Investments:
Fundamental Theory & Practice

C. Michael Smith
Roanoke College

About this Edition:

Summary of the Smith Differentiators:

- **Affordable:** *Digital Options start at* **$39.95**
- **A True "Introductory" Text**
- **Practical**
- **Concise**
- **Self-Explanatory**

Textbook Media Press
The Quality Instructors Expect
At Prices Students Can Afford
Replacing Oligarch Textbooks Since 2004

More on The Smith Differentiators:

Affordable: *Digital Options start at* $39.95

Print + Digital Bundles start at **$49.95**

It is ironic that most "investments" textbooks are such terrible investments themselves. This textbook provides an inexpensive alternative to the traditional textbooks, many of which are five times the expense. It's an unfortunate truth that a growing number of college students simply can't afford the high prices of the traditional textbooks and more and more cash-strapped students are choosing to do without a textbook at all. The low cost of this text means that every student can afford to have this important learning resource.

A True "Introductory" Text

In addition to being overpriced, many traditional investments textbooks contain hundreds of pages of materials that are not meant to be explored in an "introductory" undergraduate investments course. In fact, many textbooks utilized in introductory undergraduate courses are the same texts used in higher-level undergraduate and graduate courses. This textbook provides readers with the true fundamentals of investing. Advanced investing topics are left for more advanced courses.

Practical

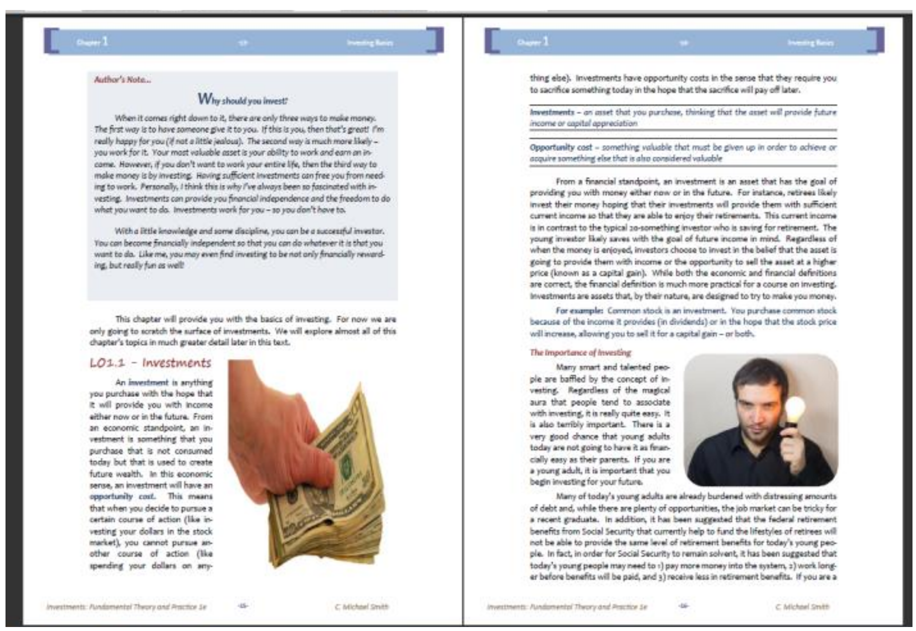
This textbook is not only "about" investments, it is also on "how" to invest. It is the primary goal of this text that readers will be able to directly apply the theories and concepts they learn to their own investing practice.

Concise

Why use two pages of description when a two-sentence example makes for a stronger understanding of a concept? The fact that this textbook is only for introductory courses means that important points can be clear without exploring the minutia that advanced-level courses would require.

Self-Explanatory

Readers can use this textbook as a self-contained resource to teach themselves the fundamentals of investments. Students without the assistance of a professor or class can use this text to learn how to invest. Easy-to-understand language accompanies logical step-by-step instruction for each and every topic covered in this text. The reader's knowledge can then be tested using the pedagogical aides that accompany each chapter.



Chapter 1 Investing Basics

Author's Note...

Why should you invest?

When it comes right down to it, there are only three ways to make money. The first way is to have someone give it to you. If this is you, then that's great! I'm really happy for you (if not a little jealous). The second way is much more likely – you work for it. Your most valuable asset is your ability to work and earn an income. However, if you don't want to work your entire life, then the third way to make money is by investing. Having sufficient investments can free you from needing to work. Personally, I think this is why I've always been so fascinated with investing. Investments can provide you financial independence and the freedom to do what you want to do. Investments work for you – so you don't have to.

With a little knowledge and some discipline, you can be a successful investor. You can become financially independent so that you can do whatever it is that you want to do. Like me, you may even find investing to be not only financially rewarding, but really fun as well!

This chapter will provide you with the basics of investing. For now we are only going to scratch the surface of investments. We will explore almost all of this chapter's topics in much greater detail later in this text.

LO1.1 – Investments

An **investment** is anything you purchase with the hope that it will provide you with income either now or in the future. From an economic standpoint, an investment is something that you purchase that is not consumed today but that is used to create future wealth. In this economic sense, an investment will have an **opportunity cost**. This means that when you decide to pursue a certain course of action (like investing your dollars in the stock market), you cannot pursue another course of action (like spending your dollars on any-

Investments: Fundamental Theory and Practice 1e C. Michael Smith

Chapter 1 Investing Basics

thing else). Investments have opportunity costs in the sense that they require you to sacrifice something today in the hope that the sacrifice will pay off later.

Investments – *an asset that you purchase, thinking that the asset will provide future income or capital appreciation*

Opportunity cost – *something valuable that must be given up in order to achieve or acquire something else that is also considered valuable*

From a financial standpoint, an investment is an asset that has the goal of providing you with money either now or in the future. For instance, retirees likely invest their money hoping that their investments will provide them with sufficient current income so that they are able to enjoy their retirements. This current income is in contrast to the typical 20-something investor who is saving for retirement. The young investor likely saves with the goal of future income in mind. Regardless of when the money is enjoyed, investors choose to invest in the belief that the asset is going to provide them with income or the opportunity to sell the asset at a higher price (known as a capital gain). While both the economic and financial definitions are correct, the financial definition is much more practical for a course on investing. Investments are assets that, by their nature, are designed to try to make you money.

For example: Common stock is an investment. You purchase common stock because of the income it provides (in dividends) or in the hope that the stock price will increase, allowing you to sell it for a capital gain – or both.

The Importance of Investing

Many smart and talented people are baffled by the concept of investing. Regardless of the magical aura that people tend to associate with investing, it is really quite easy. It is also terribly important. There is a very good chance that young adults today are not going to have it as financially easy as their parents. If you are a young adult, it is important that you begin investing for your future.

Many of today's young adults are already burdened with distressing amounts of debt and, while there are plenty of opportunities, the job market can be tricky for a recent graduate. In addition, it has been suggested that the federal retirement benefits from Social Security that currently help to fund the lifestyles of retirees will not be able to provide the same level of retirement benefits for today's young people. In fact, in order for Social Security to remain solvent, it has been suggested that today's young people may need to 1) pay more money into the system, 2) work longer before benefits will be paid, and 3) receive less in retirement benefits. If you are a

Investments: Fundamental Theory and Practice 1e C. Michael Smith

Smith: *Investments: Fundamental Theory and Practice 1e*
Table of Contents (Brief)

About the Author

Michael Smith, Ph.D., is Assistant Professor at Roanoke College, teaching courses in Personal Finance, Investments, Communication in Leadership, Organizational Behavior & Management, and Strategic Management. Mr. Smith is currently a Certified Financial Planner and a Chartered Financial Consultant. But his greatest interest is teaching investments to undergrads. He regularly oversees a group of students who manage an investment portfolio using a portion of Roanoke College's endowment.

Abstract

This introductory-level investments text offers students an easy-to-read primer on the topic of investing. This textbook will teach students the basic concepts and theories of investments. For instance, students are taught about popular investments like stocks, bonds, mutual funds, exchange-traded funds, and derivatives. Students will also learn the theories behind investing so that they can make the decision for themselves as to whether or not they desire to passively or actively manage their investment portfolios. However, perhaps the most important feature of this text is that it provides students with the knowledge and confidence they need to actually begin an investment regimen of their own. Students not only learn "about" investments, they learn "how" to invest.

While many investments textbooks contain advanced-level (graduate) information in addition to introductory investments, this textbook focuses on the true fundamentals of investing. This textbook is ideal for a semester-long study of investments!

Smith: *Investments: Fundamental Theory and Practice 1e*

About Textbook Media:

I've never heard of Textbook Media...who are you guys?

We're a Midwest–based publisher who's been in business since 2004. The publishers who founded the business have been in college publishing since 1980 and have published textbooks for Irwin, McGraw Hill, Houghton Mifflin and Cengage. Our Textbook Media titles are in use in over 300 colleges (2 and 4 YR) and universities. Our publishing focus is on the Business curriculum, with books and software in Accounting, Finance, Economics and Marketing. Our Textbook Media model has fulfilled textbooks to over 1 million students since our inception.

About the Textbook Media Model:

All students will have access to an online version which provides them with powerful digital tools including search, notes, highlights and chat. Students can quickly locate key terms, and move quickly and easily within and between chapters, or navigate to related web sites. The online version is also available bundled with PDF chapters, or with print options (loose-leaf and paperback). Students from all backgrounds will find the prices of all textbook options refreshingly affordable, with prices starting at $29.95.

Do I have to do anything differently to assign your textbook?

Yes. One thing. Direct students to our URL (preferably in your syllabus, and we'll supply you with suggested copy). We'll take it from there. Actually, the web site takes it from there: over 98% of students order without needing customer service. Those that do need help get it within 24 hours, and most of those inquiries are about corrections they want to make to their order. BTW, we deliver the paperbacks via Fed-Ex, so student orders are easily tracked. And we will work with bookstores if need be. Regarding the online book: it works on laptops and almost all mobile devises. And the online book experience is supported by our customer service staff. Pretty straightforward and easy for all concerned.

To Request a Paperback or eBook Review Copy

info@textbookmedia.com

For More Info on Textbook Media

www.textbookmediapress.com

Sample Chapter Follows

Preface

Abstract

This introductory-level investments text offers students an easy-to-read primer on the topic of investing. This textbook will teach students the basic concepts and theories of investments. For instance, students are taught about popular investments like stocks, bonds, mutual funds, exchange-traded funds, and derivatives. Students will also learn the theories behind investing so that they can make the decision for themselves as to whether or not they desire to passively or actively manage their investment portfolios. However, perhaps the most important feature of this text is that it provides students with the knowledge and confidence they need to actually begin an investment regimen of their own. Students not only learn "about" investments, they learn "how" to invest.

While many investments textbooks contain advanced-level (graduate) information in addition to introductory investments, this textbook focuses on the true fundamentals of investing. This textbook is ideal for a semester-long study of investments!

Differentiators

This textbook is a practical introduction to investments for students with or without a finance background. This text was developed on the belief that the (currently available) mainstream texts are too expensive, conceptual, and advanced for a student's first exposure to investing.

The primary differentiating factors of this text can be summed up in five points. This textbook is:

1. **Affordable** – It is ironic that most "investments" textbooks are such terrible "investments" themselves. This textbook provides an inexpensive alternative to the traditional textbooks, many of which are five times the expense. It's an unfortunate truth that a growing number of college students simply can't afford the high prices of the traditional textbooks and more and more cash-strapped students are choosing to do without a textbook at all. The low cost of this text means that every student can afford to have this important learning resource.

2. **A true "introductory" text** - In addition to being overpriced, many traditional investments textbooks contain hundreds of pages of materials that are not meant to be explored in an "introductory" undergraduate investments course. In fact, many textbooks utilized in introductory undergraduate courses are the same texts used in higher-level undergraduate and graduate courses. This textbook provides readers with the true fundamentals of investing. Advanced investing topics are left for more advanced courses.

3. **Practical** –This textbook is not only "about" investments, it is also on "how" to invest. It is the primary goal of this text that readers will be able to directly apply the theories and concepts they learn to their own investing practice.

4. **Concise** – Why use two pages of description when a two-sentence example makes for a stronger understanding of a concept? The fact that this textbook is only for introductory courses means that important points can be clear without exploring the minutia that advanced-level courses would require.

5. **Self-explanatory** – Readers can use this textbook as a self-contained resource to teach themselves the fundamentals of investments. Students without the assistance of a professor or class can use this text to learn how to invest. Easy-to-understand language accompanies logical step-by-step instruction for each and every topic covered in this text. The reader's knowledge can then be tested using the pedagogical aides that accompany each chapter.

Pedagogy

Beyond the text of this work, several other elements will add to student learning opportunities.

- ***Learning objectives.*** Each chapter has concise and specific learning objectives stated at the chapter's introduction. The goal of each chapter's reading is that readers are able to understand and apply the learning objectives by the time they finish the chapter. Each learning objective provides educators and students with additional insight into the chapter material and follows a logical (and frequently nested) design that takes readers on a step-by-step process to mastering the material.

- ***Examples.*** This text provides numerous examples of concepts and theories. While writing about a topic provides students with an idea of the concept, providing a specific example does more to aid a student's understanding than page upon page of concept descriptions. In fact, in this text, specific examples typically make up approximately one-fourth to one-third of each chapter's length. In addition, this text frequently uses actual securities in examples in an effort to make the topic relevant for students.

- ***Tables and figures.*** Whenever possible, tables and figures are used to summarize information and to aid visual learners in conceptually visualizing the material. Tables and figures are all labeled by chapter and number. For example, Table 2.3 is the third table in the second chapter.

- ***Definitions.*** This text highlights key words and provides definitions in a special text box (located near the word usage in the text). Key words and definitions are also included in a glossary. In addition, key words are listed at the end of each chapter and labeled by the learning objective of the chapter in which they are found.

- ***Insights.*** A special font is utilized to highlight "author insights." Throughout the text, the author has added special thoughts, ideas, relationships, and metaphors as additional insights to the reader. These insights may not be testable material, but they are designed to attract and maintain the reader's interest in the topic. Each chapter starts with an insight that introduces the chapter, typically with an unconventional, yet applicable, story or example.

- ***Chapter summaries.*** Each chapter concludes with a bulleted summary of the material covered in the chapter. These summaries provide a quick reference and resource for readers as they study the text.

- ***Practice questions/problems.*** Each chapter ends with true-false and fill-in-the-blank questions regarding chapter topics (with answers provided). In addition, more quantitative chapters have additional practice problems that ask students to apply the mathematical equations outlined in the chapter. This textbook asks only questions that can be answered from the chapter reading. However, to help motivate students to think beyond the text, a special line of questioning called "In your own words" encourages students to think outside the chapter. But no answers/solutions are provided for these questions since the "right" response should be in the words of the student.

- ***Closer looks.*** This post-chapter "extra" details (in much greater specificity) some aspect of the chapter. The intention of the Closer look is to provide additional details that might be helpful and interesting to student learners, but may not be required learning for an introductory investments course. Most chapters contain a "Closer look" at some aspect of investing.

About the Author

C. Michael Smith is a Lecturer in the Business Administration Department at Roanoke College where he has also served as the school's Director of the Student-Managed Fund. In this role, he regularly teaches classes on investing including a special topics course that prepares students to take the Series 7 General Securities Exam. His educational background includes a B.B.A. from Roanoke College as well as an MBA and Ph.D. from Virginia Tech, in which his dissertation topic was on the information-seeking efforts of investors.

Dr. Smith began his investments career in 1999 as an advisor before moving into investment analysis and plan design. Dr. Smith would eventually create his own registered investment advisory (RIA) in which he was the President and Principal Advisor. During this time, he obtained the Series 7, 66, and 24 licenses, as well as the Chartered Financial Consultant (ChFC®) and Certified Financial Planner (CFP®) certifications.

Since returning to academia, Dr. Smith has written numerous finance-related articles for Virginia Cooperative Extension. In addition, he has published and presented several articles on investing, including a paper on the benefits of practical learning activities in college investments courses. Most recently, Dr. Smith published a book for young adults on how to achieve financial success through investing.

Table of Contents

Investments: Fundamental Theory & Practice 1e

BRIEF CONTENTS

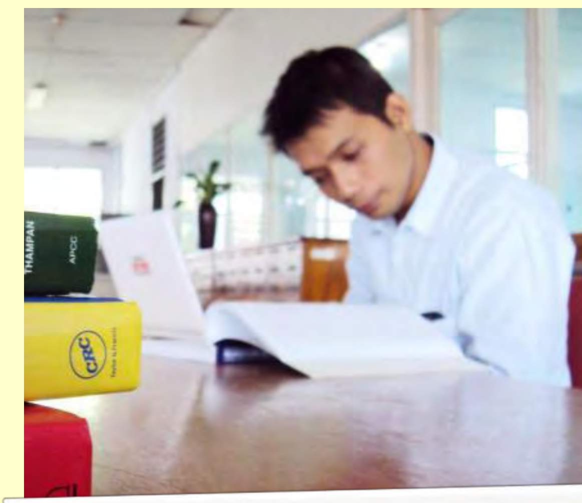
DETAILED CONTENTS & CHAPTER SUMMARIES

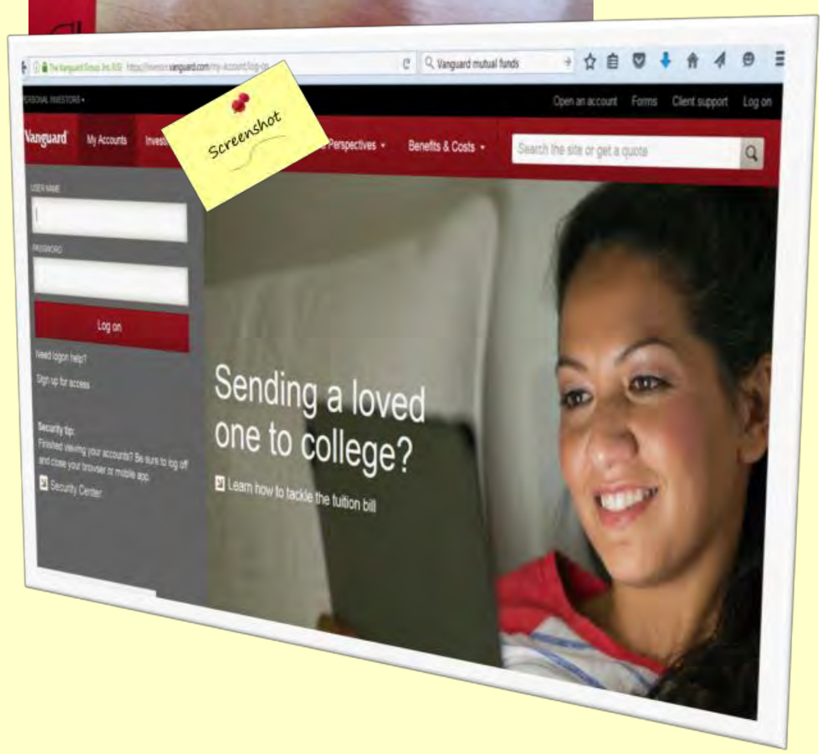
Chapter 6

MUTUAL FUNDS

After reading this chapter, you will be able to:

- Understand the features, advantages, and disadvantages of mutual funds (LO6.1)
- Identify the fee structures of mutual funds and recognize the impact that fees have on performance (LO6.2)
- Appreciate the impact that a mutual fund's classification has on its diversification potential (LO6.3)
- Compare and distinguish mutual funds with exchange-traded funds and hedge funds (LO6.4)





Author's Note...

What is a mutual fund?

A mutual fund is a pool of money, collected from many thousands of investors, which is given to an experienced manager to invest in the market. By pooling investors' money, mutual funds help individual investors create wonderfully diversified portfolios of investments with relatively small amounts of individual savings.

As has been stated, diversification is just about the only concept in investments that everyone agrees is a good thing. Therefore, mutual funds are fantastic! Except when they are not...

As a teacher of Investments, my students often ask for advice on their own personal investing. While everyone's situation is different, almost without exception, I suggest mutual funds as a core investment holding. For investors with limited resources, mutual funds and exchange-traded funds provide the most efficient way to participate in the investment markets. As you read this chapter, I hope it becomes clear why I have the belief that almost all young people should get started in investing using mutual funds (or exchange-traded funds). In fact, you can be an extremely successful investor throughout your investing life, using nothing but mutual and/or exchange-traded funds.

However, I don't believe that one mutual fund is just as good as another. Depending on the specific needs of the investor, some funds may be much better choices than others. In addition, some funds are just managed more efficiently than others. Said another way, some funds are simply too expensive and take too much of your investment dollar for their own profit.

Effective mutual fund management isn't always easy to discern, but it is possible if you know what to look for. Therefore, in this chapter (in addition to understanding why mutual funds are fantastic investments), I also hope you understand why some mutual funds don't deserve your investment dollars while others might.

LO6.1 – What is a Mutual Fund?

A **mutual fund** is an investment vehicle that is a pool of funds, collected from many different individual investors, managed by an investment manager who invests the funds into individual securities.

Author's Note: *Visualize, for a moment, the money you have in your pocket right now. Is it enough to buy even one share of your favorite company's stock? In my personal case, this is a definite "no" as I only have a few dollars on me right now.*

However, now imagine that everyone in the country takes their pocket change and sends it to an investment manager. Our pocket change now becomes a fund of millions (if not billions) of dollars. Further imagine that the investment manager takes

all of our money and invests it in the Wilshire 5,000 Total Stock Market Index. It is no problem for the investment manager to purchase shares of all 5,000 stocks with our millions of dollars. Further, the pocket change that you and I personally contributed to the fund is now fractionally invested in 5,000 different stocks!

Finally, visualize that the investment manager keeps a record of how much money our personal pocket change is making (or losing) in the market – and sends us regular updates on our personal investment performance. He also stands ready to buy us out of our investment at any time.

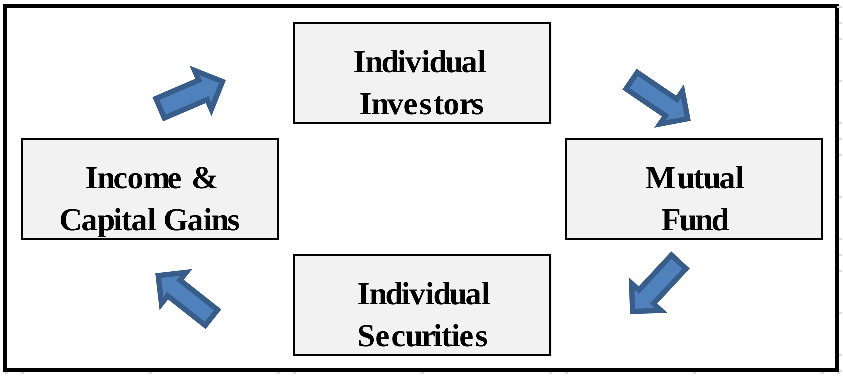
This is basically how a mutual fund works.

The dollars invested in a mutual fund are managed by an investment manager who invests the fund's capital into stocks, bonds, real estate, money markets, and the like for the benefit of the fund's investors. Whether an investor contributes $1,000 or $1,000,000 to the fund, each shareholder participates proportionally in the gains and losses of the overall fund performance. Any income earned from the investment performance of the fund can either be reinvested into the fund or paid out to the investor. The manager also keeps track of the investment performance for the investor and, in most cases, stands ready to redeem any investor's shares if and when the investor wants to sell their investment in the fund for a capital gain or loss.

With only a small amount of capital, a mutual fund investor can invest in hundreds or even thousands of stocks, bonds, real estate investment trusts, commodities, etc. In addition, many mutual funds have professional money managers who strategically select specific investments for the fund's assets. This means that investors with little time, knowledge, or commitment to investing can still try to beat the market by outsourcing that job to a mutual fund manager. Why spend countless hours poring over *The Wall Street Journal* or watching CNBC? Pay someone else to do that for you!

Author's Note: *Many "sophisticated" investors think of mutual funds as strictly investments for "the little guy" because they provide the means for the "unsophisticated" investor to invest like a professional. In a sense, this is like a mathematician refusing to buy a calculator because it makes math too easy.*

Figure 6.1 – Money Flow in Mutual Fund Investing



The Mutual Fund Prospectus

All regulated mutual funds must provide potential investors with a ***prospectus*** prior to the sale of the fund. The prospectus is a legally binding written contract that details the investment objectives, strategies and risks of the particular mutual fund. In some cases, the prospectus may be for a group of similar funds in the same fund family; however, in most cases, the prospectus describes one fund only. It is intended to be written in everyday language that can be easily understood by the novice investor and contains information on the fund's underlying investments, its past performance, its fees and expenses, the tenure and experience of the fund's managers, and the financial information of the fund itself.

Author's Note: *You may notice that before you buy a mutual fund, you must check off a box that states that you have read and understand the prospectus. While checking off the box is required for the mutual fund company, it's also a really good idea to read your prospectus before making a purchase! Reading the prospectus can really aid you in making an informed investment decision.*

Mutual fund *– an investment vehicle that invests its shareholder's pooled money in a portfolio of securities*

Prospectus *– formal legal document that provides details about an investment being offered*

Mutual Fund History and Popularity

While some historians speculate that the mutual fund has been around in some way or another since the late 1700s, the true origin of the mutual fund is a mystery. However, the first "modern" mutual fund was created in 1924 by Massachusetts Investors Trust, which was later reorganized as Massachusetts Financial Services (MFS) and is still in existence today. By 1940, there were less than 70 mutual funds in existence, and that number grew to only 564 by 1980. However, the popularity of mutual funds has grown substantially over the past 25 years as today there are well over 10,000 mutual funds available (and this number continues to grow). In

1980, only five million households owned mutual funds, but today almost half of the households in the United States (sixty million) own them.

Author's Note: *There are roughly twice as many mutual funds as there are individual stocks!*

Mutual fund popularity began to soar in the 1980s and 1990s for several reasons. One reason was that during this time many employers began to restructure their retirement plans. The traditional pension plan (in which employers save regularly for the retirement benefits of their employees) was becoming too expensive for firms to maintain. Because of the expense, most firms switched from a defined benefit "pension" plan to a defined contribution plan, like a 401(k). These 401(k), 403(b) and 457 plans almost all utilize mutual funds for their investment options. Since many employees participate in their company's defined contribution retirement plans, they automatically own mutual funds.

Another reason for the growth in popularity of mutual funds is the fact that they, themselves, are consumer products – and consumer products are marketed. The marketing of mutual funds (or any other product) increases the public's demand for them. As more and more consumers are exposed to the concept of mutual funds, more consumers demand them.

Author's Note: *Think about it – does Starbucks (for example) try to get you to buy Starbucks stock (SBUX)? No… They market to you for the sole purpose of getting you to buy more of their coffee and other products. On the other hand, have you ever seen a commercial for a mutual fund company like Franklin Templeton or Fidelity? What are they trying to get you to buy? You guessed it – their mutual funds! A successfully marketed product will successfully influence consumers to buy it!*

Mutual Fund Organization

A mutual fund company is simply a corporation. Like any corporation, the mutual fund company is owned by its shareholders. Just as you are part owner of IBM if you invest in IBM stock, you are part owner of Fidelity if you purchase a Fidelity mutual fund. As an owner, you get to participate in the profits earned from the fund's underlying securities (which is how you make money in a mutual fund) and make some corporate level decisions (like elect members of the board of directors).

Most mutual fund companies have their own "family" of funds. For instance, Vanguard has over one hundred different funds available for investors with different goals and risk tolerances, but each individual fund is classified under the Vanguard family of funds. Similarly, Fidelity, T. Rowe Price, BlackRock, American Century, Allianz, and numerous other fund families all provide their own list of specific mutual fund options. If you invest in any one of these funds, then you are a shareholder in in the fund family's corporation.

Table 6.1 – Sample of Popular Mutual Fund Families

1	AIG SunAmerica	21	LeggMason
2	AllianceBernstein	22	Lord Abbett
3	American Century	23	Mainstay Funds
4	American Funds	24	MFS Investment Mgmt
5	BlackRock	25	Northern Trust
6	BNY Mellon/Dreyfus	26	Nuveen Fund Adv
7	Calvert Funds	27	Oppenheimer
8	Charles Schwab	28	PIMCO/Allianze
9	Columbia Mgmt	29	Pioneer Inv Mgmt
10	Eaton Vance	30	PNC Funds
11	Federated Investors	31	Principal Mgmt
12	Fidelity	32	Prudential
13	Franklin Templeton	33	Putnam
14	GE Asset Mgmt	34	SEI Group
15	Goldman Sachs	35	State Farm
16	Hartford	36	T. Rowe Price
17	Invesco	37	UBS Global Asset Mgmt
18	Ivy Investment Mgmt	38	USAA Investment
19	John Hancock	39	Vanguard Group
20	JP Morgan	40	Wells Fargo

However, unlike the typical corporation, mutual funds do not pay their own taxes. Assuming the mutual fund meets the definition of a "regulated" firm (meaning it complies with certain rules imposed on investment companies by the federal government), it is able to pass through all of its tax liabilities onto the investor. These tax liabilities are sometimes confusing to mutual fund owners who don't recognize that they have any income or capital gains. Regardless, if the mutual fund (itself) sells any of its assets for a gain, then it incurs capital gains, and rather than paying the tax itself, it passes that burden onto the investor.

How are Mutual Funds Sold?

Like individual stocks and bonds, you can purchase mutual funds yourself (generally online) or through an investment broker or financial advisor. In addition, like individual stocks and bonds, purchasing funds yourself is typically much less expensive than using a broker. When buying funds online, you typically have two options – buying directly from the mutual fund family itself, or from a "financial supermarket."

In most cases, you can buy mutual funds from a specific fund family directly from the fund's website. Buying directly from the mutual fund family can save you money because most of the time, the fund companies do not charge you a commission on their own products.

***For example*:** If you desire to only buy mutual funds from the Royce family of funds (assume you want to buy both the Royce 100 and the Royce Low-Priced Stock fund), you can create an account with http://www.roycefunds.com and purchase these funds directly from Royce with no commission or transaction fee.

However, if you desire to buy stocks, bonds, or mutual funds from other fund families, having set up an account directly with one mutual fund family may not provide you the option to do so. They are generally limited to the products of the mutual fund family only. Therefore, another option to buy mutual funds online is through a financial supermarket like Charles Schwab, T.D. Ameritrade, or Scottrade. These brokerage accounts will generally offer you the ability to hold many different mutual funds from many different fund families all in the same account. However, in some cases, the expenses may be somewhat higher than buying them directly from the mutual fund family. Typically, the financial supermarkets will provide investors with **No Transaction Fee (or NTF)** funds and ***Transaction Fee (or TF)*** funds. Therefore, if a particular fund family is attractive to you, then you may want to research different brokers to see if they offer the funds from that family as NTF funds. While they are more than happy to sell TF funds, you will pay the broker's transaction fee (which can vary substantially from broker to broker).

Author's Note: *As a combination between the financial supermarket and a single mutual fund family, some investment companies (like Vanguard and Fidelity) allow you to register and set up your own brokerage account. This option may be good for investors who primarily like the funds of the particular fund family, but want to have the option to invest in other stocks, bonds, and mutual funds.*

If making mutual fund selection decisions isn't for you, then you can always hire an advisor or broker to obtain the mutual funds for you. In addition to helping you with individual stocks and bonds, personal financial advisors stand ready to recommend and sell mutual funds to their clients. A good advisor will provide unbiased mutual fund investment advice based on your return preferences and risk tolerance, as well as help you create a successfully diversified mutual fund portfolio. They will also keep you updated on your progress and help you deal with changes as needed. But they will need to be paid for this help, and buying funds from a broker will incur higher costs than buying them on your own (see the section on mutual fund expenses in LO6.2).

Author's Note: *When buying mutual funds directly from an advisor or broker from a large investment company (like Merrill Lynch, Wells Fargo, AXA, or Ameriprise), you may find that the advisor has a preference for the funds of his/her firm. There are* *several reasons for this preference. First, the broker is liable to be compensated more for selling the funds of his/her investment company over other fund families. In addition, the broker is likely just more familiar with the funds of his/her firm over others. It would be impossible for a broker to be versed in every mutual fund available since there are literally thousands… and the funds change frequently.*

No transaction fee funds *– mutual funds offered by an investment brokerage without any formed of commission charged*

Transaction fee funds *– mutual funds offered by an investment brokerage for which investors must pay a commission to trade*

Net asset value *– price per share of a mutual fund equal to the fund's assets minus liabilities divided by the number of shares outstanding*

Net Asset Value

Investors who buy and sell mutual funds will execute their trades at the fund's ***net asset value (NAV).*** The fund's NAV is the price per share of the fund and is found by taking the market value of all the securities in the fund's portfolio, subtracting any liabilities (fees, taxes, and losses), and then dividing by the number of shares outstanding.

- **NAV = Fund assets – Fund liabilities / # of shares**

For example: Suppose a particular mutual fund has assets of $55 million, liabilities of $5 million, and there are one million shares outstanding. The fund's NAV would be $50 per share.

In one sense, the fund's NAV is similar to the share price of a stock. It is the price you pay per share. However, the share price of a stock is determined by the market (the buying and selling of investors). The NAV of a mutual fund is determined by a formula that incorporates the market prices of the securities it holds.

A mutual fund's NAV is only updated once per trading day (as of 4 P.M. – the market's close). Therefore, it does no good for mutual fund investors to try to time their purchases of mutual funds throughout the course of a trading day. If you buy a mutual fund at any point during a trading day, your order will be executed as of the market close. If you buy a mutual fund after the market's close, it will be executed as of the market close the next trading day.

For example**:** Assume you desire to invest in a mutual fund that invests in the S&P 500. Suppose that on the day you wish to buy the fund, you notice that at 1 P.M. the S&P 500 has taken a dip – so you log into your brokerage account and buy the fund. Further suppose that after 1 P.M. the S&P 500 recovers and at 4 P.M. closes much higher than its 1 P.M. price. Unfortunately, even though you timed your purchase very well, the mutual fund will be sold to you using the S&P 500 price as of 4 P.M. (not 1 P.M.) to determine the NAV that you pay.

Table 6.2 – Sample of Daily Mutual Fund Price Quotes at *wsj.com*

Family/ Fund	Symbol	NAV	Chg	YTD % return	3-yr % chg
Ivy Funds					
AssetStrA p	WASAX	26.56	0.07	4.2	11.8
AssetStrB t	WASBX	25.35	0.07	3.9	11.0
AssetStrC t	WASCX	25.50	0.06	3.9	11.0
AssetStrE t	IASEX	26.63	0.07	4.1	11.8
AssetStr I r	IVAEX	26.84	0.08	4.1	12.0
AssetStrY p	WASYX	26.61	0.07	4.1	11.8
BalancedA p	IBNAX	25.90	0.04	3.6	14.0
BalancedB	IBNBX	25.67	0.04	3.3	13.1
BalancedC t	IBNCX	25.75	0.04	3.3	13.2
Balanced Y t	IBNYX	25.90	0.04	3.6	14.0
BondA p	IBOAX	10.66	-0.03	1.1	3.2
BondB t	IBOBX	10.66	-0.03	0.7	2.3
BondC t	IBOCX	10.66	-0.03	0.8	2.5

Values obtained from www.wsj.com

Notes to sample data:

Table 6.2 is only a very small sample of the mutual fund quotes available online. This particular sample provides information on three mutual funds from the Ivy Funds family.

- AssetStr is an abbreviation of the Ivy Asset Strategy Fund. There are obviously several share classes for this fund shown. The A, B, C, E, I, and Y following the abbreviated name all indicate a different share class for the same "Asset Strategy" fund. Similarly, there are several different share classes for the Ivy Balanced Fund and the Ivy Bond Fund.
- Column two shows the ticker symbols for each fund.
- Column three shows the NAV as of the latest market close.
- "Chg" is the change in NAV from the previous trading day.
- The final two columns show the percentage return of the funds so far this year (year-to-date) and over the most recent three years.

NAV of Money Market Mutual Funds

A notable exception to the standard NAV rule is for that of money market mutual funds (MMMFs). A money market fund is almost always priced at $1 per share to provide MMMF investors with the feeling of safety and security. Recall that

MMMFs are not FDIC insured, and can lose money, but most MMMF investors treat them as risk free. To aid investors in this self-deception, the NAV of an MMMF is simply set to have the number of shares equal the fund's assets.

Despite the accounting gimmick, money market funds are extremely safe investments for investors wishing to preserve capital. From 1971 until 2008, there were virtually no consumers invested in MMMFs that "broke the buck" or had their share price forced lower than $1 due to market forces. However, in 2008, a money market fund was forced to lower its price to 97 cents per share due to bad debt holdings it had in Lehman Brothers (which had gone bankrupt). This episode almost triggered a "banking run" where MMMF investors rushed to pull money out of their money market mutual funds. However, the U.S. Treasury stepped in and announced a temporary program to guarantee the $1 value of money market fund shares, which curbed the panic sufficiently until after the crisis.

Open-end vs Closed-end Investment Companies

An ***investment company*** is a business that specializes in managing the financial assets of individual investors. While not all investment companies are mutual funds, all mutual funds are investment companies. However, an investment company may be an open-end investment company or a closed-end investment company. The difference between an ***open-end fund*** and a ***closed-end fund*** is the fact that open-end investment companies will sell new mutual fund shares to anyone wishing to buy them and stands ready to buy back shares from any investor wishing to sell. As a mutual fund investor, you do not need to buy and sell open-end investment companies (mutual funds) on an exchange. You simply buy or sell them directly from the open-end investment company. In fact, most investors use the term "mutual fund" to only describe open-end funds.

Author's Note: *In an open-end fund, the shares are always worth the NAV!*

All open-end funds have a ticker symbol that ends in an "X" to help distinguish them from stocks and closed-end funds. For instance, if you look at Table 6.2, you will see that all funds end with the letter "X."

A closed-end investment company, on the other hand, provides a fixed number of shares of a fund that typically doesn't change. In addition, the firm doesn't stand ready to buy back the shares issued like that of an open-end fund. The capital structure is much more similar to that of a stock than a mutual fund, and like a stock, the share value is determined by the trading of the fund in the secondary market (typically on a formal exchange like the NYSE or NASDAQ). The value of a closed-end fund (unlike an open-end fund) changes continually throughout the trading day. While relatively rare, depending on economic factors, it is possible that closed-end fund investors do not receive the NAV.

Author's Note: *When investors talk about a "mutual fund," they are almost always referring to an open-end investment company. Practically every investor will dis-*

tinguish between a "mutual fund" and a "closed-end fund." There are also a very small number of closed-end funds (around 600) relative to open-end funds (around 10,000).

Investment company *– business that specializes in managing the financial assets of individual investors*

Open-end fund *– another name for a mutual fund where the investment company buys and sells shares to investors*

Closed-end fund *– a type of investment company that issues a fixed number of shares*

Pooled diversification *– a process where individuals benefit from buying into a diversified portfolio of securities*

Minimum initial investment *– the smallest dollar (or share) amount that an investor can purchase when investing in a fund*

Diversification Advantages

There are several advantages to mutual fund investing, but the biggest is likely the ability of mutual fund investors to be able to substantially diversify investment holdings on a relatively small budget. With a mutual fund, an investor has the opportunity to purchase tens, hundreds, even thousands of different securities, often with as little as a $1,000 to $3,000 investment. This ***pooled diversification*** (which is the cornerstone of mutual fund investing) allows individual investors to increase the predictability of their returns and lower overall investment risk. Being able to adequately diversify an investment portfolio on such a minimal budget is a huge advantage for mutual funds.

Author's Note: *As a concept, pooled diversification works for more than just mutual funds. In fact, if you have car insurance, your insurer has pooled your individual policy with thousands of other policies to help them be able to predict how much money they will need to pay out this year.*

However, most funds still do require at least a minimum level of investment. For instance, most funds would not allow you to open up an account with $10 or even $50. In fact, most mutual funds have a ***minimum initial investment*** of at least $3,000, though some may be as low as $500. This means that the investor needs to save up this initial amount before the mutual fund will allow investment into the fund. The minimum initial investments for mutual funds can generally be found in the fund's prospectus. However, once the initial investment has been met, most mutual funds typically allow much smaller subsequent investments, often as low as $1.

Author's Note: *Be on the lookout… some mutual funds with low initial minimums may have higher overall expenses than those funds with higher minimums. We will discuss expenses shortly…*

Table 6.3 – Investment Minimums of Several Popular Mutual Funds

Vanguard S&P 500 (VFINX)	$3,000
Fidelity Growth Company (FDGRX)	$2,500
Dodge & Cox Income (DODIX)	$2,500
T. Rowe Price Growth Stock (PRGFX)	$2,500
Oakmark Select (OAKLX)	$1,000

It is worth noting that if you are purchasing mutual funds in an employer-sponsored retirement plan, there are no investment minimums! In addition, some fund families offer lower investment minimums for their funds if they are being purchased within an individual retirement account like a traditional or Roth IRA. You can always check the fund's prospectus for more information on a particular fund's initial investment minimums.

Other Advantages of Mutual Funds

Another advantage that mutual funds provide over individual securities is the fact that they provide the opportunity for the professional management of the investor's assets. When an investor purchases a mutual fund, they are basically hiring an investment professional to manage their assets for them. These investment professionals are typically well educated and have years of industry experience. While the individual investor may not know a growth stock from an income stock, you can bet that the mutual fund manager has a nuanced understanding of the theory and practice of investing. In addition, the fund manager is likely able to take advantage of economies of scale that the individual investor does not enjoy. This can mean that the mutual fund manager can trade less expensively and lower transaction costs.

Mutual funds also provide investors with an easy way to keep track of not only their investment performance, but their tax liabilities. The fund administrator keeps track of all of your investments and distributions (capital gains, dividends, and interest) in one place. This allows the mutual fund to provide you with your gains and losses in one consolidated statement as tax season approaches.

Last, mutual fund families generally provide investors with the ability to easily switch between funds within the same family. They are also generally willing to allow you to set up an automatic investment plan, where you can have a certain dollar amount sent directly from your savings account (or paycheck) on a weekly, monthly, quarterly, or annual basis to be deposited into the fund.

Table 6.4 – Advantages and Drawbacks of Mutual Funds

Advantages	Drawbacks
Diversification	Risk inherent in underlying securities
Minimal investment	Uncontrollable tax liabilities
Professional management	Costs
Investment/tax reporting	
Easy switching/automatic investing	

Drawbacks of Mutual Funds

While mutual funds, by their nature, allow investors to diversify their holdings, there is still risk associated with them. Mutual funds carry all the same risks as their underlying investments.

While the investment performance of a risky mutual fund might earn you a great return or lose you a lot of money, it is certain that taxes will only take your money.... As stated before, the mutual fund itself has "pass through status" and pays no taxes. The fund shifts the tax burden onto the individual investor. It is not uncommon for a mutual fund investor to be surprised by taxes owed on a mutual fund, even when the investor has not received any money from it. This is likely due to a fund's manager buying and selling securities within the fund. This "turnover" of assets frequently incurs taxable gains that are then passed through to the mutual fund owner. Mutual funds will state their typical turnover rate in the prospectus. Invariably, funds with higher turnover ratios will be less tax efficient than those funds with lower turnover.

Author's Note: *Note that the turnover rate of each fund is easily found in the prospectus or other published information about the fund. A low turnover ratio might be below 20 percent whereas a high turnover rate might be over 200 percent.*

Another aspect of mutual funds that will only serve to lower your return is the fund's fees. Perhaps the biggest drawbacks to mutual funds are the costs. Investing in a mutual fund is not free. The funds have fees and expenses and some funds have significantly more than others.

LO6.2 – Mutual Fund Fees and Performance

Mutual fund fees and expenses vary substantially from fund to fund. Other things equal, the lower a fund's expenses, the better. Mutual funds have three different types of fees that they can charge (sales charges, 12b-1 fees, and management fees). These three fees are all reported by the fund, and careful mutual fund investors will likely be able to save money by researching these fees before making a buying decision.

An additional cost worth noting is the fund's trading costs. While mutual fund managers may be able to trade more economically than the individual investor, they still incur trading and transaction costs. These costs are not reported directly, but funds with lower turnover not only increase the fund's tax efficiency, they also mean that the fund's trading costs are lower.

Sales Charges

Sales charges are oftentimes referred to as sales loads (or simply loads). These charges are generally associated with ***load funds*** that are sold by personal financial advisors and investment brokers. This load is how many brokers make their commission from selling you the fund. In theory, the sales charge compensates the broker for assisting you in selecting the best mutual funds for your return goals and risk tolerance.

The sales charge lowers the amount of money that is invested in the fund. For instance, if you invest $1,000 into a mutual fund that has a five percent sales charge, only $950 is actually invested in the fund. By law, a sales charge cannot be above eight percent, but in practice, you rarely see any loads this high. Most loads fall within a range of three to six percent.

Typically, for funds that have sales loads, the loads may be reduced as you invest more and more money. Frequently, mutual funds have ***breakpoints,*** or dollar investment amounts that will lower the fund's sales charge.

Table 6.5 – Sample Breakpoint Schedule

Class A Shares (Front-end Sales Load)	
Investment Amount	**Sales Load**
Less than $25,000	5.00%
$25,000 but less than $50,000	4.25%
$50,000 but less than $100,000	3.75%
$100,000 but less than $250,000	3.25%
$250,000 but less than $500,000	2.75%
$500,000 but less than $1 million	2.00%
$1 million or more	0.00%

Sales loads can either be front end or back end. If the sales load is a front-end load, then the charge is deducted at purchase (like in the example used above). However, some load funds have a back-end load which means the charge is an "exit" fee incurred when you sell the shares. Another name for a back-end load is a "contingent deferred sales charge" and it will generally be reduced, the longer you hold the fund. For instance, a back-end load fund's charge may be six percent if you sell it within one year, but reduced by a certain percentage for each year that you hold the fund (similar to that of a breakpoint). Some funds may reduce the charge entirely (but be aware that back-end loaded funds typically have higher expense ratios than front-end loaded funds)

You can usually designate whether a load fund has a front-end load or a back-end load by the letter designation that follows the fund's name. For funds that carry sales charges, you will typically find that they will be written with an A, B, or C after the fund's name in printed material (including the fund's prospectus). Class A shares are generally for front-end load funds, while Class B shares are for back-end load funds. Class C shares are not very popular with brokers or investors. They carry a sales charge on a regular basis for as long as the investor holds the fund.

Author's Note: *Be aware that some fund families use an entirely different letter labeling system for their funds and some funds have many more share classes with different levels of expenses. Be sure you understand the load structure before investing in a load fund.*

From a practical investing standpoint - if you are intent on buying a load fund from a broker, generally Class A shares make the most sense for the long-term investor.

While many funds carry sales loads, there are many more that do not. If you choose to do the research, you will likely find a no-load fund that matches the investments and investment strategy of any load fund. ***No-load funds*** (as the name would suggest) do not carry a sales load as they are distributed directly by an investment company instead of going through an intermediary (like an investment broker). When investing $1,000 into a no-load fund, the entire $1,000 is invested in the fund.

Table 6.6 – Sample Selection of No-load Mutual Funds by Category

Large Company Stock	Small-Mid Size Stock
Dodge & Cox Stock (DODGX)	Akre Focus (AKREX)
Fidelity New Millennium (FMILX)	Parnassus Mid Cap (PARMX)
T. Rowe Price Value (TRVLX)	T. Rowe Price Small-Cap Value (PRSVX)
Vanguard Dividend Growth (VDIGX)	Vanguard Select Value (VASVX
International Stock	**Bond**
Artisan International (ARTIX)	DoubleLine Total Return (DLTNX)
FMI International (FMIJX)	Fidelity New Markets Income (FNMIX)
Harding Loevner Emerging Markets (HLEMX)	Fidelity Total Bond (FTBFX)
Vanguard Total International Index (VGTSX)	Vanguard Short-term Investment Grade (VFSTX)

Author's Note: *However, recall that many brokerages have NTF (No Transaction Fee) as well as TF (Transaction Fee) funds. While not exactly a sales load, if you purchase a TF no-load fund, then the transaction fee will be deducted much like that of an* *up-front load. If keeping costs low is important to you, then look for no-load NTF funds that meet your portfolio needs, investment objectives, and risk tolerance.*

12b-1 Fees

A ***12b-1 fee*** is a mutual fund's annual marketing and distribution expense. The name "12b-1" comes from the section of the Investment Company Act of 1940 that describes the Act's allowance for the fee, and the Act currently limits the amount that investment companies can charge in 12b-1 fees to one percent or less per year. Like sales loads, these fees are designed to further incentivize brokers to sell the fund as generally two-thirds of the 12b-1 fee acts as a quasi-commission for the broker selling the fund.

Somewhat ironically, these fees were originally thought to benefit consumers. The logic was that by charging the fee, the mutual fund company could market their products to more consumers and attract more investment dollars into the fund. The fund could then take advantage of economies of scale and provide the fund's investors with lower overall fees.

Author's Note: *To date – the logic of how 12b-1 fees save mutual fund investor's money has not been proven. What has been proven in many studies is the more that you pay in mutual fund fees, the less overall wealth your fund generates for you.*

12b-1 fees are sometimes referred to as "hidden fees" since their impact is not as obvious as a sales load. However, since the 12b-1 fee is an annual expense, these fees can have a much greater negative impact on the total performance of a mutual fund over time than a front-end load.

For example**:** If you were to invest $10,000 into a mutual fund that charged a one percent annual 12b-1 fee, you would be charged $100 per year, and this fee would only go up if your fund earned positive returns.

Some mutual fund investors think they are doing the smart thing by investing in no-load mutual funds. However, if the goal is to control costs, then you cannot forget about the annual expenses like 12b-1 fees! From a cost perspective, it would make more sense for the typical buy-and-hold investor to pay an upfront load than a high annual 12b-1 fee. Better yet, from a cost perspective, it would be better if you didn't pay either expense! Fortunately, there are thousands of no-load mutual funds available with no 12b-1 fees. You just need to do your research.

Author's Note: *However, other investors seem happy to pay annual 12b-1 fees because they respect the advice of their broker and enjoy the advisory relationship. From a certain perspective, paying 12b-1 fees is like paying for your financial advisor to be on retainer. The advisor will be making regular and continuous money from your investments which would likely increase the motivation to keep you as a happy client. That's your call…*

12b-1 fees are always expressed as a percentage and along with management fees are included in the fund's expense ratio.

Management Fees

Unlike sales loads and 12b-1 fees, all mutual funds have ***management fees***. These fees include the compensation that goes to the fund's managers for their time and expertise, as well as the paperwork, reporting, custodial, auditing, and any other expenses that the fund incurs in its daily operations. The structure of management fees can vary, but most are stated as an annual percentage of the assets under management. These percentages can vary widely from fund to fund, but most average between 0.5 and 1 percent per year.

Management Fees of Actively-managed versus Passively-managed Funds

Sometimes, the size of a mutual fund's management fee is directly correlated with whether or not the fund is ***actively managed*** or ***passively managed***. In an actively-managed mutual fund, the manager makes security selection decisions based on his/her judgement. Their goal is to choose securities that outperform their benchmark – to "beat the market." In their attempt to do so, they will likely employ analysts, subscribe to databases, research company sites and the like. All of this research, however, is expensive, and the fund will likely charge higher management fees to compensate for the higher expenses. On the other hand, a passively-managed fund doesn't try to outperform a benchmark. The manager of a passively-managed fund is only trying to obtain the benchmark (or market) rate of return. The passive manager does not use research or analysis, and typically invests the fund's assets into a pre-set index. The lower expenses associated with the management of passively-managed funds is generally reflected in the fund having lower management fees than actively-managed funds.

For example: The Vanguard Group is widely known by investment professionals to provide a wide array of low-cost mutual funds. However, even their passively-managed index funds typically have lower costs than their actively-managed funds.

According to the company's website, the Vanguard S&P 500 fund is a passively-managed index fund. The expense ratio for this fund is 0.17 percent for its Investor shares (with an investment minimum of $3,000). It states the following objective on the fund's website:

> *As the industry's first index fund for individual investors, the 500 Index Fund is a low cost way to gain diversified exposure to the U.S. equity market. The fund invests in 500 of the largest U.S. companies, which span many different industries and account for about three-fourths of the U.S. stock market's value. The key risk for the fund is the volatility that comes with its full exposure to the stock market. Because the 500 Index Fund is broadly diversified within the large-capitalization market, it may be considered a core equity holding in a portfolio.*

On the other hand, the Vanguard Growth & Income fund is a fund that invests in similar securities, but is actively-managed. The expense ratio for this fund 0.37 percent for its Investor shares (with an investment minimum of $3,000). Compare the objective it states on the fund's website to that of the passively-managed S&P 500 fund.

> *This fund seeks to outperform the Standard & Poor's 500 Index. The fund's quantitative investment approach results in risk and sector profiles that are similar to those of its benchmark index. The fund has a total return goal, meaning that it seeks both capital appreciation and dividend income. The key risk for the fund is the volatility that comes with its full exposure to the stock market. The fund provides broad exposure to a diverse group of large U.S. companies and may be considered a primary equity holding in a portfolio.*

Author's Note: *Your decision to invest in either an actively-managed or a passively-managed mutual fund begins to get to the heart of your belief in market efficiency (which will be an important topic in later chapters of this text). If you believe in an efficient market, then you typically would consider paying higher fees to an active manager to be a waste. However, if you believe that the market can be beaten, you may believe active management to be worth the extra expense. This thought process will be explored much further throughout this text.*

For more information on active vs. passive management, see the 'Closer Look' at the end of this chapter.

Management Expense Ratio

Management fees and 12b-1 fees (if any) make up a mutual fund's ***expense ratio***, which is a measure of what it costs the investment company to operate the mutual fund. Every investor in the fund carries a portion of the burden of paying the expenses associated with managing the fund. The expense ratio is the percentage of the total investment that goes toward managing the fund's operations. Generally, the lower the ratio, the more efficiently the fund is being run (and the better for the investor).

For example**:** How much will you pay in fees on a $10,000 investment over 10 years, assuming a hypothetical growth rate of 9 percent per year?

- Expense ratio of 0.17% = $399
- Expense ratio of 0.29% = $678
- Expense ratio of 0.41% = $953
- Expense ratio of 0.66% = $1,517
- Expense ratio of 1.05% = $2,372
- Expense ratio of 1.12% = $2,522
- Expense ratio of 1.34% = $2,988

Sales charge *– a front-end, back-end, or annual commission paid to a broker for selling a mutual fund*

***Load fund** – a mutual fund that charges a commissio, or sales charge used to compensate a broker*

***No-load fund** – a mutual fund that does not charge a sales load*

***Breakpoint (mutual fund)** – discount on front-end loads for larger investments*

***12b-1 fee** – a mutual fund's annual marketing and distribution expense*

***Management fee** – a mutual fund's annual expense that compensates the fund's manager and the other expenses associated with operating the fund*

***Actively-managed fund** – mutual fund in which the fund manager attempts to outperform a set benchmark*

***Passively-managed fund** – mutual fund in which the fund manager only attempts to attain the market return, typically investing in a pre-set index*

***Expense ratio** – the annual cost of operating the fund as a percentage of assets under management*

LO6.3 – Diversification and Mutual Fund Classifications

At the most basic level, mutual funds are classified as either equity (stock) funds or bond funds. However, mutual funds can be further classified in a multitude of specific ways. The classifications provide potential mutual fund investors with enormous insight into the investment strategies and objectives of the fund.

Developing a Diversified Portfolio of Mutual Funds

The classifications of mutual funds are also beneficial to investors as they consider the diversification of their investment portfolios. Recall that, to be properly diversified, it is important to not only be invested in several different securities, but several different types of securities. In this sense, the diversification feature of mutual funds can be thought of in two ways:

- Diversification into more than one asset
  - All mutual funds provide at least some diversification benefits by investing in more than one asset. However, some funds may offer more diversification benefits than others. A fund that only invests in 20 stocks is much less diversified than a fund that invests in 200 stocks.
- Diversification into more than one asset class

- Some mutual funds provide greater diversification benefits by investing not only in several different assets, but several different types of assets (large-cap, mid-cap, and small-cap stocks for example). The more asset classes in which a fund invests, the greater its diversification benefits held alone.

Financial professionals are often asked by investors how many mutual funds they need in their portfolio to be adequately diversified. The unfortunate answer to this question is "It depends." Some individual funds are extremely diversified among different types of asset classes, while other funds limit their investments to just one type of security.

Author's Note: *For instance, an investor who has invested 100 percent of their retirement savings in the Vanguard Balanced Index Fund (VBINX) is relatively diversified whereas an investor who has invested 100 percent of their retirement savings in the Vanguard Health Care Fund (VGHCX) is not very diversified at all. VBINX invests in a multitude of different types of stocks and bonds, whereas VGHCX only invests in a relatively small number of stocks that all fall into the health care sector.*

If a particular fund does not offer exposure but to one type of asset class, it still provides diversification benefits. However, to truly take advantage of the power of diversification, it will be necessary to invest in other funds as well so that the portfolio has exposure to other asset classes. The fund selection decision, and how much to put into each, is a function of the investor's goals and risk tolerance.

For example: If you invest in only three funds -- the Vanguard Total Stock Market Index fund, the Vanguard Total International Stock Market Index fund, and the Vanguard Total Bond Market Index fund -- then you arguably have a low-cost, broadly diversified portfolio – but how much you invest in each is a function of your return goals and risk tolerance.

Table 6.7 (next page) provides three hypothetical asset allocation examples based on the risk tolerances of three different investors (aggressive, moderate, and conservative). The percentage figures represent the dollar amount of the investor's total money that is invested in each mutual fund. You can see that the aggressive investor (with a high risk tolerance) tries to earn a higher return with his/her portfolio by investing much larger percentages in the more aggressive asset classes, whereas the conservative investor prefers to invest a much larger portion in the less volatile asset classes. Regardless, each is a broadly diversified portfolio.

Investors have the opportunity to develop mutual fund portfolios that fit almost any risk/return goal by combining the diversification aspects of many different asset classes. When choosing funds to fit a certain asset class and contribute to the diversification aspects of an overall portfolio, Table 6.8 may be helpful in classifying different types of mutual funds.

Table 6.7

Aggressive Allocation Example	
60%	Vanguard Total Stock Market Index
30%	Vanguard Total International Stock Market Index
10%	Vanguard Total Bond Market Index

Moderate Allocation Example	
55%	Vanguard Total Stock Market Index
15%	Vanguard Total International Stock Market Index
30%	Vanguard Total Bond Market Index

Conservative Allocation Example	
25%	Vanguard Total Stock Market Index
5%	Vanguard Total International Stock Market Index
70%	Vanguard Total Bond Market Index

Important note: These fund choices and the percentages allocated to each are completely hypothetical and should not be taken as a recommendation. Your investment goals and risk tolerance are specific to you, and your asset allocation should reflect that.

Table 6.8 – Mutual Fund Classifications

Equity (Stock) funds	**Fixed-income (Bond) funds**
Objective	Maturity
Capital appreciation	*Short-term*
Growth	*Intermediate-term*
Growth & Income	*Long-term*
Income	
	Type/Taxability
Company Size	*Government*
Large-cap	*Corporate*
Mid-cap	*Agency*
Small-cap	*Municipal*
Country of origin	Credit rating
Global	*Investment-grade*
International	*Mid-grade*
Region specific	*Speculative*
Emerging markets	
	Country of origin
Sector	*Global*
Varies	*International*

Stock Funds – Classifications by Objective

- **Capital appreciation** – Mutual funds with the objective of capital appreciation typically invest in speculative stocks that are unproven and potentially out of favor. Having an objective of capital appreciation means that stocks are chosen solely for their potential to provide capital gains. There is little opportunity for capital appreciation stocks to provide dividend income since the firms reinvest all profits for the potential of growth.

- **Growth** – Growth funds invest in stocks that are potentially less speculative than those that make up the holdings of capital appreciation funds, but have similar goals for future growth in earnings. Growth firms typically do not pay out dividend income. They reinvest all profits back into the firm for the potential of higher capital gains. Growth firms typically have higher price-to-earnings ratios because of the relatively high opportunity for future earnings growth.

- **Growth & income** – Having an objective of both growth and income means that these funds invest in stocks that have both the potential for future growth and the ability to pay out current income. As such, the stocks in these funds can have a wider range of price-to-earnings ratios. Growth and income funds are made up of a more diversified combination of stocks than the capital appreciation and growth categories.

- **Income** – Typically income funds contain stocks with lower price-to-earnings ratios. Their primary goal is to pay out company profits in the form of dividends with less reinvestment than those with a higher growth objective. Income funds are less diversified than those with the objective of both growth and income, but the stocks chosen for the fund are relatively established with stable earnings.

Stock Funds – Classifications by Size

- **Large-cap funds** – Invest in firms with a market capitalization over $30 billion.

- **Mid-cap funds** – Invest in firms with a market capitalization between $10 billion and $30 billion.

- **Small-cap funds** – Invest in firms with a market capitalization less than $10 billion.

Stock Funds – Classifications by Country of Origin

- **Global** – A global fund invests in firms from all over the world, including the United States.

- **International** – An international fund only invests in foreign stocks. These funds do not include stocks from the United States.

• **Region specific** – These funds invest in international companies from designated advanced economy regions. Examples include Europe, Asia, and Japan.

• **Emerging markets** – A fund that invests in emerging markets may or may not be region specific, but invests in the stocks of countries that are progressing toward becoming advanced economies. Examples include Mexico, Chile, Peru, and the Czech Republic.

Stock Funds – Classifications by Sector

• **Sector funds** include those that invest a fund's assets entirely in the consumer discretionary, consumer staples, energy, financials, health care, industrials, technology, materials, telecommunications, and utilities sectors.

Author's Note: *In addition, some sector funds even invest in specific industries. For instance, Fidelity offers a series of "Select" funds that invest in industries like automotive, retailing, air transportation, biotechnology, natural gas, real estate, and many more.*

Other Popular Stock Fund Classifications

• **Socially responsible funds** – Some mutual funds only invest in firms that are considered socially responsible due to their products, strategies, and cultures. A socially responsible fund would not invest in the stocks of companies that deal in addictive or unhealthy substances (alcohol, tobacco, fast food, gambling), socially questionable products (firearms, pornography) or business practices that may be harmful to the environment (oil, lumber).

• **Tax-managed funds** – These funds try to earn a return for the mutual fund owner while limiting the shareholder's tax burden. Typically the strategies employed by these funds are to limit investment in dividend-paying stocks (as income is typically taxed at a higher rate than capital gains) and keep stock turnover to a minimum. The funds try to only sell stocks that qualify for long-term capital gains treatment since this rate is lower than the short-term capital gains tax for most investors. They may also attempt to offset capital gains with the sale of other stocks for capital losses.

• **Index funds** – Most passively managed mutual funds invest in one of the dozens of stock indices that track the performance of a specific "basket" of stocks. These indices typically represent a particular market or sector of the United States or some other international economy. The manager of an index fund only strives to obtain the market return in the mutual fund (as opposed to an actively-managed fund where the manager's goal is to beat the market). For this reason, the fees associated with index funds are comparatively low. Interestingly, due to the fact that stock turnover in indices is limited, they are naturally tax-efficient.

Author's Note: *On a limited budget, passively-managed index funds (along with exchange-traded funds discussed later) are the least expensive way to begin investing in the market.*

Bond Funds

As stated previously, the two primary classifications for mutual funds are "stock" and "bond." However, just like stock funds, bond funds can also be further classified to provide the potential investor with additional insight into the underlying investments of the fund.

- **Maturity range** – Bond funds will generally provide insight in the prospectus as to the average maturity of the bonds held within the fund. Some funds may invest primarily in short-term bonds while others invest in intermediate and/or long-term bonds.

Author's Note: *Note that money market mutual funds are a special category of fixed-income fund with a maturity range of less than one year and an investment objective of capital preservation. Another distinguishing characteristic of a money market mutual fund is the NAV, which will always be $1.*

- **Bond type** – A bond fund will state the percentage of the fund that is invested in "Government" bonds or "Corporate" bonds. A corporate bond fund typically has a large percentage of its holdings in corporate bonds while government bond funds invest primarily in U.S. Treasuries. Other types of bond funds include "Agency" funds or "Municipal" funds.

Author's Note: *Note that these labels sometimes provide insight into the taxability of the fund. Municipal funds are not taxed at the federal (and possibly state) level, while Treasury bond funds avoid state tax.*

- **Credit quality** – A primary risk of bond investing is the default risk of the bond issuer. Bond funds will generally provide in the prospectus the average credit quality of the fund's bond holdings. Some bond funds invest solely in investment grade (A and above) bonds while other bond funds may be labeled as high-yield or "junk" bond funds (C and below).

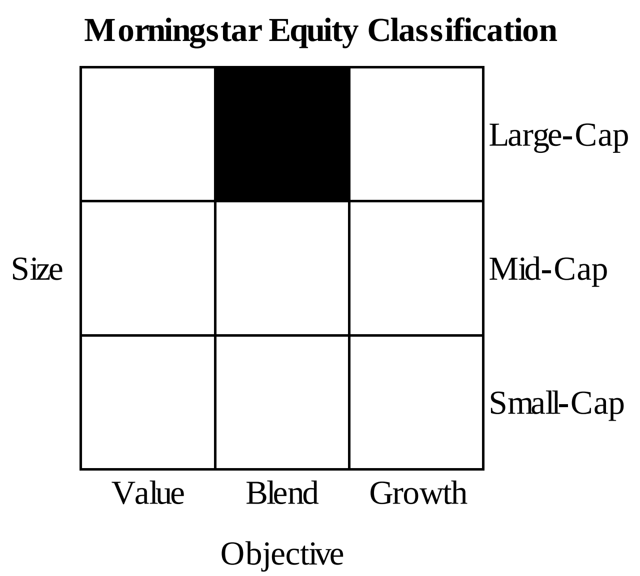
- **Country** – Just like stock funds, bond funds can be global or international. A global bond fund invests in bonds from around the entire world (including the U.S.) while an international bond fund only invests in the bonds of overseas governments and corporations.

Morningstar Mutual Fund Classifications

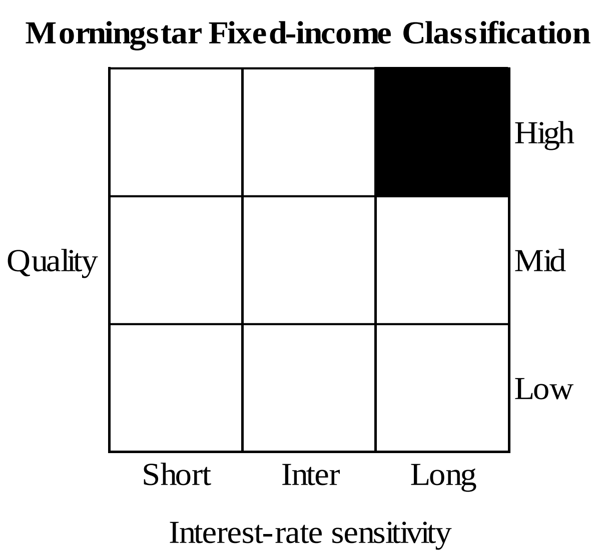
Morningstar, Inc. is an investment research firm used by many investment professionals and consumers for its unbiased and thorough insights and reviews of mutual funds. Much of the information that Morningstar accumulates on each mutual fund is available for free online at http://www.morningstar.com.

One of the primary insights that Morningstar provides on each mutual fund is demonstrated with the Morningstar-style map. For stock funds, Morningstar labels the fund by its size and objective (price-to-earnings). For bond funds, Morningstar labels the fund by its maturity and credit quality. The style map helps investors identify several important aspects of the fund's features with just a quick glance.

Figures 6.2 & 6.3 – Morningstar Equity Style Box & Fixed-income Style Box



Note that the Morningstar classification of the equity fund above is that of a large-cap, blend stock fund.



Note that the Morningstar classification of the fixed-income fund above is that of a high-credit quality, long-term bond fund.

Asset Allocation and Balanced Mutual Funds

Some mutual funds cannot be labeled as simply "stock" or "bond" funds because they invest in both stocks and bonds. The two primary types of funds that invest in both asset classes are known as balanced funds and asset allocation funds. Both of these types of funds offer a tremendous amount of diversification advantages as they provide exposure to stocks and bonds within the same fund. However, there is a primary difference between the investment strategies of balanced funds verses that of asset allocation funds.

A ***balanced fund*** has a pre-set percentage of assets that it will invest in stocks and bonds. This percentage allocation does not change.

***For example*:** The Vanguard Balanced Index Fund invests approximately 60 percent in stocks and 40 percent in bonds. This particular fund accomplishes this by tracking the performance of a domestic total stock market index for the stock portion of its investments and an aggregate bond index for the bond portion. The 60/40 breakdown of stocks to bonds does not change.

An ***asset allocation fund***, on the other hand, reserves the right to be able to change the percentage allocation between stocks and bonds given certain criteria that will be stated in the fund's prospectus. For instance, the percentage of stocks to bonds in some asset allocation funds can be changed given simply the personal preference of the fund manager. If the fund manager believes that the stock market looks undervalued, he or she allocates more of the fund's assets to the stock market. On the other hand, if the fund manager believes that the stock market has topped, he or she may pull funds out of stocks and invest a greater percentage of the fund's assets in bonds.

Another type of asset allocation fund that is growing in popularity is the "target-date" or "target-retirement" fund. These funds are the ultimate "buy it and forget it" funds. The investment strategy of these funds considers that as most investors approach retirement, they desire to take less and less risk with their investments. These funds will change the stock/bond percentages over time to reflect the risk capacities of investors as they age.

***For example*:** In the year 2020, a young 20-year old investor could purchase a 2065 target-date retirement fund. The 2065 in the fund's name implies that the investor plans to retire in the year 2065. When purchased (the year 2020), the fund is invested in 90 percent stocks and 10 percent bonds. However, over the next 45 years, the fund slowly moves assets out of stocks and into bonds, so that by the year 2065, the fund has only 30 percent of the fund's assets invested in stocks and 70 percent invested in bonds (reflecting the reduced risk capacity of the now 65-year old investor).

Balanced fund – *mutual fund that combines investments between set percentages of stocks and bonds that do not change*

Asset allocation fund *– mutual fund that provides investors with a portfolio of mixed asset classes (generally stocks and bonds) that can change over time*

LO6.4 - Exchange-Traded Funds and Hedge Funds

Exchange-traded funds (or ETFs for short) are marketable securities that track an index. ETFs share certain qualities associated with stocks, open-end mutual funds and closed-end mutual funds. However, first and foremost, an ETF is basically an open-end mutual fund in that the ETF's distributing firm can always create new shares. However, once the ETF distributer has created shares to sell to the initial investor, subsequent trades of the ETF take place on an exchange in a similar fashion to that of common stocks and closed-end funds. The firm issuing the ETF does not stand ready to buy back shares (though they may) and sales of an ETF take place in the secondary market. Liquidity risk is not generally a problem for ETFs due to the large size of the ETF market.

Exchange-traded fund *– marketable security that tracks an index, similar to a mutual fund that trades like a stock*

The first ETF was an S&P 500 Index fund (nicknamed "Spider" because of the SPDR ticker symbol). Spiders began trading on the American Stock Exchange (AMEX) in 1993. ETFs have grown considerably in their popularity since then, and today, you can find an ETF that tracks just about any index or sector associated with the market. (See Table 6-8: Popular ETF Terminology on the next page.)

Buying and Selling Exchange-traded Funds

Since the ETF is traded like a stock, the trading expenses are very similar to those of a stock (rather than a mutual fund). With most ETFs, buyers and sellers pay a commission for the trade which can vary substantially depending on the broker. ETFs have no loads or 12b-1 fees and the management expenses for ETFs are typically much lower than those of mutual funds. In fact, the management fees for ETFs are typically even lower than those of low-cost index mutual funds.

Author's Note: *The average annual ETF expense ratio is currently 0.44 percent whereas the average expense for index mutual funds is approximately 0.74 percent (according to Morningstar).*

Since ETFs trade like stocks, trades do take place the moment they are executed. While timing a mutual fund purchase to the market's low point during a trading day would do the investor no good (the trade is executed at the fund's NAV after the market's close), an ETF investor would benefit from this extremely fortunate timing by paying a lower price for the security. In addition, since ETFs trade like common stocks, this feature provides the ETF investor with the ability to sell ETFs short and buy them using margin (features that are not available for mutual funds).

Table 6.8 - Popular ETF Terminology

Spiders - SPDR ETFs invest in the S&P 500 index. Spiders also offer ETFs for each sector of the S&P 500, known as sector spiders. For instance, SPDR Gold shares (GLD) provide investors with an efficient and secure way to invest in the gold market.
Nasdaq-100 Index (QQQ) - Represents ownership in the 100 largest and most actively traded non-financial stocks on the Nasdaq. They are considered to be an effective method of investing in the technology sector.
Diamonds - While not technically an ETF, Diamonds (DIA) act enough like ETFs for them to be considered an exchange-traded fund by most investors. They provide investors with fractional ownership in the 30 stocks of the Dow Jones Industrial Average.
Vanguard ETFs - Vanguard's brand of ETFs provides numerous ETFs for many different market indices including the Vanguard Total Stock Market (VTI) ETF that tracks the performance of the CRSP U.S. Total Market Index.
iShares – BlackRock/Barclays provide numerous iShares ETFs that follow many of the major indices around the world including the Nasdaq, NYSE, Dow Jones, and Standard & Poor's. Of particular note, the iShares MSCI Emerging Market Index (EEM) is a popular way for investors to participate in the world's emerging market economies.
Direxion Daily Bear 3X Shares - For investors who believe that the market is headed down, the Direxion Bear 3X ETFs seek to provide investors with the opposite returns of the underlying indices. For instance, the Daily S&P 500 Bear 3X (SPXS) shares attempt to perform 300 percent in the opposite direction of the S&P 500.

For investors who desire to enter the market on an extremely limited budget, ETFs typically have no investment minimum. You can buy as little as one share of most ETFs. But keep in mind that (in most cases) you will be paying a commission, which can have a profoundly negative impact on a small investment dollar amount. Also keep in mind that you will need to pay that commission again when you sell the ETF.

***For example*:** If you pay a $10 commission on a purchase of $1,000, your commission is only 1 percent of your purchase. However, if you pay a $10 commission on a $100 purchase, you are paying 10 percent of your purchase! With this sort of impact, it might make sense to save up more money before investing in an ETF.

Hedge Funds

Like mutual funds, hedge funds have been gaining in popularity over recent years, with literally thousands of hedge funds in operation today. The term ***hedge fund*** can be somewhat difficult to define because the individual characteristics of hedge funds can be very different from fund to fund. However, all hedge funds are basically just a special type of investment company (or investment partnership).

Hedge funds are similar to mutual funds in that they have a fund manager who invests a pool of money contributed to the fund by individual investors. Also similar to mutual funds, hedge funds have the goal of making money for their investors. However, in the case of a hedge fund, the fund's manager is generally permitted to invest the proceeds any way she or he sees fit. While mutual funds are required to have explicit investment objectives and strategies, hedge fund managers are free to pursue any strategy they wish – including borrowing on margin, utilizing derivatives, and selling short (which are not allowed for mutual funds).

The term "hedge" fund comes from the aim of these funds to make money regardless of market performance. The thinking is that if the market goes up, the hedge fund should obviously make money. In addition, since hedge funds are allowed to sell short, if the market goes down, the thinking is that they should also make money. Due to the short-selling, hedge funds can make an excellent "asset class" in a diversified portfolio. However, due to the large investment minimums generally associated with hedge funds, many investors do not have sufficient assets to invest their entire life savings in a hedge fund (much less a small portion).

Other than requiring some of the larger hedge fund managers to register with the SEC, there is very little regulation of hedge funds. The reasoning behind the government's hands-off attitude toward hedge funds is that hedge fund managers are only allowed to have "qualified" investors. A qualified investor can generally be defined as an institution or a high net worth individual (a rich person). Typically, the minimum investment for a hedge fund is $50,000 but certain funds may have minimum investments of millions of dollars.

Other potential features of hedge funds vary substantially from fund to fund. Some hedge funds allow only a relatively small number of investors while other hedge funds may have a "lock-up" period where investors are prohibited from withdrawing funds until the lock-up period ends (perhaps after two years).

As you can probably guess, the success of hedge fund managers in achieving the primary goal of making money is somewhat mixed. The performance history of some funds has been impressive while others have been abysmal. Regardless, one aspect of hedge funds that is almost always impressive is the level of compensation the fund manager receives. Generally, whether the fund is successful or not, the fund manager makes a lot of money. The majority of hedge funds use the "2 and 20" compensation structure which means the fund manager receives two percent of assets under management and up to 20 percent of profits each year.

For example: If you were a hedge fund manager who had $100 million under management (which is relatively small in the hedge fund business) – you make $2 million per year without doing anything. Further, if you actually earn 10 percent on that $100 million under management, then you earn another $2 million.

***Author's Note:** As a final thought – Given the compensation associated with being a hedge fund manager, I just thought I'd let you know that starting your own hedge fund is relatively easy.*

***Hedge fund** – a special type of investment company that can use a number of different investment strategies on pooled funds to earn a positive return for investors*

Chapter 6 – Summary

• A mutual fund is an investment vehicle that is constituted of a pool of funds, collected from investors, that is invested in individual securities by an investment manager.

• Mutual funds are sold by a prospectus, which is a legal contract that describes the fund's investment objectives, strategies, risks, performance, etc.

• Mutual fund popularity has soared since the 1980s largely due to defined contribution plans and mutual fund marketing.

• Each mutual fund family typically has numerous individual funds. Each fund acts like its own corporation owned by its shareholders.

• Mutual funds can be sold directly from the investment company, online with a brokerage account, or through a financial advisor or investment broker.

• The share price of an open-end mutual fund is the fund's net asset value (NAV).

• Closed-end funds are traded more like stocks than mutual funds and are not what most investors mean when they use the term "mutual fund."

• Mutual funds typically have a minimum initial investment.

• The costs of mutual funds (which can include loads, 12b-1 fees, and management fees) vary considerably from fund to fund. Other things equal, the returns of funds with lower fees are higher than those with higher fees.

• Each individual mutual fund offers inherent diversification advantages over a single security, but some mutual funds are much more diversified than others.

• Mutual funds can be classified and categorized in myriad ways.

• Exchange-traded funds (ETFs) are marketable securities that track an index.

• Exchange-traded funds typically do not have investment minimums and extremely low annual expenses; however, ETF investors do pay commissions on trades.

Chapter 6 – Key Terms

12b-1 fee (LO6.2)
Actively-managed fund (LO6.2)
Agency bond fund (LO6.3)
Asset allocation fund (LO6.3)
Balanced fund (LO6.3)
Capital appreciation fund (LO6.3)
Closed-end fund (LO6.1)
Corporate bond fund (LO6.3)
Emerging markets fund (LO6.3)
Exchange-traded fund (LO6.4)
Expense ratio (LO6.2)
Global bond fund (LO6.3)
Global equity fund (LO6.3)
Government bond fund (LO6.3)
Growth and income fund (LO6.3)
Growth fund (LO6.3)
Hedge fund (LO6.4)
Income fund (LO6.3)
Index fund (LO6.3)
Intermediate-term bond fund (LO6.3)
International bond fund (LO6.3)
International equity fund (LO6.3)
Investment company (LO6.1)
Large-cap fund (LO6.3)
Load fund (LO6.2)
Long-term bond fund (LO6.3)
Management fee (LO6.2)
Mid-cap fund (LO6.3)
Minimum initial investment (LO6.1)
Municipal bond fund (LO6.3)
Mutual fund (LO6.1)
Mutual fund breakpoint (LO6.2)
Net asset value (LO6.1)
No transaction fee fund (LO6.1)
No-load fund (LO6.2)
Open-end fund (LO6.1)
Passively-managed fund (LO6.2)
Pooled diversification (LO6.1)
Prospectus (LO6.1)
Region specific fund (LO6.3)
Sales charge (LO6.2)
Sector fund (LO6.3)
Short-term bond fund (LO6.3)
Small-cap fund (LO6.3)
Socially responsible fund (LO6.3)
Tax-managed fund (LO6.3)
Transaction fee fund (LO6.1)

Chapter 6 – Closer Look

Some mutual fund investors and financial professionals don't agree that "professional management" is one of the key advantages of investing in mutual funds. In fact, many academic studies suggest that mutual fund managers responsible for actively managing their funds to "beat the market" index end up generating lower returns for their mutual fund investors than those managers who simply invest in a pre-set market index.

Unfortunately, the question of whether or not any one individual is capable of outperforming a market index is difficult to test. Have you ever flipped a coin and got "heads" nine or ten times in a row? While it's not likely, it can happen. Do you attribute this inordinate number of flipped heads in a row to the fact that you are an excellent flipper, or was it just luck? Now, pose the same question to a mutual fund manager. While you likely attribute your coin flipping to luck, do you think that an active fund manager would attribute 10 years of superior performance to luck or to skill? Further, if the manager touted their skillful stock-picking ability, could you prove otherwise?

Many studies have analyzed mutual fund performance, and when studies compare the performance of actively-managed mutual funds to passively-managed mutual funds, the longer the time-frame, typically the worse the active managers look by comparison.

Logically, there is one primary reason that explains why active managers might perform worse than passive managers. That reason is simply higher costs. Actively-managed funds are generally more expensive than passively-managed funds due to higher expenses and turnover. These fees eat into returns and performance suffers as a result. It is much more difficult to attribute logical reasoning as to how an active manager might have identified the "secret" on how to consistently beat the market.

These comparisons begin to get to the heart of a theory known as the efficient market hypothesis. Believers in market efficiency do not believe in active management. On the other hand, those who find markets to suffer some inefficiency may be more open to the possibility of an individual manager beating the market. The thinking behind these theories will be explored in parts III and IV of this text.

However, in the meantime, for more information on this topic, read "A Random Walk Down Wall Street" by Burton Malkiel (W.W. Norton & Co). Malkiel has conducted several thorough and respected studies that demonstrate that actively-managed mutual funds consistently underperform index funds. Do you agree with his findings?

Chapter 6 – Quiz Yourself

True or False

1. Typically, only sophisticated investors have the investment background necessary to be able to successfully own mutual funds.

2. One of the primary benefits of mutual funds is that they provide diversification on a relatively small budget.

3. Mutual funds all have an indenture that describes them in detail.

4. Mutual funds have gained tremendous popularity since 1980, largely due to defined contribution plans and mutual fund marketing efforts.

5. Mutual funds sold by a personal financial planner may have higher expenses than those purchased on-line.

6. A mutual fund's NAV equals the fund's assets minus liabilities divided by the number of shares (except for money market mutual funds).

7. Open-end and closed-end mutual funds are traded the same way on an exchange.

8. Investors can initially invest any dollar amount to establish a mutual fund.

9. All mutual funds have sales loads.

10. All mutual funds have 12b-1 fees.

11. All mutual funds have management expenses.

12. The diversification advantages of each individual fund can vary substantially.

13. Income funds and small-cap funds are basically the same thing.

14. A global fund invests in the U.S. and other countries.

15. Exchange-traded funds typically have lower annual management expenses than mutual funds.

Fill in the Blank

1. A ______ is an investment vehicle that is comprised of a pool of funds, collected from investors, that is invested in individual securities by an investment manager.

2. The mutual fund ______ is a legally binding contract that describes the fund.

3. A ______ mutual fund means that you can purchase it in a brokerage account without paying a commission (or transaction fee).

4. A mutual fund's ______ is only updated once per day.

5. Assuming a fund has assets of $110M, liabilities of $10M, and shares outstanding of 10M – the fund's NAV is ______ per share.

6. When investors are discussing mutual funds, they are typically only referring to ______ rather than closed-end funds.

7. A ______ is a mutual fund's annual marketing and distribution expense.

8. ______ funds are mutual funds that do not invest in firms with addictive or unhealthy substances.

9. Sometimes the terms ______ and passively-managed fund are used interchangeably.

10. The first S&P 500 ETF was nicknamed ______ because of its ticker symbol.

In Your Own Words

1. Do you think that employers are wise to choose mutual funds as the investment options within their defined contribution retirement plans? Why or why not?

2. Would you rather purchase mutual funds from a personal financial advisor, online via a broker account, or directly from the fund's website? Why?

3. Look up your favorite brokerage online and see if it has your favorite mutual fund family as a Transaction Fee or a No Transaction Fee offering.

4. Why do you think mutual funds have minimum initial investments?

5. Why do you think that load funds offer breakpoints to investors the more they invest?

6. Do you prefer actively-managed funds or passively-managed funds? Why?

7. Look up your favorite mutual fund family's website online and develop your ideal portfolio (including percentages) using their fund selections.

8. Look up the exchange-traded funds offered by Vanguard and Fidelity. What are the commissions if you buy Vanguard or Fidelity ETFs directly from Vanguard or Fidelity?

Quiz Answers

1	F
2	T
3	F
4	T
5	T
6	T
7	F
8	F
9	F
10	F
11	T
12	T
13	F
14	T
15	T

1	mutual fund
2	prospectus
3	no transaction fee
4	NAV
5	$10
6	open-end
7	12b-1 fee
8	Socially responsible
9	index
10	spider