

# Managing Investment Risk

## I. Introduction

When you invest, you take certain risks. With insured bank investments, such as certificates of deposit (CDs), you face inflation risk, which means that you may not earn enough over time to keep pace with the increasing cost of living. With investments that aren't insured, such as stocks, bonds, and mutual funds, you face the risk that you might lose money, which can happen if the price falls and you sell for less than you paid to buy.

Just because you take investment risks doesn't mean you can't exert some control over what happens to the money you invest. In fact, the opposite is true. If you know the types of risks you might face, make choices about those you are willing to take, and understand how to build and balance your portfolio to offset potential problems, you are managing investment risk to your advantage.

## **2. Why Take Risks?**

The question you might have at this point is, “Why would I want to risk losing some or all of my money?” In fact, you might not want to put money at risk that you expect to need in the short term—to make the down payment on a home, for example, or pay a tuition bill for next semester, or cover emergency expenses. By taking certain risks with the rest of your money, however, you may earn dividends or interest. In addition, the value of the assets you purchase may increase over the long term.

If you prefer to avoid risk and put your money in an FDIC-insured certificate of deposit (CD) at your bank, the most you can earn is the interest that the bank is paying. While that may be good in some years, when interest rates are relatively high, over time money invested in this way tends to grow more slowly than other investments, including stock and bonds. In fact, avoiding investment risk entirely provides no protection against inflation, which decreases the value of the dollar over time.

On the other hand, if you concentrate on only the riskiest investments, it’s entirely possible, even likely, that you will lose money.

For many people, it’s best to manage risk by building a diversified portfolio that holds several different types of investments. This approach provides the reasonable expectation that at least some of the investments will increase in value over a period of time. So even if the return on other investments is disappointing, your overall results may be positive.

### 3. Types of Investment Risk

There are many different types of investment risk. The two general types of risk are:

- Losing money, which you can identify as investment risk
- Losing buying power, which is inflation risk

It probably comes as no surprise that there are several different ways you might lose money on an investment. To manage these risks, you need to know what they are.

#### **Systematic and Nonsystematic Risk**

Most investment risk is described as either systematic or nonsystematic. While those terms seem intimidating, what they refer to is actually straightforward.

**Systematic risk** is also known as market risk and relates to factors that affect the overall economy or securities markets. Systematic risk affects all companies, regardless of the company's financial condition, management, or capital structure, and, depending on the investment, can involve international as well as domestic factors. Here are some of the most common systematic risks:

- **Interest-rate risk** describes the risk that the value of a security will go down because of changes in interest rates. For example, when interest rates overall increase, bond issuers must offer higher coupon rates on new bonds in order to attract investors. The consequence is that the prices of existing bonds drop because investors prefer the newer bonds paying the higher rate. On the other hand, there's also interest-rate risk when rates fall because maturing bonds or bonds that are paid off before maturity must be reinvested at a lower yield.
- **Inflation risk** describes the risk that increases in the prices of goods and services, and therefore the cost of living, reduce your purchasing power. Let's say a can of soda increases from \$1 to \$2. In the past, \$2 would have bought two cans of soda, but now \$2 can buy only one can, resulting in a decline in the value of your money.

Inflation risk and interest rate risk are closely tied, as interest rates generally rise with inflation. Because of this, inflation risk can also reduce the value of your investments. For example, to keep pace with inflation and compensate for the loss of purchasing power, lenders will demand increased interest rates. This can lead to existing bonds losing value because, as mentioned above, newly issued bonds will offer higher

interest rates. Inflation can go in cycles, however. When interest rates are low, new bonds will likely offer lower interest rates.

- **Currency risk** occurs because many world currencies float against each other. If money needs to be converted to a different currency to make an investment, any change in the exchange rate between that currency and yours can increase or reduce your investment return. This risk usually only impacts you if you invest in international securities or funds that invest in international securities.

For example, assume that the current exchange rate of the U.S. dollar to British pound is \$1=0.53 British pounds. If you invest \$1,000 in a mutual fund that invests in the stock of British companies, this will equal 530 pounds ( $\$1,000 \times 0.53 \text{ pounds} = 530 \text{ pounds}$ ). Six months later, assume the dollar strengthens and the exchange rate becomes \$1=0.65 pounds. If the value of the fund does not change, converting the original investment of 530 pounds into dollars will return only \$815 ( $530 \text{ pounds} / 0.65 \text{ pounds} = \$815$ ). Consequently, while the value of the mutual fund has not changed in the local currency, a change in the exchange rate has devalued the original investment of \$1,000 into \$815. On the other hand, if the dollar were to weaken, the value of the investment would go up. So if the exchange rate changes to \$1=0.43 pounds, the original investment of \$1,000 would increase to \$1,233 ( $530 \text{ pounds} / 0.43 \text{ pounds} = \$1,233$ ).

As with most risks, currency risk can be managed to a certain extent by allocating only a limited portion of your portfolio to international investments and diversifying this portion across various countries and regions.

- **Liquidity risk** is the risk that you might not be able to buy or sell investments quickly for a price that is close to the true underlying value of the asset. Sometimes you may not be able to sell the investment at all if there are no buyers for it. Liquidity risk is usually higher in over-the-counter markets and small-capitalization stocks. Foreign investments can pose liquidity risks as well. The size of foreign markets, the number of companies listed, and hours of trading may limit your ability to buy or sell a foreign investment.
- **Sociopolitical risk** is the possibility that instability or unrest in one or more regions of the world will affect investment markets. Terrorist attacks, war, and pandemics are just examples of events, whether actual or anticipated, that impact investor attitudes toward the market in general and result in system-wide fluctuations in stock prices. Some events, such as September 11, can lead to wide-scale disruptions of financial markets,

further exposing investments to risks. Similarly, if you are investing overseas, problems there may undermine those markets, or a new government in a particular country may restrict investment by non-citizens or nationalize businesses.

Your chief defense against systematic risk, as you'll see, is to build a portfolio that includes investments that react differently to the same economic factors. It's a strategy known as asset allocation. This generally involves investing in both bonds and stocks or the funds that own them, always holding some of each. That's because historical patterns show that when bonds as a group—though not every bond—are providing a strong return, stocks on the whole tend to provide a disappointing return. The reverse is also true.

Bonds tend to provide strong returns, measured by the combination of change in value and investment earnings, when investor demand for them increases. That demand may be driven by concerns about volatility risk in the stock market—what's sometimes described as a flight to safety— or by the potential for higher yield that results when interest rates increase, or by both factors occurring at the same time.

That is, when investors believe they can benefit from good returns with less risk than they would be exposed to by owning stock, they are willing to pay more than par value to own bonds. In fact, they may sell stock to invest in bonds. The sale of stock combined with limited new buying drives stock prices down, reducing return.

In a different phase of the cycle, those same investors might sell off bonds to buy stock, with just the opposite effect on stock and bond prices. If you owned both bonds and stocks in both periods, you would benefit from the strong returns on the asset class that was in greater demand at any one time and at the same time be ready when investor sentiment changes and the other asset class provides stronger returns. To manage systematic risk, you can allocate your total investment portfolio so that it includes some stock and some bonds as well as some cash investments.

**Nonsystematic risk**, in contrast to systematic risk, affects a much smaller number of companies or investments and is associated with investing in a particular product, company, or industry sector.

Here are some examples of nonsystematic risk:

- **Management risk**, also known as company risk, refers to the impact that bad management decisions, other internal missteps, or even external situations can have on a company's performance and, as a consequence, on the value of investments in that company. Even if you research a

company carefully before investing and it appears to have solid management, there is probably no way to know that a competitor is about to bring a superior product to market. Nor is it easy to anticipate a financial or personal scandal that undermines a company's image, its stock price, or the rating of its bonds.

- **Credit risk**, also called default risk, is the possibility that a bond issuer won't pay interest as scheduled or repay the principal at maturity. Credit risk may also be a problem with insurance companies that sell annuity contracts, where your ability to collect the interest and income you expect is dependent on the claims-paying ability of the issuer.

One way to manage nonsystematic risk is to spread your investment dollars around, diversifying your portfolio holdings within each major asset class—stock, bonds, and cash—either by owning individual securities or funds that invest in those securities. While you're likely to feel the impact of a company that crashes and burns, it should be much less traumatic if that company's stock is just one among several that you own.

### **Other Investment Risks**

The investment decisions you make—and sometimes those you avoid making—can expose you to certain risks that can impede your progress toward meeting your investment goals.

For example, buying and selling investments in your accounts too frequently, perhaps in an attempt to take advantage of short-term gains or avoid short-term losses, can increase your trading costs. The money you spend on trading reduces the balance in your account or eats into the amount you have to invest. If you decide to invest in something that's receiving a lot of media attention, you may be increasing the possibility that you're buying at the market peak, setting yourself up for future losses. Or, if you sell in a sudden market downturn, it can mean not only locking in your losses but also missing out on future gains.

You can also increase your investment risk if you don't monitor the performance of your portfolio and make changes where appropriate. For example, you should be aware of investments that have failed to live up to your expectations, and shed them when you determine that they are unlikely to improve, using the money from that sale for another investment.

## 4. Assessing Risk

It's one thing to know that there are risks in investing. But how do you figure out ahead of time what those risks might be, which ones you are willing to take, and which ones may never be worth taking? There are three basic steps to assessing risk:

- Understanding the risk posed by certain categories of investments
- Determining the kind of risk you are comfortable taking
- Evaluating specific investments

You can follow this path on your own or with the help of one or more investment professionals, including stockbrokers, registered investment advisers, and financial planners with expertise in these areas.

### **Step 1: Determining the Risk of an Asset Class**

The first step in assessing investment risk is to understand the types of risk a particular category or group of investments—called an asset class—might expose you to. For example, stock, bonds, and cash are considered separate asset classes because each of them puts your money to work in different ways. As a result, each asset class poses particular risks that may not be characteristic of the other classes. If you understand what those risks are, you can generally take steps to offset those risks.

**Stock.** Because shares of stock don't have a fixed value but reflect changing investor demand, one of the greatest risks you face when you invest in stock is volatility, or significant price changes in relatively rapid succession. In fact, in some cases, you must be prepared for stock prices to move from hour to hour and even from minute to minute. However, over longer periods, the short-term fluctuations tend to smooth out to show a gradual increase, a gradual decrease, or a basically flat stock price.

For example, if a stock you bought for \$25 a share dropped \$5 in price in the following week because of disappointing news about a new product, you suffered a 20% loss. If you had purchased 200 shares at a cost of \$5,000, your investment would now be worth just \$4,000. If you sold at that point—and there might have been good reason to do so—you would have lost \$1,000, plus whatever transaction fees you paid.

While some gains or losses of value seem logical, others may not, as may be the case when a company announces increased earnings and its stock price drops. If you have researched the investment before you made it and believe that the company is strong, you might hold on to the stock. In that case, you might be rewarded down the road if the investment then increases in value and perhaps

pays dividends as well. While positive results aren't guaranteed, you can learn to anticipate when patience is likely to pay off.

**Bonds.** Bonds have a fixed value—usually \$1,000 per bond—or what is known as par or face value. If you hold a bond until maturity, you will get that amount back, plus the interest the bond earns, unless the issuer of the bond defaults, or fails to pay. In addition to the risk of default, you also face potential market risk if you sell bonds before maturity. For example, if the price of the bonds in the secondary market—or what other investors will pay to buy them—is less than par, and you sell the bonds at that point, you may realize a loss on the sale.

The market value of bonds may decrease if there's a rise in interest rates between the time the bonds were issued and their maturity dates. In that case, demand for older bonds paying lower rates decreases. If you sell, you must settle for the price you can get and potentially take that loss. Market prices can also fall below par if the bonds are downgraded by an independent rating agency because of problems with the company's finances.

Some bonds have a provision that allows the issuer to “call” the bond and repay the face value of the bond to you before its maturity. Often there is a set “call date,” after which a bond issuer can pay off the bond. With these bonds, you might not receive the bond's original coupon rate for the bond's entire term. Once the call date has been reached, the stream of a callable bond's interest payments is uncertain, and any appreciation in the market value of the bond may not rise above the call price. These risks are part of call risk.

Similar to when a homeowner seeks to refinance a mortgage at a lower rate to save money when loan rates decline, a bond issuer often calls a bond after interest rates drop, allowing the issuer to sell new bonds paying lower interest rates—thus saving the issuer money. The bond's principal is repaid early, but the investor is left unable to find a similar bond with as attractive a yield. This is known as reinvestment risk.

**Cash.** The primary risk you face with cash investments, including U.S. Treasury bills and money market mutual funds, is losing ground to inflation. In addition, you should be aware that money in money market funds usually is not insured. While such funds have rarely resulted in investor losses, the potential is always there.

Other assets classes, including real estate, pose their own risks, while investment products, such as annuities or mutual funds that invest in a specific asset class, tend to share the risks of that class. That means that the risk you face with a stock mutual fund is very much like the risk you face with individual stock, although most mutual funds are diversified, which helps to offset nonsystematic risk.

## **Step 2: Selecting Risk**

The second step is to determine the kinds of risk you are comfortable taking at a particular point in time. Since it's rarely possible to avoid investment risk entirely, the goal of this step is to determine the level of risk that is appropriate for you and your situation. Your decision will be driven in large part by:

- Your age
- Your goals and your timeline for meeting them
- Your financial responsibilities
- Your other financial resources

Age is one of the most important issues in managing investment risk. In general, the younger you are, the more investment risk you can afford to take. The reason is simple: You have more time to make up for any losses you might suffer in the short term.

You can use recent history to illustrate the validity of this point. Suppose two people, one 30 and the other 60, had been similarly invested in January 2000 in portfolios overloaded with telecommunications and technology stocks. By the end of 2002, both would almost certainly have lost substantial amounts of money. But while the younger person has perhaps 35 years to recover and accumulate investment assets, the older person may be forced to delay retirement.

On the other hand, having a long time to recover from losses doesn't mean you can ignore the importance of managing risk and choosing investments carefully and selling them when appropriate. The younger you are, the more stock and stock funds—both mutual funds and exchange traded funds—you might consider buying. But stock in a poorly run company, a company with massive debt and noncompetitive products, or a company whose stock is wildly overpriced, probably isn't a good investment from a risk-management perspective, no matter how old you are.

As you get closer to retirement, managing investment risk generally means moving at least some of your assets out of more volatile stock and stock funds into income-producing equities and bonds. Determine what percentage of your assets you want to transfer, and when. That way you won't have more exposure to a potential downturn than you've prepared for. The consensus, though, is to include at least some investments with growth potential (and therefore greater risk to principal) after you retire since you'll need more money if you live longer than expected. Without growth potential, you're vulnerable to inflation.

Keep in mind that your attitude toward investment risk may—and probably should—change over time. If you are the primary source of support for a number

of people, you may be willing to take less investment risk than you did when you were responsible for just yourself.

In contrast, the larger your investment base, the more willing you may be to take added risk with a portion of your total portfolio. In a worst-case scenario, you could manage without the money you lost. And if your calculated risk pays off, you may have even more financial security than you had before.

Many people also find that the more clearly they understand how investments work, the more comfortable they feel about taking risk.

### **Step 3: Evaluating Specific Investments**

The third step is evaluating specific investments that you are considering within an asset class. There are tools you can use to evaluate the risk of a particular investment—a process that makes a lot of sense to follow both before you make a new purchase and as part of a regular reassessment of your portfolio. It's important to remember that part of managing investment risk is not only deciding what to buy and when to buy it, but also what to sell and when to sell it.

For stocks and bonds, the place to start is with information about the issuer, since the value of the investment is directly linked to the strength of the company—or in the case of certain bonds, the government or government agency—behind them.

#### **Company Documents**

Each public company must register its securities with the Securities and Exchange Commission (SEC) and provide updated information on a periodic basis. The annual report on Form 10-K contains audited financial statements as well as a wealth of detailed information about the company, the people who run it, the risks of investing in the company, and much more. Companies also submit to the SEC three additional quarterly reports called 10-Qs and interim reports on Form 8-K. You can access these company filings using the SEC's EDGAR database ([www.sec.gov/edgar/searchedgar/webusers.htm](http://www.sec.gov/edgar/searchedgar/webusers.htm)). While they aren't always exciting reading, SEC filings can be a treasure trove of information about a company.

When you're reading a company's financial statements, don't skip over the footnotes. They often contain red flags that can alert you to pending lawsuits, regulatory investigations, or other issues that could have a negative impact on the company's bottom line.

The company's prospectus, especially the risk factors section, is another reliable tool to help you evaluate the investment risk of a newly issued stock, an individual mutual fund or exchange-traded fund, or a REIT (real estate investment trust). The investment company offering the mutual fund, ETF, or REIT must update its prospectus every year, including an evaluation of the level of risk you are taking by owning that particular investment. You'll also want to look at how the fund, ETF, or REIT has done in the past, especially if it has been around long enough to have weathered a full economic cycle of market ups and downs. (The period from 1996 to 2006 is a fairly good example of such a cycle.)

#### **Rating Services**

It's important to check what one or more of the independent rating services has to say about specific corporate and municipal bonds that you may own or may be

considering. Each of the rating companies—including A.M. Best Company, DBRS, Fitch, Japan Credit Rating Agency, Moody's Investors Service, Rating and Investment Information, and Standard & Poor's Ratings Services—evaluates the issuing company a little differently, but all of them are focused on the issuer's ability to meet its financial obligations. The higher the letter grade a rating company assigns, the lower the risk you are taking. But remember that ratings aren't perfect and can't tell you whether or not your investment will go up or down in value.

Also remember that managing investment risk doesn't mean avoiding risk altogether. There might be times when you include a lower-rated bond or bond fund in your portfolio to take advantage of the higher yield it can provide.

Research companies also rate or rank stocks and mutual funds based on specific sets of criteria. Brokerage firms that sell investments similarly provide their assessments of the probable performance of specific equity investments. Before you rely on ratings to select your investments, learn about the methodologies and criteria the research company uses in its ratings. You might find some research companies' methods more useful than others'.

### **A Broad View**

While the past performance of an investment never guarantees what will happen in the future, it is still an important tool. For example, a historical perspective can alert you to the kinds of losses you should be prepared for—an awareness that's essential to managing your risk. A sense of the past can also tell you which asset class or classes have provided the strongest return over time and what their average returns are.

Another way to assess investment risk is to stay tuned to what's happening in the world around you. For example, investment professionals who learn that a company is being investigated by its regulator may decide it's time to unload any of its securities that their clients own or that they hold in their own accounts. Similarly, political turmoil in a particular area of the world might increase the risk of investing in that region. While you don't want to overreact, you don't want to take more risk than you are comfortable with.

## 5. Investing to Minimize Risk

While some investors assume a high level of risk by going for the gold—or looking for winners—most people are interested in minimizing risk while realizing a satisfactory return. If that's your approach, you might consider two basic investment strategies: asset allocation and diversification.

### Using Asset Allocation

When you allocate your assets, you decide—usually on a percentage basis—what portion of your total portfolio to invest in different asset classes, usually stock, bonds, and cash or cash equivalents. You can make these investments either directly by purchasing individual securities or indirectly by choosing funds that invest in those securities.

As you build a more extensive portfolio, you may also include other asset classes, such as real estate, which can also help to spread out your investment risk and so moderate it.

Asset allocation is a useful tool in managing systematic risk because different categories of investments respond to changing economic and political conditions in different ways. By including different asset classes in your portfolio, you increase the probability that some of your investments will provide satisfactory returns even if others are flat or losing value. Put another way, you're reducing the risk of major losses that can result from over-emphasizing a single asset class, however resilient you might expect that class to be.

For example, in periods of strong corporate earnings and relative stability, many investors choose to own stock or stock mutual funds. The effect of this demand is to drive stock prices up, increasing their total return, which is the sum of the dividends they pay plus any change in value. If investors find the money to invest in stock by selling some of their bond holdings or by simply not putting any new money into bonds, then bond prices will tend to fall because there is a greater supply of bonds than of investors competing for them. Falling prices reduce the bonds' total return. In contrast, in periods of rising interest rates and economic uncertainty, many investors prefer to own bonds or keep a substantial percentage of their portfolio in cash. That can depress the total return that stock provides while increasing the return from bonds.

While you can recognize historical patterns that seem to indicate a strong period for a particular asset class or classes, the length and intensity of these cyclical patterns are not predictable. That's why it's important to have money in multiple asset classes at all times. You can always adjust your portfolio allocation if economic signs seem to favor one asset class over another.

Financial services companies make adjustments to the asset mix they recommend for portfolios on a regular basis, based on their assessment of the current market environment. For example, a firm might suggest that you increase your cash allocation by a certain percentage and reduce your equity holdings by a similar percentage in a period of rising interest rates and increasing international tension. Companies frequently display their recommended portfolio mix as a pie chart, showing the percentage allocated to each asset class.

Modifying your asset allocation modestly from time to time is not the same thing as market timing, which typically involves making frequent shifts in your portfolio holdings in anticipation of which way the markets will turn. Because no one knows what will happen, this technique rarely produces positive long-term results.

### **Using Diversification**

When you diversify, you divide the money you've allocated to a particular asset class, such as stocks, among various categories of investments that belong to that asset class. These smaller groups are called subclasses. For example, within the stock category you might choose subclasses based on different market capitalizations: some large companies or funds that invest in large companies, some mid-sized companies or funds that invest in them, and some small companies or funds that invest in them. You might also include securities issued by companies that represent different sectors of the economy, such as technology companies, manufacturing companies, pharmaceutical companies, and utility companies.

Similarly, if you're buying bonds, you might choose bonds from different issuers—the federal government, state and local governments, and corporations—as well as those with different terms and different credit ratings.

Diversification, with its emphasis on variety, allows you to manage nonsystematic risk by tapping into the potential strength of different subclasses, which, like the larger asset classes, tend to do better in some periods than in others. For example, there are times when the performance of small company stock outpaces the performance of larger, more stable companies. And there are times when small company stock falters.

Similarly, there are periods when intermediate-term bonds—U.S. Treasury notes are a good example—provide a stronger return than short- or long-term bonds from the same issuer. Rather than trying to determine which bonds to buy at which time, there are different strategies you can use.

For example, you can buy bonds with different terms, or maturity dates. This approach, called a barbell strategy, involves investing roughly equivalent amounts in short-term and long-term bonds, weighting your portfolio at either

end. That way, you can limit risk by having at least a portion of your total bond portfolio in whichever of those two subclasses is providing the stronger return.

Alternatively, you can buy bonds with the same term but different maturity dates. Using this strategy, called laddering, you invest roughly equivalent amounts in a series of fixed-income securities that mature in a rolling pattern, perhaps every two years. Instead of investing \$15,000 in one note that will mature in 10 years, you invest \$3,000 in a note maturing in two years, another \$3,000 in a note maturing in four years, and so on. This approach helps you manage risk in two ways:

- If rates drop just before the first note matures, you'll have to invest only \$3,000 at the new lower rate rather than the full \$15,000. If rates behave in traditional fashion, they will typically go up again at some point in the ten-year span covered by your ladder.
- If you need money in the short term for either a planned or unplanned expense, you could use the amount of the maturing bond to meet that need without having to sell a larger bond in the secondary market.

### **How Much Diversification?**

In contrast to a limited number of asset classes, the universe of individual investments is huge. Which raises the question: How many different investments should you own to diversify your portfolio broadly enough to manage investment risk? Unfortunately, there is no simple or single answer that is right for everyone. Whether your stock portfolio includes six securities, 20 securities, or more is a decision you have to make in consultation with your investment professional or based on your own research and judgment.

In general, however, the decision will depend on how closely the investments track one another's returns—a concept called correlation. For example, if Stock A always goes up and down the same amount as Stock B, they are said to be perfectly correlated. If Stock A always goes up the same amount that Stock B goes down, they are said to be negatively correlated. In the real world, securities often are positively correlated with one another to varying degrees. The less positively correlated your investments are with one another, the better diversified you are.

Building a diversified portfolio is one of the reasons many investors turn to pooled investments—including mutual funds, exchange traded funds, and the investment portfolios of variable annuities. Pooled investments typically include a larger number and variety of underlying investments than you are likely to assemble on your own, so they help spread out your risk. You do have to make sure, however, that even the pooled investments you own are diversified—for example, owning two mutual funds that invest in the same subclass of stocks won't help you to diversify.

With any investment strategy, it's important that you not only choose an asset allocation and diversify your holdings when you establish your portfolio, but also stay actively attuned to the results of your choices. A critical step in managing investment risk is keeping track of whether or not your investments, both individually and as a group, are meeting reasonable expectations. Be prepared to make adjustments when the situation calls for it.

## **Measuring Risk**

You can't measure risk by putting it on a scale or lining it up against a yardstick. One way to put the risk of a particular investment into context—called the risk premium in the case of stock or the default premium in the case of bonds—is to evaluate its return in relation to the return on a risk-free investment.

Is there actually a risk-free investment? The one that comes closest is the 13-week U.S. Treasury bill, also referred to as the 91-day bill. This investment serves as a benchmark for evaluating the risk of investing in stock for two reasons:

- The shortness of the term, which significantly reduces reinvestment risk.
- The backing of the U.S. government, which virtually eliminates default, or credit risk

The long-term Treasury bond is the risk-free standard for measuring the default risk posed by a corporate bond. While both are vulnerable to inflation and market risk, the Treasury bond is considered free of default risk.

## **6. Modern Portfolio Theory**

In big-picture terms, managing risk is about the allocation and diversification of holdings in your portfolio. So when you choose new investments, you do it with an eye to what you already own and how the new investment helps you achieve greater balance. For example, you might include some investments that may be volatile because they have the potential to increase dramatically in value, which other investments in your portfolio are unlikely to do.

Whether you're aware of it or not, by approaching risk in this way—rather than always buying the safest investments—you're being influenced by what's called modern portfolio theory, or sometimes simply portfolio theory. While it's standard practice today, the concept of minimizing risk by combining volatile and price-stable investments in a single portfolio was a significant departure from traditional investing practices.

In fact, modern portfolio theory, for which economists Harry Markowitz, William Sharpe, and Merton Miller shared the Nobel Prize in 1990, employs a scientific approach to measuring risk, and by extension, to choosing investments. It involves calculating projected returns of various portfolio combinations to identify those that are likely to provide the best returns at different levels of risk.

## 7. Risk Protection

You're not alone in wanting to manage investment risk. In addition to the professionals you work with individually, there are federal, state, and private-sector agencies and organizations whose responsibilities help reduce risk by:

- Ensuring you have adequate information with which to make investment decisions
- Providing oversight of the companies and individuals through whom you invest
- Insuring you against specific losses

**The Securities and Exchange Commission (SEC)** requires all publicly traded companies to register and provide detailed financial information, as well as a description of how the company operates, the management team, and risks posed to investors. The SEC doesn't evaluate the merits of an investment or make any judgment regarding the potential profit you can make. Instead, the SEC's role is to ensure that you and all other investors have all the information you need to make a reasonable investment decision.

The SEC also has the authority to investigate and take legal action against the companies issuing registered securities, the investment advisers who recommend those securities to you, and the investment companies, such as mutual funds, that sell them. In addition, the SEC oversees credit rating agencies that evaluate bond issuers. You can check to see whether the rating company whose assessments you are given is one of the seven identified as a Nationally Recognized Statistical Rating Organization (NRSRO)—currently A.M. Best Company, DBRS, Fitch, Japan Credit Rating Agency, Moody's Investors Service, Rating and Investment Information, and Standard & Poor's Ratings Services.

You can contact the SEC online at [www.sec.gov](http://www.sec.gov) or by calling the toll-free investor information service at 800-SEC-0330 (800-732-0330). You can file a complaint, report a potential violation, or forward investment spam electronically to [enforcement@sec.gov](mailto:enforcement@sec.gov), send it by fax to 202-772-9292, or by writing to the SEC Complaint Center, 100 F Street, NE, Washington, DC, 20549-0213.

**State securities regulators**, whose nationwide organization is called the North American Securities Administrators Association (NASAA), register the securities that are sold only within their borders. They also license the stockbrokers, brokerage firms, and small investment adviser firms (under \$25 million in managed assets) that operate in their states. These regulators play a major role in protecting investors against all types of fraud, which is one of the major risks

that investors face if they aren't diligent about checking the credentials of investment professionals and the registration of specific securities.

You can contact NASAA online at [www.nasaa.org](http://www.nasaa.org), by phone at 202-737-0900, by fax at 202-783-3571, or by writing to NASAA, 750 First Street, NE, Suite 1140, Washington, DC, 20002. The Web site provides a link to securities regulators in each state that provides the relevant address, phone number, and email address.

**FINRA** is the largest, non-governmental self-regulatory organization (SRO) for the securities industry and operates under the jurisdiction of the SEC. Among its responsibilities are governing the activities of brokerage firms, also known as broker-dealers, licensing registered representatives, also called stockbrokers, and regulating trading in corporate bonds, equities, and certain futures and options.

FINRA regularly reviews the communications you receive from its members to help ensure that the information you and other investors receive is not misleading or exaggerated, and that it clarifies the risks as well as the potential rewards of investing.

FINRA conducts regular reviews of firms and representatives under its supervision. It has the authority to investigate and, if warranted, discipline members, and it maintains a BrokerCheck database where you can review the background and qualifications of firms and brokers. Using that information lets you avoid the risk of working with a person or firm that FINRA has disciplined for rules violations. You can find this information by visiting FINRA's Web site at [www.finra.org/brokercheck](http://www.finra.org/brokercheck). You can also find information on dispute resolution, mediation, and arbitration on the Web site as well as contact information.

You can reach the FINRA Call Center at 301-590-6500 or at one of FINRA district offices located around the country. The telephone number of the Office of Dispute Resolution is 212-858-4400.

**The Securities Investor Protection Corporation (SIPC)** is a federal nonprofit corporation that insures you against losses of up to \$500,000 if you have an account with one of its member brokerage firms that goes out of business because it has failed financially. The coverage includes up to \$100,000 in cash or cash equivalent losses. Since all firms that register with SEC are required to be members of SIPC, one way to check the reliability of any broker or brokerage firm that solicits your business is to ask for confirmation of SIPC membership.

SIPC, however, does not protect you against investment risk, including the risk that you could lose money. It protects you only if the firm you are dealing with can no longer operate and its assets aren't acquired by a healthy firm.

You can find more information about SIPC at the Web site, [www.sipc.org](http://www.sipc.org) and contact them by phone at 202-371-8300, by fax at 202-371-6728, by email at [asksipc@sipc.org](mailto:asksipc@sipc.org). You can also write to SIPC at 805 15<sup>th</sup> Street, NE, Suite 800, Washington, DC, 20005-2215.