33B. Application of Investing Principles to Investing (2)

Introduction

You have an understanding of key investment basics, why you invest, factors you control, how most investors have done with their investments (performance has not been good compared to benchmarks). You understand what you should do before you invest, and you have reviewed the principles of successful investing. You understand asset classes and you have reviewed the risk and return characteristics of the various asset class. These principles we discussed are critical to understanding, developing, and implementing a successful investment portfolio. In addition, you have reviewed the investment hourglass, a learning tool to help you understand that investing is a means to an end, not an end in itself. Investing is a way to achieve your personal and family financial goals.

Objectives

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

A. Understand how to apply the key principles to your personal investing including:
   1. Building an investment portfolio
   2. Selecting investment vehicles carefully
   4. Investing at your risk level, i.e., determining your asset allocation
   5. Wisely selecting assets, and
   6. Final cautions for investing.

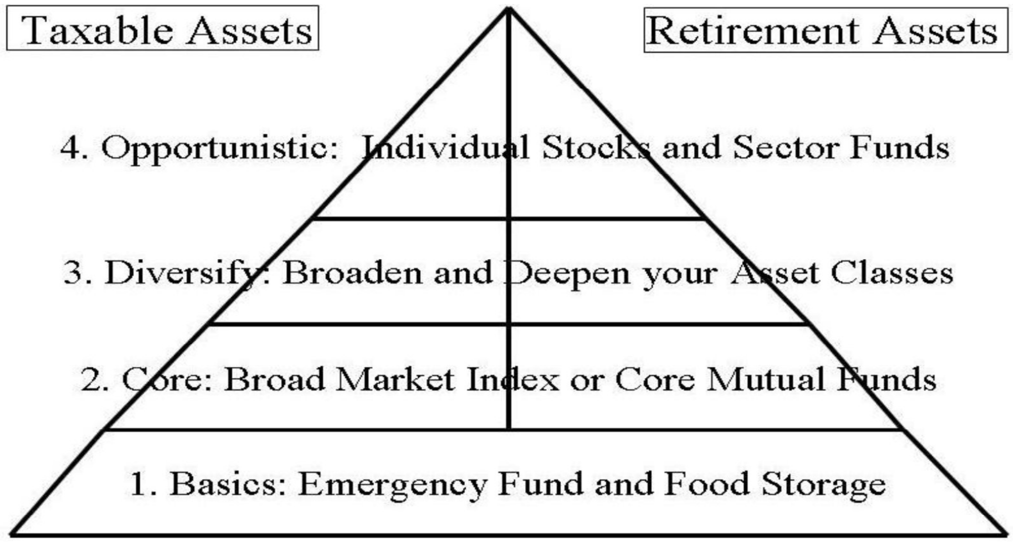
Building an Investment Portfolio

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; an investor's strategy also depends on his or her goals, budget, and experience in investing. It is impossible to discuss the strategies that 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 top half of the investment hourglass detailed 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.

The bottom of the investment hourglass contains a pattern of successful portfolios that I have seen in my experience as I have worked with students, families, and institutions (see Chart 1).

Chart 1: The Investment Hourglass Bottom



The bottom of the investment hourglass is divided into four levels, representing four phases of investment. The first level, or base, of the hourglass represents the phase in which you develop your emergency fund and food storage. I strongly recommend that you start this phase first. Generally, it is recommended that you have the larger of three to six months of income or expenses in very liquid cash or cash equivalents (i.e., savings accounts, internet savings accounts, money market mutual funds, short-term CDs, checking accounts, etc.) for your emergency fund. For information on cash management vehicles, see the chapter on **Cash and Liquid Asset Management**.

The second level represents the phase in which you develop your portfolio's core, or broad exposure. This level generally gives you exposure to the least risky of all the equity asset classes, mainly large-capitalization mutual funds. When you first begin investing, I strongly recommend that instead of purchasing individual stocks and bonds you follow the principles of investing discussed earlier and instead invest in low-cost, no-load index mutual funds. Doing so will give you broad diversification (I prefer a minimum of 500 securities per fund), market returns, and tax-efficient investments. For information on mutual funds, see chapter on **Investments 6: Mutual Fund Basics**.

The third level represents the phase in which you further diversify your portfolio by broadening and deepening your asset classes. If your core allocation is large-capitalization stocks, to deepen your portfolio you might include mutual funds which invest in small-capitalization or mid-capitalization stocks. If you were to broaden your asset classes, you might look to add no-load, low-cost, tax-efficient mutual funds which gave you exposure to new asset classes such as international (companies listed on stock exchanged located outside the United States), emerging markets (companies listed on stock exchanges located in the developing countries), or Real Estate Investment Trusts (portfolios of real estate investments that are developed and trade similar to mutual funds). There are many more other asset classes as well.

Finally, the fourth level represents the phase in which you develop your opportunistic assets, such as individual stocks and sector funds. Truthfully, you do not ever need to purchase individual stock or bond assets or sector funds.

Levels two, three, and four are also divided in terms of taxable assets and retirement assets. *Taxable assets* are assets on whose generated earnings you will need to pay taxes each year. *Retirement assets* are assets that you will not need until after you retire and on whose generated earnings you do not pay taxes ever or 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 that taxes have on these two types of accounts is not the same, so retirement and taxable assets should be managed differently.

Select Investment Vehicles Carefully

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 that provide a tax-advantaged framework that allows you to invest in various financial assets. Tax advantages include the deferral of current taxes or the elimination of future taxes on earnings. 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 the grocery store.

Investment, or financial, 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 towards helping you build a retirement account and 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 2017.

Table 1. Select Investment Vehicles for 2017 (Before Catch-Up)

Plan	*Tax-Deferred*	*Tax-Eliminated*	*Maximum Amount*	*For Employees of:*
401(k)	Yes		$18,000	Businesses w/ Plans
Roth 401(k)		Yes	$18,000	Businesses w/ Plans
403(b)	Yes		$18,000	Non-profit, tax-exempt
Roth 403(b)		Yes	$18,000	Non-profit, tax-exempt
457	Yes		$18,000	State/Municipalities
SEP IRA	Yes		$54,000	Small Businesses
SIMPLE IRA	Yes		$12,500	Small Businesses
IRA	Yes		$5,500	Individuals
Roth IRA		Yes	$5,500	Individuals
Education IRA		Yes	$2,000	Individual Education
529 Plans		Yes	$418,000 per child	Individual Education

Understanding the process can help you identify the tax benefits and other benefits that different investment vehicles offer. The process is divided into three sections: free money; tax-advantaged money; and tax-efficient and wise investments. Understanding the process 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*: free money is the money provided by your company when you participate in a company-sponsored retirement plan or a reduction in taxes for investing in specific education vehicles for your children and family. 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 retirement plan. A matching plan is used as an incentive to encourage employees to remain with the company and to invest in a retirement plan. Some states allow a tax deduction for your contribution to that state's 529 Plan for education, which is also a form of free money

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, take full ownership of the free money.

Priority 2: Tax-Advantaged Money

There are two different types of tax-advantaged vehicles or accounts: tax-eliminated accounts and tax-deferred accounts. 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 if you choose a Roth retirement account versus a traditional, and pay the taxes now. However, 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 choose a traditional retirement account in which you pay taxes when you take the money out at retirement. To help you decide which type of IRA is more beneficial for you, see **Learning Tool 28: Roth versus Traditional: Which Is Better for You** in the Learning Tools directory of this website. It allows you to set an annual contribution, an estimate for a rate of return on earnings, and your current and future tax rates. By changing your future tax rates, you can determine if your balance in the future would be higher or lower, all other areas being held constant.

Tax-eliminated accounts: Tax-eliminated accounts require you to pay taxes on principal before you invest it; 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 and assets that can help you save for retirement (i.e., Roth IRAs or Roth 401(k)) or for education (i.e., 529 funds, Education IRAs and Series EE or I bonds when the principle and interest are used for qualified educational expenses). 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 you deposit the money into your retirement account. Once you reach age fifty-nine and a half, you can take both the principal and interest out of this retirement account without paying taxes on the money. By paying taxes beforehand, you eliminate taxes on all capital gains and earnings in this account. Roth IRAs have an additional advantage: if you need to use 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 fifty-nine and a half years old.

With many 529 funds and Series EE and I bonds, you are 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 withdrawal as it is considered ordinary income for tax purposes.

Tax-deferred accounts: 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), 403(b), and 457 plans; and Simplified Employment Plan Individual Retirement Accounts (SEP-IRAs).

Suppose your gross income last year was $50,000, and you invested $3,000 in a traditional IRA. Your adjusted gross income (the income on which you pay taxes) would be $47,000 ($50,000 less the $3,000 contribution). 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 fifty-nine and a half and take this money out of your retirement accounts, you are not only required pay taxes on your $3,000 investment, but you must also pay taxes on any earnings the IRA investment has produced as well. Note also that although your investments were long-term investments, both earnings and principle will be taxed at ordinary tax rates.

The risk of using tax-deferred investment vehicles is that you must be at least age fifty-nine and a half to make withdrawals. If you withdraw funds before you reach 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 50 percent of your investment in taxes (a 10-percent penalty charge plus 40 percent in taxes if you have the highest marginal tax rate possible). Tax-deferred earnings that have remained in your retirement account for more than twelve months are still taxed as ordinary income, which is taxed at a higher rate than capital gains.

Priority 3: Tax-Efficient and 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' performances by comparing their returns after taxes and transaction fees to the appropriate benchmarks. The following are five important suggestions for investing tax-efficiently and wisely.

> **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. Your marginal tax rate 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 marginal tax rate, stock dividends are taxed at preferential 15 percent (if your marginal tax rate is higher

than 15%) or 0 percent (if your marginal tax rate is 15 percent or less), and more if you make taxable income over $400,000. Unrealized capital gains (the capital gains on assets that have not been sold yet) are not taxed at all 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. Capital gains are taxed at a much lower rate than ordinary income (15 percent if your marginal tax rate is 25 percent or more, or 0 percent if your marginal tax rate is 15 percent or less. Earn as much of your income as possible in the form of long-term capital gains.

Invest in your qualified and individual retirement plans. This way you are getting a tax break now, and will not have to pay taxes until retirement. You could also invest in Roth retirement vehicles where you pay taxes now, but never pay taxes on the investments ever again.

You can replace ordinary income with 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 set up a taxable event (a transaction that has tax consequences). By using a buy-and-hold strategy, you minimize the impact of taxes and reduce your transaction costs as well.

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. 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 educational expenses.

Using the Process

Some investment vehicles are preferred over others because they provide tax advantages and other advantages. Unfortunately, some of the investment vehicles that are high money priorities also have lower maximum contribution limits. For example, in 2017 the maximum amount you could contribute to a Roth IRA was $5,500, while there was no limit on how much you could invest in taxable individual financial assets.

Although some investment vehicles have limitations, it is still a good idea to adhere to the process discussed. You should first invest money in vehicles that are the highest priority on the list. 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, or not at all. If you own financial assets that are actively traded or that generate a lot of income, these assets should be held in your retirement accounts; you will not have to pay taxes on the assets until you take them out at retirement, if at all. 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 are managing 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 that you must pay on these funds will add little to your yearly tax bill.

Invest at Your Risk Level (your asset allocation)

One of the key challenges of investing is to invest at a risk level you are comfortable with. Different investors can accept different levels of risk as they work to achieve their personal and family goals. This view and understanding of risk is not an easy thing to determine.

If you choose to invest at lower risk levels, you will have a greater probability of not losing money, yet because of the lower risk, your returns are likely to be lower as well. There is a tradeoff between risk and return. If your risk level is too low, you will need to save more money for retirement and other goals as your returns will likely be less.

If you take too much risk in your investing, there are concerns as well. With higher risk, you have higher volatility and hopefully higher returns. However, if you invest at a higher risk level than you are comfortable with, you will be very concerned every time the market declines.

Interestingly, most investors are torn between "fear" and "greed." When the financial markets decline, the "fear" kicks in. We think we should take our investments out of the market, and that we will know and be able to put them back in before the market goes up again (this is called market timing). I personally know of no investor that can consistently time the market.

Likewise, when the markets are going up, the "greed" kicks in. We think we should put all our assets into one or two "sure things", which are anything but sure.

Our challenge then is to find a median point between fear and greed, so that we can build a portfolio that will give us the amount of risk that we are comfortable with and that will help us to achieve our goals. That is where risk tolerance comes in.

Risk Tolerance

Risk tolerance is an investor's willingness to accept risk. It is related to the holdings of the investor's investment portfolio or their expected holdings in their investment portfolio, particularly their asset allocation or asset mix. Generally, a higher risk tolerance indicates a willingness to take on more risk, while a lower risk tolerance indicates a willingness to take on less risk.

Your risk tolerance is determined in two main ways: 1. It can be derived from an investor's age and their current portfolio holdings, i.e., an implied risk tolerance, or 2. It can be estimated by an investor answering specific questions regarding investor demographics including age, characteristics, spending habits, history, and investment experience.

When we define risk in the determination of risk tolerance, risk in this case is generally considered the volatility of investment returns. Investors with a lower risk tolerance will have more assets in less risky or less volatile asset classes such as bonds and cash. Investors with a higher risk tolerance will have more assets is more risky or more volatile asset classes such as equities or stocks including small caps, international, REITs, etc.

Some have wondered if risk tolerance is more an absolute number or a general category. For the purposes of this class and lecture, risk tolerance is considered more a general category. In this class, we divide risk tolerance into five general categories: very conservative, conservative, moderate, aggressive, and very aggressive.

The purpose of risk tolerance is to enable an investor to determine an appropriate asset allocation or investment mix based on the investor's willingness to accept risk. This allocation is critical because it determines the amount of risk an investor is willing to accept. A lower risk tolerance should lead to a lower risk portfolio, with more invested in bonds and cash. A higher risk tolerance should lead to a higher risk portfolio with more equities.

Table 2. 90 Year Return and Volatility of Asset Classes from 1926 to 2016

Asset Class	Annual Return*	Standard Deviation*
US Small Cap	12.2%	28.5%
US Large Cap	10.0%	18.8%
Treasury Bonds	5.5%	8.6%
Treasury Bills	3.4%	0.9%
Inflation	2.9%	1.8%

Source: Calculated from Ibbotson Data, 2016. Note that each of these asset classes are portfolios of financial assets, not individual assets.

The challenge of risk tolerance is that it is not an exact science, and can mean different things to different people. Risk tolerance varies from one individual to another.

Please note that there are many different risk tolerance tests and categories that may lead to slightly different results. There are lots of different risk tolerance tests available online, many of which are more to sell investment products than to really help people understand how they should invest their assets. Luckily, we are not selling anything with this manual or this website.

Asset allocation

Asset allocation it is the process of determining how the assets of a portfolio are divided, mainly into which asset classes. A well-diversified portfolio should have broad diversification across many asset classes to reduce overall portfolio risk. A broadly diversified portfolio is an investor's key defense against risk, a key to a "sleep-well portfolio," one that is not torn between fear and greed.

Asset allocation is important for two reasons:

1. Research has shown that most of the returns from financial assets are mainly a function of returns from the specific asset class decision, and not from the individual stock selection decision. Asset class choice influences returns.

2. In the process of selecting your asset allocation, you are selecting your risk level for your overall portfolio. Selecting asset classes is selecting the risk or risk level for your portfolio.

Table 3. 10 Year Return and Volatility of Asset Classes from 2006 to 2016

Asset Class	Annual Return*	Standard Deviation*
Other: US REIT	4.7%	35.6%
Equity: Emerging Markets	2.3%	22.7%

Equity: US Small Cap	7.2%	20.6%
Equity: International	1.1%	18.6%
Equity: US Large Cap	6.9%	15.2%
Government Treasury Bonds	6.7%	12.6%
Government Treasury Bills	0.7%	0.4%
Inflation	2.8%	1.5%

Source: Calculated from Ibbotson and MSCI 2016. These are portfolios of financial assets, not individual assets.

While we cannot know which asset classes will be the most risky over the upcoming years, we can use historical data to determine the most risky asset classes over the past 90 years ending December 2016 in terms of volatility (or standard deviation). The higher the standard deviation the more volatile the asset class (see Table 2).

As you know, time periods change. What were the most risky asset classes over the past 10 years ending December 2016 (see Table 3)?

Notice that generally the higher risk asset classes had the higher return, but it was not necessarily the case.

So if risk tolerance is important then the challenge becomes the process of determining your asset allocation. How do we do that?

Asset allocation is a three-step process:

<u>Step 1</u>: Set your initial bonds and cash allocation to equal your age as a percent of your overall portfolio allocation. For example, if you are 40 years old, you should have 40% of your portfolio in bonds and cash, and 60% in equities

<u>Step 2</u>: Take this risk tolerance test. Based on your results, you will adjust that allocation to take into account your individual risk tolerance and come up with an risk-appropriate asset mix. If you are more conservative you will increase your bonds and cash allocation and decrease your equity allocation. If you are more aggressive, you will do the opposite

<u>Step 3</u>: Determine your preferred asset classes based on risk within your major asset classes. If you are a conservative investor, you will likely have many different bond asset classes (short-term, long-term corporates, governments, municipals, etc.), but likely only large cap equities, and perhaps a small amount of other equity asset classes. If you are more aggressive, you will do the opposite, have more small cap, international, emerging markets, REITs, etc. and less allocation to bonds and cash.

To come up with your asset allocation, I recommend you take our risk tolerance test from the website. ***Learning Tool 16: A Risk Tolerance Test*** is a tool we developed to help students understand and determine their asset allocation and risk tolerance. The process is:

1. Read through the entire test to familiarize yourself with what you are doing (it is included below).
2. Review each of the 8 questions and answer each of the questions carefully based on your views, experience and opinions.
3. Then add up your points from each question. There are five potential responses to each question, worth 1 to 5 points.
4. Add up the point next to the correct response and sum your total points from each of the 8 questions.
5. From your total points, we will have recommended actions for your asset allocation.

Question 1: Demographics. What is your age currently?

1. 65 and over
2. 45 to 64
3. 35 to 44
4. 25 to 34
5. 24 and under

Question 2: Time Horizon. What is your investment time horizon for this money?

1. 1 year
2. 2-5 years
3. 5-10 years
4. 10-20 years
5. 20 years or longer

Question 3: Investment Goals. What is your primary objective for this money?

1. Preservation of Principal
2. Current Income
3. Growth and Income
4. Conservative Growth
5. Aggressive Growth

Question 4: Expected Personal Earnings: Regarding your current income, do you expect it to:

1. Decrease dramatically in the future
2. Decrease a slight amount in the future
3. Stay about the same
4. Increase with the pace of inflation
5. Increase dramatically

Question 5: Emergency Funds: What amount of money do you have set aside for emergencies? (This does not include borrowings or credit lines, but does include money you can access quickly)

1. None

2. Enough to cover three months of expenses
3. Enough to cover six months of expenses
4. Enough to cover nine months of expenses
5. Over twelve months of expenses

Question 6: Investment Experience: What is your personal investment experience?

1. I have never invested any money in any financial market or instrument.
2. I am relatively new investor,--only a few years.
3. I have invested in IRAs and employer sponsored retirement plans (401 (k)) for some time, but now I am ready to develop additional investment strategies outside of that plan.
4. I have invested for quite some time and am fairly confident in my investment decisions.
5. I have invested money for years and have a definite knowledge of how financial markets work.

Question 7: Investment Risk: Regarding your view of risk, which investment would you be more comfortable making?

1. I am comfortable investing in savings accounts, CDs, and other short-term financial instruments.
2. I invest in savings accounts/CDs, but I also own income-producing bonds and bond mutual funds.
3. I have invested in a broad array of stock and bond mutual funds, but only the highest quality.
4. I have invested primarily in growth stocks and growth stock mutual funds.
5. I like to pick out new and emerging growth companies and aggressive stock mutual funds.

Question 8: Investment Preference: Which investment would you be more likely to invest in? The investment has:

1. A 20-year average return of 0-2%, with infrequent downturns and no years of negative returns.
2. A 20-year average return of 3-4% with mostly positive returns but less than a year of negative returns.
3. A 20-year average return of 5-6% with a few downturns and more than one-year of negative returns.
4. A 20-year average return of 7-8% with several periods of negative returns
5. A 20-year average return of 9% or greater with several periods of substantially negative returns.

You should now have your total score. From your total score, it can help you understand what type of investor you are: Very conservative, Conservative, Moderate, Aggressive, and Very aggressive. Each score will have a recommended action regarding increasing or reducing risky assets (see Table 4).

The challenge is to get from your risk tolerance to your asset allocation. Table 4 below helps you do that. Match your beginning allocation, which is your age in bonds, with your recommended action. Once you perform the recommended action, you will have your asset allocation or asset mix consistent with your preferred level of risk.

Investors are free to shift between the cash and bond allocations without any change in effectiveness of the test. I personally prefer to always have, at minimum, a 1-5% allocation to cash.

So how does this scoring work? For example, if you scored 35 points, you would be considered an "aggressive" investor. This is your risk tolerance or type of investor you are.

To get to your asset allocation or asset mix, you need to start with your age in bonds. For example, assume you are age 40 so assume 40% in bonds.

Next, do what the Asset Allocation Recommendations suggest. For an "aggressive" investor, you would add 10% to equities and subtract 10% to your bond and cash allocations from the above charts. Your asset allocation at age 40 would be 30% bonds and cash, and 70% equities.

You are likely wondering if you can have two individuals with similar asset allocations yet with different risk levels? The answer is yes. This is due to their different ages. For example, three investors each have a 60% equity and 40% bond allocations. Investor A is age 50 and is Aggressive; Investor B is age 60 and is Moderate; and Investor C is age 40 and is Very aggressive. Their overall allocations of 60% equity and 40% bonds the same. However, their allocations within the equity and bond allocations will likely be very different. Aggressive investors will have more small cap, international, and other risk equity asset classes. Conservative investors will have more in savings accounts, bonds, government securities, and municipal bonds.

Table 4. Asset Allocation Results from the Risk Tolerance Test

Investor Type Asset Allocation	
Asset Classes:	*Recommendations:*
Very Conservative	8 to 12 points
Cash	+5%
Bonds	+15%
Stocks	-20%
Conservative	13 to 20 points
Cash:	+0%
Bonds:	+10%
Stocks:	-10%

Moderate	21 to 28 points
Cash	0%
Bonds	0%
Stocks	0%

Aggressive	29 to 36 points
Cash	-5%
Bonds	-5%
Stocks	+10%

Very Aggressive	37 to 40 points
Cash	-5%
Bonds	-15%
Stocks	+20%

Wisely Select Individual Assets

Once you have the "whys" of investing, understand your principles of successful investing, are ready to invest (meaning your priorities are in order, you are out of credit card and consumer debt, have adequate health and life insurance, and know your goals, budget, and have a well written investment plan), and know your target asset allocation, the next challenge is to choose your financial assets. What type of assets should you choose?

The answer to this question depends on the size of your investment portfolio. Many wonder when and if they should pick individual stocks?

I recommend most investors avoid picking individual stocks and bonds. For those who really want to do this, then I recommend waiting until your portfolio is sufficiently large (i.e., $500,000 or more) to make this feasible. You can have a successful portfolio without purchasing individual stocks and bonds. Why is this the case?

There are five major reasons why I do not recommend picking stocks when your portfolio is small, and these all relate to our principles of successful investing.

1. Principle 3: Stay Diversified. Picking single stocks violates the principle of diversification, especially when you are just beginning to build your portfolio. With a small portfolio, it is difficult to achieve acceptable diversification with limited numbers of stocks.

2. Principle 4: Invest Low Cost. Investing in stocks when you have a small portfolio is very expensive. Transactions costs for purchasing stocks are among the highest of any major asset class.

3. Principle 6: Know What You Invest In. Picking stocks when you have not developed the knowledge base necessary to evaluate stocks is very risky, bordering on speculation or gambling. Most have not as yet put in the time to learn to evaluate stocks nor have developed the tools to make good stock selection decisions. This caution also includes most of my Finance students unless they have taken my Finance 409 Equity Modeling and Valuation and 415 Asset Management classes which specifically address the selection process.

4. Principle 8: Don't spend too much time trying to "Beat the Market." Picking stocks is very difficult and challenging. There is so much more to be learned about valuation that can't be taught in a single presentation or class on investing. I have given only the very basics in this chapter.

5. Stock selection is not required to have a successful investment portfolio. While it is intellectually challenging to select stocks, you can generally improve returns and reduce risk more by properly selecting asset classes and buying no-load mutual funds, index funds and exchange traded funds (ETFs). You may never need to buy an individual stock unless you really want to. I personally have no individual stocks in my portfolio except with what I do with the students in my classes.

I recommend students use low cost and tax efficient no-load mutual funds, index funds and ETFs to get exposure to the asset classes they are considering.

Index funds and ETFs are mutual funds which hold specific shares in proportion to those held by an index. Their goal is to match the benchmark performance. They came about because investors were concerned that most actively managed mutual funds have not been able to beat their benchmarks after all fees, taxes and costs on a consistent basis.

Index funds have become the standard against which other mutual funds are judged. If an active manager cannot beat the benchmark after all fees and costs, then investors should just invest in the index fund or ETF. They know they will get the return of the index without the additional costs active management entails.

The principle becomes simply. If an actively managed mutual fund cannot perform consistently better (after taxes and fees) than a low cost index fund from the same asset class, then investors should invest in index funds. Research has shown that investors who invest in low-cost funds can have significantly more resources in retirement than those who invest in high-cost investments.[1]"

Remember the Dalbar study discussed earlier.[2] Investors have significantly underperformed the performance of the benchmarks (see Dalbar 2012-2017).

Index funds and ETFs grown quickly over the past years, as they have outperformed most actively managed funds after fees, taxes and expenses.

Remember that winners rotate. There is no correlation between last year's winners and this year's winners for actively managed funds. Actively managed funds reduce performance through excessive trading and high fees. Experience has shown it is very difficult to beat index funds on a consistent basis after all fees and taxes

Jason Zweig, a senior writer for Money Magazine commented:

> With an index fund, you're 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]

Warren Buffet commented about index funds:

> 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]

While it is exciting to buy individual stocks and actively managed mutual funds, most actively managed funds will generally under-perform index funds in the long run after all taxes, costs and fees.[5] The competition in stock-market research is intense and will get more competitive going forward, making markets more efficient and indexing even more attractive. Buying an index fund or "passive investing" is a free-ride on the competition. Passive investing takes very little time and has generally outperformed most actively managed funds over time.

Remember, since analyzing companies is not likely going to be many of your jobs, it will be in most of your best interests to develop a "sleep-well portfolio" plan and follow it. This is done by:

- Living on a budget and saving monthly. It is not what you earn but what you save and invest that makes you wealth.
- Investing regularly for your personal and family goals. "Let the solemnities of eternity rest on your mind."[6]
- Staying diversified and investing low cost and tax efficiently through index funds consistent with your level of risk.
- Writing and following your Investment Plan.
- Enjoying your family and friends.
- Doing well in your day job, church responsibilities and community

Final Cautions on Investing

Let me share a few final thoughts on Investing:

> **Do not go into debt to invest.** This includes taking equity out of your home, buying on margin, or short-selling assets. Investing has enough risks of its own. Do not compound that with leverage.
>
> **Beware of financial advisors who recommend shifting assets from one investment vehicle to another.** I have sadly heard many instances of salesmen who recommend investors shift assets from a 401(k) retirement account, having them pay heavy penalties, and then putting them into another asset, usually an insurance product that generates huge commissions (for the salesman). Do not move your investments from one investment vehicle to another unless you fully understand all the costs and benefits.
>
> **Beware the agency problem**. Some advisors sell products based on their commissions, not what is best for you. Watch your turnover in your portfolio. A high turnover usually indicates problems and leads to lower returns.
>
> **Listen to the spirit.** If it seems too good to be true, it probably is. Beware of members of your local congregation, friends, and others who will try to use associations to have you buy their products. There are no guaranteed returns. If it sounds too good to be true, it likely is a scam.
>
> **There are no shortcuts to financial security**. Finally, remember the wise counsel of M. Russell Ballard who said:
>
>> 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.[7]

Summary

We discussed in the earlier chapter the important investing principles that, if followed, will result in a quality investment plan and lead to a successful investment portfolio. We also discussed the investment hourglass and how that helps you understand what you should do before you invest. If you follow these principles, there is a greater chance of a successful portfolio—one that can help you achieve your personal and financial goals.

We discussed how you build an investment portfolio using the bottom of the investment hourglass. As you begin to save and invest, review the bottom of the investment hourglass. Start with the basics: build your emergency fund and food storage, then work up the pyramid. As you go up the pyramid, you will be adding risk to your portfolio. When you build your portfolio, it is critical that you take risk into account.

Selecting investment vehicles was next, which is the process of determining which investment vehicles can help you achieve your goals the fastest. It is largely related to understanding the tax advantages of the various investment vehicles, and utilizing the vehicles that can help you get the highest after-tax returns.

We took a risk tolerance test which helped you to understand which type of an investor you are: very conservative, conservative, moderate, aggressive, and very aggressive. This test had two purposes: to help you understand what type of investor you are and to help you understand a recommendation for your asset allocation, how risk is brought into your portfolio. The riskier the assets in your portfolio, the riskier the portfolio.

We discussed how you select financial assets for your portfolio. We discussed why it is a poor idea to buy individual stocks and bonds initially, especially when your portfolio is less than a $500,000. Easier and wiser investments would be no-load, low-cost index and mutual funds which offer immediate diversification, low cost, low taxes, and generally good performance.

We finished with some final cautions. Don't go into debt to invest. This includes borrowing against your home equity, buying on margin, or selling short. Don't move assets from one vehicle to another, i.e., take money from your 401(k) to buy a cash value insurance policy. Be careful of people selling assets—make sure they are licensed and the products are registered. If it sounds too good to be true, it likely is.

Assignments

Financial Plan Assignments

Understanding yourself is a critical part of investing. It is important that you understand not only your personal view of investing, but also your family view of investing. Start by taking the simple risk-tolerance test, found in Learning Tool 16: Risk-Tolerance Test. The test gives simple recommendations for possible asset-allocation targets (asset-allocation targets will be discussed later). Know how much risk you are willing to take. When you have answered these questions, you are ready to start creating your Investment Plan.

> First, copy the sample plan found in Learning Tool 5A: Investment Plan Example. Read through this 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, after the results of your risk-tolerance test (see Learning Tool 16: A Risk-Tolerance Test), fill out the type of investor you are in Section I.B.

Fifth, using your risk-tolerance test results, develop equity targets, bond targets, and other targets for Stages 1 and 2 in Section III.C.1. and III.C.2. Start first with the general rule of thumb of your age in bonds, then use the results of your risk-tolerance test to adjust those allocations. If you have questions, consult the notes for adjustments to the general rule of thumb at the end of Learning Tool 16: A Risk-Tolerance Test. Later, you will return to this section to determine your allocations within the stock and bond asset classes.

Optional Reading Assignments

To help you understand what steps you must take before you invest, please read the following articles in the Readings directory of this website:

22. Charles E. Davis, "A Banker's Dozen: Guidelines for Wise Investing," *Ensign,* Sept. 1991, 64.

25. Joe J. Christensen, "Greed, Selfishness, and Overindulgence," *Ensign,* May 1999, 9.

Learning Tools

The following Learning Tools may be helpful to you as you become more financially self-reliant and as you prepare your personal financial plan:

28. Roth versus Traditional: Which Is better?

    This spreadsheet gives a simple way of comparing which of the alternatives, a Roth or a Traditional IRA or 401(k) is better for you, based on your assumptions.

26. Return Simulation Spreadsheet

    This spreadsheet helps you see the impact of various investment strategies and volatility for different types of asset classes. With selective asset classes, it can also help you to see the historical impact of different asset-allocation decisions.

27. Expected Return Simulation and Benchmarks

    This spreadsheet gives a historical perspective on returns and standard deviation (risk) for the major asset classes over the last 1, 5, 10, 25, 50, 75, and 80 years. It also includes some recommended benchmarks for the major asset classes.

Review Materials

Review Questions

1. What is the process of selecting investment vehicles? Why should we learn it?

2. How much can an individual invest in a Roth IRA in 2017 (see Table 1)? In a 401(k)? Are these tax-eliminated or tax-deferred investment vehicles?

3. What are asset classes? What are the three major asset classes?

4. What is the main goal of cash and cash equivalent investments? Fixed income investments? Equities?

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[1] William F. Sharpe, "the Arithmetic of Investment Expenses," Financial Analysts Journal, CFA Institute, March/April 2013, p. 34-41.
[2] DALBAR QAIB 2009-2017.
[3] Jason Zweig, "Indexing Let's You Say Those Magic Words," CNN Money, August 29, 2001.
[4] Warren Buffett, Letter to Berkshire Hathaway Shareholders, 1993.
[5] Aye Soe, S&P Indices Versus Active Funds (SPIVA) U.S. Scorecard Year-end 2016", *S&P Research*, McGraw Hill, 2017.
[6] D&C 43:34.
[7] M. Russell Ballard, "Keeping Life's Demands in Balance," *Ensign,* May 1987, 13.