

24. 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)

<i>Plan</i>	<i>Tax-Deferred</i>	<i>Tax-Eliminated</i>	<i>Maximum Amount</i>	<i>For Employees of:</i>
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 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

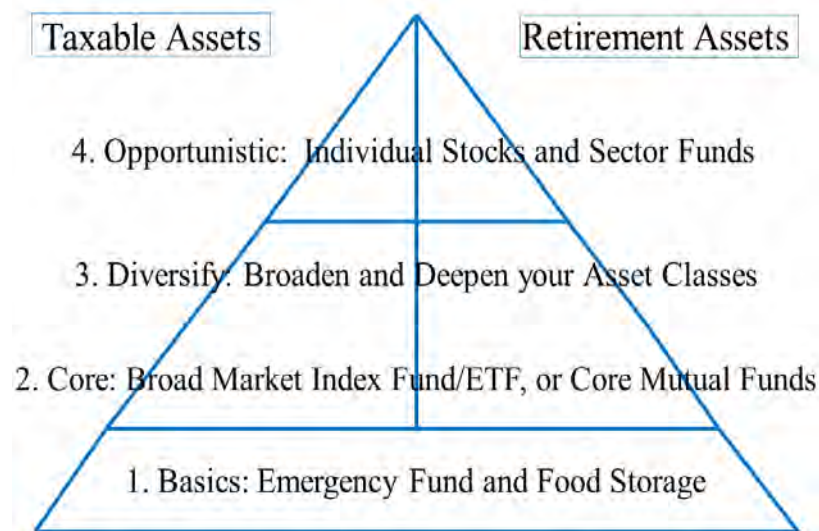
retirement accounts will depend on your personal goals and your available retirement vehicles.

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 your 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.

Case Study 3

Data

Bill and Suzie are now both 30, and have one child. Suzie stays home with the baby. They are earning \$60,000 per year, are full tithe payers, have adequate health and life insurance, are out of credit card and consumer debt, and have an Investment Plan. They are aggressive investors, want three months of income as an emergency fund, and have determined their asset classes and investment benchmarks as 75 percent equities and 25 percent bonds and cash with targets:

25% Bonds/Cash (Barclays Aggregate) 25% T, 0% R

55% U.S. (S&P 500 Index) 35% T, 20% R

10% Small Cap (Russell 5000 Index) 4% T, 6% R

10% International (MSCI EAFE Index) 4% T, 6% R

How should Bill and Suzie build their portfolio?

Case Study 3 Answers

1. Determine the initial target portfolio monetary goal.

An easy method is to take their emergency fund goal and divide it by the percentage of assets in cash and bonds (which are generally used for your emergency fund).

If their goal is three months of income (\$15,000) and their target allocation for cash and bonds is 25 percent, their target fund size would be \$15,000 times 25 percent, or \$60,000.

2. Determine asset classes and target percentages.

Multiply their asset class percentages by their initial target portfolio size to get their asset-allocation targets.

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.

Case Study 4

Data

Bill and Suzie are now 40 years old and have four children. They are earning \$80,000 per year and have achieved their initial target portfolio size goal. Their financial house is in order; they have three months of income in their emergency fund and have determined 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.

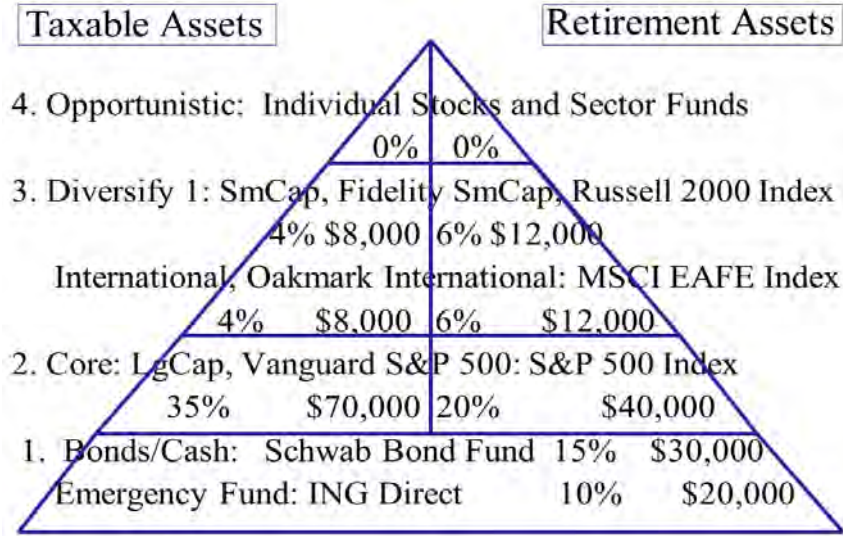
A. Since their emergency fund is full, they could begin purchasing the Schwab Intermediate Bond Fund.

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.