

25. Investing 8: Understand Selecting Financial Assets

Introduction

You are now ready to begin selecting specific assets for your portfolio. Before you get started, you should recognize that this step cannot be completed in one day. In fact, it is likely that your portfolio will be most successful if you build it a little at a time by adding small amounts of money to your investments each month. In explaining how investing can help us become self-reliant, L. Tom Perry said:

Be prudent, wise, and conservative in your investment programs. It is by consistently and regularly adding to your investments that you will build your emergency and retirement savings. This will add to your progress in becoming self-reliant.¹

As Perry states, you should strive to be prudent, wise, and conservative in your investing. The information provided in this chapter will help you to follow his counsel as you select securities for your investment portfolio.

Objectives

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

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

Understand Why You Should Wait to Purchase Individual Stocks

This chapter provides a detailed framework for selecting mutual funds but only briefly discusses a framework for selecting stocks. If you add individual stocks to your portfolio before it has become large enough to handle them, you are violating four of the principles of successful investing: stay diversified; invest low-cost; know what you are investing in; and don't spend too much time, energy, and money trying to beat the market. Purchasing individual stocks is not a necessary part of a successful portfolio. The following paragraphs explain these principles:

1. Stay Diversified (Principle 3)

Buying individual stocks early in your investing career violates the principle of diversification. It

is difficult to achieve an acceptable level of diversification in a small portfolio with a limited number of stocks. Investing in individual stocks is both the fastest way to become rich and the fastest way to become poor. Drawn by the potential for high returns, some investors treat the stock market like a lottery and invest a large percentage of their portfolio in a single investment. Such investors ignore the principle of diversification and significantly increase their risk.

The best way to build your portfolio is by wisely investing money in a variety of assets and asset classes (e.g., a diversified mutual fund) each month—not by aggressively “betting” on a single stock.

2. Invest Low-Cost and Tax-Efficiently (Principle 4)

When you have a small portfolio, investing in individual stocks is very expensive. Transaction costs for purchasing stocks are the highest of any major asset class. Also, many of the costs of individual stocks are charged according to the number of transactions and not based on the amount purchased or sold. Costs for smaller purchases or sales are therefore much higher as a percentage of the assets purchased or sold than are costs for larger purchases or sales.

3. Know What You Are Investing In (Principle 6)

Although several chapters in this course discuss investing in stocks and specify the qualities of a good stock, you have not learned all you need to know to successfully evaluate stocks for your portfolio. While buying individual stocks can be fun and exciting, it can also be a form of gambling if you do not have the necessary knowledge base. Your knowledge of stocks will grow with experience; the information on the website will not give you all of the tools necessary to make good stock-selection decisions, but it will give you a good foundation.

4. Don't Spend Too Much Time, Energy, and Money Trying to Beat the Market (Principle 8)

Trying to beat the market through purchasing individual stocks is a time-consuming and challenging activity. Expending great amounts of time and energy selecting individual stocks violates the principle that you should not spend too much time trying to beat the market. Most of you will be able to gain more substantial returns through wise investing and proper asset allocation.

5. Stock Selection Is Not Required for a Successful Portfolio

It can be fun and intellectually challenging to select individual stocks; however, your return will usually be greater and your risk will be reduced if you wisely select your asset allocation targets and use an index or other low-cost mutual fund to purchase a diversified portfolio of stocks. You can have a successful portfolio without ever buying an individual stock or sector fund.

Since many of you will not become experts at analyzing companies, it will be in your best interests to focus on developing a “Sleep-Well Portfolio.” This is done by writing and carefully

following your Investment Plan, maintaining a generally passive strategy (indexing is a viable long-term strategy for most investors), enjoying your family and friends (make memories, not investment reports), and doing well in your day jobs (make a difference where you work).

Know How to Find Information on Financial Assets and Taxes

The Internet has facilitated a virtual explosion of information related to financial assets and investing. Many companies provide investing information on the Internet in hopes that investors who use the information will buy their products or use their services. Unfortunately, much of this information is biased, flawed, or even incorrect. So where can you find reliable mutual fund and stock information? There are a number of helpful resources you can and should use before selecting your financial assets.

Good Sources of Information

Mutual fund monitoring companies: These companies usually provide information to subscribers for an annual fee. Mutual fund monitoring companies include Morningstar Mutual Funds and Lipper Analytics.

Stockbrokerage firms: The different types of stockbrokerage firms range from full-service brokerages to discount and online brokerage houses. Full-service brokerage firms usually supply investment data to their clients free of charge, while discount firms usually charge a fee. Stockbrokerage firms include companies such as Merrill Lynch, TD Ameritrade, Morgan Stanley, and Charles Schwab.

Fund supermarkets: Mutual fund supermarkets are brokerage houses that offer mutual funds from many different fund families. To compensate these mutual fund supermarkets for bringing in new customers, mutual fund companies rebate part of their management fees to them. Mutual fund supermarkets have large databases composed of the mutual funds they offer, and they make these databases available to clients. Mutual fund supermarkets include companies such as Schwab, Fidelity, and TD Ameritrade.

Financial websites: There are a number of reliable financial websites you can access without paying a fee, including www.indexfunds.com, www.money.cnn.com, <http://finance.yahoo.com>, www.fool.com, www.money.msn.com, and www.dailyfinance.com.

Financial publications: There is a great deal of information available in financial publications such as *The Wall Street Journal*, *Financial Times*, *Kiplinger's*, and *Smart Money*.

Libraries: Libraries also house a lot of helpful information. The Harold B. Lee Library at Brigham Young University has a wealth of information—much of it online—that can help students analyze the various financial assets they are thinking of including in their portfolios.

Finding the Best Format for Information

Investors need to have access to accurate and current information. Although there are many good sources that offer financial information, the best sources are databases that are regularly updated and easy to search via the Internet.

One example of such a database is Morningstar.com. Morningstar provides both free information and subscription information to investors; it is just one of many available databases. Please note that I am merely using this database as an example; I am neither endorsing Morningstar nor implying it is the best database. However, I do think the information provided by Morningstar is generally good. Graphs for this chapter are from Morningstar, Library Edition and are examples of the types of information that are available on mutual funds as of August 8, 2014. This product is also available as a free resource for students enrolled in many colleges. For help in using Morningstar on the Internet or from your local college, see [Using Morningstar to Select Funds](#) (LT07).

Taxes on Financial Assets

All investment earnings are not created equal. There are different taxes and tax rates on different types of financial assets. Some have preferential federal, and others preferential state tax rates. Taxes on financial assets fall under three main headings: (1) stocks, (2) bonds and savings vehicles, and (3) mutual funds (which include index funds and exchange traded funds). Note that each of these assets is taxed at the federal level and may be taxed at the state and local level as well, depending on your state of residence (see Table 8).

Taxes on Stocks (or Equities)

There are two main types of federal taxes on stocks: capital gains taxes and taxes on dividends. Capital gains are realized earnings from selling a stock. They are divided into short-term and long-term realized capital gains.

Stock dividends are of two types, qualified and ordinary (or not qualified). A qualified dividend is a dividend paid by a U.S. corporation where the investor held the stock for more than 60 days during the 121-day period that begins 60 days before the ex-dividend date (see [Taxes on Security Earnings Including Qualified Dividends](#) (LT32)). Qualified dividends are taxed at a preferential federal tax rate. An ordinary dividend is a dividend that is not qualified, i.e., you have not held the stock for a long enough time period to qualify for the preferential tax treatment.

Taxes on Bonds and Savings Vehicles

There are two main types of bond taxes: capital gains taxes and taxes on interest, or coupon, payments:

Capital gains are taxed similarly to stocks.

Interest, or coupon payments, is payments received as part of the contractual agreement to

receive interest payments. They are taxed at your ordinary, or marginal, tax rate.

Bonds that receive preferential tax treatment for interest (municipal bonds and Treasuries) have a preferential tax rate of 0 percent on their respective taxes, i.e., 0 percent federal tax for municipal bonds and 0 percent state tax for Treasuries. You must still pay capital gains taxes on any capital gains earned by both types of bonds.

Taxes on Mutual Funds

Mutual funds are pass-through vehicles, which means that taxes are not paid at the fund level but are instead passed through to the individual shareholders who must then pay the taxes. Mutual fund taxes are mainly on capital gains, stock dividends, and interest, or coupon, payments. They are handled the exact same way as the taxes for stocks and bonds discussed earlier.

Describe the Process of How to Pick a Good Mutual/Index Fund

Before you can choose which funds you will invest in, you must understand the process of choosing good mutual funds:

1. Determine the asset classes that are appropriate for your Investment Plan and choose the appropriate benchmarks.
2. Determine key criteria for each asset class (e.g., costs, fees, diversification, etc.) to identify the best potential funds based on your principles of successful investing.
3. Use a database program to set your chosen parameters and evaluate each potential candidate.
4. Evaluate each candidate based on your criteria and select the best funds.
5. Purchase the funds and monitor performance carefully.

Be careful not to purchase funds before distributions are made. Distributions result in taxes and are generally made in December. Try to purchase your mutual funds after their distributions are made.

You already determined the asset classes your portfolio should contain and the appropriate benchmarks for these asset classes in previous chapters. Therefore, you have already completed steps one and two. This chapter will discuss steps three and four; you will learn how to determine key parameters for evaluating mutual funds of specific asset classes, and you will learn how to use a database program to set those parameters and evaluate potential candidates.

There are a number of important criteria you should consider when selecting mutual funds. Seven of the key criteria include diversification, low cost, tax-efficiency, low turnover, low levels of un-invested cash, no manager style drift, and small (or positive) tracking error.

1. Wide Diversification

Diversification is your most important defense against market risk. Select mutual funds that include many different companies in each portfolio category. Avoid investing in sector funds or

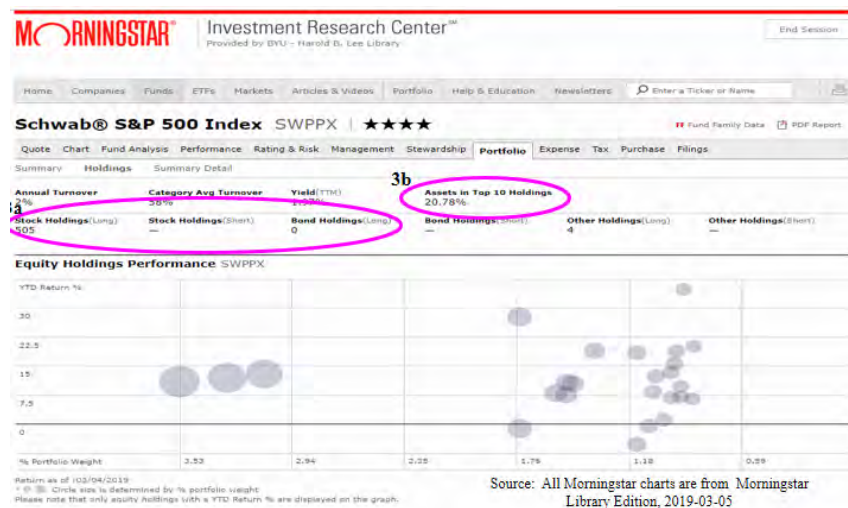
industry funds, individual stocks, or concentrated portfolios of any kind until you have sufficient education, experience, and assets. Even then, keep the percentage of these assets low in relation to the amount of your overall assets.

There are four main factors that determine whether a mutual fund is sufficiently diversified: numbers, concentration, types of assets, and location.

Numbers: What is the total amount of holdings, or securities, in the fund? You want to select a fund that holds many securities and industries. Check the number of holdings in the fund (see Table 1). If the fund has only 15 holdings, it is not very diversified and you should carefully understand each of those 15 companies. If the fund has 504 holdings (as does the Vanguard 500 index fund), it is much more diversified. Since there are over 500 companies in the portfolio, and since no company is a significant portion of the portfolio, it is not as critical that you carefully understand each of the companies in the portfolio.

Concentration: What percentage of the fund is allocated to the top 10 holdings? If 50 percent or more of the fund is invested in the top 10 holdings, then the fund has a high concentration in these holdings. If only 17 percent of the fund is invested in the top 10 holdings, then the fund has a lower concentration in these holdings and your risk is most likely spread out over many companies.

Table 1. Morningstar Website: Diversification



In addition, by looking at the top 10 holdings of a mutual fund, you can see the percentage of net assets or of the value of the portfolio that the top 10 stock comprises. Generally, the lower the concentration in the top 10 holdings, the lower the risk of a problem with a single company, and the better for most investors.

Type of assets: What types of assets are in the fund? If the mutual fund is an equity fund or a

bond fund, then all assets should be of the same asset class. However, if the fund is a balanced fund, an asset-allocation fund, or life-cycle fund, you should examine the percentage of the fund that is allocated to stocks, bonds, and cash. Again, the more diversified the fund is in terms of its holdings of different types of financial assets, the less volatile the fund will be.

Location: What is the location of the companies that are included in the mutual fund? The more diversified the locations, the less risk to the fund. Companies from different geographical areas are subject to different business cycles; hence, these companies should experience highs and lows at different times in the investment cycle.

2. Low Cost

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

I recommend you invest in low-cost, no-load (i.e., without a sales charge) mutual funds. You should rarely (if ever) pay sales charges of any kind. Because you are a long-term investor, it may be acceptable to invest in funds with back-end loads or funds with a sales charge for selling within a specific period of time, as long as that period of time is under 180 days. You should also minimize management fees as much as possible. Remember, a dollar saved is a dollar you can invest to earn more money.

Costs are explained in the mutual fund's prospectus (a document that describes all aspects of the mutual fund) in the section entitled "Fees, Management Fees, and Expenses" (see Table 2). This section details all administrative costs, management fees, 12b-1 fees, and other charges. The most important ratio listed in this section is the total expense ratio. This is the overall cost of the listed fees. Remember that the fund manager will reduce your investment by this amount every year. The lower this ratio, the more you will be able to earn for your personal goals. Note that the Vanguard Fund charges 0.16 percent a year for total expenses. Compare this to the average total expense of large-cap stocks, which is .92 percent. While you cannot change the management fee once you have invested in a fund, you can and should understand the management fee before you invest in any fund.

If you are investing in a non-retirement investment vehicle, taxes are another important expense you should analyze. Look at the tax cost ratio in the section entitled "Returns: Tax Analysis." Too many investors fail to account for the impact taxes will have on their returns: taxes typically reduce returns by about 25 percent each year.

Table 2. Morningstar Website: Costs



Source: Morningstar 2019

3. Tax Efficiency

If you are investing in a non-retirement investment vehicle, taxes are another important expense you should analyze. Look at the tax cost ratio in the section entitled “Returns: Tax Analysis.” Too many investors fail to account for the impact taxes will have on their returns: taxes typically reduce returns by about 25 percent each year.

When investing in taxable funds, choose funds with an eye to obtaining high returns while keeping taxes low. Taxes reduce the amount of money you can use for personal and family goals. Watch the historical impact of taxes for the fund because it is likely to be similar in the future. Remember, it is not what you earn, but what you keep after taxes that makes you wealthy.

Your tax-adjusted return is the estimated return after the impact of taxes. There are two ratios to watch: the tax cost ratio and the potential capital gains exposure (see Table 3).

The tax cost ratio is the percent of nominal fund returns that is taxable, assuming the fund is taxed at the highest rate, and is calculated as $(1 + \text{return}) * (1 - \text{tax cost ratio}) - 1$. If a fund had an 8 percent return and the tax cost ratio was 2 percent, investors in the fund took home 6.00 percent, or $(1.08 * .98) - 1$. The potential capital gains exposure is an estimate of the percent of the fund’s assets that represent capital gains. If this number is high, there is a high probability that investors may receive gains as capital gains rather than as ordinary income.

Table 3. Morningstar Website: Tax Efficiency

Schwab® S&P 500 Index SWPPX | ★★★★★

Quote Chart Fund Analysis Performance Rating & Risk Management Stewardship Portfolio | [Compare](#)

Tax Analysis

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

(02/28/2019)

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

4. Low Turnover

Look for funds with low turnover. Turnover is a measure of the amount of trading activity that takes place during a given period of time; turnover is shown as a percentage of the average amount of total assets in the fund. Calculate turnover by adding the fund's sales and purchases and dividing by two. High turnover, or excessive trading, increases the amount of taxes and transaction costs you will have to pay. Many costs associated with turnover are hard to quantify and are therefore not disclosed in the prospectus. Other costs that stem from high turnover include commissions, bid-ask spreads (the difference between what buyers are willing to pay and what sellers are asking for in terms of price), and market impact costs (a jump in price that occurs when a manager tries to buy a large block of shares). Remember that each transaction generates a taxable event, and the cumulative taxes can be very expensive.

A mutual fund's turnover is described under the prospectus heading "Annual Turnover" (see Table 5). You want a mutual fund that invests long-term, consistent with the principles of good investing. The more turnover a fund has, the more the investor will spend on transaction costs and taxes (which are not included in the total expense ratio). The more costs the fund generates, the higher the fund's returns must be to offset these expenses.

You should also look at the section entitled "Potential Capital Gains Exposure in the Returns: Tax Analysis." You should avoid mutual funds that have a high potential for earning short-term capital gains because they are taxed at the highest marginal tax rate.

5. Low Un-Invested Cash Low

Un-invested cash is cash the mutual fund has not yet invested in securities. High levels of un-invested cash are drags on a mutual fund's performance. For example, if the fund's portfolio has a small percentage of large-cap stocks and a large percentage of cash, the low rate of return on the cash will dilute the higher rate of return on the large-cap stocks. Look for funds that keep the percentage of cash in their portfolios low. Some mutual funds hold large amounts of cash to fund potential redemptions or to comply with their investment policy. Choose funds that are fully invested (95 to 99 percent, depending on the asset class and fund size) in the market segment you are targeting. Do not pay the mutual fund to manage cash. While it is acceptable for open-end mutual funds to have some frictional cash, this cash should comprise less than 5 percent of the fund.

The percentage of un-invested cash in a fund is listed in the "Asset Allocation" section of the prospectus (see Table 5). Remember that the amount of un-invested cash in a fund may change over time, so monitor this amount. The Vanguard fund has 0.4 percent un-invested cash.

6. No Manager Style Drift

The law requires that mutual funds have a prospectus available for individual clients to review. This prospectus states the investment objective of the fund (whether the fund will invest in large-capitalization stocks, international bonds, real estate, etc.). Manager style drift relates to the fund manager's style and the types of companies the fund will buy or sell. Over time, portfolio managers may change the types of companies they choose to invest in; this change is called manager style drift. Changes in the size, geographical location, or relative valuation of the companies included in the fund can alter a manager's investment style. Since this investment style affects the performance of the fund, a portfolio manager should generally remain consistent in the types of companies he or she selects for the fund.

The fund's prospectus should clearly define the asset classes that will be included in the portfolio, the size of the target companies, and whether the portfolio has a growth or value tilt. A growth tilt means that the portfolio manager invests in stocks that have higher price-earnings and price-book ratios than the market and are likely to grow faster than the market. A value tilt means that the portfolio manager invests in stocks that are cheaper than the market and have lower price-earnings and price-book ratios than the market. A portfolio manager should not change the type of asset classes included in the fund. You are paying the manager to invest in the asset classes that are detailed in the prospectus, and this is what he or she should do. If you purchase a small company mutual fund, the fund manager should not purchase international or emerging market shares because these investments are not part of the fund's target asset classes. If you want exposure to these asset classes, you should invest in a mutual fund that specializes in international and emerging market shares.

Table 4. Morningstar Website: Turnover

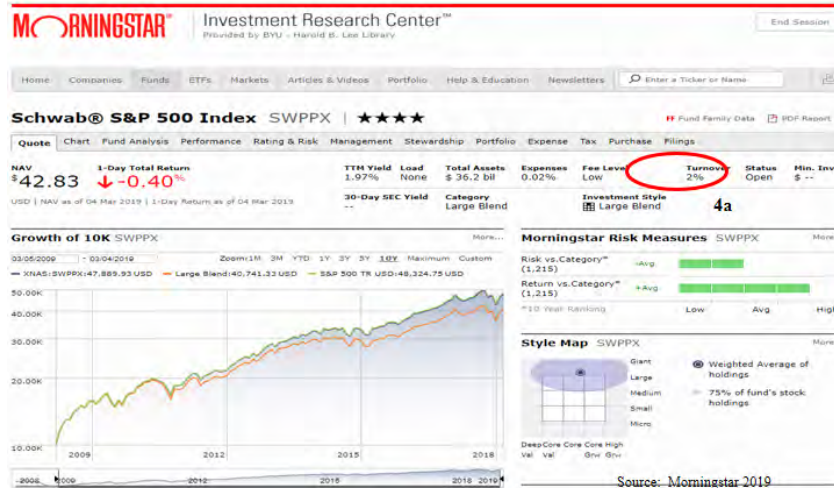
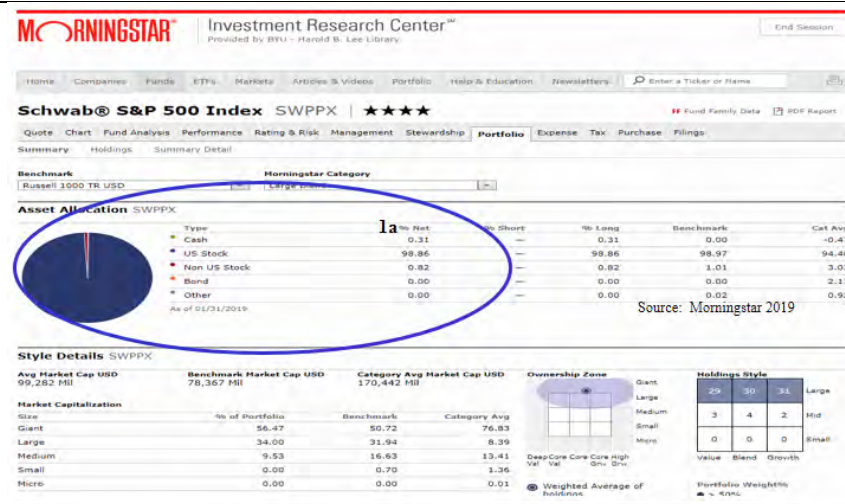


Table 5. Morningstar Website: Un-Invested Cash



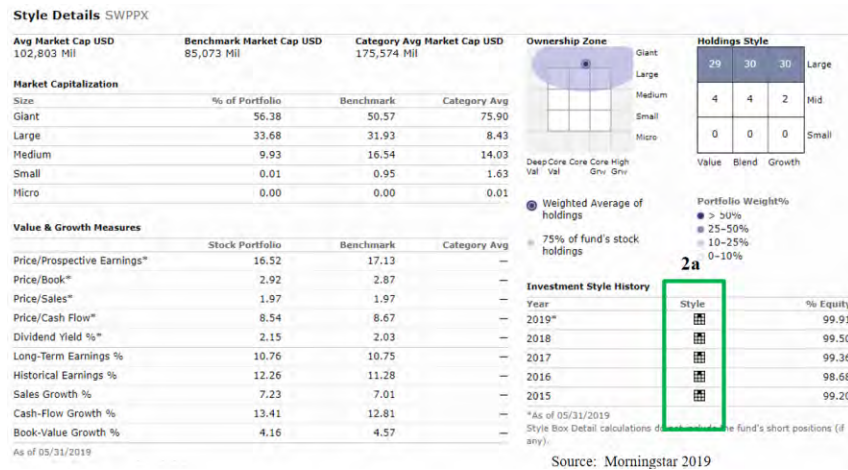
The portfolio manager’s investment style is described in the “Manager’s Style” box in the section called “Portfolio: Style Box Details” (see Table 6). The diagram in the “Manager’s Style” box lists the company valuation across the top and the company size on the side. The manager’s style should not have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

7. Small (or Positive) Tracking Error

Tracking error (or trailing return, as defined by Morningstar) is the difference between the return on the fund and the return on the fund’s benchmark.² Tracking error should be small, meaning that the fund return should be very close to the benchmark return. Generally, the smaller the tracking error, the more consistent the performance of the fund is compared to its benchmark. If the tracking error is negative, the fund has yielded lower returns than the benchmark. Most

people do not complain too much if the tracking error is positive, or in other words, if the fund has yielded higher returns than the benchmark.

Table 6. Morningstar Website: Manager Style Drift



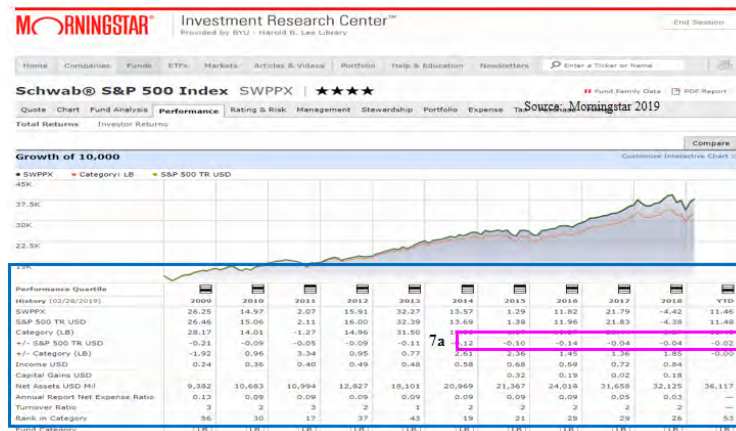
A fund’s tracking error is usually listed in the prospectus section entitled “Tracking Error: Returns: Performance History” (see Table 7). You should look at three major parts of the section that deals with tracking error, “Tracking Error versus the Index,” “Tracking Error versus the Category,” and “Percent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

Tracking error versus the index (+/- index): This section shows the difference between the return on the fund and the return on the benchmark, or index. If tracking error is consistently small, it is likely you will consistently receive benchmark returns.

Tracking error versus the category (+/- category): Sometimes funds with similar objectives will have different benchmarks. This section combines all funds with similar objectives. This information indicates how well the fund performs in comparison with other funds in the same asset class (or category). A positive tracking error indicates that a fund has had higher-than-average returns as compared with other funds in the category.

Percent rank in category: This section shows the percentile in which a fund falls in a given category. A rank of 15 indicates that the fund is in the top 15th percentile of all funds; the lower the number, the better the performance of the fund compared to the performance of other funds in the category. Watch this percentage rank for consistency. A fund that is in the top-third of all funds year after year is a much better prospect than a fund that is the top performer one year and a mediocre performer for several years. Remember that winners rotate, and last year’s best-performing fund is unlikely to be this year’s best-performing fund. Consistency is a critical factor.

Table 7. Morningstar Website: Tracking Error



Using Databases to Select Funds

Now that you understand the parameters you should adhere to when selecting mutual funds, you can set your criteria and then use a database to get a list of all the funds that meet your criteria. For example, you can use Morningstar and [Using Morningstar to Select Funds](#) (LT07) to set your criteria for stocks, bonds, and other financial assets. To aid you in your selection, we have created a [Mutual Fund Selection Worksheet](#) (LT07B) that includes the criteria discussed and where to find it on Morningstar.

While there are many different resources for finding mutual funds, the Premium Fund Screener from Morningstar is one of the better resources. You will need to set up an account and a password. The cost of using Morningstar on the Internet is \$125 per year. This service is available for free for some college students, such as BYU.

Why Index or Exchange Traded Funds

Index funds are mutual funds that hold the same proportions of specific shares as that held by a specific benchmark or index. Exchange-traded funds (ETFs) are mutual funds that are very similar to index funds, except that instead of being traded only once a day like a mutual fund, they can be purchased and sold at any time the market in which they trade is open. The goal of index funds and ETFs is to match the benchmark performance of a specific asset class. There are nearly 1,000 different index funds and over 500 different ETFs, and they all follow different indices or benchmarks related to geography, maturity, capitalization, and style.

Index funds and ETFs were created because some investors were concerned that actively managed funds were not always able to beat benchmarks after the effects of fees, taxes, and other expenses. By purchasing an index fund, investors stop trying to beat the benchmark: instead, they accept the benchmark’s return and risk. Interestingly, index funds have tended to outperform most actively managed mutual funds over the long term.

ETFs were created because index funds trade only once per day at the fund's ending net asset value. Some investors wanted to trade index funds throughout the day. In addition, although the management fees on index funds were low, some people thought they should be even lower. Hence, many ETFs have lower management fees than many index funds. However, since ETFs trade on a market just like a stock, investors in ETFs need to factor in the additional cost of buying and selling the shares into the total cost calculation.

Active management tends to hurt a mutual fund's performance because excessive trading generates taxes and fees. Actively managed funds also have much higher management fees than index funds. (The average index fund charges 18 basis points, while the average actively managed mutual fund charges 80 to 200 basis points).

Index funds and ETFs use a passive investing strategy that requires very little time to maintain. Passive investment does not require you to know much about valuation, security analysis, or other company-specific information. You just need to be willing to accept the general market return for the asset classes included in your index fund or ETF. Although returns on index funds vary from year to year (just as returns on benchmarks vary from year to year), they still yield a consistent, respectable return. Jason Zweig, a senior writer for *Money* magazine, said the following about index funds:

With an index fund, you are on permanent auto-pilot: you will always get what the market is willing to give, no more and no less. By enabling me to say "I don't know, and I don't care," my index fund has liberated me from the feeling that I need to forecast what the market is about to do. That gives me more time and mental energy for the important things in life, like playing with my kids and working in my garden.³

Index funds have become the standard against which other mutual funds are judged. If an actively managed mutual fund cannot perform better (after taxes and fees) than an index fund (index funds are very tax-efficient), then investors should lean toward purchasing the index fund. Warren Buffet wrote the following in 1993, and I believe his statement still applies today, "By periodically investing in an index fund, the know-nothing investor can actually outperform most investment professionals. Paradoxically, when "dumb" money acknowledges its limitations, it ceases to be dumb."⁴ He also said, "Doing reasonably well investing in stocks is very, very easy. Buy an index fund, preferably over time, so you end up owning good businesses at a reasonable average price. If you own a cross-section of American businesses, you are going to do well."⁵

In addition, the amount of time necessary to invest in index funds and ETFs is significantly less than the time needed to analyze, evaluate, value, and purchase individual stocks. In general, most actively managed funds and brokerage accounts tend to under-perform index funds in the long run after all taxes, costs, and fees. Invest accordingly.

The competition in stock-market research is intense and will get more competitive in the future. This will help make markets more efficient and indexing even more attractive. Market indexing or "passive investing" is a free ride on the competition; it takes very little time and contributes to

a “sleep-well” portfolio.

Many dislike indexing because passive investing is boring, selecting stocks can be intellectually challenging, sharing investment “war” stories with friends is fun, and doing “nothing” about your investments is unnerving. Reasons to use index funds include immediate diversification, generally superior long-run performance, tax-efficient strategy, and time efficiency, which allows you to spend more time on the things that are important to you, such as family and friends, helping others, and doing well at work, instead of spending time analyzing individual companies.

Understand How to Pick Your Mutual Funds

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

1. Determine the asset classes needed for your Plan and choose the appropriate benchmarks. This you have already done.
2. Determine what makes a good mutual fund and which asset classes you need exposure. You have determined your criteria and know what makes a good mutual fund.
3. Using a database program (we use Morningstar in the class), set those criteria and evaluate each of the potential mutual funds.
4. Select the best mutual funds using [Using Morningstar to Select Funds](#) (LT07) and [Mutual Fund Selection Worksheet](#) (LT07B) (with hints on the “Filled in” tab).
5. Now put your Investment Plan together.

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

1. Go to Morningstar, and type the ticker “SWPPX” in upper right box
 - Where it says PDF Report (if available), print off this report. If there is no PDF Report, just print off the entire “Quote” Page. Include these in your Investment Plan as Exhibit III. Fund Support Exhibits. If you need help, see Mutual Fund Selection Worksheet (LT7B), Filled In for possible fund ideas and tickers
2. Download the Investment Process Spreadsheet (LT13)
 - For most, the first 4-10 asset tab will be sufficient.
 - Put in your Salary and emergency fund goal and percentage.
 - It will automatically determine your target portfolio fund size (your emergency fund amount divided by your bonds/cash percentage).

- Assuming a salary of \$60,000 and a 25% allocation to bonds and cash. Your target portfolio size would be \$100,000.
3. Add data to the Investment Process Spreadsheet (LT13)
- Put in your asset classes and benchmarks, and percentages in Panel I. Use the dropdown boxes for asset classes and benchmarks
 - Then put in the tickers and Fund names
4. Print off all your Exhibits
- Print off your filled in Exhibit I. [Expected Return Simulation and Benchmarks](#) (LT27)
- Print off your filled in Exhibit II. [Investment Process Spreadsheet](#) (LT13)
 - Print off Exhibit III. Mutual Fund Pages from Morningstar. There should be a minimum of 4 funds from 4 different asset classes
 - Include these with your completed and filled in Investment Plan and you should be good.

Understand Plans and Strategies for Selecting Financial Assets

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

Investing

General Investing

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

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

Summary

Your portfolio is likely to be most successful if you build it gradually, adding a small amount money to your investments each month. This chapter provides a detailed framework for selecting mutual funds but only briefly discusses a framework for picking stocks. Adding individual stocks to your portfolio before it has become large enough violates four principles of successful investing: stay diversified; invest low-cost; know what you are investing in; and don't spend too much time, energy, and money trying to beat the market. Individual stocks are not a necessary part of a successful portfolio, but many people enjoy picking individual stocks.

The Internet contains much information related to financial assets and investing. Many companies provide investing information online, hoping that investors who use the information will buy their products or use their services. Unfortunately, much of this information is biased, flawed, or even incorrect. It is important to use reliable resources.

Before picking funds to invest in, you must understand how to pick good mutual funds:

Steps one and two were to determine the asset classes your portfolio should contain and the appropriate benchmarks for these asset classes. For steps three and four, you determine key parameters for evaluating mutual funds of specific asset classes and use a database program to set those parameters and evaluate potential candidates. In steps five and six, you select and purchase the best funds.

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

Chapter 25. Investing 8: Understanding Selecting Financial Assets

Taxes on Different Types of Earnings - 2019 (LT32) for Stocks, Bonds, and Mutual Funds		
Types of Investment Earnings:	Federal Tax Rate	State Tax Rate **
Stocks:		
Capital Gains		
Short-term capital gains	Marginal Tax Rate	Marginal Tax Rate
Long-term capital gains *	15% or 0%	Marginal Tax Rate
Long-term capital gains (TI-S488MFJ) *	20% +	Marginal Tax Rate
Dividends		
Stock Dividends: Qualified ***	15% or 0%	Marginal Tax Rate
Stock Dividends: Ordinary/Not Qualified	Marginal Tax Rate	Marginal Tax Rate
Bonds and Savings Vehicles:		
Capital Gains		
Short-term capital gains	Marginal Tax Rate	Marginal Tax Rate
Long-term capital gains *	15% or 0%	Marginal Tax Rate
Long-term capital gains (TI-S488MFJ) *	20% +	Marginal Tax Rate
Interest/Coupon Payments		
Interest Payments	Marginal Tax Rate	Marginal Tax Rate
Treasury-bills/bond Interest	Marginal Tax Rate	0%
Muni-bond Interest (bonds from your state)	0%	0%
Muni-bond Interest (bonds from another state)	0%	Marginal Tax Rate
Mutual Funds (Pass Through Vehicles):		
Distributions:		
Capital Gains for Stocks/Bonds/Municipals		
Short-term capital gains	Marginal Tax Rate	Marginal Tax Rate
Long-term capital gains *	15% or 0%	Marginal Tax Rate
Long-term capital gains (TI-S488MFJ) *	20% +	Marginal Tax Rate
Stock Dividends		
Stock Dividends: Qualified ***	15% or 0%	Marginal Tax Rate
Stock Dividends: Not Qualified/Ordinary	Marginal Tax Rate	Marginal Tax Rate
Interest/Coupon Payments		
Bond Interest	Marginal Tax Rate	Marginal Tax Rate
Treasury-bills/bonds Interest	Marginal Tax Rate	0%
Muni-bond Interest (bonds from your state)	0%	0%
Muni-bond Interest (bonds from another state)	0%	Marginal Tax Rate

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

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

^ The beginning of the tax bracket. * Combined rate = 1.45% employer contribution.
 Net Investment Income Tax is calculated on your MAGI and Investment Income being above the Threshold. MAGI is AGI + foreign income + a few other areas. Your tax is on the excess above that threshold amount.

You should consider a number of factors when selecting mutual funds, including diversification, costs, turnover, un-invested cash, manager style drift, and tracking error.

Now that you understand the parameters for selecting mutual funds, you can set your criteria and use a database, such as Morningstar, and [Using Morningstar to Select Funds](#) (LT07), to get a list of all the funds that meet your criteria.

Index funds and exchange-traded funds (ETFs) hold the same proportions of specific shares as a specific benchmark does. Their goal is to match the benchmark performance of a specific asset class. Nearly 1,000 different index funds and over 500 different ETFs follow different indices related to geography, maturity, capitalization, and style.

Index funds and ETFs were created because actively managed funds do not always beat benchmarks after fees, taxes, and other expenses. With an index fund, investors stop trying to beat the benchmark and instead accept the benchmark's return and risk.

The challenge is getting and keeping your finances (and your life) under control.

Assignments

Financial Plan Assignments

Continue to work on your Investment Plan. As you do, it your challenge now is to begin building your portfolio. When you are starting to invest, you will have only a few assets, but you must still apply the principles of building a successful portfolio regardless of the size of your investment portfolio or the number of assets invested in. How do you apply these principles?

Diversification is critical to building a successful portfolio. Single assets do not add much

diversity to your portfolio. Most mutual funds hold multiple assets and may already be diversified. Consider purchasing mutual funds as your first financial assets. What factors make a good mutual fund? What factors are important to you? What are your thoughts on index funds and ETFs (exchange-traded funds)? What tools are available to help you choose candidates for your portfolio?

This chapter gives you the opportunity to choose your financial assets and to develop your investment strategy. To choose your financial assets, read [Using Morningstar to Select Funds](#) (LT07), which explains how to access the Morningstar database and how to set up criteria to select the best mutual funds in your chosen asset classes. If you like, you can look at [Mutual Fund Selection Worksheet](#) (LT7B) which helps with criteria for determining a good mutual fund and gives a few ideas.

Using these tools, determine which assets you should purchase to give you exposure to your desired asset classes. What are the minimum purchase amounts, management fees, 12b-1 fees (if any), loads (loads are sales charges and are generally not recommended), and other critical areas of the assets you are considering? Select a minimum of four assets you will initially include in your investment portfolio.

The first asset for your portfolio should be for your emergency fund. Choose a liquid, no-load fund that has a low minimum balance requirement yet still yields positive returns. It could be a money market mutual fund, intermediate-term bond fund, Internet bank deposit, or other liquid investment.

Your second asset should be a core mutual fund. Select a fund that is inexpensive, has low turnover, and is tax-efficient. This fund should also offer you exposure to your main equity market. I personally like index funds for core allocations because they are low cost and tax-efficient and generate good returns. I also like the broadest index funds I can get that offer exposure to the total market, i.e., both large and small stocks.

Your third and fourth assets should be funds that broaden and deepen your portfolio. Broaden your portfolio by adding new asset classes to your portfolio: these assets could include international stocks or bonds, emerging market stocks or bonds, and real estate investment trusts (REITs).

To deepen your portfolio, add more companies to your core allocation or your main asset class. You might also include a U.S. small-cap or mid-cap fund or a fund that offers exposure to all the stocks in the U.S. market, such as the Wilshire 5000 index, which includes most of the listed stocks in the United States.

Once you have determined which assets to include in your portfolio, print off the “Snapshot” page for each of your assets. This page includes information on pricing, size, fees, total return, and return versus benchmarks. These pages will be included in your financial plan.

Then use [Investment Process Spreadsheet](#) (LT13). Open the spreadsheet and determine which

tab to use. If you own no financial assets or have only a few in your portfolio (fewer than 10 financial assets), use Tab “Inv. Process (4–10 Assets).” If you have more than 10 assets, use tab “Inv. Process (4–42 Assets).” Assets include stocks, bonds, mutual funds, savings, CDs, and other financial assets.

Add your expected annual salary after you get out of school to cell G11. It will calculate a three-to six-month estimate. Looking at these ranges, type in your emergency fund goal in cell G14. This is the amount you want to save before you begin investing.

Add in your asset classes consistent with your phases in column D in the light-green rows from Section III.B.1. Add the benchmarks in column D from the same section.

Once you have selected a minimum of four assets (one for each asset class), type in the name of the financial assets in the dark-green section.

Finally, type in the percentage allocation in columns F and G, with F being the taxable accounts and G being retirement accounts. The sum of the taxable and retirement accounts should be added to your total allocations as stated in Section III.B.1.

Notice that [Investment Process Spreadsheet](#) (LT13) automatically calculates your initial target portfolio size goal, or your first goal for investing. It takes the amount of your emergency fund and divides this by the percentage you allocate to bonds and cash. For example, if your emergency fund goal were \$20,000 and you allocated 25 percent to bonds and cash, your initial target portfolio size would be \$80,000, or $\$20,000 / .25$. This is just one way of calculating your first goal for investing, but it is a good starting point. Once you achieve this first target portfolio size, you will add an amount to this goal, say \$100,000; type the new amount directly over the formula in cell L12 and begin working on your new targets.

Learning Tools

[Using Morningstar to Select Funds](#) (LT07)

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

[Mutual Fund Selection Worksheet](#) (LT7B)

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

[Investment Process Spreadsheet](#) (LT13)

This Excel spreadsheet helps you determine how much you should invest in different assets based on the asset-allocation targets in your Investment Plan. It

can also help you as you work toward reaching your investment targets by showing you the target amount for each asset, the amount you have invested thus far, and the amount that remains for you to reach your target.

[Key Sources of Financial Information](#) (LT10)

This document gives suggestions on finding quality sources of financial information.

[Taxes on Security Earnings – Qualified Dividends](#) (LT32)

This tool helps you determine the taxes on the different types of earnings. It also explicitly shares your capital gains and dividend taxes on earnings, depending on your taxable income and AGI.

[Expected Return Simulation and Benchmarks](#) (LT27)

This spreadsheet helps you see the impact of various investment strategies as well as the volatility of different asset classes. It also shows you the historical impact of different asset-allocation decisions.

Review Materials

Terminology Review

% Rank in Category. This is the number the fund ranks in its category or versus the benchmark. It is the top percentile, i.e., the lower the number the better.

Actively managed funds. These are funds where the portfolio managers try to beat the performance of a benchmark through the active purchase and sell of securities in their asset class. Actively managed funds generally have higher management fees which must be overcome through higher returns

Benchmark. This is the relevant index for the specific category tracked by Morningstar or other fund monitoring company.

Capital gains taxes. Capital gains are realized earnings from selling a financial asset at a profit. It is the sale price less the purchase price, and are divided into short-term and long-term. Short-term capital gains are gains from the sale of an asset where the asset was held for less than 366 days and is taxed at your marginal tax rate. Long-term capital gains are gains on the sale of an asset where the asset was held for more than 366 days and is taxed at a preferential federal rate.

Category. These are all funds in the same category as established by Morningstar.

DALBAR. A firm that produces the book titled Quantitative Analysis of Investor Behavior which tracks the performance of individual investors over succeeding 20 year periods.

Diversification. Diversification is the process of “not putting all your eggs in one basket.” It is your key defense against market risk. Pick a fund with many companies in their portfolios within each asset class.

Index funds. These are mutual funds or ETFs which hold specific shares in proportion to those held by a specific index, i.e., the S&P 500 or Russell 2000. Their goal is to match the benchmark performance. Index funds have become the standard against which other mutual funds are judged.

Interest/coupon payments. These are payments received as part of the contractual agreement to receive interest payments from a bond. Bonds which have preferential interest tax treatment, i.e.,

muni's and Treasuries, must still pay capital gains taxes.

Cost. These are the fees and expenses you pay to own a mutual fund or asset. Invest low cost. In a world where investment returns are limited, investment costs of any kind reduce your returns. We recommend you invest in no-load mutual funds to reduce costs.

Manager Style Drift. This is a check on the management style. Make sure the managers investment style remains constant. Investment fund managers have no authority to change the asset class. If you purchase a small cap fund, the manager should purchase small cap shares. The fund's prospectus should clearly define the market, size company, and portfolio style tilt.

Potential Cap Gains Exposure. This is an estimate of the percent of a funds asset's that represent capital gains. If this is high, the probability is high that these may come to the investor as capital gains.

Stock dividends. Stock dividends are dividends received from a company from the ownership of the company shares. Stock dividends are of two types, qualified or ordinary/not qualified. A qualified dividend is a dividend paid by a U.S. corporation where the investor held the stock for more than 60 days during the 121-day period that begins 60 days before the ex-dividend date (see Teaching Tool 32). An ordinary dividend is a dividend that is not qualified, i.e., you have not held the stock for a long enough time period to get the Federal preferential tax rate.

Tax Cost Ratio. This is the percent of nominal Fund return attributable to taxes, assuming the fund is taxed at the highest rate. If a fund had an 8.0% return, and the tax cost ratio was 2.0%, the fund took home $(1 + \text{return}) * (1 - \text{tax cost ratio}) - 1$ or $(1.08 * .98) - 1$ or 6.00%.

Tax Efficiency. Invest in taxable funds with an eye to obtaining high returns while keeping taxes low. Taxes reduce the amount of money you can use for your personal and family goals. Watch the historical impact of taxes, for it will likely continue. Remember it is not what you earn, but what you keep after taxes that makes you wealthy.

Tax-adjusted Return. This is your return after taxes

Taxes on mutual funds. Mutual funds are pass through vehicles, which means that taxes are not paid at the Fund level but are passed through to the individual shareholders who must pay the taxes. Mutual fund taxes are mainly capital gains, stock dividends and interest/coupon payments. They are handled the exact same way as the taxes for stocks and bonds discussed earlier.

Tracking Error. This is the return on the fund less the return on the benchmark. This tracking error should be small versus your benchmark. Tracking error is the historical difference between the return of a fund (i.e. a mutual fund) and its specific market/sector benchmark or index. The smaller the tracking error, the better the performance of the Index fund relative to the benchmark. However, you won't complain if the tracking error is positive (i.e., your fund had higher returns than the index or benchmark).

Turnover. This is the amount of the portfolio that is bought and sold during a specific period. Keep turnover low, as turnover is a proxy for fund expenses and taxes. The costs associated with turnover are hard to quantify and may not be disclosed in the prospectus. These costs include commissions, bid-ask spreads, and market impact.

Un-invested Cash. This is the amount of cash in the portfolio. High cash levels in the portfolio are drags on performance so keep un-invested cash low.

Review Questions

1. What advice does L. Tom Perry give in regard to building an emergency fund and retirement savings?
2. What four principles of successful investing would you break by investing in

- individual stocks before completing the other steps outlined in the previous chapters?
3. What are six good sources of information for researching individual stocks?
 4. In regard to mutual funds, what is turnover? Why is turnover an important consideration when buying a mutual fund?
 5. What is an index fund? What is the goal of any given index fund?

Case Studies

Case Study 1

Data

You already have your emergency fund but are concerned that you have only \$50 per month to invest. You would like to find an index fund that follows the large-cap stocks, and your chosen benchmark is the S&P 500 Index. You have determined your criteria as large-cap stocks, index funds that have a minimum purchase of \$50, an asset size greater than \$750 million, and a lack of sales charges (i.e., a no-load fund), with fees and expenses less than .10% that a retail investor can invest in.

Application

Using either Morningstar at your local library or Morningstar on the Internet, determine how many funds meet these criteria. Which fund(s) would you choose?

Case Study 1 Answers

Go to the library edition of Morningstar, and go to the screeners (see [Using Morningstar to Select Funds](#) (LT07)). Set up the problem with the following criteria:

- Fund Category = U.S. Equity; your category is Large Blend
- Special Fund Types and Index Funds = Yes
- Minimum Purchase and \leq \$50
- Fund Size (Total Assets) and Value \geq \$750
- Fees and Expenses and No-Load Fund = Yes
- Fees and Expenses and Expense Ratio \leq .10
- Minimum Purchase, Institutional Investor = No

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

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

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

Please note that after doing the analysis in Morningstar, you need to call each fund family to make sure the information is correct. Toll-free numbers are available under the Purchase Info tab.

Case Study 2

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

DWS S&P 500 Index A SXPAX | ★★★★★

Quote Chart Fund Analysis Performance Rating & Risk Management Stewardship Portfolio

Minimum Investments SXPAX		Contact Information SXPAX	
	USD	Telephone	800-728-3337
Initial	1,000	Website	dws.com
Additional	50		
Initial IRA	500		
Additional IRA	50		
Initial AIP	500		
Additional AIP	50		

Review Other Classes SXPAX

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

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

Case Study #2 Answers

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

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

Case Study 3

Given the Morningstar report for VFINX (see Table 9 below), highlight the areas where you find the critical information below (with the colors listed):

1. Diversification (orange)
2. Costs and Fees (orange)
3. Taxes (light green)
4. Turnover (red)

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- 5. Un-invested cash (blue)
- 6. Style and style drift (green)
- 7. Tracking error and performance (blue)

Vanguard 500 Index Investor

Investment Style: Large Blend

Assets: \$254.765 mil

Yield: 1.8%

NAV: 25.0

12-Month Return: 15.0%

3-Year Return: 44.8%

5-Year Return: 100.0%

10-Year Return: 188.4%

20-Year Return: 206.5%

30-Year Return: 248.8%

40-Year Return: 289.2%

50-Year Return: 329.6%

60-Year Return: 369.9%

70-Year Return: 410.2%

80-Year Return: 450.5%

90-Year Return: 490.8%

100-Year Return: 531.1%

110-Year Return: 571.4%

120-Year Return: 611.7%

130-Year Return: 652.0%

140-Year Return: 692.3%

150-Year Return: 732.6%

160-Year Return: 772.9%

170-Year Return: 813.2%

180-Year Return: 853.5%

190-Year Return: 893.8%

200-Year Return: 934.1%

210-Year Return: 974.4%

220-Year Return: 1014.7%

230-Year Return: 1055.0%

240-Year Return: 1095.3%

250-Year Return: 1135.6%

260-Year Return: 1175.9%

270-Year Return: 1216.2%

280-Year Return: 1256.5%

290-Year Return: 1296.8%

300-Year Return: 1337.1%

310-Year Return: 1377.4%

320-Year Return: 1417.7%

330-Year Return: 1458.0%

340-Year Return: 1498.3%

350-Year Return: 1538.6%

360-Year Return: 1578.9%

370-Year Return: 1619.2%

380-Year Return: 1659.5%

390-Year Return: 1699.8%

400-Year Return: 1740.1%

410-Year Return: 1780.4%

420-Year Return: 1820.7%

430-Year Return: 1861.0%

440-Year Return: 1901.3%

450-Year Return: 1941.6%

460-Year Return: 1981.9%

470-Year Return: 2022.2%

480-Year Return: 2062.5%

490-Year Return: 2102.8%

500-Year Return: 2143.1%

510-Year Return: 2183.4%

520-Year Return: 2223.7%

530-Year Return: 2264.0%

540-Year Return: 2304.3%

550-Year Return: 2344.6%

560-Year Return: 2384.9%

570-Year Return: 2425.2%

580-Year Return: 2465.5%

590-Year Return: 2505.8%

600-Year Return: 2546.1%

610-Year Return: 2586.4%

620-Year Return: 2626.7%

630-Year Return: 2667.0%

640-Year Return: 2707.3%

650-Year Return: 2747.6%

660-Year Return: 2787.9%

670-Year Return: 2828.2%

680-Year Return: 2868.5%

690-Year Return: 2908.8%

700-Year Return: 2949.1%

710-Year Return: 2989.4%

720-Year Return: 3029.7%

730-Year Return: 3070.0%

740-Year Return: 3110.3%

750-Year Return: 3150.6%

760-Year Return: 3190.9%

770-Year Return: 3231.2%

780-Year Return: 3271.5%

790-Year Return: 3311.8%

800-Year Return: 3352.1%

810-Year Return: 3392.4%

820-Year Return: 3432.7%

830-Year Return: 3473.0%

840-Year Return: 3513.3%

850-Year Return: 3553.6%

860-Year Return: 3593.9%

870-Year Return: 3634.2%

880-Year Return: 3674.5%

890-Year Return: 3714.8%

900-Year Return: 3755.1%

910-Year Return: 3795.4%

920-Year Return: 3835.7%

930-Year Return: 3876.0%

940-Year Return: 3916.3%

950-Year Return: 3956.6%

960-Year Return: 3996.9%

970-Year Return: 4037.2%

980-Year Return: 4077.5%

990-Year Return: 4117.8%

1000-Year Return: 4158.1%

Vanguard 500 Index Investor

Investment Style: Large Blend

Assets: \$254.765 mil

Yield: 1.8%

NAV: 25.0

12-Month Return: 15.0%

3-Year Return: 44.8%

5-Year Return: 100.0%

10-Year Return: 188.4%

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560-Year Return: 2384.9%

570-Year Return: 2425.2%

580-Year Return: 2465.5%

590-Year Return: 2505.8%

600-Year Return: 2546.1%

610-Year Return: 2586.4%

620-Year Return: 2626.7%

630-Year Return: 2667.0%

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700-Year Return: 2949.1%

710-Year Return: 2989.4%

720-Year Return: 3029.7%

730-Year Return: 3070.0%

740-Year Return: 3110.3%

750-Year Return: 3150.6%

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810-Year Return: 3392.4%

820-Year Return: 3432.7%

830-Year Return: 3473.0%

840-Year Return: 3513.3%

850-Year Return: 3553.6%

860-Year Return: 3593.9%

870-Year Return: 3634.2%

880-Year Return: 3674.5%

890-Year Return: 3714.8%

900-Year Return: 3755.1%

910-Year Return: 3795.4%

920-Year Return: 3835.7%

930-Year Return: 3876.0%

940-Year Return: 3916.3%

950-Year Return: 3956.6%

960-Year Return: 3996.9%

970-Year Return: 4037.2%

980-Year Return: 4077.5%

990-Year Return: 4117.8%

1000-Year Return: 4158.1%

- 1 "Becoming Self-Reliant," *Ensign*, Nov. 1991, 64.
- 2 [http://library.morningstar.com/Education/MLE_Glossary T Z.html#TrailingReturnCategory](http://library.morningstar.com/Education/MLE_Glossary_T_Z.html#TrailingReturnCategory)
- 3 "Indexing Lets You Say Those Magic Words," *CNN Money*, Aug. 29, 2001.
- 4 *Letter to Berkshire Hathaway Shareholders*.
- 5 "Warren Buffet: Top 3 Investment mistakes to Avoid," *USA Today*, October 26, 2013.

