sees, to adjust our minds so we may see things from an eternal perspective. If we listen too often to the voices of the world, we will become confused and tainted. We must anchor ourselves in the spirit and that requires daily vigilance."[63]

Goals: We Develop our Goals. Goals are tools to help us keep us focused on our vision. Robert D. Hales gave advice on your choice of goals. He recommended:

> I would like to suggest a few of the most important goals in life that will give you joy as you fulfill your mission on this earth—eternal goals that will help you return with honor to your Father in Heaven. They include: Marry in the temple and cultivate eternal family relationships by prayerfully balancing the many facets of life, such as family, occupation, continuing education, hobbies, and entertainment. Faithfully and obediently live your religion and be true to the baptismal and temple covenants, always treasuring up the good things of life. Hold on to the eternal perspective, remembering that the things of the kingdom are eternal and the things of the world are temporal or temporary. Remember to give dedicated service throughout your life and always care for the needy who may require your love and other support.[64]

Plans and Strategies: We Make our Tactical Plans and Strategies. He continued and said, "Making these goals is not enough; we must make a plan to carry them out."[65] Goals are the destination, where we want to be, and our plans are the process by which we will get from where we are now to where we want to be. We need to be detailed in our plans to accomplish our goals and hence our vision.

Constraints: We Determine our Constraints. Whereas goals are the clear objectives for what you want to accomplish, and your plans are how you will accomplish those goals, then your constraints are given conditions or circumstances that your solution must satisfy. These are things that must be taken into account as these constraints can have a major impact on your ability to accomplish your goals and vision.

Accountability: We Share our Vision with Accountability Partners Who Can Help. Accountability is the process by which we make known our vision, goals and plans to others. This could be for three reasons.

- It may be because we need their moral or personal help to accomplish our goals and vision. Sharing your goals with your spouse and children is a good way to get help in accomplishing your goals. Having others help you be accountable for your goals is a great motivator.

- It also may be because they are part of our creative process and necessary to help us accomplish our goals. Mentors and friends can help when we fall short and help us know what to do to improve.

- As we share our vision with others, we give others permission to catch their own visions.

Regardless of the reason, accountability is an important part of the creation process.

For example, Heavenly Father's vision is the happiness and exaltation of his children. His goal is to "bring to pass the immortality and eternal life of man."[66] His plan is the Plan of Salvation or the Plan of Happiness. He has no constraints as his plan is for all people, and He communicates his plan with His children through prophets, apostles and scriptures. Just as He has a vision, goal, plan, constraints, and accountability, so we should too.

The manual will share concrete ideas and experiences on how you can apply the creative process to the personal finance area, how you can create your vision of what you want to become, set goals, develop a plan, work on constraints, and then communicate it to help you accomplish your vision. This process is applicable to all areas of your Personal Financial Plan.

Ezra Taft Benson reminded us to "Plan your financial future early, then live your plan."[67] As part of planning your financial future, you will develop your own Personal Financial Plan (PFP). Your PFP includes 16 different Plans, including your:

- Plan for Life (Vision, Goals, and Plans)
- Saving, Income and Expense Plan (Budget)
- Tax Plan
- Cash Management Plan
- Credit Plan
- Consumer Loans and Debt Plan

- Insurance Plan
- Family Financial Plan
- Investment Plan
- Retirement Plan
- Advance Plan
- Mission Plan
- Education Plan
- Housing Plan
- Auto/Toy Plan
- Individual/family Giving Plan

Our Conduct on the Journey is as Important as our Destination

As Anne and Bryan Sudweeks were driving home from our service in Nauvoo this year, they were listening to the book "Revelations in Context" and the section on D&C 136. Brigham Young was with the vanguard company in Winter Quarters, Iowa, and was praying for inspiration to get the Saints to the west. This section was guidance by the Lord on how to organize the Saints for their trip from Nauvoo to the Great Salt Lake.

As they thought about this inspired document, they wondered if there was more to this section than a standard organizational chart. Did it have a greater meaning that extended beyond the lessons for 1847? Chad M. Orton wrote:

> Some have assumed that the revelation is a simple how-to guide for organizing pioneer companies and have underestimated the role it played in refocusing Brigham Young and the Church. By helping the Saints remember that their conduct on the journey was as important as their destination, the revelation helped transform the westward migration from an unfortunate necessity into an important shared spiritual experience.[68]

Could the Lord be not only letting us know what Brigham needed to do, but also giving us a pattern that we can use in our financial lives as well?

Some have said, "The end justifies the means," meaning that "a desired result is so good or important that any method, even a morally bad one, may be used to achieve it."[69] Here in D&C 136 the Lord is saying that the means is as important as the end.

Brigham Young's vision and goal was simple, namely the largest single migration of an entire people, institutions, and culture in the history of the United States. To do this, the Lord inspired Brigham to organize the Saints "into companies, with a covenant and promise to keep all the commandments and statues of the Lord" (v. 2). Organization into companies was not new and had been discussed by the prophet Joseph. However, that combined with the covenant of righteousness was an inspired addition. Orton continued, "Brigham came to understand that rather than simply blazing a trail that others would follow, the 1847 vanguard company was establishing a covenant path."[70] He knew that thousands would be following their path and direction, so inspiration was crucial. As the Saints kept their covenants and walked in the ordinances of the Lord, they had the help of heaven as they worked toward their destination.

Likewise, how we conduct ourselves on a day-to-day basis in our finances is as important as the final destination of financial self-reliance or saving money. The important thing is what we learn and become from our experiences with our finances, not just the amount saved, and the inspiration of heaven is critical. Our challenges may not be as daunting as Brigham's, but they are important. As we work toward our vision and goals of greater financial self-reliance, we should likewise be organized and prepared, as well as make that same covenant that we will "keep all the commandments and statues of the Lord" (v. 2) and "walk in all the ordinances of the Lord" (v. 4). As we do these things, we too can have heaven's help as we go along our journey to our financial and other goals.

What should our conduct entail? Thankfully, the Lord shared three important points.

<u>Follow the prophets and stay on the covenant path</u>. As soon as Brigham received this revelation, he and the other apostles worked to ensure that the Saints knew what the Lord expected of them. The results were instructive and impressive. Hosea Stout observed that following the revelation would bring needed calm and unity in the face of unexpected trials; it would "put to silence the wild bickering" that had complicated the journey across Iowa.[71] Richard E. Bennett noted that as they followed the prophet, the exodus became "the most carefully orchestrated, deliberately planned, and abundantly organized hegira [migration] in all of American history."[72]

As the pioneers kept all the commandments and statutes of the Lord (v. 2), followed the prophets (v. 3), and walked in all the ordinances of the Lord (v. 4), the Lord blessed them that they would be able to get to their destination. Likewise, as we keep the commandments and statues, listen to the prophets and stay on the covenant path, we too will get to our destinations, whether it is budgeting, investing, retirement planning, or other activities.

<u>Be wise stewards over all the Lord has freely given you</u>. The Lord reminded the saints that they were His agents and the blessings they had received were from Him and should be used to prepare for what and who were coming later (v. 7, 9). They were to use their intellect, resources and property to help others (v. 10), be honest in their dealings, not covet (v. 20), return things borrowed (v. 25), return what they find to their rightful owners (v. 26), and be diligent in preserving what they have (v. 27). They were counseled against contention, pride (v. 19), taking the name of the Lord in vain (v. 21), speaking evil one with another (v. 23), drunkenness, and unedifying conversations (v. 24). As they did these things with pure hearts, they were promised "Ye shall be blessed; you shall be blessed in your flocks, and in your herds, and in your fields, and in your houses, and in your families" (v. 11). Likewise, as we are wise stewards over our financial resources and work to avoid contention, we too will be blessed in the things we are striving to achieve.

Remember the poor and needy on your journey. While the Saints were to be wise stewards, they also had a covenant responsibility to share an equal proportion for taking care of the poor, widows, and fatherless (v. 8). Likewise, as we work toward our financial goals, we also must remember our covenant responsibility to remember the poor and the needy along our way and to bear our "equal proportion" through our fast and other offerings and helping and serving others.

Because of both organization and righteous conduct, the pioneers were able to make the journey to the west. They established not only a physical but a covenant path as well, a path we can follow today. The Lord reminded the Saints that their conduct on the journey was as important their destination. Likewise, how we do the things we need to do as we work toward our financial goals is as important as what we do.

The Lord then shared what that conduct should include. They must follow the prophets and stay on the covenant path, be wise stewards over all the Lord has freely given, and remember the poor and needy on their journey. As the Saints followed this inspired guidance and improved their conduct, they made progress toward their ultimate goal in the west. Likewise, that guidance has relevance to us today. As we remember the importance of our conduct and these same three areas of concern, the Lord will likewise help us in our financial vision, goals and destinations.

By emphasizing the importance of what we do, our conduct, and what we have, our blessings, we tie everything, including our finances, back to the gospel of Jesus Christ. Moreover, we transform our finances from an unfortunate necessity to an important shared spiritual experience as we work together with our spouse and families to accomplish our financial vision and goals.

Understand the Implications of this Learning Framework

This learning framework is important for six specific reasons.

1. This framework helps us ask the important questions about our lives and our finances, such as "What doctrines and principles, if understood, would help me:
- "Change my attitudes and behaviors toward my finances to become better at them?"
- "Teach my children the place of money in our lives, instead of just the world's ways?"
- "Better live the commandments to live on a budget, spend less than I earn, and be more exact in my record keeping?"

Understanding doctrines and principles can help us ask important questions that can be used to enhance our learning as we ask and seek deeper answers to the difficult questions of life.

2. This framework reminds us where the answers really are. Bednar reminds us, "Appropriate applications are necessary but can never stand alone. What is needed is a balance among doctrines, principles and application. . . The answers always are in the doctrines and principles. And the doctrines and principles need to be in us."[73]

3. This framework allows us to lift our perspective and vision, which can help us gain greater motivation. By finding our higher purpose (or doctrines) in what we are doing, we gain greater motivation to do the things that we need to do. Ted Callister reminds us "With increased vision comes increased motivation."[74]

4. This framework encourages us to take a long-term eternal perspective rather than a checklist approach. Paul declared "In the dispensation of the fullness of times [God] might gather together in one all things in Christ."[75] How do we gather together in one all things and how does this framework help?

David A. Bednar wrote, "The principle of gathering together in one can aid us in changing the conventional checklist [of family finance] into a unified, integrated, and complete whole in receiving the transforming power of the gospel of Jesus Christ in our lives."[76] For most of us our lives revolve around the checklist of things necessary for us to do including living on a budget, getting out of debt, saving for long-term goals, etc. These things are often considered separately, rather than in relation to each other and in relation to our overall lives. As we gather together in one, we put all these things together and see that these things, including our finances, are simply part of the gospel of Jesus Christ and hence we know what is necessary for us to do. We must "obey the commandments."[77] "bridle all our passions,"[78] "perform every word of command with exactness,"[79] "strip ourselves of all pride,"[80] "offer [our] whole souls as an offering unto Him,"[81] and "endure to the end."[82]

5. This framework reminds us of the importance of Christ and our daily conduct. It is not enough to know these things and even to have a testimony of their truthfulness, we must do them every day. It is crucial that we daily stay on the covenant path daily and we will achieve our destination.

6. Finally, this framework helps change our thinking. While principles and application keep us on the right track, understanding the doctrines and principles allows us to transform those hourly and daily mundane acts of obedience we must do in our finances into the majestic purposes that our Heavenly Father has planned for us. It magnifies, as Dieter F. Uchtdorf says, "our small acts of obedience into holy acts of consecration" to our Savior Jesus Christ.[83] Louise Y. Robison reminds us, "If we only half do our work we will have no pleasure, if we do it from a sense of duty we will have no joy, but if we feel . . . that our Father in Heaven has felt us to be worthy . . . and that we can carry this work when it is here to do, then we will have joy.[84]

Summary

We must strive to bring Jesus Christ more into our lives and finances. To do that, we must seek to learn and love the Savior and His atonement more, strive to change daily and become more like Him, learn to apply His words and create our lives more closely with Him, and always remember Him. Our learning framework supports each of those activities.

Perspective is important in studying personal finance. Our perspective 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 others and ourselves 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 with our lives and finances, as perspective influences our choices.

We shared our important learning framework of doctrine, principles and application. Doctrines are revealed truth. The first critical question was "why should we learn and become better at family finance? Four key concepts constitute the doctrines, each related to a different perspective.

1. Spiritual- To bring us to Christ
2. Temporal- To help us become wiser stewards.
3. Family- To help us return with our families back to Heavenly Father's presence.
4. Individual- To help us accomplish our divine missions.

Principles are guidelines for the proper use of agency. The second question was "what are the principles on which how we learn and become better at personal finance are based? Four key concepts constitute the principles or "what's" on which this perspective is based. They are:

1. Ownership- None of what we have is ours.
2. Stewardship- We are stewards over all God has blessed us with.
3. Agency- The gift of choice is one of God's most precious gifts.
4. Accountability- We will be accountable for all our choices, including our financial choices.

Application is how we accomplish what we need. The third question was "how do we learn about and become better at personal or family finance? This application or the creative process is critical to our accomplishing all we need to in life. The five key concepts are:

1. Vision- Our vision is what we want to become or how we want to live our lives. It is our ultimate destination and what we want to be like.
2. Goals- Goals constitute our destination or where we want to get to become our vision.
3. Plans- Plans are our tactical strategies or plans that will allow us to accomplish our goals.
4. Constraints- These are the conditions or circumstances that are critical for us to accomplish our goals.
5. Accountability- Finally, accountability is how we let others know what we are trying to accomplish and how we enlist their help in our process.

In summary, our learning framework was designed to help us bring Christ into our finances.

- We must seek to learn and love the Savior and His atonement more. As we do, we realize the personal finance is simply part of the gospel of Jesus Christ.

- We strive to change daily and become more like Him. We know that doctrines and principles, confirmed by the Spirit, change behavior.

- We learn to apply His words and create our lives more closely with Him. For we know that application is an invitation to learn and create.

- We always remember Him. As we do, we remember our conduct on our journey is as important as out destination.

It is our responsibility to be financially wise and use the resources we have been blessed with in blessing the lives of our families and others. We do that best when we daily bring Christ more into our lives and finances. The purpose of this manual and accompanying website, PowerPoints and learning tools is to help you accomplish that purpose.

Assignments

Financial Plan Assignments

Think about the things we have discussed regarding the doctrines ("why's"), principles ("what's"), and application ("how's") of personal finance. Why is this learning framework different? What things will this framework help us understand? These are the reasons we should be learning this material and we have a process on how to do it. With this framework we can change, as Dieter F. Uchtdorf states, "our small acts of obedience into holy acts of consecration."[85] With this understanding, we can avoid the problems that come with the world's different perspectives on wealth – generally incorrect ones. To become truly wealthy, we must first have a correct perspective and understand the key doctrines and 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."[86] 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.ChurchofJesusChrist.org/.

As you begin your PFP, start by filling our your PFP Introduction Template (LT01-01). What will happen if you don't prepare carefully this PFP? What will happen if you do? Think through the benefits of putting together a thoughtful Plan.

Learning Tools

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

Personal Financial Plan (PFP) Table of Contents (LT01)

This is a recommended table of contents for your Personal Financial Plan. It includes the 16 separate plans which make up your PFP.

Review Materials

Terminology Review

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 accountability; rather, we will be held accountable 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.

Constraints. Constraints are given conditions or circumstances that must be satisfied in order to enable us to accomplish our goals.

Accountability. Accountability is the process of letting others know what your vision, goals, plans, and constraints are to enlist your help in the creative process. It can also be enlisting others in helping accomplish your goals as you need their help for certain specific parts of your plans and strategies.

Creative Process. It is the way we get from an idea or vision to its eventual accomplishment. It has five critical areas: vision, goals, plans, constraints, and accountability.

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.

Goals. Goals are tools to help us keep our vision in focus. They are intermediate stepping stones that will take us to our eventual vision of what we are trying to accomplish.

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 influences 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.

Plans. Tactical plans are the roadmaps by which we will accomplish our goals. It is how we will get from where we are now to where we want to be to accomplish our goals.

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.

Vision. This is the act or power of seeing or imagination, where we come to solidify in our minds who we are and what we can accomplish. It is a creative work through which the power of thought, imagination, and effort combine to help us thoughtfully consider possible future events that may come to pass.

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?
6. What are the benefits of this doctrines, principles and application learning framework?

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 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 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.
    - 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.

Case Study 3

Data

Brenda was concerned as one of her friends was blessed with material riches, and made poor choices which caused him to lose his testimony. She asks: "If wealth is so bad, should we seek for riches?"

Application

What did the prophet Jacob in Jacob 2:18-19 say about this question? What should we seek for first?

Case Study 3 Answers

The prophet Jacob said seeking for riches is OK "if" we first seek the Kingdom of God, and if we seek riches for the right intent--for righteous purposes.
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 (Jacob 2:18-19).

> First, we should seek for the Kingdom of God and doing His will. Then we can seek for riches—but with the intent to do good. Gordon B. Hinckley said: "The Lord will love us, I think, to the degree to which we lift and bless those in distress. I believe that with all my heart, mind, and soul. The accumulation of means is not a bad endeavor when those means are used to bless the needy of the earth."[87]

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[7] David A. Bednar, Increase in Learning, 2016, p. 172.
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[13] For a discussion of this topic, see Sudweeks and Hill, "Conduct on our Journey is as Important as our Destination," unpublished manuscript, August 2019.
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[82] 3 Nephi 27:16-17.
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2. Investing 1: What to Do Before You Begin Investing

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:

A. Know what to do before you invest.
B. Recognize the principles of successful investing.
C. Understand the major asset classes and their risk and return history.

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:

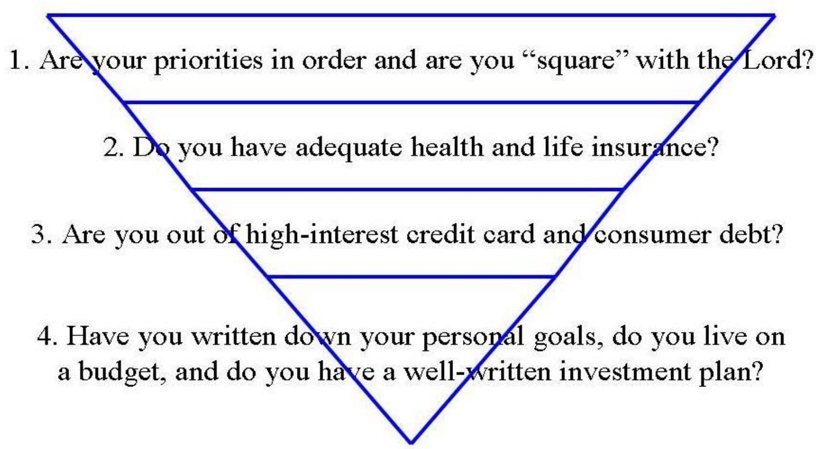
- Is there a priority to paying your bills? Do you consider some of your bills more important than others? Which bill do you consider more important?
- Are there certain products or services you feel you should never do without? Should you have health and life insurance before you begin investing?
- 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 vision, 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



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 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 understand the principle and 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.[2]

Table 1. Historical Analysis of Equity Investor's Return (Dalbar 2015-2019)

Year	Investor Period	Investor Returns	Benchmark Returns	Difference
2015	1995–2014	5.2%	9.9%	-4.7%
2016	1996–2015	4.7%	8.2%	-3.5%
2017	1997–2016	4.8%	7.7%	-2.9%
2018	1998–2017	5.3%	7.2%	-1.9%
2019	1999–2018	3.9%	5.6%	-1.7%

Table 2. Historical Analysis of Fixed Income Investor's Return (Dalbar 2015-2019)

Year	Investor Period	Investor* Returns	Benchmark Returns	Difference
2015	1995–2014	0.8%	6.2%	-5.4%
2016	1996–2015	0.5%	5.3%	-4.8%
2017	1997–2016	0.5%	5.0%	-4.5%
2018	1998–2017	0.4%	4.6%	-4.2%
2019	1999–2018	0.2%	4.6%	-4.4%

Table 3. Historical Analysis of Asset Allocation Investor's Return (Dalbar 2015-2018)

Year	Investor Period	Investor Returns*	Benchmark Returns**	Difference
2015	1995–2014	2.5%	8.4%	-5.9%
2016	1996–2015	2.1%	7.0%	-4.9%
2017	1997–2016	2.3%	6.6%	-4.3%
2018	1998–2017	2.6%	6.2%	-3.6%
2019	1999–2018	2.9%	9.7%	-2.3%

* DALBAR 2015– 2019 ** 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.

1. Know Yourself, your goals, vision and plans. 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.

1. **Seek, receive and act on the Spirit's guidance**. This includes seeking diligently through study and prayer, living worthy of the Spirit's guidance, and then acting on it once it is received. Carlos E. Asay said,

> When the Spirit is with us, we can think thoughts we've never thought before, we can say words we've never said before, we can perform beyond our natural abilities. That power is related to truth, to the scriptures, to the stirring of the Spirit within. And the power won't come unless we're actively courting the influence of the Holy Ghost.[5]

3. Understand the key areas of investing and especially 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 A Risk-Tolerance Test (LT16).

4. 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 Historical Return Simulation for Asset Classes (LT23).

5. 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.

6. Invest for the Long Term. 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.[6]

7. 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.

8. 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." [7]

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 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.

9. 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.

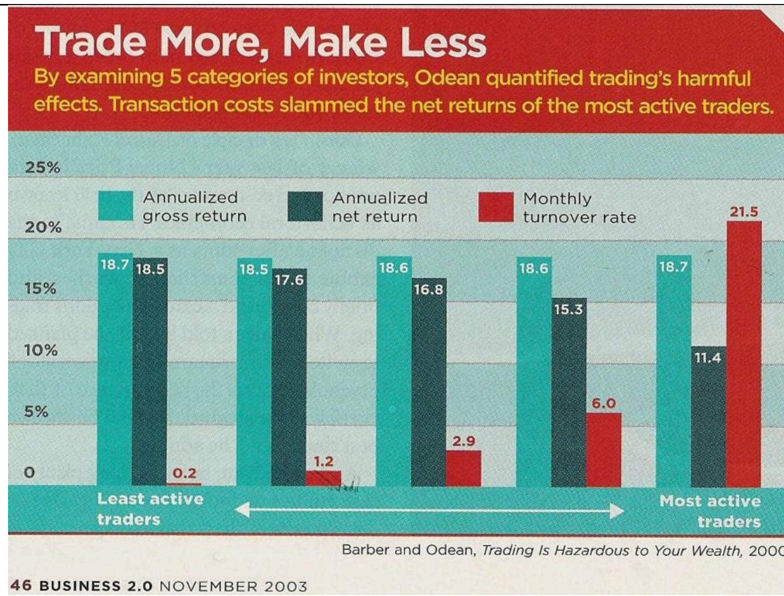
If you want to try to beat the market, try for a short period of time and compare your returns after taxes to your benchmarks. Do not waste too much time and energy because you will be able to match the market return with little or no effort through no-load, low-fee index mutual funds or exchange traded 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.

10. 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.

Chart 2. Trade More, Make Less



11. 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 Investment Plan Example Template (LT05A).

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.

Finding Balance

As you work on understanding and developing your Investment Plan, finding balance among doctrines, principles and application is important in helping you become better investors. We have shared some ideas for principles, although you can find others. Below are a few ideas for doctrines on which the principles are based. As you strive to increase your ability and effectiveness in investing wisely, I recommend you study and ponder the doctrines and principles supporting this application.

Principles	Doctrines
Know yourself, your goals, vision and budget	Identity
Seek, receive and act on the Spirit's guidance	Obedience
Understand risk – there is lots of it	Stewardship
Stay diversified	Accountability
Invest low-cost and tax efficiently	Stewardship
Invest long-term	Stewardship
Know what you invest in	Accountability
Monitor performance versus benchmarks	Accountability
Don't waste time trying to beat the market	Stewardship
Invest with good people and firms	Stewardship
Develop a good Investment Plan (IPS) and follow it	Stewardship

Obedience to Consecration

From the principles and doctrines, we can see that we are not just working on being wise with our liquid assets, which is an application. From a higher perspective, or increased vision,

> We are children of a Creator (identity), striving to live worthy of the Spirit (obedience), striving to understand ourselves and our risk tolerance (agency), and learning to understand financial markets and instruments (accountability). We are developing our investing talents carefully (stewardship), so we can invest our resources carefully and wisely (agency), to earn the return we are expecting (stewardship), and accomplish our personal missions and individual and family vision and 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 the chapter on 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.

Table 4. Asset Class Summary

Asset Class Summary 2019 MBA 620/Fin418/Fin200 Financial Planning (2/22/19)												
	Cash and Cash Equivalents		Fixed Income				Equity					
	Taxable or Tax-free		Taxable or Tax-free			Intl./Global	Domestic			International/Global		
Asset Classes:	**CDs, MMA, MMMFs**	**Government Bills/Funds**	**Short-term Bonds/Funds**	**Intermediate Bonds/Funds**	**Long-term Bonds/Funds**	**International/ Global Funds**	**Small Cap/Funds**	**Mid Cap/Funds**	**Large Cap/Funds**	**International / Global Funds**	**Emerging Markets/Funds**	**Domestic/Intl. REITs/Funds**
Description:	Short-term interest bearing investments from banks, mutual fund companies and public companies	Short-term interest bearing investments of the government, agencies, and municipalities	Bonds/funds which invest in short-term instruments with a maturity of < 5 years and can be either taxable or tax-free	Bonds/funds which invest in intermediate-term instruments with a maturity of 3 - 10 years and can be either taxable or tax-free	Bonds/funds which invest in long-term instruments with a maturity of 10 - 30 years and can be either taxable or tax-free	All maturity bonds/funds which invest in bonds of companies domiciled outside the US. Global includes both international and US bonds.	US stocks with a market capitalization less than $3 bn.	US stocks with a market capitalization of between $2 and $10mn, considered the up and coming companies	US stocks with a market capitalization of >$10 bn, considered the blue chip and larger companies	All capitalization stocks that are domiciled outside the US. Global includes both international and US stocks	All capitalization stocks that are domiciled in countries not considered Developed by the World Bank/IMF	All capitalization stocks that generally own and operate income producing real estate, ranging from offices and apartments to hospitals and shopping centers
Includes:	CDs, money market funds, commercial paper and funds which invest in these	Bonds and funds of Treasury bills, US Savings bonds, municipal bonds, etc.	Bonds and funds of short-term US Treasuries, US Savings, corporate, municipal and agency bonds	Bonds and funds of intermediate-term US Treasuries, US Savings, corporate, municipal and	Bonds and Funds of long-term US Treasuries, US Savings, corporate, municipal, agency and junk bonds	Bonds and Funds of al maturity international companies	Small cap value, growth, blend, and funds that invest in these types.	Intermediate cap value, growth, blend, and funds that invest in these types.	Large cap value, growth, blend, and funds that invest in these types.	All capitalization stocks and funds that invest in these types	All capitalization stocks and funds that invest in these types	All capitalization stocks and funds that invest in these types
Key Advantages	Good for liquidity and stability of principle	Good for liquidity and stability of principle	Provides income and returns generally in excess of inflation	Provides income and returns generally in excess of inflation	Provides income and returns generally in excess of inflation	Provides income and returns generally in excess of inflation	These stocks are generally smaller, less followed, and tend to grow faster than larger stocks	These stocks are generally larger than small-cap and smaller than large-cap, somewhere in between	Least risky of all equities. These stocks are generally larger, better run, and less volatile stocks	Returns can be enhanced through investing across borders–correlations are not as strong	Returns generally enhanced through investing across small country borders–lower correlations	Offers exposure to real estate without having to own any individual properties
Key Risks	Low returns, and little risk of losing principal since the borrowers have good credit and loans are for a short period.	Low returns and little risk of losing principal since the government can always print new money. More risk with agencies and municipalities	Lower returns and little risk of losing principle from non-government bonds as terms are generally short	Lower returns and risk of losing principle from non-government bonds as terms are still somewhat short	Interest rate and other risks as bond's principle is not fixed as bond price fluctuates with interest rates	Interest rate and other risks as bond's principle is not fixed as bond price fluctuates with interest rates	Because these stocks are smaller and less well-capitalized, they are considerably more risky than larger-cap stocks	Risk is generally between small and large-cap stocks	These are considered the least risky of all equities, although risks remain, particularly with individual stocks	Much risk can be diversified away due to investing across borders; however, still risky as subject to different risks	These tend to be among the riskiest of asset classes due to currency, interest rate and other domestic risks	Tends to move with real estate markets generally, very interest-rate sensitive
Taxes:	Interest is fully taxable and capital gains at preferential rates	Interest from Treasuries state tax-free, muni's Federal tax free, and muni's from your state are both state and federal tax-free	Interest from Treasuries state tax-free and muni's Federally tax free. Other interest is taxable at ordinary rates	Interest from Treasuries state tax-free and muni's Federally tax free. Other interest is taxable at ordinary rates	Interest from Treasuries state tax-free and muni's Federally tax free. Other interest is taxable at ordinary rates	Internation/global bonds are generally fully taxable, sometimes taxed both internationally and domestically	Fully taxable, with dividends and long-term capital gains at preferential rates	Fully taxable, with dividends and long-term capital gains at preferential rates	Fully taxable, with dividends and long-term capital gains at preferential rates	Fully taxable, with dividends and long-term capital gains at preferential rates.	Fully taxable, with dividends and long-term capital gains at preferential rates	Fully taxable, with dividends and long-term capital gains at preferential rates
Returns & Risk:	(ending 2018)											
10 Year Return		0.3%			4.3%		12.7%		12.7%	2.4%	2.0%	2.0%
10 year Risk		0.2%			14.1%		18.9%		13.6%	18.5%	22.7%	22.7%
25 Year Return		2.4%			7.0%		10.3%		8.9%	6.9%	8.0%	
25 year Risk		0.6%			11.6%		20.1%		14.4%	16.0%	22.4%	
How to Invest:	Banks, brokerage, mutual fund companies	www.treasurydirect.gov, banks, brokerage mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies	Banks, brokerage, or mutual fund companies

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. For a summary of the major asset classes, see Table 4.

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:

- 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:

HPR = (ending price – beginning price + dividends + distributions) / 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." [8]

Chart 3. Asset Class Returns

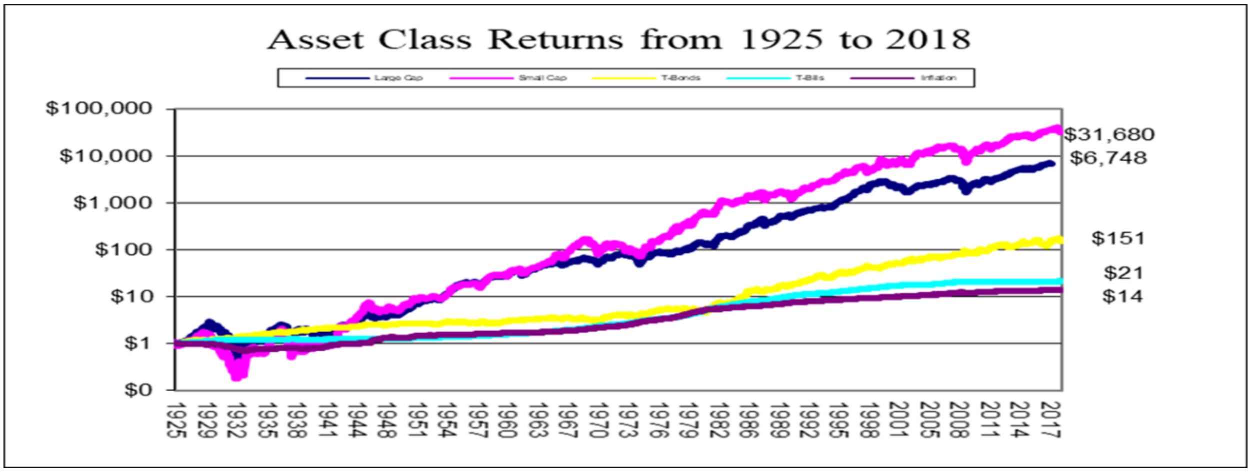
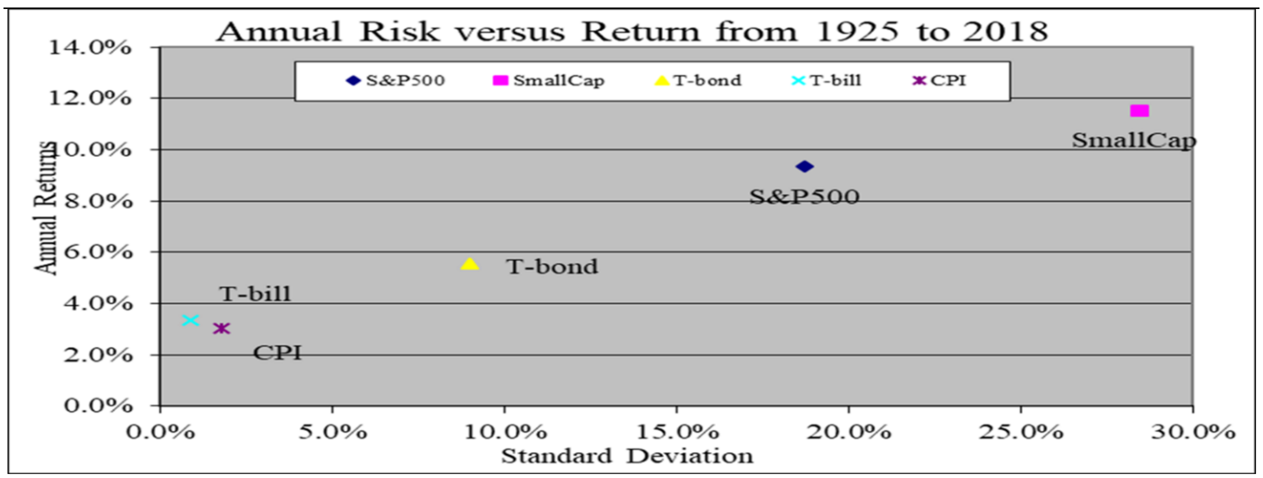


Chart 4. Annual Risk versus Return



What have been the characteristics of risk and return historically? Chart 4 and Table 4 show that from 1926 to 2018, large-cap stocks (as represented by the S&P 500) have yielded a return of over 9.0 percent per year and have a standard deviation of about 19 percent. Small-cap stocks have yielded a return of above 11.0 percent per year and have a standard deviation of approximately 29 percent. T-bonds have yielded a return of roughly 5.5 percent per year and have a standard deviation of 9.0 percent. T-bills have yielded a return of 3.3 percent per year and have a standard deviation of about 0.9 percent. As a reference point, inflation over this same period has been 3.0% 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. S&P 500 1 Year Annual Returns

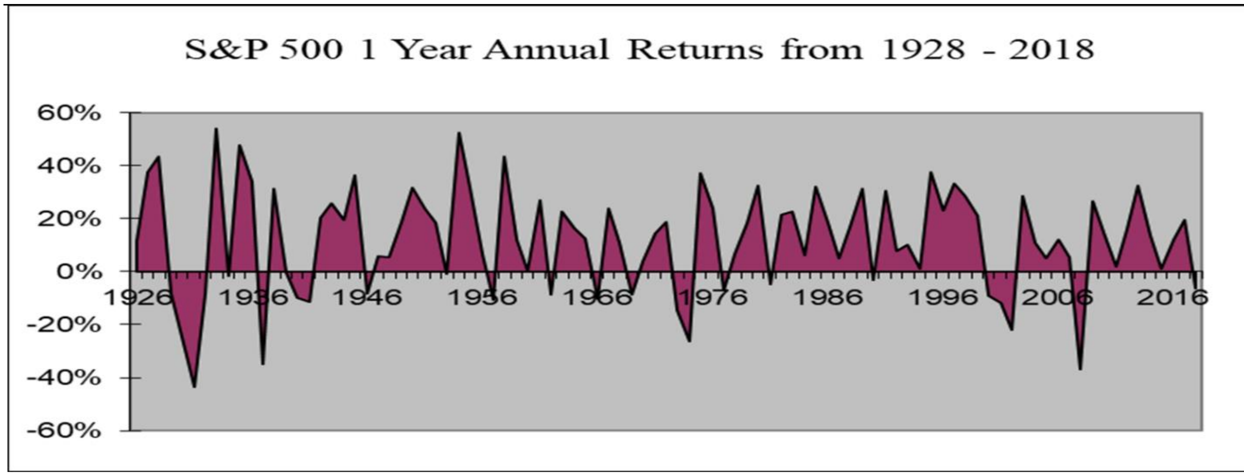


Chart 5, which shows the S&P 500 annual return since 1925, shows that the annual return appears to be very volatile—there are many years of high returns and many years of negative returns. However, looking at the return in terms of 5-year periods instead of 1-year periods shows that there are only a 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).

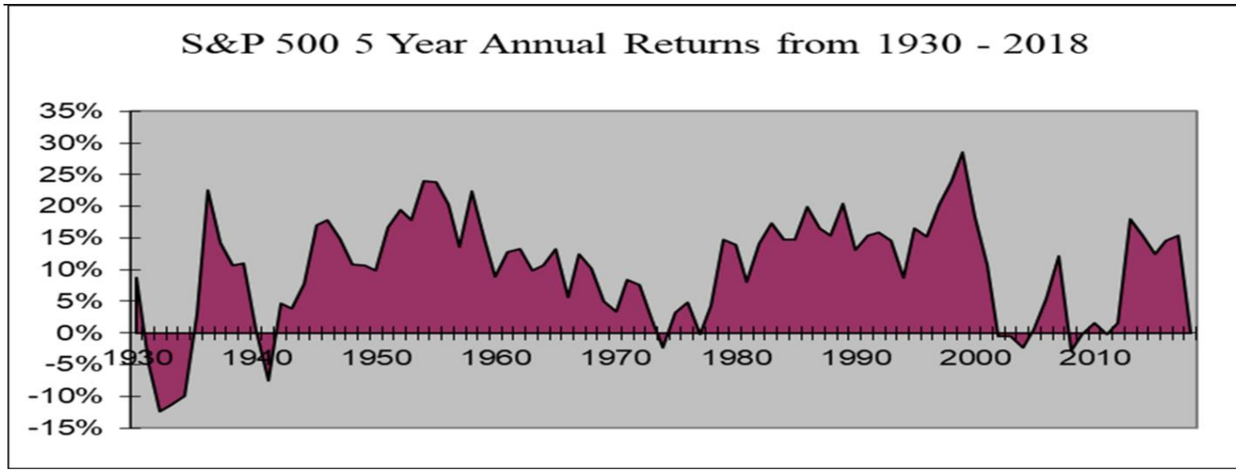
We will now look at risk, or standard deviation. Table 4 shows the geometric return and the standard deviation for each of the major asset classes. As you look at the large-cap return and risk, note that over 5, 10, 25, 50, 75, and 90 years, the return was volatile, yet over longer periods has been around 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.

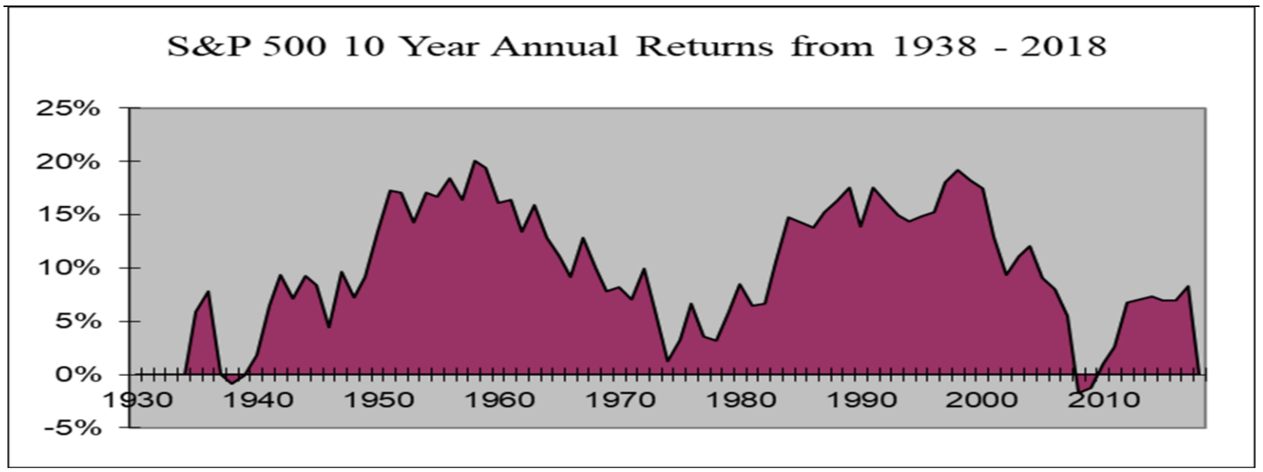
If you look at T-bills on the chart, you will see that they have yielded a range of approximately 0.1 to 5 percent interest over the various periods of time; T-bills have had a standard deviation of between 0.1 and 0.9 percent.

Chart 6. Five-Year Annual Returns



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.

Chart 7. 10-Year Annual Returns



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:

1. Know yourself.
2. Understand risk.
3. Stay diversified.
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.

Table 4. Geometric Return and Risk over Specific Time Periods

Total Returns For the Periods Ending December 31, 2018

	1 Year	5 Years	10 Years	25 Years	50 Years	75 Years	90 Years
S&P500							
Compound Return	-6.2%	7.6%	12.7%	8.9%	9.7%	11.2%	9.3%
Standard Deviation	14.7%	10.9%	13.6%	14.4%	15.0%	14.2%	18.7%
SmallCap							
Compound Return	-12.2%	3.5%	12.7%	10.3%	11.0%	13.6%	11.5%
Standard Deviation	18.5%	15.2%	18.9%	20.1%	21.2%	19.9%	28.5%
T-bond							
Compound Return	11.6%	6.2%	4.3%	7.0%	8.0%	5.8%	5.5%
Standard Deviation	21.7%	15.2%	14.1%	11.6%	11.3%	9.6%	9.0%
T-bill							
Compound Return	1.9%	0.6%	0.3%	2.4%	4.7%	3.9%	3.3%
Standard Deviation	0.1%	0.2%	0.2%	0.6%	1.0%	0.9%	0.9%
EAFE (International)							
Compound Return	25.6%	8.4%	2.4%	6.9%			
Standard Deviation	4.3%	11.7%	18.5%	16.0%			
Emerging Markets							
Compound Return	37.8%	4.7%	2.0%	8.0%			
Standard Deviation	6.7%	12.3%	22.7%	22.4%			
REITs							
Compound Return	5.1%	9.3%	7.4%				
Standard Deviation	6.8%	15.0%	39.1%				
CPI							
Compound Return	2.1%	1.5%	1.8%	2.2%	4.0%	3.6%	3.0%
Standard Deviation	0.0%	0.8%	1.0%	1.1%	1.3%	1.5%	1.8%

Source: Ibbotson Associates for large cap, small cap, T bond, T bill and Inflation up to 2014 with Bloomberg for 2015 and beyond, and Morgan Stanley Capital International for the remainder, 2015 and beyond.

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

This section on investing is different from previous sections. Instead of vision and goals, these things are included (well mostly) in your Investment Plan, which we have prepared a template (Investment Plan Example Template (LT5A)). We then encourage you to change it to fit your situation. Because of the number of different and important parts to this Investment plan, we have chosen to give you more guidance.

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 the questions on investing from Family - Key Questions on Money and Relationships (LT21). Reviewing your past can help you gain important insights about the events that shaped your views on money.

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.

When you have answered these questions, you are ready to start creating your Investment Plan.

> First, copy the sample Investment Plan template found in Investment Plan Example Template (LT5A). 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 such as A Risk-Tolerance Test (LT16) 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. (we should do this in class to help you).

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 A Risk-Tolerance Test (LT16). 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:

A Risk-Tolerance Test (LT16)

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.

Family - Key Questions on Money and Relationships (LT21).

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 are subject to short-term price fluctuations (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).

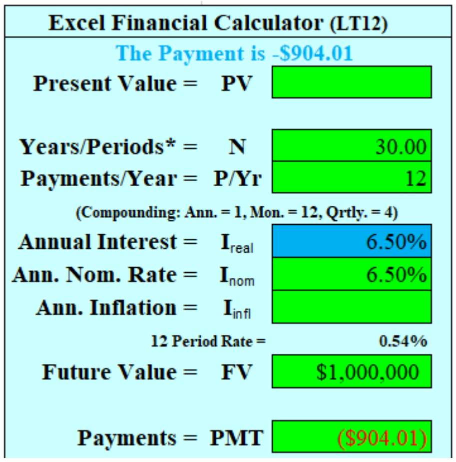
N = 30, I = 8.5%, PV = 0, FV = $1,000,000

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 index 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

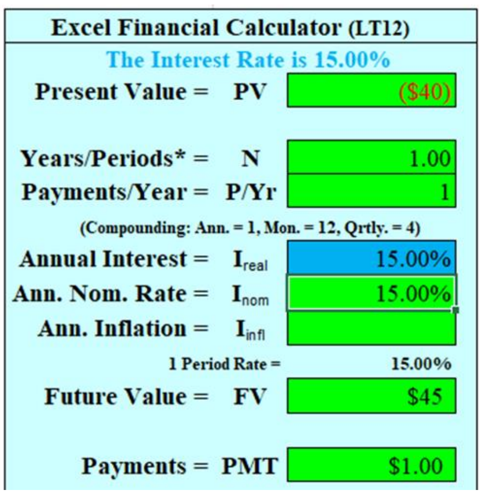
(($45 × 100 − $40 × 100) + 1 × 100) / $40 × 100 = ?

Kim's total rate of return is 15%.

Per-share basis

(($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:

(($40 × 100 − $40 × 100) + 5 × 100) / ($40 × 100) = 12.5%

Taking that return and annualizing for five years gives the following annual

returns:
Geometric return = $(1 + .125)^{(1/5)}$ = 2.38%
Average return = 12.5% / 5 = 2.5%
Using either method, Kim's stock performed better than the bank account.

Excel Financial Calculator (LT12)		
The Interest Rate is 2.50%		
Present Value =	PV	($40)
Years/Periods* =	N	5.00
Payments/Year =	P/Yr	1
(Compounding: Ann. = 1, Mon. = 12, Qrtly. = 4)		
Annual Interest =	I_{real}	2.50%
Ann. Nom. Rate =	I_{nom}	2.50%
Ann. Inflation =	I_{infl}	
1 Period Rate =		2.50%
Future Value =	FV	$40
Payments =	PMT	$1.00

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.

Excel Financial Calculator (LT12)		
The Present Value is -$1,386.09		
Present Value =	PV	($1,386)
Years/Periods* =	N	10.00
Payments/Year =	P/Yr	1
(Compounding: Ann. = 1, Mon. = 12, Qrtly. = 4)		
Annual Interest =	I_{real}	5.00%
Ann. Nom. Rate =	I_{nom}	5.00%
Ann. Inflation =	I_{infl}	
1 Period Rate =		5.00%
Future Value =	FV	$1,000
Payments =	PMT	$100.00

Excel Financial Calculator (LT12)		
The Present Value is -$887.00		
Present Value =	PV	($887)
Years/Periods* =	N	10.00
Payments/Year =	P/Yr	1
(Compounding: Ann. = 1, Mon. = 12, Qrtly. = 4)		
Annual Interest =	I_{real}	12.00%
Ann. Nom. Rate =	I_{nom}	12.00%
Ann. Inflation =	I_{infl}	
1 Period Rate =		12.00%
Future Value =	FV	$1,000
Payments =	PMT	$100.00

Case Study 5

Data

Ryan is 35 years old and took the Risk Tolerance Test from A Risk-Tolerance Test (LT16). 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] *Presidency of The Church of Jesus Christ of Latter-day Saints*, 6 vols., [1965–75], 3:54.
[2] “Brother’s Keeper,” *Ensign,* Nov. 1986, 20.
[3] Carla Fried, “The Problem with Your Investment Approach,” *Business 2.0*, Nov. 2003, 146.
[4] Carla Freid, “The Problem with Your Investment Approach,” *Business 2.0*, Nov. 2003, 146.
[5] Carlos E. Asay, “Scriptures and Sunday Classes,” Ensign, January 1986.
[6] Chart 2; Carla Fried, “The Problem with Your Investment Approach,” *Business 2.0*, Nov. 2003, 146.
[7] In James R. Moss, “Sheep, Shepherds, and Sheepherders,” *New Era,* June 1977, 20.
[8] “Reach with a Rescuing Hand,” *New Era,* Jul. 1997, 4.

3. Investing 2: Understanding and Creating Your Investment Plan (IPS)

Introduction

Once you have put your finances in order and know what to do before you invest, you are prepared to invest. Like a good road map, a good Investment Plan (or Investment Policy Statement) 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 helps you decide where you want to go in terms of your personal and family goals and helps you get there by making 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 your personal Investment Plan.

Objectives

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

A. Understand the importance of financial goals and how to set them
B. Know the importance of your Investment Plan and how to prepare it
C. Identify and be aware of get-rich-quick schemes and how to avoid them.

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. Catch your vision, 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.

6. Begin saving now.
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? 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, it is likely not important to you and will be difficult for you to achieve.

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.

Understand the Importance of your Investment Plan and How to Prepare It

The most important financial-planning document you will prepare, besides your list of personal and family vision and goals, is your Investment Plan. In finance terms, your Investment Plan is also known as your investment policy statement (IPS). 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 Investment Plan Example Template (LT05A). 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 policies, plans and strategies
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 Historical Return Simulation for Asset Classes (LT23).

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 7.2 percent return over the past 10 years with a 20.6 percent standard deviation. Your mutual fund or asset has a slightly lower return than the benchmark (6.5 percent versus 7.2 percent), but with slightly lower risk than the benchmark (19.3 percent versus 20.6 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 Possible Benchmarks for Investment Plans (LT15) and Expected Return Simulation and Benchmarks (LT27). 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. 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 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 Policies, Plans and Strategies

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

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. These 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 2016, 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 12 percent during 2016, then you know that your investment underperformed in that year. Your investment was up 6 percent for the period versus a 12 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. 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 A Risk-Tolerance Test (LT16) 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, or 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.

Investment Strategy. 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]

Finally, 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.

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, 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 15 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.

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 and 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 Investment Plan Example Template (LT05A). 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 Investment Plan Example Instructions (LT5B).

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: following the principles of successful investing and doing it consistently for many years.

Assignments

Financial Plan Assignments

Open your copy of your Investment Plan Investment Plan Example Template (LT05A). 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 vision and goals. What are you trying to accomplish individually and as a family through investing? Think through your general investment guidelines in Section IIA for both Stage 1 and Stage 2, and fill in those sections.

Using Expected Return Simulation and Benchmarks (LT27) , input your stock and bond allocations from your work you have done in the previous section.

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 market stocks* 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 Expected Return Simulation and Benchmarks (LT27), 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 Un-acceptable 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 Expected Return Simulation and Benchmarks (LT27).

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:

Investment Plan Example Template (LT05A)
You are encouraged to copy this Investment Plan template 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.

Investment Plan Example Instructions (LT5B)
These are instructions for preparing your Investment Plan.

Expected Return Simulation and Benchmarks (LT27)
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.

Possible Benchmarks for Investment Plans (LT15)
This document give ideas for possible benchmarks for your different 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 to 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.

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[1] Robert G. Ibbotson and Paul D. Kaplan, "Does Asset Allocation Policy Explain 40, 90 or 100 Percent of Performance?", *Financial Analyst Journal*, Jan./Feb. 2000, 2633.

[2] Conference Report, Oct. 1911, 128–29.

[3] "Keeping Life's Demands in Balance," *Ensign,* May 1987, 13.

4. Investing 3: Understanding Securities Markets

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:

A. Recognize the different types of securities markets.
B. Be aware of the basics of brokers and investment advisors and how to buy and sell securities.
C. Understand how to choose a broker or an investment advisor.
D. Know the uses and types of investment 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. 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 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.

Understand the Basics of Brokers and Investment Advisors and How to Busy and Sell Securities

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:

Commissions. 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.

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. 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.

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.

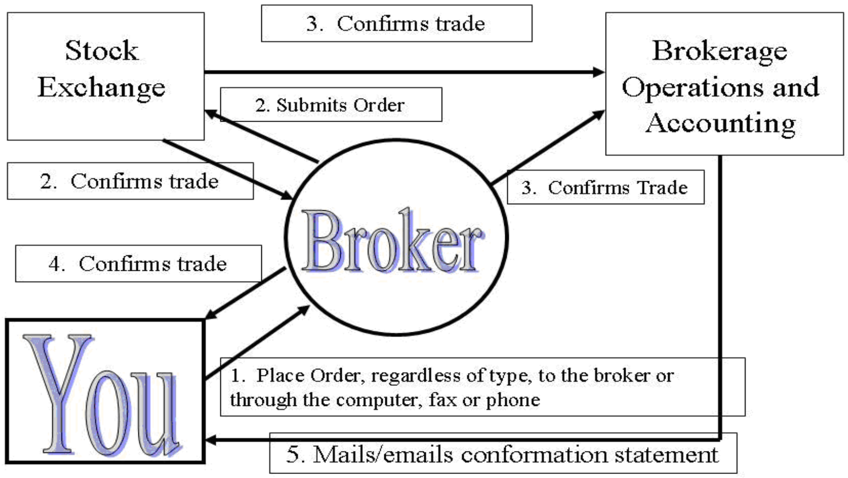
Limit orders are directions you give to a broker to buy or sell a specific number of shares at a specific price (or a better price, if possible). An advantage is that you may get the limit price or better. A disadvantage is that you may not get any shares at all if the market moves against you.

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



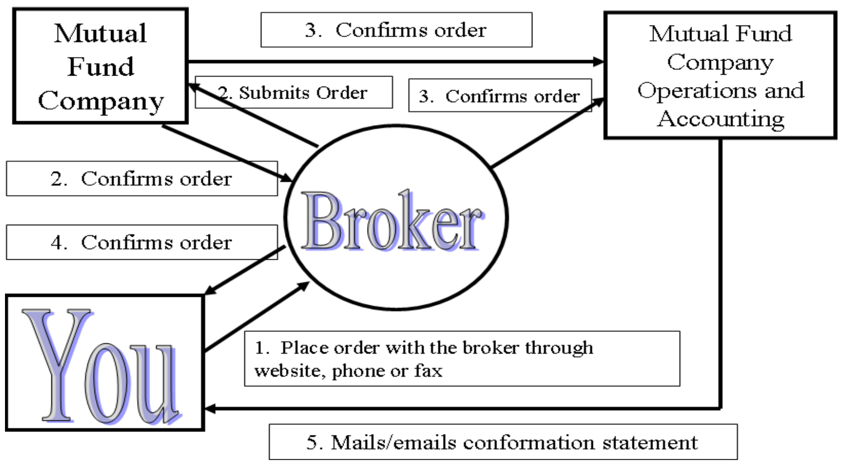
Stop orders and stop-loss orders are directions to either sell a specific number of shares if the stock price falls below a certain level or to buy a specific number of shares if the stock price rises above a certain level. Use care when you set stop prices to safeguard against major fluctuations. An 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.

Chart 2. The Trading Process for Mutual Funds with a Load, or Sales Charge (or Load)



Understand how to Choose a Broker or an Investment Advisor

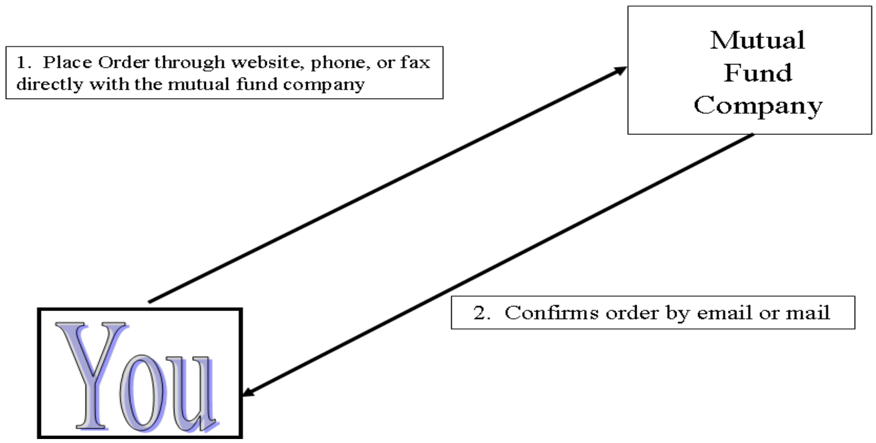
How do you choose an investment advisor or stockbroker? The key is to decide what kind of assistance you need and to get quality help from the best individuals and institutions. Whichever institution or individual you choose, remember that this individual or institution must be registered and licensed 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.

Chart 3. The Trading Process for No-Load Mutual Funds



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 Financial Advisor (TFA) 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.

Understand the Uses and Types of Investment 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; benchmarks also 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 weighted. 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 weigh 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 weighted. 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 weighted. 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 weighted. 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.

Table 1. Key Benchmarks for the Major Asset Classes

Asset Class	Benchmarks
Domestic Equities	
Large-Cap Stocks	S&P 500
Small-Cap Stocks	Russell 5000
Micro-Cap Stocks	Wilshire Micro-Cap
International Equities	
Global	S&P Global 1200, MSCI & DJ World
International	EAFE (Europe, Australia, and the Far East)
Emerging Markets	S&P/IFCI Emerging Markets Free, MSCI Emerging Markets Free
Corporate Bonds	
Short-Term	DJ Corporate Bond
Intermediate-Term	Barclays Intermediate
High-Yield	Salomon Smith Barney High Yield
Mortgage-Backed	Barclays MBS
Yankee	Merrill Lynch Yankee
Treasury Securities	
Intermediate-Term	Barclays Intermediate Treasury
Long-Term	Barclays Long-Term Treasury
Real Estate	
Real Estate Investment Trusts	S&P REIT MSCI US REIT

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—once 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).

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, who is acting in your interests as a fiduciary.

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

Continue to work on your Investment Plan. As you do, it is important that you understand the environment in which you are investing. Understanding the key components of this environment is critical. 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 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. Also, 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 Expected Return Simulation and Benchmarks (LT27). 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.

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.

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).

5. Investing 4: Understanding Bonds

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:

A. Explain the benefits, risks, terminology and types of bonds
B. Understand how bonds are valued and the costs of investing in bonds
C. Understand plans and strategies for bonds.

Explain the Benefits, Risks, Terminology and Types of 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 and the Costs of Investing in Bonds

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:

$$\text{ETY} = \text{tax-free yield} / (1 - \text{marginal tax rate})$$

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 After-Tax, ETY, and Other After-Inflation Returns (LT26).

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 27.6 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: Feeds 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.

Understand Plans and Strategies for Bonds

Following are a few ideas for your plans and strategies for bonds and bond mutual funds. These will be include in your Investment Plan. The numbers refer to specific parts of your Investment Plan (LT05A).

Plans and Strategies for Bonds

Overall Investment Plan

- We will invest in bonds/bond funds which are great at doing what they do well, adding stability to the portfolio
- We will always have a diversified portfolio that includes bonds, realizing that bonds generally will not give us the returns needed to grow your portfolio much above inflation
- We will compare our bond/bond funds to the Barclay's Aggregate Index (or other bond benchmark of your choice). Note that there are different benchmarks for the different bond asset classes, i.e., short-term, intermediate-term, long-term bonds, treasuries, etc.

General Investing

- While risk of individual bonds can be high, we will reduce that risk considerably by buying no-load and low cost bond mutual/index funds with different maturities
- We will invest at our risk level, which is doable due to the many different types of bonds and bond asset classes
- As we get closer to retirement, we will increase our allocation to bonds as they offer more stability of principle and income, and are generally less volatile than equities
- We will follow the principles of successful investing.

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

Continue to work on your Investment Plan. As you do, it 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 Possible Benchmarks for Investment Plans (LT15). 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 Expected Return Simulation and Benchmarks (LT27). 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 Expected Return Simulation and Benchmarks (LT27**).** 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:

Possible Benchmarks for Investment Plans (LT15)
This document shows possible benchmarks for most of the major asset classes.

Historical Return Simulation for Asset Classes (LT23)
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.

After-Tax, ETY, and Other After-Inflation Returns (LT26)
This spreadsheet calculates the after-tax return, equivalent taxable yield, and after-inflation return on various assets.

Expected Return Simulation and Benchmarks (LT27)
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 0-20% depending on how long you have held the assets and your taxable and adjusted gross income.
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 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.
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

<u>Case Study 1</u>

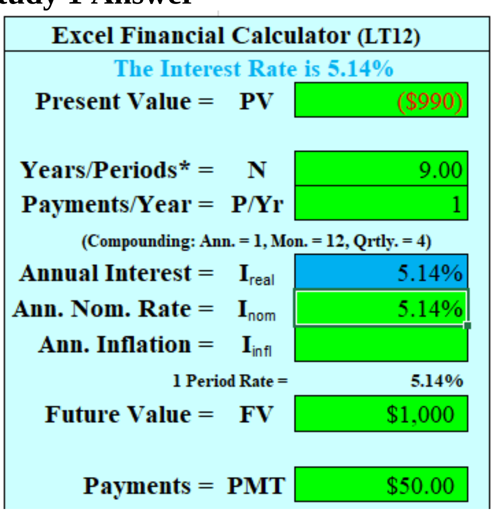
Data

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.

<u>Case Study 2</u>

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.

<u>Case Study 3</u>

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:

($1,050 – 1,000 + 40) / 1,000, 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:
(1,050 – 1,000 + [40 * (1 - .25)]) / 1,000 = 8.0%.
Of the $40 coupon, you pay $10 in taxes and keep the remaining amount.

6. Investing 5: Understanding Stocks

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 stocks. 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 low-cost, low-turnover and tax efficient 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:

A. Review risk and return for stocks and common stock terminology
B. Understand how stocks are valued and why stocks fluctuate in value
C. Know stock-investing strategies and the costs of investing in stocks
D. Understand plans and strategies for stocks.

Review Risk and Return for Stocks and Stock Terminology

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" (β). 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 are an increase in share value. Investors purchase shares in companies with the expectation that the price of the shares will increase. 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 and Why Prices Fluctuate

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).

$$\text{Value of common stock} = D_1 / (k - g)$$

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 effect the expected return, or discount rate, investors require 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 impacts company value. 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 have an impact. 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 effect stock prices. 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 has an impact on stock prices. They 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 and the Costs of Investing in Stocks

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.

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 are taxed paid on capital gains 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 are taxes paid on dividends, which are the returns you get from a company. 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.

Understand Plans and Strategies for Stocks

Following are a few ideas for your plans and strategies for stocks. The numbers refer to specific parts of your Investment Plan (LT05A).

Plans and Strategies

Overall Investment Plan

- Stocks are good at doing what they do well, gaining returns in excess of inflation at a higher level of risk.
- We will invest in stocks/stock mutual/index funds which are great at gaining returns in excess of inflation.
- We will compare our stock/funds to the S&P500 for Large Cap, Russell 2000 for small cap, EAFE for International, S&P REIT for REITs, and MSCI EM Free for emerging markets so we can know how we are doing.

General Investing

- Due to the many different types of stocks and stock asset classes, investors can invest at differing risk levels within this asset class.
- While risk of individual stocks can be high, buying multiple stocks or stock mutual funds can reduce that risk considerably (no-load and low cost stock mutual/index funds are recommended).
- Some stocks are likely necessary to give you the returns needed to grow your portfolio above inflation as part of your diversified portfolio.
- As you age and get closer to retirement, stocks, because of their risk, are a generally recommended to become a smaller percentage of your overall portfolio due to their higher volatility.
- As you review stock and stock mutual funds for your portfolio, make sure you follow the principles of successful investing.

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

Continue to work on your Investment Plan. As you do, it 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 Possible Benchmarks for Investment Plans (LT15)). 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 Historical Return Simulation for Asset Classes (LT23). 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 Expected Return Simulation and Benchmarks (LT27). 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 Expected Return Simulation and Benchmarks (LT27) 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, **LT27** 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 **L**T**27** to account for current market conditions. I strongly recommend that if your weighted return is greater than 7.5 percent from the historical returns, use an expected return of less than 7.5 percent (6.5-7.5 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 **LT27.**

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:

Possible Benchmarks for Investment Plans (LT15)
This document shows possible benchmarks for most of the major asset classes.

Historical Return Simulation for Asset Classes (LT23)
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.

After-Tax, ETY, and Other After-Inflation Returns (LT26)
This spreadsheet calculates the after-tax return, equivalent taxable yield, and after-inflation return on various assets.

Expected Return Simulation and Benchmarks (LT27)
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

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 index 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 and top step on the bottom of the investment hourglass, not the first step.

Case Study 2

Data

Anne own 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:

(55 – 50 + 1.5) / 50, 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:
(55 – 50 + [1.50 * (1 – .15)]) / 50 = 12.55%.
Of the $1.50 dividends, Clinton pays 22.5 cents in taxes and keeps the remaining amount.

7. Investing 6: Understanding Mutual Funds

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:

A. Explain the advantages, disadvantages, types and classes of mutual fund shares.
B. Understand how to calculate mutual fund returns.
C. Understand the costs of investing in mutual funds and how to purchase a mutual fund.
D. Understand plans and strategies for mutual funds.

Explain the Advantages, Disadvantages, Types and Classes of Mutual Fund Shares

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.

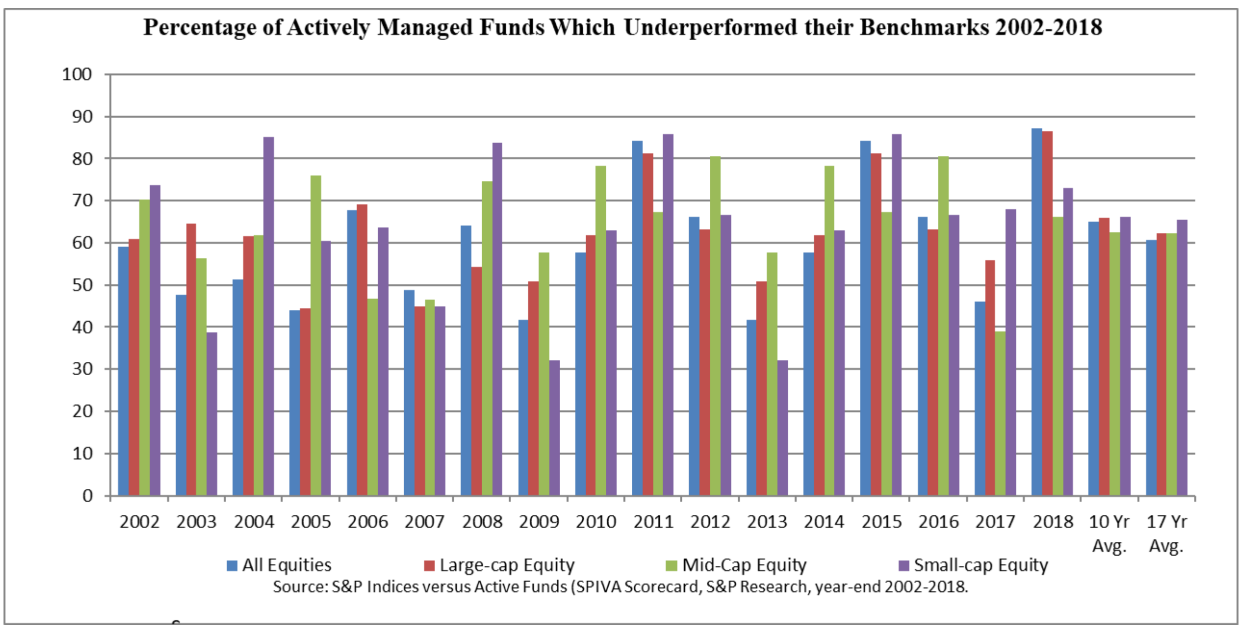
For the period from 1962 to 1997, the average actively managed fund, or a fund whose purpose is to outperform a specific index by the active buying and selling of securities, failed to outperform their benchmarks. In 22 of 35 years, less than half of all actively managed funds beat their benchmarks.[1]

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 Benchmarks[3]



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 the previous section. 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.

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 March 9, 2017, there were 1,185 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 March 9, 2017, 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.[5]

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.

Understand How to Calculate Mutual Fund Returns

There are two ways to make money on mutual fund holdings: capital appreciation and distributions.

Capital Gains

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 a preferential rate by the federal government whereas ordinary income may be taxed at a rate of up to 38.6 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 2018, long-term capital gains are taxed at a federal rate depending on your taxable income and AGI. 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 Taxes on Securities Earnings Including Qualified Dividends (LT32)). In 2018, qualified stock dividends are taxed at the same rate as capital gains.

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.

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:

([ending NAV – beginning NAV] + distributions) / 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:

([#ES * EP] – [#BS * BP] + distributions) / (#BS * 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:

([#ES * EP] – [#BS * BP] + ATSD + ATLCG + ATSCG + ATBDI) / (#BS * 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
ATSD = after tax stock distributions, or stock dividend distributions * (1 – the tax rate on stock dividends)
ATLCG = after tax long-term capital gains distributions, or long-term capital gains distributions * (1 – tax rate on long-term capital gains)
ATSCG = after tax short-term capital gains distributions, or short-term capital gains distributions * (1 – tax rate on short-term capital gains)

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 and the Costs of Investing in Mutual Funds

There are five steps to buying a mutual fund:

1. Determine your investment objectives, goals and key principles.
2. Select your risk level, asset classes, asset allocation and your investment benchmarks
3. Identify funds that meet your objectives subject to your investment principles.
4. Evaluate the funds and choose wisely
5. Make the purchase and monitor performance versus benchmarks.

Step 1: Determine Your Investment Objectives, Goals and Principles of Successful Investing

The first step is to determine your investment objectives and goals. 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: Select your Risk Level, Asset Classes, Asset Allocation and your Investment Benchmarks

The second step is to determine your risk level. How much risk are you willing to take? Your risk is determined by your asset allocation, your percentage of investments in each asset class. Find your risk tolerance by taking a risk tolerance test (see A Risk Tolerance Test (LT16) as an example). From that, determine your asset classes you will invest in and set your asset allocation, your percentage of your portfolio in each asset class.

Next, 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 (see Using Morningstar to Select Funds (LT07)) 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* (see Using Morningstar to Select Funds (LT07)), *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 and Monitor Performance

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.

Understand Plans and Strategies for Mutual Funds

Following are a few ideas for your plans and strategies for mutual funds. The numbers refer to specific parts of your Investment Plan (LT05A).

Plans and Strategies
General Investing

- Due to the many different types of stocks and bond mutual funds, investors can invest at differing risk levels with mutual funds
- Index funds and Exchange Traded Funds (ETFs) are great alternatives to actively managed mutual funds, and offer cost, tax, and other advantages
- While risk of individual stocks and bonds can be high, buying mutual/index funds can reduce that risk considerably, and is recommended
- If you are choosing to put in a small amount of savings each week or month, choose no-load mutual/index funds due to no transaction fee.
- If you are making one large purchase and holding it long-term, choose the ETF due to its slightly lower annual costs.
- Remember that most actively managed funds fail to beat their benchmarks after all costs and fees, and most index funds return close to their benchmarks.
- Moreover, the costs of investing in individual stocks and bonds can be high, and low-cost, no-load and tax-efficient index funds are generally very cheap.

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.

Assignments

Financial Plan Assignment

Continue to work on your Investment Plan. As you do, it 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.

Possible Benchmarks for Investment Plans (LT15)
This document shows possible benchmarks for most of the major asset classes.

After-Tax, ETY, and Other After-Inflation Returns (LT26)
This spreadsheet calculates the after-tax return, equivalent taxable yield, and after-inflation return on various assets.

Using Morningstar to Select Funds (LT07)

This tool gives instructions on how to use Morningstar, a company that tracks mutual fund and financial asset performance. Using this tool and your criteria that you determined as to what makes a good fund, you can find mutual funds that match your criteria.

Mutual Fund Selection Worksheet (LT7B)

This worksheet lists the criteria for what makes a good mutual fund so you can compare various mutual fund within specific asset classes. If filled out correctly, it is a good tool to determine which mutual better meets your criteria and needs.

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. Based on taxable income, 2019 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 2016 (from 12/31/15 – 12/31/16.

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.

Fund Name	Ending NAV	Beginning NAV	Short-term Distributions	LT CGain & Qual. Div.	Short-term Cap. Gain	Weight in Portfolio
FIDELITY MAGELLAN FUND (FMAGX)	91.36	89.43	0.546	2.119	-	50%
SCHWAB SMALL-CAP INDEX-SEL (SWS	28.1	24.1	0.391	0.762	-	10%
VANGUARD S/T BND INDX-INV (VBISX	10.43	10.43	0.146	0.001	0.001	20%
WFA MUNICIPAL BOND FUND-INV (SX	10.34	10.45	-	-	-	10%
VANGUARD SHRT TRM TREAS-INV (VFI	10.64	10.65	0.094	0.002	0.030	10%
For the period beginning 20151231 and ending 20161231						

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. Bloomberg put LTCG and Qualified Dividends together.

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.

$(NAV_{Ending} - NAV_{Beginning} + (Distributions * 1- \text{tax rate})) / NAV_{Beginning}$

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.

Federal Marginal Tax Rate	25.0%	Federal Tax on Qualified Dividends	15.0%
State marginal Tax Rate	7.0%	Federal LT Capital Gains Rate:	15.0%

LT33

	Ending Net Asset Value (NAV)	Beginning Net Asset Value	Short-term Distr. (1)	Long-term Capital Gains Distr.(2)	Qualified Stock Distr. (3)	Short-term Capital Gains Distr. (4)	Percent of Portfolio (5)	Fund Return
Stock Funds (all taxable):								
Fidelity 500 Index	91.36	89.43	0.546	2.119			50%	5.14%
Tax Rate (all taxable)			0.320	0.220	0.220	0.320		
AT Return		1.93	0.371	1.653	-	-		4.42%
Schwab Small Cap	28.10	24.10	0.391	0.762			10%	21.38%
Tax Rate (all taxable)			0.320	0.220	0.220	0.320		
AT Return		4.00	0.266	0.594	-	-		20.17%
Bond Funds:								
Corporate Bond Funds (all taxable):								
Vanguard ST Bond	10.43	10.43	0.146	0.001	-	0.001	20%	1.42%
Tax Rate (all taxable)			0.320	0.220		0.320		
AT Return		-	0.099	0.001	-	0.001		0.97%
Muni Bond Funds (Federal Tax Free for Interest only (5)):								
WFA Muni Bond	10.34	10.45			-		10%	-1.05%
Tax Rate (Fed tax free)			0.070	0.220		0.070		
AT Return		(0.11)	-	-	-	-		-1.05%
Treasury Bond Funds (State Tax Free for Interest Only(5)):								
Vanguard ST T- Bond	10.64	10.65	0.094	0.002	-	0.030	10%	1.09%
Tax Rate (state tax free)			0.250	0.220		0.250		
AT Return		(0.01)	0.071	0.002	-	0.023		0.79%
			Overall Portfolio Weight:					100.00%
			Overall Portfolio Before Tax:					4.99%
Notes:			**Overall Portfolio After Tax:**					4.39%

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 taxes 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:

Mutual Funds	Fund A	Fund B
Beginning NAV	$100.00	$10.00
Short-Term Distributions	$1.00	$0.90
Ending NAV	$109.00	$10.10

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:

	Fund A	Fund B	
YTD Nominal Returns	10% (note 1)	10%	
Estimated Turnover	10%		90%
Taxes on Short-Term Distributions	35%		35%
Taxes Paid (on Short-Term Distributions)	$.035	$0.315	
After-Tax Return	9.65%	6.85%	
Loss from Nominal Return Due to Taxes	0.35%		3.15%

To calculate Bill's before-tax return, the formula is (ending NAV + distributions – beginning NAV) / beginning NAV.

- Fund A: (109.00 + 1.00 – 100.00) / 100.00 = 10 percent
- Fund B: (10.10 + 0.90 – 10.00) / 10.00 = 10 percent

The formula for finding the after-tax return is:

(ending NAV + [(distributions – taxes paid) – beginning NAV]) / beginning NAV, 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.

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[1] John Bogle, *Common Sense on Mutual Funds: New Imperative for the Intelligent Investor*, John Wiley & Sons, USA, 1999, p. 119.

[2] Rich Fortin and Stuart Michelson, "Indexing Versus Active Mutual Fund Management," *Journal of Financial Planning*, vol. 15, no. 9, 2002, 82.

[3] S&P SPIVA Scorecard Year-end 2018, *S&P Research*, 2019.

[4] Matthew R. Morey, "Should You Carry the Load? A Comprehensive Analysis of Load and No-Load Mutual Fund Out-of-Sample Performance," *Journal of Banking & Finance*, vol. 27, no. 7, 2003, 1245–7.

[5] Matthew R. Morley, "Should You Carry the Load? A Comprehensive Analysis of Load and No-Load Mutual Fund Out-of-Sample Performance," *Journal of Banking and Finance*, vol. 27, no. 7 2003, 1245–71.

8. Investing 7: Understanding How to Build Your Investment Portfolio

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.

Objectives

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

A. Understand which factors control investment returns and
how to select investment vehicles
B. Understand the elements of a successful investment portfolio
C. Explain the investment process and how to build a successful portfolio
D. Understand plans and strategies for building your portfolio.

Understand Which Factors Control Investment Returns and How to Select Investment Vehicles

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."[1] There are six factors that control investment returns.[2] 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 at your level of risk;
- 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.

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 2018.

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 2018 (Before Catch-Up)

Plan	*Tax-Deferred*	*Tax-Eliminated*	*Maximum Amount*	*For Employees of:*
401(k)	Yes		$19,000	Businesses w/ Plans
Roth 401(k)		Yes	$19,000	Businesses w/ Plans
403(b)	Yes		$19,000	Non-profit, tax-exempt
Roth 403(b)		Yes	$19,000	Non-profit, tax-exempt
457	Yes		$19,000	State/Municipalities
SEP IRA	Yes		$56,000	Small Businesses
SIMPLE IRA	Yes		$13,000	Small Businesses
IRA	Yes		$6,000	Individuals
Roth IRA		Yes	$6,000	Individuals
Education IRA		Yes	$2,000	Individual Education
529 Plans		Yes	$485,000 per child	Individual Education

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 Roth versus Traditional: Which Is Better for You (LT28) 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. It also has the 8 questions you should ask to help you determine which to choose.

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:

$$\text{Return}_{\text{after tax}} = \text{Return}_{\text{before-tax}} * (1 - \text{marginal tax rate})$$

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 a preferential rate, 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. Remember 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). Earn as much of your income as possible in the form of long-term capital gains.

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 2019 the maximum amount you could contribute to a Roth IRA was $6,000, 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 Elements 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.

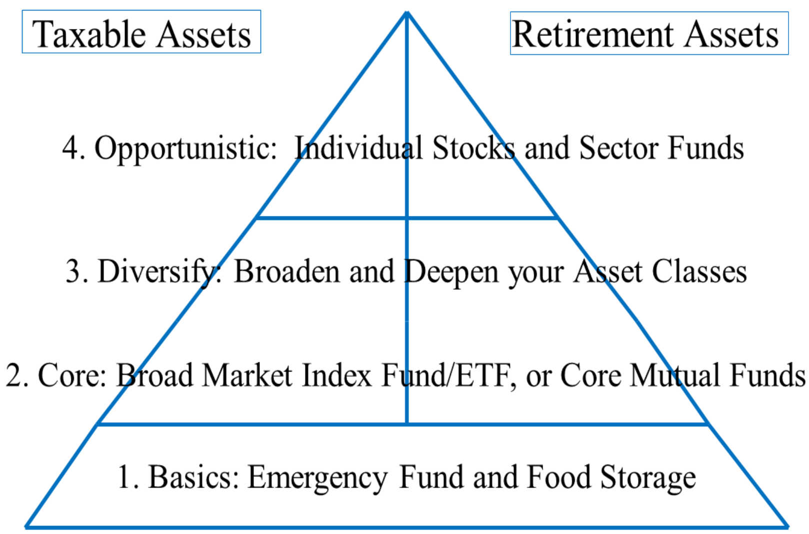
Levels two, three, and four are also divided in terms of taxable assets and retirement assets. Taxable assets are assets whose earnings you will need to pay taxes on each year. Retirement assets are assets you will not need until after you retire and on which you do not pay taxes until you take the money 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.

Chart 1: The Investment Hourglass Bottom



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 the chapter on **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.

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 Investing 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 (see Investment Process Worksheet (LT13) which can help you with this process.

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.

4. Research Potential Candidates for Financial Assets and Select the Assets Most Likely to Help You Achieve Your Goals

In this step, you determine which assets are likely to deliver the return you need to achieve your goals. The next chapter on 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.

Phase	Asset Class	Financial Asset	Benchmark	Total	Taxable	Retirement
Emergency	Cash/Bonds	Fidelity Bond	Barclays Ag.	25%	25%	0%
Core	Large Cap	Vanguard 500	S&P 500	55%	35%	20%
Diversity	International	Oakmont Int’l	MSCI EAFE	10%	6%	4%
Diversity	Small Cap	Wells Fargo	Russell 5000	10%	6%	4%

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:

Phase	Financial Asset	Taxable	Retirement	Total
Emergency	Fidelity Bond Fund	$25,000	$0	$25,000
Core	Vanguard 500 Fund	$35,000	$20,000	$55,000
Diversity (Broaden)	Oakmont Int’l Fund	$6,000	$4,000	$10,000
Diversity (Deepen)	Wells Fargo Small Cap.	$6,000	$4,000	$10,000
Total Target Size		$72,000	$28,000	$100,000

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.

Understand Plans and Strategies for Building Your Portfolio

Following are a few ideas for your plans and strategies for building your portfolio. The headings and numbers refer to specific parts of your Investment Plan (LT05A) which is a good template for your Investment Plan.

I. Introduction and Purpose

- Who is this plan for? (I.A.)
- What is the purpose of this plan? (I.B.)
- What are the investment principles you will use to develop your investment plan? (I.C.)

II. Risk and Return Objectives

- What are you investment objectives?
- What are your objectives? (II.A.)
- Which investment vehicles will you use? (II.B.)
- What are your time frames for these investments? (II.C.)
- What is your expected return for your portfolio for each time frame? (II.D.)

- What risk-type of investor are you? What is your expected risk for your portfolio for each time frame? (II.E).)

III. Investment Guidelines and Constraints

- What are your investment guidelines before retirement and after retirement? (III.A.)
- What are your investment constraints (liquidity, time horizon, taxes and unique needs)? (III.B.)

IV. Investment Policy

- What are your acceptable and unacceptable asset classes? Will you use debt to invest (buy on margin or sell short – I recommend no)? (IV.A.)
- What are your investment benchmarks (IV.B.)
- What is your target asset allocation both before and during retirement? (IV.C.)
- Will you invest active, passive or both? (IV.D.)
- What is the maximum you will invest in any individual asset, i.e., company stock, in any single investment, or in any single sector?
- What is the maximum you will invest in any new investment (except broad mutual funds)?
- How much will you invest in your company stock?
- Will you invest in any unlisted security (I recommend no)?
- What is your current investment strategy?
- What is your tax strategy and what different types of investment vehicles will you use?
- How will you fund your investments?

V. Investment Monitoring and Evaluation

- How will you monitor your portfolio? (V.A.)
- How and how often will you rebalance your portfolio and what rebalancing method will you use? (V.B.)
- How often will you communicate results to your spouse? (V.C.)
- How and how often will you revise your Investment Plan? (V.D.)
- Who will be following and following up on this Plan? (V.E.)

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

Continue to work on your Investment Plan. 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, 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 Investment Process Spreadsheet (LT13). 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:

Investment Process Spreadsheet (LT13)

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.

Roth versus Traditional: Which Is Better for You (LT28)

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. It has the 8 questions to ask to help you determine which to choose.

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 no 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, single, and makes $50,000 per year in 2019. Assume she is in the 12 percent marginal federal tax bracket and the 5 percent marginal state tax bracket. Her company has a 401(k) plan (but not a Roth) 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 2019 in a 401(k) account is $19,000. 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 $6,000 per person in a Roth IRA or traditional IRA in 2019. If Suzie invests $1,500 in her 401(k) plan and $6,00 for herself in a Roth IRA, she still has $2,500 remaining.

Third, Suzie should take advantage of tax-deferred money.

Suzie could invest the remaining $2,500 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:

Free Money	$1,500	401(k)	for the Company Match
Tax-Advantaged	$6,000	Roth IRA	for the Elimination of Future Taxes
Tax-Advantaged	$2,500	401(k)	for Tax Deferral
Total	$10,000	Total Amount Suzie Saved	

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 $680 on next year's taxes. (This is her 12 percent federal marginal tax rate and her 5 percent state tax rate) multiplied by the $4,000 she invested in her 401(k) plan. The total amount Suzie saved, including the match and tax savings, is $11,430.

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.

<u>Case Study 3</u>

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.

   Emergency Fund (25% * $60,000) $15,000

Note that your first allocation will always produce your target emergency fund amount.

U.S. (55% * $60,000)	$33,000
International (10% * $60,000)	$6,000
Small Cap (10% * $60,000)	$6,000
Total Portfolio Target	$60,000

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: 4% * $60,000 = $2,400
Retirement: 6% * $60,000 = $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: 35% * $60,000 = $21,000
Retirement: 20% * $60,000 = $12,000

5. Purchase the assets and compare the actual portfolio against the target portfolio.

<u>Case Study 4</u>

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 the same asset classes and investment benchmarks as they did before. Their holdings and allocations are

ING Direct Internet Savings Account	$20,000	25%
Vanguard S&P 500 Index Fund	$35,000	55%
Fidelity Small Cap Fund	$10,000	10%
Oakmark International Fund	$10,000	10%

How should Bill and Suzie build their next portfolio (assume 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

Bonds/Cash Allocation 25% * $200,000 =	$50,000
Emergency Fund = (20 / 200) = 10% or	20,000
Remainder of 15%, or	$30,000

5. Purchase the new assets and compare the actual portfolio against the target portfolio.

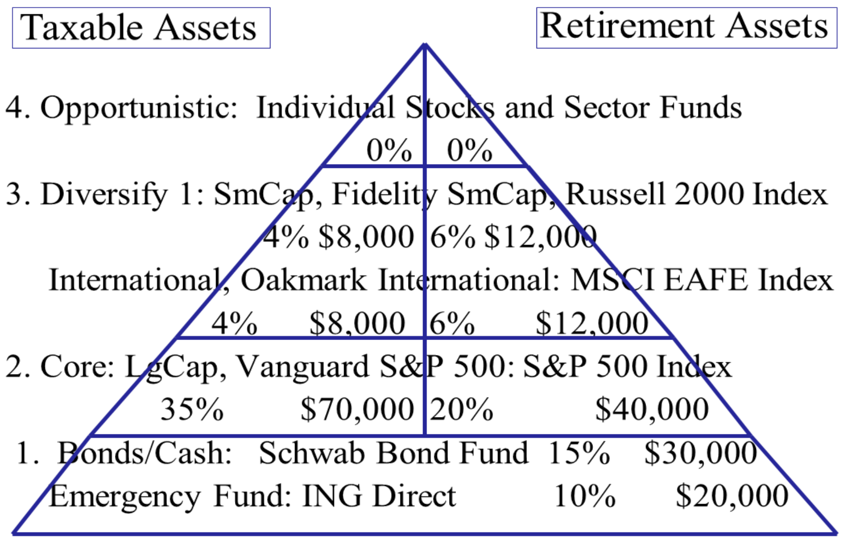
A. Since their emergency fund is full, they could begin purchasing the Schwab Intermediate Bond Fund.

B. Purchase core assets.

C. Purchase diversification assets.

D. Purchase opportunistic assets (optional).

Bill and Suzie's target portfolio would be:



[1] Fred R. Shapiro, "Who Wrote the Serenity Prayer," *Yale Alumni Magazine*, Jul./Aug. 2008
[2] Jim Seaberg, unpublished document, 2014.

9. Investing 8: Understand Selecting Financial Assets

Introduction

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:

A. Understand why you should wait to purchase individual stocks until your assets have grown
B. Know how to find information on financial assets and taxes
C. Understand what makes a good mutual fund and the big deal about index funds
D. Understand how to pick the mutual/index/exchange traded funds
E. Understand plans and strategies for picking financial assets.

Understand Why You Should Wait to Purchase Individual Stocks

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 (Principle 3)

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 (Principle 4)

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 (Principle 6)

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 (Principle 8)

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 Financial Assets and Taxes

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, www.money.cnn.com, http://finance.yahoo.com, www.fool.com, www.money.msn.com, and 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.

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 Using Morningstar to Select Funds (LT07).

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 Taxes on Security Earnings Including Qualified Dividends (LT32)). 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.

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.

Describe the Process of How to Pick a Good Mutual/Index 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 Investment Plan and choose the appropriate benchmarks.
2. Determine key criteria for each asset class (e.g., costs, fees, diversification, etc.) to identify the best potential funds based on your principles of successful investing.
3. Use a database program to set your chosen parameters and evaluate each potential candidate.
4. Evaluate each candidate based on your criteria and select the best funds.
5. 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 previous chapters. 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.

1. Wide Diversification

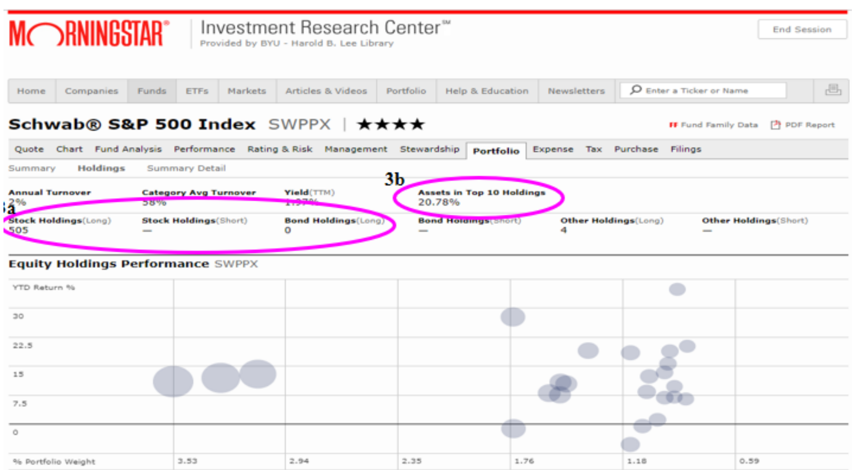
Diversification is your most important defense against market risk. Select mutual funds that include many different companies in each portfolio category. Avoid investing in sector funds or industry funds, individual stocks, or concentrated portfolios of any kind until you have sufficient education, experience, 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



Source: All Morningstar charts are from Morningstar Library Edition, 2019-03-05

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.

2. Low Cost

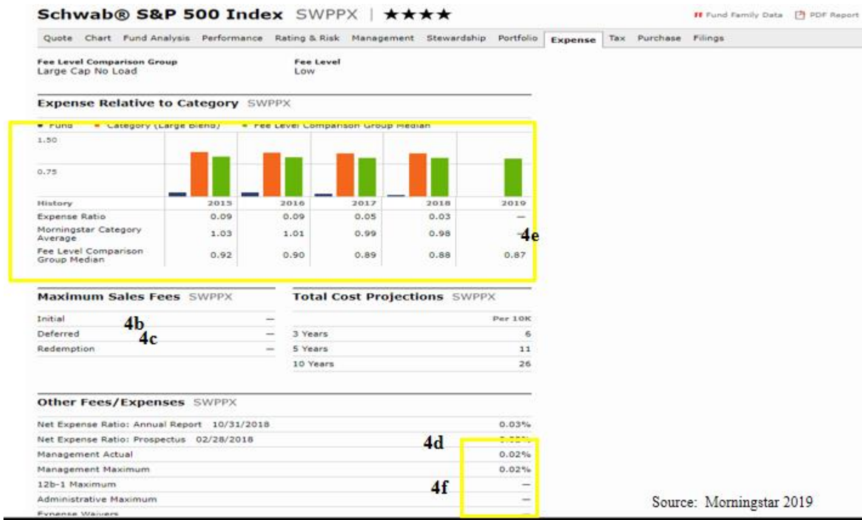
Investment returns are limited, and investment costs of all kinds reduce your returns. If you have two funds with the same return, the fund with the lower expense ratio will give you the higher actual return. Keep costs low!

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.

Table 2. Morningstar Website: Costs



Source: Morningstar 2019

3. Tax Efficiency

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 + return) * (1 – 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 6.00 percent, or (1.08 * .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

Schwab® S&P 500 Index SWPPX | ★★★★

Quote Chart Fund Analysis Performance Rating & Risk Management Stewardship Portfolio

Compare

Tax Analysis

	1-Mo	3-Mo	6-Mo	YTD	1-Yr	3-Yr	5-Yr	10-Yr	15-Yr	Since Inception
Pretax Return										
SWPPX	3.21	1.39	-3.07	11.46	4.63	15.20	10.58	16.57	8.26	7.61
Tax-adjusted Return *										
SWPPX	3.21	0.35	-4.06	11.46	3.56	14.41	9.86	16.00	7.71	7.07
% Rank in Category	48	44	38	48	27	15	8	11	13	—
Tax Cost Ratio										
SWPPX	—	—	—	—	1.02	0.68	0.65	0.48	0.51	—
Potential Cap Gains Exposure										
SWPPX	45.40									

(02/28/2019)

Currency is displayed in USD.
* Post tax returns are load adjusted.

4. 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.

5. Low 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.

6. 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.

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.

Table 4. Morningstar Website: Turnover

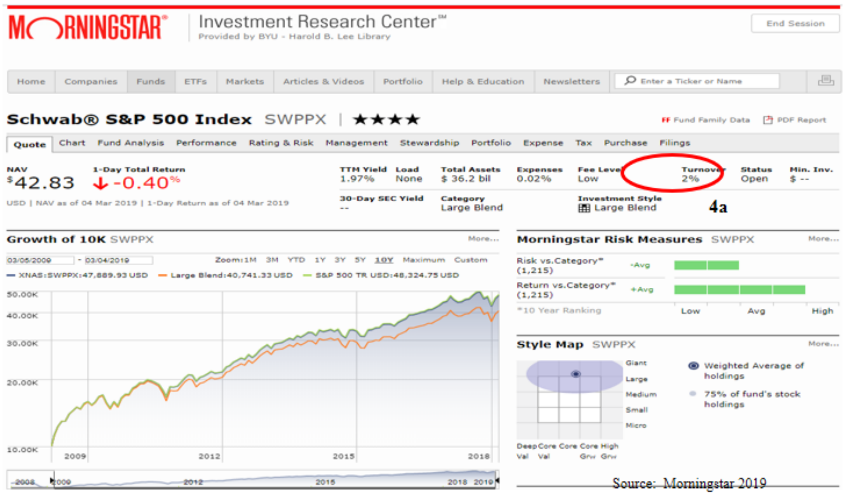
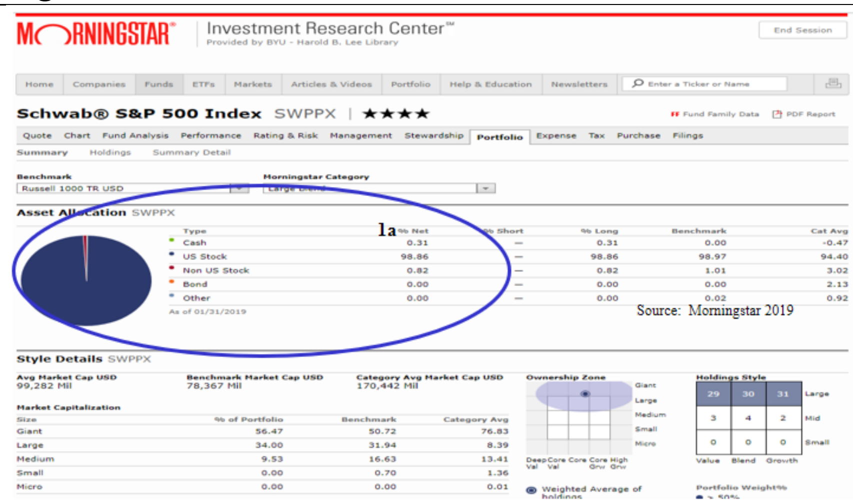


Table 5. Morningstar Website: Un-Invested Cash

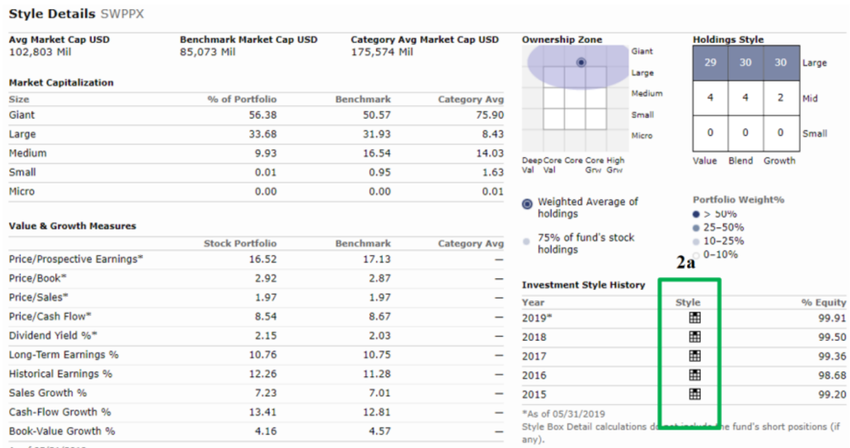


The portfolio manager's investment style is described in the "Manager's Style" box in the section called "Portfolio: Style Box Details" (see Table 6). The diagram in the "Manager's Style" box lists the company valuation across the top and the company size on the side. The manager's style should not have changed over time. If you see that it has changed, find another fund where the style has remained consistent.

7. 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.

Table 6. Morningstar Website: Manager Style Drift



Style Details SWPPX

Avg Market Cap USD	Benchmark Market Cap USD	Category Avg Market Cap USD
102,803 Mil	85,073 Mil	175,574 Mil

Market Capitalization

Size	% of Portfolio	Benchmark	Category Avg
Giant	56.38	50.57	75.90
Large	33.68	31.93	8.43
Medium	9.93	16.54	14.03
Small	0.01	0.95	1.63
Micro	0.00	0.00	0.01

Value & Growth Measures

	Stock Portfolio	Benchmark	Category Avg
Price/Prospective Earnings*	16.52	17.13	—
Price/Book*	2.92	2.87	—
Price/Sales*	1.97	1.97	—
Price/Cash Flow*	8.54	8.67	—
Dividend Yield %*	2.15	2.03	—
Long-Term Earnings %	10.76	10.75	—
Historical Earnings %	12.26	11.28	—
Sales Growth %	7.23	7.01	—
Cash-Flow Growth %	13.41	12.81	—
Book-Value Growth %	4.16	4.57	—

As of 05/31/2019

Holdings Style

	Value	Blend	Growth
Large	29	30	30
Mid	4	4	2
Small	0	0	0

Portfolio Weight%
> 50%
25–50%
10–25%
0–10%

2a

Investment Style History

Year	Style	% Equity
2019*		99.91
2018		99.50
2017		99.36
2016		98.68
2015		99.20

*As of 05/31/2019
Style Box Detail calculations d[illegible]e fund's short positions (if any).

Source: Morningstar 2019

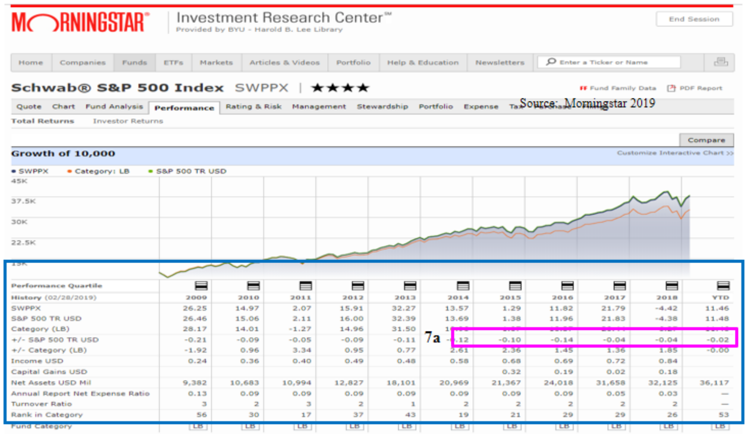
A fund's tracking error is usually listed in the prospectus section entitled "Tracking Error: Returns: Performance History" (see Table 7). You should look at three major parts of the section that deals with tracking error, "Tracking Error versus the Index," "Tracking Error versus the Category," and "Percent 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.

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.

Table 7. Morningstar Website: Tracking Error



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 Using Morningstar to Select Funds (LT07) to set your criteria for stocks, bonds, and other financial assets. To aid you in your selection, we have created a Mutual Fund Selection Worksheet (LT07B) that includes the criteria discussed and where to find it on Morningstar.

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, such at BYU.

Why Index or Exchange Traded Funds

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 very 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."[4] 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."[5]

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 analyzingflog individual companies.

Understand How to Pick Your Mutual Funds

Once you have done your research and have completed your Investment Plan, the process to pick YOUR mutual funds is simply:

1. Determine the asset classes needed for your Plan and choose the appropriate benchmarks. This you have already done.

2. Determine what makes a good mutual fund and which asset classes you need exposure. You have determined your criteria and know what makes a good mutual fund.

3. Using a database program (we use Morningstar in the class), set those criteria and evaluate each of the potential mutual funds.

4. Select the best mutual funds using Using Morningstar to Select Funds (LT07) and Mutual Fund Selection Worksheet (LT07B) (with hints on the "Filled in" tab).

5. Now put your Investment Plan together.

Assume your asset class was Large Cap, and you choose SWPPX for your fund. What next?

1. Go to Morningstar, and type the ticker "SWPPX" in upper right box

- Where it says PDF Report (if available), print off this report. If there is no PDF Report, just print off the entire "Quote" Page. Include these in your Investment Plan as Exhibit III. Fund Support Exhibits. If you need help, see Mutual Fund Selection Worksheet (LT7B), Filled In for possible fund ideas and tickers

2. Download the Investment Process Spreadsheet (LT13)

- For most, the first 4-10 asset tab will be sufficient.
- Put in your Salary and emergency fund goal and percentage.
- It will automatically determine your target portfolio fund size (your emergency fund amount divided by your bonds/cash percentage).

- Assuming a salary of $60,000 and a 25% allocation to bonds and cash. Your target portfolio size would be $100,000.

3. Add data to the Investment Process Spreadsheet (LT13)

- Put in your asset classes and benchmarks, and percentages in Panel I. Use the dropdown boxes for asset classes and benchmarks
- Then put in the tickers and Fund names

4. Print off all your Exhibits

Print off your filled in Exhibit I. Expected Return Simulation and Benchmarks (LT27)

- Print off your filled in Exhibit II. Investment Process Spreadsheet (LT13)
- Print off Exhibit III. Mutual Fund Pages from Morningstar. There should be a minimum of 4 funds from 4 different asset classes
- Include these with your completed and filled in Investment Plan and you should be good.

Understand Plans and Strategies for Selecting Financial Assets

Following are a few ideas for plans and strategies for picking financial assets.

Investing
General Investing

- Decide whether to use mutual funds or individual stocks and bonds to invest
  - I recommend mutual funds as they give immediate diversification and low cost
  - With a broadly diversified fund, you will get the performance of the asset class and do not need to know much about each stock individually
  - Most students, including business students, have not yet developed the skills necessary to purchase individual stocks and bonds
- Decide whether to invest passively (using index funds), actively or both
  - I recommend index funds for diversification, low cost, tax efficiency and consistent returns versus the index
  - Broadly diversified index funds eliminate most of the required work to understand the individual stocks and bonds in the portfolio
  - If you choose to invest actively, monitor performance versus benchmarks over 24 and 36 months
- Determine your target asset allocation and follow it
  - Ensure your chosen assets give exposure to the asset classes you need
- Follow the principles of successful investing
  - Know yourself, your vision and goals
  - Seek, receive and act on the Spirit’s guidance
  - Invest low cost and tax efficiently
  - Minimize turnover and invest long-term

- Know and follow what makes a good mutual fund
- Minimize cash drag
- Be diversified in all you do
- Ensure no style drift
- Monitor performance.

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.

Table 8: Taxes on Securities Earnings Including Qualified Dividends (LT32)

Taxes on Different Types of Earnings - 2019 (LT32)
for Stocks, Bonds, and Mutual Funds

Types of Investment Earnings:	Federal Tax Rate	State Tax Rate **
Stocks:		
Capital Gains		
Short-term capital gains	Marginal Tax Rate	Marginal Tax Rate
Long-term capital gains *	15% or 0%	Marginal Tax Rate
Long-term capital gains (TI>$488MFJ) *	20% +	Marginal Tax Rate
Dividends		
Stock Dividends: Qualified ***	15% or 0%	Marginal Tax Rate
Stock Dividends: Ordinary/Not Qualified	Marginal Tax Rate	Marginal Tax Rate
Bonds and Savings Vehicles:		
Capital Gains		
Short-term capital gains	Marginal Tax Rate	Marginal Tax Rate
Long-term capital gains *	15% or 0%	Marginal Tax Rate
Long-term capital gains (TI>$488MFJ) *	20% +	Marginal Tax Rate
Interest/Coupon Payments		
Interest Payments	Marginal Tax Rate	Marginal Tax Rate
Treasury-bills/bond Interest	Marginal Tax Rate	0%
Muni-bond Interest (bonds from your state)	0%	0%
Muni-bond Interest (bonds from another state)	0%	Marginal Tax Rate
Mutual Funds (Pass Through Vehicles):		
Distributions:		
Capital Gains for Stocks/Bonds/Municipals		
Short-term capital gains	Marginal Tax Rate	Marginal Tax Rate
Long-term capital gains *	15% or 0%	Marginal Tax Rate
Long-term capital gains (TI>$488MFJ) *	20% +	Marginal Tax Rate
Stock Dividends		
Stock: Dividends: Qualified ***	15% or 0%	Marginal Tax Rate
Stock Dividends: Not Qualified/Ordinary	Marginal Tax Rate	Marginal Tax Rate
Interest/Coupon Payments		
Bond: Interest	Marginal Tax Rate	Marginal Tax Rate
Treasury-bills/bonds Interest	Marginal Tax Rate	0%
Muni-bond Interest (bonds from your state)	0%	0%
Muni-bond Interest (bonds from another state)	0%	Marginal Tax Rate

Chart 1. 2019 Tax Brackets, Capital Gains and Dividends, and Medicare Tax Rates (000s)

Taxable Inc. Filing Single^	Married Filing Jointly^	Head of Household^	Ordinary Income	Cap. Gains & Dividends Tax Rate	Medicare Tax Rate Earned Income*	Medicare Tax Rate Net Invest. Inc. Tax	Total Cap Gains & Medicare
-	-	-	10%	0%			
9,700	19,401	13,851	12%	0%	2.9%	0.0%	2.9%
39,476	78,951	52,851	22%	0%	2.9%	0.0%	2.9%
39,376	78,751	52,751		15%	2.9%	0.0%	17.9%
84,201	168,401	84,201	24%	15%	2.9%	0.0%	17.9%
200,001	250,001	200,001		15%	2.9%	3.8%	21.7%
160,726	321,451	160,701	32%	15%	2.9%	3.8%	21.7%
204,101	408,201	204,101	35%	15%	2.9%	3.8%	21.7%
434,551	488,851	461,701		20%	3.8%	3.8%	27.6%
510,301	612,351	510,301	37%	20%	3.8%	3.8%	27.6%

^ The beginning of the tax bracket. * Combined rate = 1.45% employer contribution.

Net Investment Income Tax is calculated on your MAGI and Investment Income being above the Threshold. MAGI is AGI + foreign income + a few other areas. Your tax is on the excess above that threshold amount.

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 Using Morningstar to Select Funds (LT07), 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

Continue to work on your Investment Plan. As you do, it 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 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 Using Morningstar to Select Funds (LT07), 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. If you like, you can look at Mutual Fund Selection Worksheet (LT7B) which helps with criteria for determining a good mutual fund and gives a few ideas.

Using these tools, 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 Investment Process Spreadsheet (LT13). 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 Investment Process Spreadsheet (LT13) 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

Using Morningstar to Select Funds (LT07)

This tool gives instructions on how to use Morningstar, a company that tracks mutual fund and financial asset performance. Using this tool and your criteria that you determined as to what makes a good fund, you can find mutual funds that match your criteria.

Mutual Fund Selection Worksheet (LT7B)

This worksheet lists the criteria for what makes a good mutual fund so you can compare various mutual fund within specific asset classes. If filled out correctly, it is a good tool to determine which mutual better meets your criteria and needs.

Investment Process Spreadsheet (LT13)

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.

Key Sources of Financial Information (LT10)
This document gives suggestions on finding quality sources of financial information.

Taxes on Security Earnings – Qualified Dividends (LT32)
This tool helps you determine the taxes on the different types of earnings. It also explicitly shares your capital gains and dividend taxes on earnings, depending on your taxable income and AGI.

Expected Return Simulation and Benchmarks (LT27)
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.

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 + return) * (1 – tax cost ratio) -1 or (1.08*.98)-1 or 6.00%.
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?
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), with fees and expenses less than .10% that a retail investor can invest in.

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 Using Morningstar to Select Funds (LT07)). Set up the problem with the following criteria:

- Fund Category = U.S. Equity; your category is Large Blend
- Special Fund Types and Index Funds = 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 ≤ .10
- Minimum Purchase, Institutional Investor = No

As of July 31, 2019, there were 8 index funds that matched your criteria.

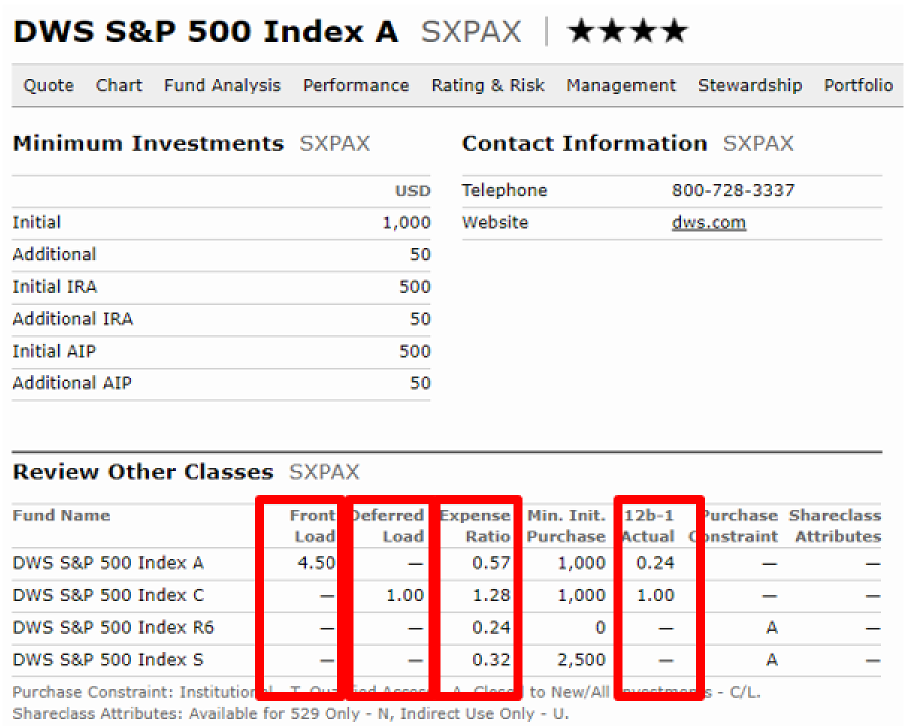
- Fidelity ZERO Large Cap Index
- Fidelity ZERO Total Market Index
- Fidelity SAI US Large Cap Index
- Schwab 1000 Index
- Schwab Total Stock Market Index
- Schwab S&P 500 Index
- TIA-CREF Equity Index W

Which fund you choose will depend on which factors you consider most important, such as tenure of managers, expense costs, asset size, and tax position.

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.

Case Study 2

Most index funds are low cost. This was not one of the chosen index funds. Why? What fees and loads does it have?



DWS S&P 500 Index A SXPAX | ★★★★

Quote | Chart | Fund Analysis | Performance | Rating & Risk | Management | Stewardship | Portfolio

Minimum Investments SXPAX

	USD
Initial	1,000
Additional	50
Initial IRA	500
Additional IRA	50
Initial AIP	500
Additional AIP	50

Contact Information SXPAX

Telephone	800-728-3337
Website	dws.com

Review Other Classes SXPAX

Fund Name	Front Load	Deferred Load	Expense Ratio	Min. Init. Purchase	12b-1 Actual	Purchase Constraint	Shareclass Attributes
DWS S&P 500 Index A	4.50	—	0.57	1,000	0.24	—	—
DWS S&P 500 Index C	—	1.00	1.28	1,000	1.00	—	—
DWS S&P 500 Index R6	—	—	0.24	0	—	A	—
DWS S&P 500 Index S	—	—	0.32	2,500	—	A	—

Purchase Constraint: Institutional - I, Qualified Access - A, Closed to New/All Investments - C/L.
Shareclass Attributes: Available for 529 Only - N, Indirect Use Only - U.

Case Study #2 Answers

You can find the expenses on Morningstar, but you should also confirm them with the mutual fund company by calling them before you invest.

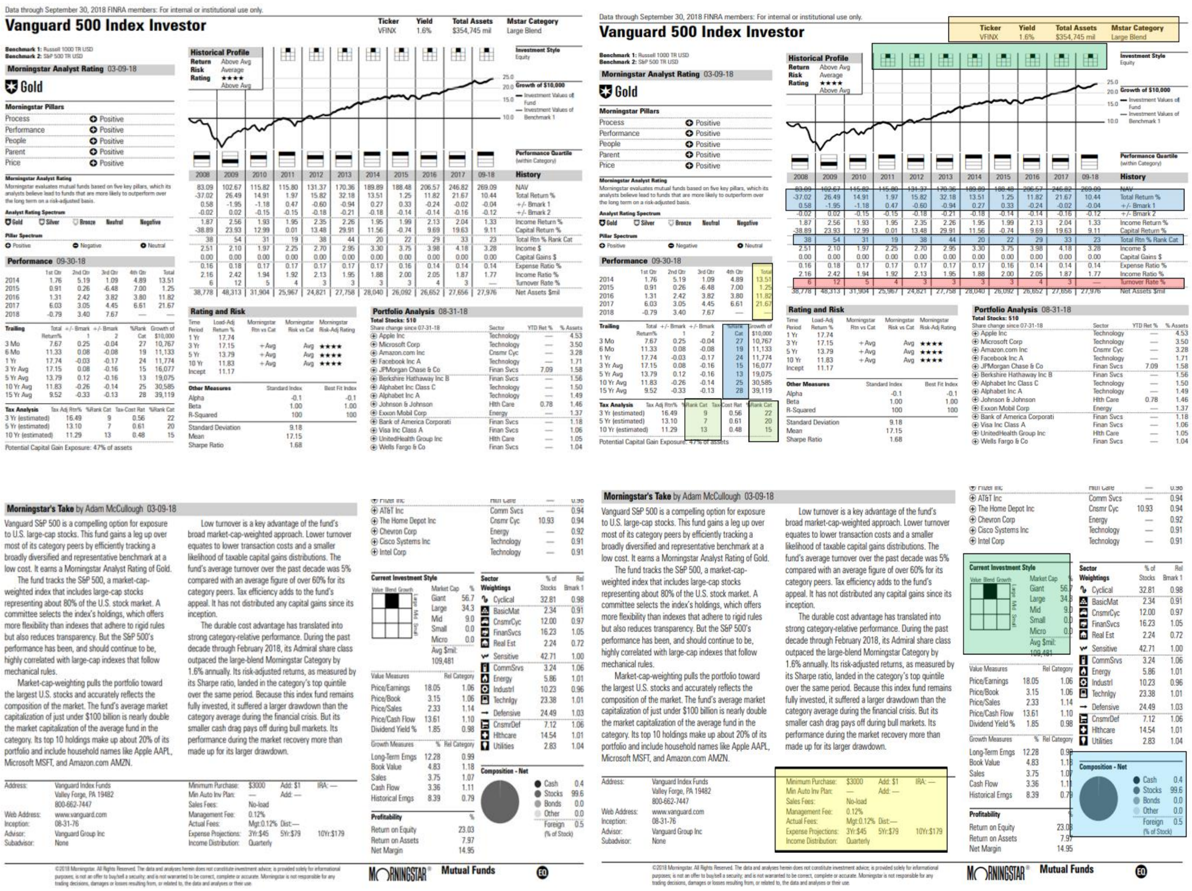
This fund, depending on your class of share, has a 4.5% front end load, 1.0-4.0% deferred load, expense ratios between .32 and 1.28%, and 12b-1 fees from 0-1.0%. This index fund will cost you a lot in expenses.

Case Study 3

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)



[1] "Becoming Self-Reliant," *Ensign*, Nov. 1991, 64.
[2] http://library.morningstar.com/Education/MLE_Glossary_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.

10. Investing 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:

A. Understand portfolio rebalancing
B. Understand the importance of portfolio management and evaluation
C. Calculate risk-adjusted performance measures.

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, you can donate to tithing, fast offerings, missionary fund donations, and almost any other type of donation listed on the 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 Church of Jesus Christ of Latter-day Saints, please see the website at ChurchofJesusChrist.org.) Within about four to six weeks of donating an asset to the Church, you will receive a donation-in-kind receipt (see Tithing Share Transfer Example

(LT08)). 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 2018. 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.

Understand the Importance of Portfolio Management and Evaluation

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."[1] 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, 2019, 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:

$$(r_p - r_f) / s_p$$

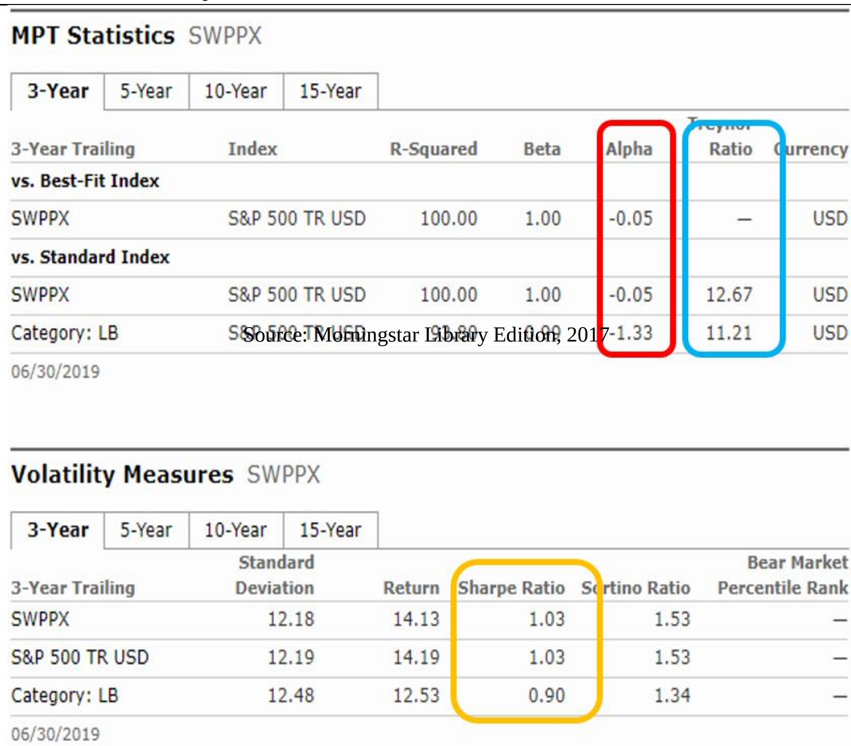
r_p = the average return on the portfolio
r_f = the risk-free rate
s_p = the standard deviation of portfolio returns

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.

Because Morningstar does not calculate the Sharpe and Treynor ratios versus the index, we do not have a totally correct ratio. However, they do calculate them versus all companies in their respective asset class, which is an acceptable proxy for the index. The Sharpe ratio is in blue (see Chart 1). Morningstar is as of June 27, 2017.

Chart 1. Performance History



MPT Statistics SWPPX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Index	R-Squared	Beta	Alpha	Treynor Ratio	Currency
vs. Best-Fit Index						
SWPPX	S&P 500 TR USD	100.00	1.00	-0.05	–	USD
vs. Standard Index						
SWPPX	S&P 500 TR USD	100.00	1.00	-0.05	12.67	USD
Category: LB	S&P 500 TR USD	[illegible]	[illegible]	-1.33	11.21	USD

06/30/2019

Source: Morningstar Library Edition, 2017

Volatility Measures SWPPX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Standard Deviation	Return	Sharpe Ratio	Sortino Ratio	Bear Market Percentile Rank
SWPPX	12.18	14.13	1.03	1.53	–
S&P 500 TR USD	12.19	14.19	1.03	1.53	–
Category: LB	12.48	12.53	0.90	1.34	–

06/30/2019

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:

$$(r_p - r_f) / ß_p$$

r_p = the average return on the portfolio
r_f = the average risk-free rate
$ß_p$ = 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. See Chart 1, in red.

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: $[r_f + ß_p (r_m – r_f)]$.

The Jensen measure incorporates the CAPM into its calculation. The Jensen measure is calculated as follows:

$$a_p = r_p – [r_f + ß_p (r_m – r_f)]$$

a_p = the alpha for the portfolio, or the return over and above your benchmark
r_p = the average return on the portfolio
$ß_p$ = 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. See Chart 1, in green.

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.[2] 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.

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.

Assignments

Financial Plan Assignments

Continue to work on your Investment Plan. As you do, 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. Use new money to purchase your underweight asset classes. This way you do not need to sell your overweight asset classes.

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. These are your accountability partners.

Once you have completed your Investment Plan, review it and make sure it is consistent with your vision, goals, plans and strategies. It is a challenging Plan to put together, but its dividends are more than money.

Learning Tools

Tithing Share Transfer Example (LT08)

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

Portfolio Attribution Example – Illustration Only (LT17)

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. It is for illustration only.

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 = rp - [rf + ßp (rm – rf)] where ap = alpha for the portfolio, rp = average return on the portfolio, ßp = Weighted average Beta, rf = average risk free rate, and 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)/ ßp where rp = average return on the portfolio, rf = average risk free rate, and ßp = 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 two strategies for rebalancing portfolios are 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.

Asset Class	Actual	Weight Target	Weight Difference
Equity	70%	60%	10%
Bonds	20%	30%	–10%
Cash	10%	10%	0%

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, see Tithing Share Transfer (LT08)), 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, the actively managed Fidelity Magellan Fund (FMAGX) for the most recent 3 and 5 year periods (ending 3/14/2017). The T-bill rate during the period was 0.8%.

	3 Yr-FMAGX	SPX	5-Yr FMAGX	SPX
Average return	9.4%	6.5%	13.1%	13.5%

Beta	1.08	1.0	1.06	1.0
Std. Deviation	9.8%	9.2%	11.4%	10.4%

Calculations and Application

a. Calculate the Sharpe, Treynor, and Jensen performance measures for the Fund for the 3 and 5 year periods

b. On a risk-adjusted basis, did it outperform the market?

c. Which risk-adjusted measure should Steve use?

Case Study #2 Answers

	3 Yr-FMAGX	SPX	5-Yr FMAGX	SPX
Average return	9.4%	6.5%	13.1%	13.5%
Beta	1.08	1.00	1.06	1.00
Std. Deviation	9.8%	9.2%	11.4%	10.4%
T-Bill rate	0.8%			

a. Performance measures

Sharpe = (rp – rf)/ sd	3 Year	5 Year
Portfolio	(9.4-.8)/.098 = .88	1.08
Market	(6.5-.8)/.092 = .62	1.23
Treynor = (rp – rf)/ ßp		
Portfolio	(9.4-.8)/1.08 = .08	.116
Market	(6.5-.8)/1.0 = .06	.128

Jensen's alpha = rp – [rf + ßp (rm – rf)]

3 Yr Alpha = .094 – [.8 + 1.08 (.065-.008)] = 3.3%

5 Yr Alpha = .131 – [.8 + 1.06 (.135-.008)] = -0.4%

b. Steve's Fund risk adjusted performance:

	3 Year	5 Year
Sharpe Ratio	.88 vs .62 (Y)	1.08 vs 1.23 (N)
Treynor measure	.08 vs .06 (Y)	.116 vs .128 (N)
Jensen's Alpha	3.3% (Y)	-.04% (N)

c. 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

You have five mutual funds in your portfolio, an emergency bond fund (VIPSX), a large cap index fund (SWPPX), a small cap fund (FSCRX), an emerging markets fund (SSEMX), and a REIT (VGSIX). How have they done versus their benchmarks (or categories) over the past three years?

Calculations

Using the data from Morningstar at the BYU Library, type in the ticker and go to the Risk tab for each fund. Look at their 3 year performance versus their categories (as a proxy for the market). Did they outperform their benchmarks?

Did these funds outperform over the past three years on a risk-adjusted basis?

Case Study #3 Data

MPT Statistics VIPSX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Index	R-Squared	Beta	Alpha	Treynor Ratio	Currency
vs. Best-Fit Index						
VIPSX	BBgBarc US Treasury US TIPS TR USD	98.47	1.03	-0.18	—	USD
vs. Standard Index						
VIPSX	BBgBarc US Agg Bond TR USD	65.65	0.95	-0.48	0.08	USD
Category: IP	BBgBarc US Agg Bond TR USD	49.60	0.79	-0.42	0.17	USD

02/28/2018

Volatility Measures VIPSX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Standard Deviation	Return	Sharpe Ratio	Sortino Ratio	Bear Market Percentile Rank
VIPSX	3.18	0.62	0.04	0.06	—
Bloomberg Barclays US Aggregate Bond TR USD	2.68	1.14	0.23	0.33	—
Category: IP	3.11	0.57	0.04	0.07	—

02/28/2018

MPT Statistics FSCRX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Index	R-Squared	Beta	Alpha	Treynor Ratio	Currency
vs. Best-Fit Index						
FSCRX	Morningstar US Small Cap TR USD	90.13	0.89	-0.80	—	USD
vs. Standard Index						
FSCRX	S&P 500 TR USD	50.49	0.85	-3.08	6.31	USD
Category: SB	S&P 500 TR USD	54.93	0.97	-2.81	7.15	USD

02/28/2018

Volatility Measures FSCRX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Standard Deviation	Return	Sharpe Ratio	Sortino Ratio	Bear Market Percentile Rank
FSCRX	12.19	5.92	0.49	0.85	—
S&P 500 TR USD	10.16	11.14	1.04	1.89	—
Category: SB	13.36	7.37	0.56	0.97	—

02/28/2018

MPT Statistics SWPPX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Index	R-Squared	Beta	Alpha	Treynor Ratio	Currency
vs. Best-Fit Index						
SWPPX	S&P 500 TR USD	100.00	1.00	-0.06	—	USD
vs. Standard Index						
SWPPX	S&P 500 TR USD	100.00	1.00	-0.06	10.54	USD
Category: LB	S&P 500 TR USD	91.04	0.98	-1.53	8.88	USD

02/28/2018

Volatility Measures SWPPX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Standard Deviation	Return	Sharpe Ratio	Sortino Ratio	Bear Market Percentile Rank
SWPPX	10.13	11.05	1.04	1.87	—
S&P 500 TR USD	10.16	11.14	1.04	1.89	—
Category: LB	10.47	9.21	0.85	1.48	—

02/28/2018

MPT Statistics SSEMX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Index	R-Squared	Beta	Alpha	Treynor Ratio	Currency
vs. Best-Fit Index						
SSEMX	Morningstar EM GR USD	95.18	0.86	-5.73	—	USD
vs. Standard Index						
SSEMX	MSCI ACWI Ex USA NR USD	78.20	0.99	-3.85	1.48	USD
Category: EM	MSCI ACWI Ex USA NR USD	72.60	1.03	1.69	7.12	USD

02/28/2018

Volatility Measures SSEMX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Standard Deviation	Return	Sharpe Ratio	Sortino Ratio	Bear Market Percentile Rank
SSEMX	14.02	2.01	0.17	0.26	—
MSCI ACWI Ex USA NR USD	12.46	6.24	0.51	0.80	—
Category: EM	15.13	7.90	0.54	0.90	—

02/28/2018

MPT Statistics VGSIX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Index	R-Squared	Beta	Alpha	Treynor Ratio	Currency
vs. Best-Fit Index						
VGSIX	S&P United States REIT TR USD	99.86	0.99	0.00		USD
vs. Standard Index						
VGSIX	MSCI ACWI NR USD	24.13	0.63	-4.75	-0.96	USD
Category: SR	MSCI ACWI NR USD	29.19	0.64	-4.41	0.23	USD

02/28/2018

Volatility Measures VGSIX

3-Year | 5-Year | 10-Year | 15-Year

3-Year Trailing	Standard Deviation	Return	Sharpe Ratio	Sortino Ratio	Bear Market Percentile Rank
VGSIX	13.78	-0.07	0.02	0.03	—
MSCI ACWI NR USD	10.83	8.34	0.75	1.22	—
Category: SR	12.94	0.48	0.07	0.12	—

02/28/2018

Case Study #3 Answers

We will use the category as the proxy for the market (as of March 12, 2018)

	3 Year		5 Year		Outperformed*	
Name	Sharpe	Category	Treynor	Category	Sharpe	Treynor
VIPSX	.04	.04	.08	.17	E	N
SWPPX	1.04	.85	10.54	8.88	Y	Y
FSCRX	.49	.56	6.31	7.15	N	N
SSEMX	.17	.54	1.48	7.12	N	N
VGSIX	.02	.07	-.96	.23	N	N

* Y = yes, N = no, E = Equal

[1] "Sheep, Shepherds, and Sheepherders," *New Era*, Jun. 1977, 20

[2] Zvi Bodie, Alex Kane, Alan Marcus, *Essentials of Investment*, 6th Edition, McGraw-Hill Irwin, New York, 2007, 579

Personal Finance Glossary

% 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 organizations.

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 accountability 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 heath care 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 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 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 (Net capitalized cost + 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.

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 $424,000 in 2018 (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.

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 of 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 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 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.

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.

Housing Ratios. As Christians, 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 Christian Savers Spreadsheet (from the website).

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.

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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.

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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 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 (Net capitalized cost + residual value) / 2 times 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 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.

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), un-reimbursed 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 = rp - [rf + ßp (rm – rf)] where ap = alpha for the portfolio, rp = average return on the portfolio, ßp = Weighted average Beta, rf = average risk free rate, and rm = 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 $424,000 in 2018 (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.

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 2018).

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 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 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 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.

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 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 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.

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.

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 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.

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 end. 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 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.

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 short-cuts 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 + return) * (1 – tax cost ratio) -1 or (1.08*.98)-1 or 6.00%.

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)/ ßp where rp = average return on the portfolio, rf = average risk free rate, and ßp = 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 for 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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