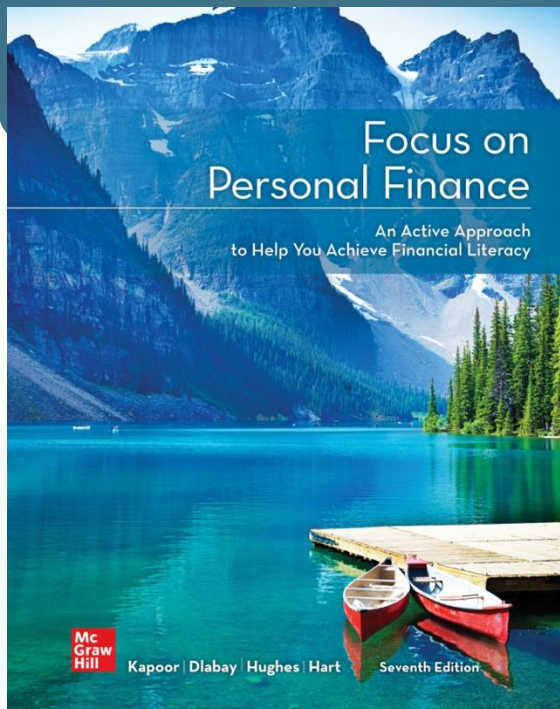


Chapter 13

Investing in Mutual Funds



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Investing in Mutual Funds

Chapter Learning Objectives

- LO13.1** Explain the characteristics of mutual fund investments.
- LO13.2** Classify mutual funds by investment objective.
- LO13.3** Evaluate mutual funds.
- LO13.4** Describe how and why mutual funds are bought and sold.



Mutual Funds

- A **mutual fund** pools the money of many investors – its shareholders – to invest in a variety of securities such as stocks, bonds, money market instruments, and other assets
 - Can be used for retirement accounts, including traditional individual retirement accounts, Roth IRAs, and 401(k) and 403(b) retirement accounts
 - Based on concept of opportunity costs; you must be willing to take some risks if you want to get larger returns on your investments



Why Investors Purchase Mutual Funds

- Mutual funds have been around for a long time
 - Began in Europe in the late 1700s and became popular in the U.S. before the Great Depression in 1929
- These statistics illustrate how important mutual fund investments are to both individuals and the nation's economy:
 - Almost 99.5 million individuals own mutual funds in the U.S.
 - Fifty-six million households own mutual funds
 - With \$17.7 trillion in total assets, the U.S. mutual fund industry is the largest in the world



The Psychology of Investing in Funds

- Major reasons investors purchase mutual funds:
 1. **Professional management** involves fund managers trying to pick the “right” securities for their funds’ portfolios
 2. **Diversification** offered by mutual funds spells safety because a loss incurred with one investment contained in a fund may be offset by gains from other investments in the fund

Types of Securities Included in the Portfolio of the Fidelity Balanced Fund

Exhibit 13-1

Top 5 Industry Sectors	% of Total Assets
Information Technology	21.1
Health Care	14.5
Financials	13.2
Industrials	10.6
Communication Services	10.0
Asset Allocation	% of Total Assets
Domestic Stocks	64.0
Bonds	28.4
International Stocks	4.3
Cash and Other Assets	3.3
Top 4 Equity Holdings	% of Total Assets
Apple	2.9
Microsoft	2.5
Amazon	1.7
Alphabet (Google)	1.7

Source: Fidelity, <https://fundresearch.fidelity.com/mutual-funds/summary/316345206?type=o-NavBar>, accessed February 24, 2020, and Yahoo!

Finance, <https://finance.yahoo.com/quote/FBALX/holdings?p=FBALX>, accessed February 24, 2020.

Characteristics of Funds

- **Closed-end funds** are funds in which shares are issued by an investment company only when the fund is organized
 - Only a certain number of shares are available to investors
 - Most are actively managed and traded on the floors of stock exchanges or in the OTC market
- **Exchange-traded funds (ETFs)** invest in the stocks or securities contained in a specific stock or securities index and has shares that are traded on a securities exchange or in the OTC market
 - Fees generally lower than those of closed- or open-end funds
- **Open-end funds** are mutual funds in which shares are issued and redeemed by the investment company at the request of investors
 - Investors are free to buy and sell shares at the **net asset value**

Net Asset Value

- **Net asset value (NAV)** is the market value of the securities contained in the fund's portfolio minus the fund's liabilities divided by the number of shares outstanding

EXAMPLE: Net Asset Value (American Frontiers Mutual Fund)

The investments contained in the New American Frontiers Mutual Fund have a current market value of \$980 million. The fund also has liabilities that total \$10 million. If this mutual fund has 40 million shares, the net asset value per share is \$24.25, as shown below.

$$\begin{aligned}\text{Net asset value} &= \frac{\text{Value of the fund's portfolio} - \text{Liabilities}}{\text{Number of shares outstanding}} \\ &= \frac{\$980 \text{ million} - \$10 \text{ million}}{40 \text{ million shares}} = \$24.25 \text{ NAV per share}\end{aligned}$$



Costs: Load Funds Versus No-Load Funds

- **Load funds** are mutual funds in which investors pay a commission every time they purchase shares
 - May be as high as 8.5% of the purchase price for investments, but average is between 3% and 5%
 - Fees are often waived or lowered for shares purchased for retirement accounts
 - Fees are often lower for investors who make large purchases
 - Advantage is that fund's sales force will explain the fund, help you determine which fund is appropriate, and offer advice
- **No-load funds** are mutual funds in which the individual investor pays no sales charge
- Some funds charge a **contingent deferred sales** load, a fee (ranging from 1% to 5%) that shareholders pay when they sell shares in a mutual fund

Examples: Sales Charge and Contingent Deferred Sales Load

EXAMPLE: Sales Charge Calculation (J.P. Morgan Large Cap Growth Fund)

The J.P. Morgan Large Cap Growth Fund charges a sales load of 5.25 percent. If you invest \$10,000, you must pay a \$525 commission to purchase shares.

$$\begin{aligned}\text{Load charge} &= \text{Dollar amount of investment} \times \text{Load stated as a percentage} \\ &= \$10,000 \times 5.25 \text{ percent} = \$525\end{aligned}$$

$$\begin{aligned}\text{Amount available for investment} &= \text{Investment amount} - \text{Load charge} \\ &= \$10,000 - \$525 = \$9,475\end{aligned}$$

EXAMPLE: Contingent Deferred Sales Load (Alger Mid Cap Growth Fund)

Assume you withdraw \$6,000 from B shares that you own in the Alger Mid Cap Growth Fund within a year of your purchase date. You must pay a 5 percent fee for any withdrawals during the first year. Your fee is \$300. After deducting the fee, you will receive \$5,700, as shown below.

$$\begin{aligned}\text{Contingent deferred sales load} &= \text{Amount of withdrawal} \times \text{Fee stated as a percentage} \\ &= \$6,000 \times 5 \text{ percent} = \$300\end{aligned}$$

$$\begin{aligned}\text{Amount you receive} &= \text{Amount of withdrawal} - \text{Contingent deferred sales load} \\ &= \$6,000 - \$300 = \$5,700\end{aligned}$$



Costs: Management Fees and Other Charges

- Companies that sponsor funds charge **management fees**, a fixed percentage of the fund's net asset value on a predetermined date
 - Annual management fees range between 0.25% and 1.5%, with the average being 0.5% to 1.0%
- Investment firms may also levy a **12b-1 fee**, a fee that defrays costs of advertising and marketing a mutual fund
 - These fees are taken out of the fund's assets and cannot exceed 1% of a fund's assets per year
 - Typically, this is an ongoing fee that is charged annually
- **Expense ratio** is the amount investors pay for all of a mutual fund's management fees and operating costs

How Important are Fees?

EXAMPLE: Expense Ratios Make a Difference in Return

Assume you invest in two different funds. Each fund returns 10 percent a year. One fund has an expense ratio of 1.5 percent; the other fund has an expense ratio of 0.5 percent.

Fund	Amount Invested	Annual Return	Expense Ratio	Value of the Investments at the End of 20 Years
Fund A	\$10,000	10%	0.5%	\$60,858
Fund B	\$10,000	10%	1.5%	\$49,725
Difference in total return				\$11,133

Source: Securities and Exchange Commission, "Mutual Fund Fees and Expenses," <https://www.sec.gov/fast-answers/answersmffeeshtm.html>, accessed February 25, 2020.

Typical Fees Associated with Mutual Fund Investments

Exhibit 13-3

Type of Fee or Charge	Customary Amount
Load fund	Up to 8.5 percent of the purchase.
No-load fund	No sales charge.
Contingent deferred sales load	1 to 5 percent fee for withdrawals, depending on how long you own shares in the fund before making a withdrawal.
Management fee	0.25 to 1.5 percent per year of the fund's assets.
12b-1 fee	Cannot exceed 1 percent of the fund's assets per year.
Expense ratio	The amount investors pay for all fees and operating costs. Financial experts recommend funds with an expense ratio of 1 percent or less.
Class A shares	Commission charge when shares are purchased.
Class B shares	Commission charge when money is withdrawn during the first five years. Generally, charges decline the longer you own the fund.
Class C shares	No commission to buy or sell shares. These shares may have a small fee for withdrawals and often have higher ongoing 12b-1 fees.



Stock Funds

- **Aggressive growth funds** seek rapid growth by purchasing stocks for which prices are expected to increase dramatically in a short period of time
- **Equity income funds** invest in stocks issued by companies with a long history of paying dividends
- **Global stock funds** invest in stocks of companies throughout the world, including the U.S.
- **Growth funds** invest in companies expecting higher-than-average revenue and earnings growth
- **Index funds** invest in the same companies included in an index, such as the Standard & Poor's 500 stock index
- **International funds** invest in foreign stocks sold throughout the world



Stock Funds (Continued)

- ***Large-cap funds*** invest in companies with total capitalization of \$10 billion or more
- ***Mid-cap funds*** invest in companies with total capitalization of \$2 billion to \$10 billion
- ***Regional funds*** seek to invest in stock traded within one specific region of the world
- ***Sector funds*** invest in companies within the same industry
- ***Small-cap funds*** invest in smaller, lesser-known companies with a total capitalization of between \$300 million and \$2 billion
- ***Socially responsible funds*** avoid investing in companies that may cause harm to people, animals, and the environment



Bond Funds

- ***High-yield (junk) bond funds*** invest in high-yield, high-risk corporate bonds
- ***Intermediate corporate bond funds*** invest in investment-grade corporate debt with maturities between 3 and 10 years
- ***Intermediate U.S. government bond funds*** invest in U.S. Treasury securities with maturities between 3 and 10 years
- ***Long-term corporate bond funds*** invest in investment-grade corporate bond issues with maturities in excess of 10 years



Bond Funds (Continued)

- ***Long-term (U.S.) government bond funds*** invest in U.S. Treasury securities with maturities in excess of 10 years
- ***Municipal bond funds*** invest in municipal bonds that provide investors with tax-free interest income
- ***Short-term corporate bond funds*** invest in investment-grade corporate bond issues with maturities of less than three years
- ***Short-term (U.S.) government bond funds*** invest in U.S. Treasury securities with maturities of less than three years
- ***World bond funds*** invest in bonds and other debt securities offered by foreign companies and governments



Other Funds

- ***Asset allocation funds*** invest in different types of investments, including stocks, bonds, fixed-income securities, and money market instruments
- ***Balanced funds*** invest in both stocks and bonds with the primary objectives of conserving principal, providing income, and providing long-term growth
- ***Fund of funds*** invest in shares of other mutual funds
- ***Lifecycle funds*** (sometimes referred to as *lifestyle funds* or *target-date funds*) are popular with investors planning for retirement by a specific date
- ***Money market funds*** invest in certificates of deposit, government securities, and other safe and highly liquid investments



Other Funds (Continued)

- ***Total stock market funds*** are designed to provide investors with exposure to most of the stocks traded in the United States, including small-cap, mid-cap, and large-cap stocks
- A **family of funds** exists when one investment company manages a group of mutual funds
 - Each fund within the family has a different financial objective
 - Allows shareholders to conveniently switch their investments among funds as different funds offer more potential, financial reward, or security
 - Charges for exchanges, if any, are generally small



The Benefits of Portfolio Construction

- **Portfolio construction** is the process of choosing different types of stocks, bonds, funds, and other investment alternatives to obtain larger returns while reducing risk
 - Very personalized process
 - Choice of investments is often determined by your goals, your tolerance for risk, your age, how much money you have to invest, how long before you retire, and other factors
 - Nation's economy, world economy, unemployment rate, inflation rates, interest rates, and a host of other factors could affect your investment portfolio



Choosing the Right Fund for a Retirement Account

- Assume you have just started a new job and your employer offers you the opportunity to participate in the company's 401(k) or 403(b) plan
 1. ***Do you want to participate in the retirement account?***
 - Employer-sponsored retirement accounts provide a way to reduce the amount of current income tax that is withheld from your paycheck
 - Many employers will match your contribution (up to a limit)
 2. ***Which mutual funds do you want to invest in?***
 - Consider long-term goals and time value of money concepts
 3. ***What is your stage in life?***
 - Younger workers typically choose more risk-oriented funds, while older workers choose more conservative funds



How to Make a Decision to Buy or Sell Mutual Funds

- *Do you want a managed fund or an index fund?*
- **Managed funds**
 - Most mutual funds are managed funds
 - Professional fund manager chooses the securities that are contained in the fund, and decides when to buy and sell securities in the fund
 - Consider how long the present fund manager has been managing the fund
 - Higher annual expenses
- **Index funds** (i.e., passive funds)
 - Majority of funds fail to outperform S&P 500 index
 - Lower expense ratio than managed funds



The Internet and Professional Advisory Services

- Information about mutual fund investments on the Internet can be accessed three ways:
 1. Obtain current market values for mutual funds by using a website such as Marketwatch, MSN Money, or Yahoo!
 2. Access the web page of the investment company that sponsors the mutual fund
 3. Professional advisory services (e.g., Morningstar, Inc., Value Line, and Refinitiv Lipper) provide detailed information on mutual funds, though many of these services may require you pay a fee for their research and recommendations



The Mutual Fund Prospectus and Annual Report

- The ***prospectus*** should provide the following, in addition to information about the fund's investment objective:
 - Statement describing the risk factor associated with the fund
 - Description of the fund's past performance
 - Statement describing type of investments in fund's portfolio
 - Information about dividends, distributions, and taxes
 - Information about the fund's management
 - Information on limitations or requirements, if any, the fund must honor when choosing investments
 - Process to open an account and to buy/sell shares in the fund
 - Description of services provided to investors and fees for services
 - Information about how often the fund's portfolio changes



The Mutual Fund Prospectus and Annual Report (Continued)

- ***Annual report*** contains the following:
 - A letter from the president of the investment company, from the fund manager, or both;
 - Detailed financial information about the fund's assets and liabilities, performance, statement of operations, and statement of changes in net assets;
 - Schedule of investments; and
 - A letter from the fund's independent auditors that provides an opinion as to the accuracy of the fund's financial statements.



Financial Publications and Newspapers

- Business- and investment-oriented magazines are excellent sources of information about mutual funds
 - *Bloomberg Businessweek*, *Forbes*, *Fortune*, *Kiplinger's Personal Finance*, and *Money* are examples
- Several mutual fund guidebooks are likely available at your local bookstore or public library
- Many large metropolitan newspapers and *The Wall Street Journal* often provide news and information about funds



The Mechanics of a Mutual Fund Transaction

LO13.4

- For many investors, mutual funds have become the investment of choice
 - May be part of a 401(k) or 403(b) retirement account, SEP IRA, Roth IRA, or traditional IRA retirement account
 - Can also be owned outright in a taxable account
- Most individuals invest in mutual funds to achieve long-term financial objectives
- For \$2,000 or less, you can open an account and begin investing



Advantages and Disadvantages of Investing in Mutual Funds

Advantages

- Diversification.
- Professional management.
- Ease of buying and selling shares.
- Multiple withdrawal options.
- Distribution or reinvestment of dividends and capital gain distributions.
- Switching privileges within the same fund family.
- Services that include toll-free telephone numbers, complete records of all transactions, and options for savings and checking.

Disadvantages

- Purchase/withdrawal costs.
- Ongoing management and 12b-1 fees.
- Poor performance that may not match that of the Standard & Poor's 500 stock index or some other index.
- Inability to control when capital gain distributions occur and complicated tax reporting issues.
- Potential market risk associated with all investments.
- Some sales personnel are aggressive and/or unethical.



Return on Investment

- Purpose of investing in a closed-end fund, exchange-traded fund, or open-end fund is to earn a financial return, which may be done in one of three ways:
 1. **Income dividends** are earnings a fund pays to shareholders from its dividend and interest income
 2. **Capital gain distributions** are payments made to a fund's shareholders that result from the sale of securities in the fund's portfolio
 3. **Capital gains** are the profits that results when investors buy shares in a fund at a low price and then sell the shares after the price has increased



Taxes and Mutual Funds

- Taxes on reinvested income dividends, capital gain distributions, and profits from the sale of shares can be *deferred* if fund investments are held in retirement account
 - These taxes may be *eliminated* if investments are held in a Roth IRA and all qualifications are met
- For mutual funds held in taxable accounts, income dividends, capital gain distributions, and financial gains and losses from the sale of funds are *subject to taxation*
- Two problems develop with taxation of mutual funds:
 - Even if you choose to reinvest dividends/distributions, they are still taxed in a taxable account and must be reported on your federal tax return as current income
 - You have no control over when the mutual fund sells securities and when you will be taxed on capital gain distributions



Purchase Options

- You can buy shares of a closed-end fund or ETF through a stock exchange or in the OTC market
- To purchase shares in an open-end mutual fund, you may use four options:
 1. **Regular account transaction** is the most popular and least complicated method
 - You decide how much money you want to invest and when you want to invest, and then you buy as many shares as possible
 2. **Voluntary savings plans** offer a chief advantage of allowing you to make smaller purchases than the minimum required by the regular account transaction method
 3. **Contractual savings plans** require you to make regular purchases over a specified period, usually 10 to 15 years
 4. **Reinvestment plan** allows income dividends and capital gain distributions to be automatically reinvested to purchase additional shares of the fund



Withdrawal Options

- Because *closed-end funds* and *ETFs* are listed on stock exchanges or traded in the OTC market, an investor may sell shares in such a fund to another investor
- Shares in an *open-end fund* can be sold on any business day to the investment company that sponsors the fund or your brokerage firm
 - In this case, the shares are redeemed at their NAV



Withdrawal Options (Continued)

- Most funds have provisions that allow investors with shares that have a minimum asset value (usually at least \$5,000) to use four options to systematically withdraw money:
 1. Withdraw a specified, fixed dollar amount each investment period until your fund has been exhausted
 2. Liquidate or “sell off” a certain number of shares each investment period
 3. Withdraw a fixed percentage of asset growth
 4. Withdraw all asset growth that results from income dividends/capital gain distributions earned by the fund during an investment period



Chapter Summary

LO13.1: Explain the characteristics of mutual fund investments.

- The major reasons investors choose mutual funds are professional management and diversification. Mutual funds are also a convenient way to invest money—especially for retirement accounts.
- There are three types of funds: closed-end funds, exchange-traded funds, and open-end funds.
 - A closed-end fund is a fund whose shares are issued only when the fund is organized.
 - An exchange-traded fund (ETF) is a fund that usually invests in the stocks or other securities contained in a specific stock index or securities index. Both closed-end and exchange-traded funds are traded on a stock exchange or in the over-the-counter market.
 - An open-end fund is a mutual fund whose shares are sold and redeemed by the investment company at the net asset value (NAV) at the request of investors.

Chapter Summary

LO13.1 (Continued)

- Mutual funds can also be classified as A shares (commissions charged when shares are purchased), B shares (commissions charged when money is withdrawn during the first five years), and C shares (no commission to buy or sell shares but often higher, ongoing fees).
 - C shares may charge a small fee to sell shares.
- You can also purchase no-load funds in which investors pay no sales charges. Other possible fees include management fees and 12b-1 fees. Together, all the different management fees and operating costs are referred to as an expense ratio.
- Since it is important to keep fees and costs as low as possible, you should examine a fund's expense ratio as one more consideration when evaluating a mutual fund.



Chapter Summary

LO13.2: Classify mutual funds by investment objective.

- The managers of funds tailor their investment portfolios to the investment objectives of their customers.
- The major fund categories are stock funds and bond funds. There are also funds that invest in a mix of different stocks, bonds, and other securities that include asset allocation funds, balanced funds, fund of funds, lifecycle funds, money market funds, and total market funds.
- Today, many investment companies use a family-of-funds concept, which allows shareholders to switch among funds as different funds offer more potential growth, financial reward, or security.



Chapter Summary

LO13.2 (Continued)

- To reduce risk, investors often construct an investment portfolio.
 - Portfolio construction is the process of choosing different types of stocks, bonds, funds, and other investment alternatives to obtain larger returns while reducing risk.
- Many investors also purchase different funds for their retirement plans in order to achieve their financial objectives.



Chapter Summary

LO13.3: Evaluate mutual funds.

- The responsibility for choosing the “right” mutual fund rests with you, the investor.
- Often, the first question investors must answer is whether they want a managed fund or an index fund.
 - With a managed fund, a professional fund manager (or team of managers) chooses the securities that are contained in the fund.
- Some investors choose to invest in an index fund because over many years, index funds have outperformed the majority of managed funds.
- To help evaluate different mutual funds, investors can use the information on the Internet, from professional advisory services, from the fund’s prospectus and annual report, in financial publications, and in newspapers.



Chapter Summary

LO13.4: Describe how and why mutual funds are bought and sold.

- The advantages of mutual funds have made mutual funds the investment of choice for many investors.
 - For \$2,000 or less, you can open an account and begin investing.
- The shares of a closed-end fund or exchange-traded fund are bought and sold on organized stock exchanges or in the over-the-counter market.
- The shares of an open-end fund may be purchased through a salesperson who is authorized to sell them, through an account executive of a brokerage firm, from a mutual fund supermarket, or from the investment company that sponsors the fund.



Chapter Summary

LO13.4 (Continued)

- The shares in an open-end fund can be sold to the investment company that sponsors the fund.
- Shareholders in mutual funds can receive a return in one of three ways: income dividends, capital gain distributions when the fund buys and sells securities in the fund's portfolio at a profit, and capital gains when the shareholder sells shares in the mutual fund at a higher price than the price paid.
- To ensure you have all of the documentation you need for tax reporting purposes, it is essential that you keep accurate records.
- A number of purchase and withdrawal options are available for mutual fund investors.