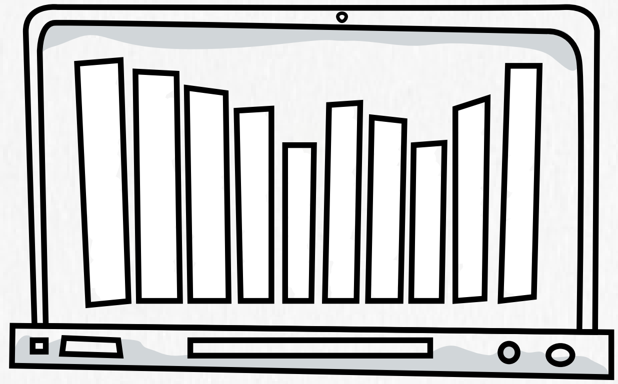
CHAPTER 4: Mutual Funds

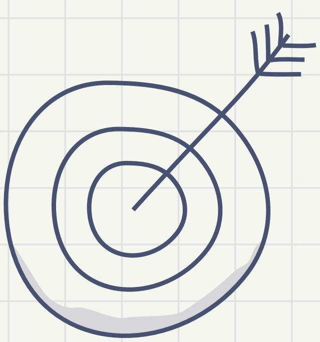


Did You Know?

The U.S. mutual fund market — with $18.75 trillion in assets under management in 2017 — is the largest in the world. Stock funds made up 59% of the market and bond funds made up 21% in that year, with 44.5% of American households owning mutual funds.[4]

As we have seen, one of the keys to successful investing is diversifying — putting your money into a variety of carefully selected financial products that collectively balance risk with return. A quick internet search will show that recommendations vary widely for how many different investments you need, but all will more or less agree that 10 is better than two.[5] If you don't have a lot of money to invest, however, it can be tough to build a diversified portfolio of individual stocks and bonds. It also takes a lot of time and expertise to study each industry and company, track the market, and figure out what to buy and when to trade.

That's where **mutual funds** come in. When you buy a share in a mutual fund, your money gets pooled with the investments of many other people, and it all gets invested together. This makes it possible to own small chunks of lots of different financial products and is one reason why mutual funds are popular for company-sponsored 401k retirement savings accounts.[6]



Career Link

Financial analysts can be found throughout the financial industry, working for banks, insurance companies, and mutual funds and securities firms. Their role is to help people decide how to invest their money. In addition to good people skills, math, computer, and problem-solving skills are vital. Most financial analysts have a college degree in business, accounting, statistics, or finance.

Mutual funds are a smart investment solution for another reason: Since most of us are not experts on a wide range of industries and don't have time to stay up-to-date on the performance of every company, we usually rely on stockbrokers to help us gather and understand this information. Yet, at the same time, most of us want to have control over our own money. With mutual funds, you get both benefits. Each fund is managed by experts, and you can select which funds you want to put your money into and change the amount invested in each fund as you see fit.

TYPES OF MUTUAL FUNDS

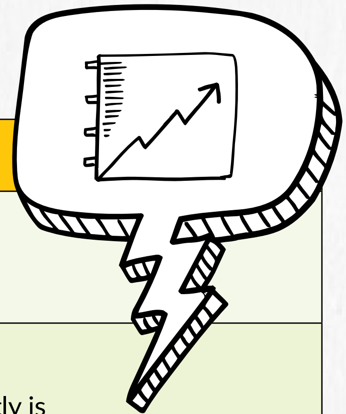
Thousands of different mutual funds exist in the U.S. covering nearly every sector of the market. Depending on the fund, it may invest in stocks, bonds, or a combination. Stock funds are known as **equity funds**, while bond funds are typically called **fixed income**. Mutual funds that invest in both stocks and bonds are sometimes called **hybrids**.

Within those three categories, there are hundreds of funds that fit any number of criteria. Looking to invest only in really large or really small companies? Technology companies? Socially responsible industries? You name it, there's probably a fund to match your preference.

Some of these funds are **actively managed**, meaning there is a professional team or individual whose job is to continuously analyze the market, and buy and sell investments for the fund, with the goal of getting higher returns than the rest of the market. Other funds are **passively managed**, which means they're set up to track a segment of the market and are largely left alone. These include **index funds**, which contain assets that mirror a specific stock price index such as the S&P 500 with the goal of matching its growth.

[4] www.statista.com/topics/1441/mutual-funds
[5] www.investopedia.com/ask/answers/05/optimalportfoliosize.asp
[6] Biafore, Bonnie, Amy Buttell and Carol Fabbri. Personal Finance: The Missing Manual. O'Reilly. 2010.

Some of the most common types of stock and bond funds include:

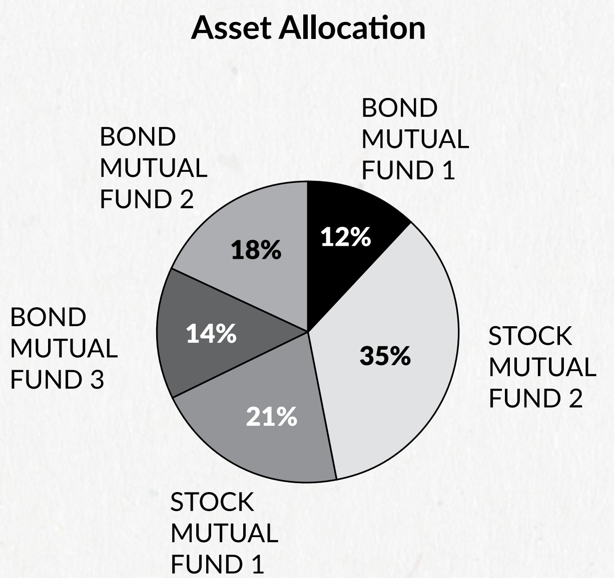


STOCK (EQUITY) FUNDS	
Equity Growth Fund	Stocks of companies for which future earnings are expected to have above-average growth relative to other companies in the marketplace
Equity Value Fund	Stocks of companies for which investment analysts' models indicate that the stock price should be higher than it currently is
Aggressive Equity Fund	Stocks of companies (generally smaller and medium-sized) for which future earnings are expected to have rapid growth
S&P 500 Index Fund	Stocks of 500 large companies; designed to reflect the combined performance of the S&P 500 index
International Equity Fund	Stocks of companies that are based outside of the U.S. that meet the "growth" or "value" criteria described above
European Equity Fund	Stocks of companies based in Europe that meet the "growth" or "value" criteria described above
Asian Pacific Equity Fund	Stocks of companies based in Asia that meet the "growth" criteria described above

BOND (FIXED INCOME) FUNDS	
U.S. Government Fund	Bonds issued by the U.S. federal government with maturities between 1 and 30 years
Fixed Income Fund	Bonds issued by the U.S. federal government and by high-quality U.S.-based companies with maturities between 1 and 30 years
High Yield Fund	Bonds issued by companies with less predictable future earnings; these companies could experience losses that could cause the suspension or elimination of both the periodic coupon payments and repayment of the bond's face amount at maturity
International Fixed Income Fund	Bonds issued by foreign governments and companies

Asset Allocation

The stocks and bonds held by mutual funds are called **assets**. When investors purchase shares in mutual funds, they often do not put all their money into one fund. Instead, they usually put some money into stock funds and some into bond funds. Let's say you decide to put 70% of your money into stock mutual funds and 30% into bond mutual funds. You could then choose to further divide the 70% allocated for stock mutual funds into specific funds, such as 30% into Stock Fund 1, 50% into Stock Fund 2, and 20% into Stock Fund 3. The 30% that was allocated for bond funds may also be divided so that 40% of it goes into Bond Fund 1 and 60% goes into Bond Fund 2. This process of **asset allocation** allows an investor to balance risk and return in a way that suits their individual investment objectives and comfort level with financial risk.



This pie chart shows what asset allocation looks like. In this case, the investor's asset allocation (or **asset mix**) is 56% stocks and 44% bonds. Typically, long-term investments and a higher comfort level with risk will have a higher ratio of stocks to bonds. Investors who prefer a steady, low-risk return or who plan to start using their investment sooner would have an asset mix with more bonds than stocks.

Hybrid mutual funds, which invest in both stocks and bonds, will have their own unique asset mix built-in, and will vary accordingly in terms of return and risk. **Target date funds** are a type of hybrid fund that has gained popularity in recent years, particularly for retirement investments. The asset mix for these funds is based on the year when investors expect

to start withdrawing and using their money. Let's say you have just started your first job and expect to retire in 40 years. You could choose to invest for your retirement in a 40-year Target Fund. In the early years, the fund will lean heavily towards stocks and other higher risk investments with a goal of achieving greater growth early on, with the expectation that you will have time to make up any losses. As the 40-year target gets closer, the fund's asset mix will shift to include more bonds and low-risk investments.

Investment Costs

Unlike purchasing stocks, in which you usually pay a commission only when you buy or sell, mutual funds require ongoing management, so they charge ongoing fees. On an annual basis, total mutual fund charges generally range between 0.2% and 2.5% of the fund's market value.[7] The fee is known as an **expense ratio**, and it is taken from your earnings.

Let's say you have $10,000 in a mutual fund that has an expense ratio of 1%. If the fund's return is 6% ($600), you will have to pay 1% ($100) as a fee, and your net return will be 5% ($500). This may not sound like much, but taken over decades, it can add up. Because of the way they are managed, bond mutual funds and stock index funds typically have lower costs than actively managed funds, something to consider when choosing your investments.

Some funds also charge a **sales load**, which is a commission based on the amount of money you invest. Today, many mutual funds are **no load** funds. The funds that still charge for investing will use a percentage rate for calculating their fee. For example, if you want to invest $1,000 in a fund that has an 8% sales load, then the **net investment** would be $920 ($1,000 x 8% = $80 sales load; $1,000 - $80 sales load = $920 net investment).

[7] www.investopedia.com/ask/answers/032715/when-expense-ratio-considered-high-and-when-it-considered-low.asp

Net Asset Value

When you invest in a mutual fund, you do not directly own any of the individual shares of stock or any of the individual bonds in the fund. Instead, you own **mutual fund shares.** The purchase price of these shares is calculated daily, based on the fund's **net asset value (NAV)**.

Unlike stocks, whose prices change constantly throughout the day, net asset value is calculated at the end of each business day, and all of the day's purchases are put through at that time. The formula is as follows:

1. Determine the market price of each individual asset in the fund.
2. Calculate the fund's **total market value** by adding up the value of all of the assets.
3. Deduct the daily **total expense** charges to find the net market value.
4. Divide the net market value by the total number of mutual shares for the net asset value.

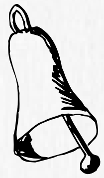
Exchange-Traded Funds

Exchange-Traded Funds, or ETFs, are another popular way that people invest. They are similar to mutual funds in that they contain a variety of assets to provide diversification, and investors purchase shares of the fund instead of shares in the individual assets. Like passively managed mutual funds, most ETFs track a stock price index, so they tend to have higher rates of return and lower costs than actively managed mutual funds.

The primary difference between ETFs and mutual funds is that ETFs are bought and sold on exchanges, the same way that individual stocks are typically traded. This means that the share price fluctuates throughout the day, and is not calculated at the end of each day as it is for a mutual fund. This makes ETFs a better option for people who want greater control and the opportunity to buy and sell more frequently. On the flip side, you can't schedule ongoing automatic purchases as you can with a mutual fund. ETFs also typically have lower minimum purchase limits than mutual funds, because they're priced like stock shares.[8]

[8] https://investor.vanguard.com/etf/etf-vs-mutual-fund

Activity 1



ASSET MANAGEMENT

PART 1: NET ASSET VALUE

You are looking to invest in a mutual fund and want to know the net asset value for today. This is what you learn: The fund has 20 million shares and the total market value of its assets today is $300 million. The expense ratio for the fund is 0.004% daily.

1. What is the net asset value of one share of this mutual fund? Use a calculator to find the answer.

Total Market Value	– (Expense Ratio x Total Market Value)	= Net Market Value	÷ Number of Shares	= Net Asset Value
$	– $	= $	÷	= $

2. How much would it cost you to buy 100 shares if this was a no-load fund? $________________

3. If you had $5,000 to invest, and this fund had a 4.75% sales load, how much would your net investment be? Use a calculator to find the answer.

Investment Amount	– (Sales Load x Investment Amount)	= Net Investment
$	– $	= $

PART 2: BUILDING A MUTUAL FUND PORTFOLIO

Imagine you have $20,000 to invest in mutual funds. Spend some time researching different funds that might fit your needs and then select at least five to invest your money. You must include at least one stock fund, one bond fund, and one hybrid in your selection. Use this chart to create a profile of your mutual fund portfolio, including the pros and cons for each of your choices. (We provide a sample to get you started.) Then answer the questions on the next page.

Fund Name	Symbol	Asset Type	Net Assets	Expense Ratio	Pros	Cons
Baron Partners Retail	BPTRX	Stocks	$2.2 billion	1.34%	High year-to-date return of 15.34%	High risk, borrows money for investment opportunities

1. What is your asset allocation?

By Individual Funds:

- Fund 1: ____________%
- Fund 2: ____________%
- Fund 3: ____________%
- Fund 4: ____________%
- Fund 5: ____________%

By Asset Type:

- Stock Funds:____________%
- Bond Funds:____________%
- Hybrid Funds:____________%

2. Create a journal to track your funds' expenses and total market value over a 30-day period. (You can modify the Daily Stock Tracker chart you used in Chapter 3.) Describe any returns or changes in your mutual funds over the 30-day tracking period.

3. Thirty days is not a long time in the life of a mutual fund, but did you notice anything about how your funds changed value that made you confident/concerned about your investments?

4. Which of your investments was the most risky? Least risky?

5. Do you think you allocated your assets correctly when you developed your portfolio? Why or why not?

6. Do you think any of the costs associated with your mutual funds were too high or too low? Explain.

7. What changes, if any, would you make to your portfolio or asset allocations if you could re-do the assignment? Explain.

8. Exchange-traded funds (ETFs) are more cost-efficient to buy and sell frequently. Do you think, based on this project, that they'd be a good choice for you? Why or why not?

Activity 2

ACHIEVING YOUR INVESTMENT GOALS

In this book, you learned about the three most common types of investments — stocks, bonds, and mutual funds — and about the importance of diversification. Now you're ready to put what you've learned to work.

Choose one of the investment goals listed below, and design a well-diversified portfolio that would help you achieve it. You might start by examining the portfolios developed by *Kiplinger's*, a personal finance publication, which cover a range of timelines and risk tolerances — visit **www.kiplinger.com/tool/investing/T052-S001-investment-portfolio-finder/index.php**. You can use one of the *Kiplinger's* portfolios or create your own with a combination of stocks, bonds, and/or mutual funds. Keep in mind that a higher ratio of stocks to bonds in your portfolio typically indicates a higher level of risk but also a higher level of returns — and vice versa.

INVESTMENT GOALS (CHOOSE ONE)

1. You'd like to buy a house in five to seven years and need a down payment.
2. You want to buy a vacation home or boat in 8-10 years.
3. Your kids will be going to college in 10-12 years.
4. In 15-18 years, you'd like to start working part-time and use your investments as supplemental income.
5. You are saving for retirement in 25 years. You want to have money to travel and take up new hobbies.
6. You are saving for retirement in 30 years. You want to have a small home near your grandkids and enough money to go out to eat occasionally.

Create a presentation for your class that demonstrates why you chose each of the assets in your portfolio, a timeline of how much money you will need to invest and when, and a projection of your earnings over the time period designated. For example, if you choose Goal 1, you will need to show how much money you will have to invest, and how much you expect to earn, over the 5-year period. Also indicate the strategy you will use for evaluating your portfolio and then buying promising assets and selling assets that aren't performing well.