## Learn about investment basics

Investor education





# Knowledge: The key to successful investing

It pays to have an understanding of fundamental investment concepts. Knowledgeable investors are better prepared when shopping for investments and investment services. They're also more inclined to stick with their investment plans for the long term—a key to building wealth.

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## Why invest?

It's this simple—you invest to create wealth.

Investing is different from saving. Saving involves placing your money in an account that is relatively safe and pays a fixed, though typically low, rate of interest. Investing, on the other hand, offers the opportunity to earn higher returns in exchange for taking some reasonable risks.

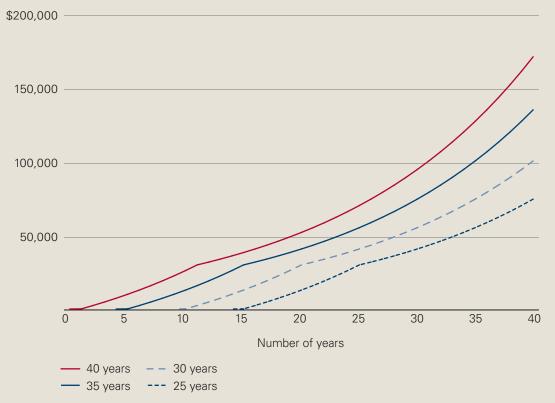
#### The power of compounding

The saying time is money sums up precisely why it's so important to invest for the long term. Whether your financial goals include funding a comfortable retirement, launching a business, supporting a favorite charity, or leaving a legacy for your heirs, investing on a regular basis over a long period of time is the best way for you to reach them. That's because when you seek the higher returns possible through investing, you enjoy the effects of compounding in a more significant way.

Compounding is the engine that powers long-term investment returns. It occurs as you reinvest your returns, those returns generate their own returns, and so on. The longer that you invest your returns, the more dramatic the effects of compounding. The chart on page 4 illustrates the power of compounding.



#### The longer you invest, the bigger the boost



In this hypothetical example, the investor started with an initial investment of \$2,000 and then contributed another \$2,000 at the start of each year for ten years and nothing more. The example assumes investment returns of 6% a year before taxes; it does not represent the return on any particular investment.

#### Prudent investing is the key

Most people understand that investing involves taking some risks with their money. But how much risk is reasonable? There's no simple answer to that question. For most investors, a reasonable level of risk lies somewhere between the low-risk approach of saving and the high-risk approach of speculating.

Unlike saving (a low-risk approach designed to protect your money with little concern for its growth) or speculating (a high-risk attempt to make a lot of money quickly), investing is a thoughtful, prudent approach to money management. Investing not only involves taking the risk necessary to achieve higher long-term returns but also requires discipline and planning. Investing involves establishing clear financial goals, knowing the time frame needed to achieve those goals, thinking carefully about your ability to withstand market volatility, and selecting investments that match your needs.

#### Your financial advisor can help

To guide you, your financial advisor will develop an investment plan geared to your particular goals, tolerance for risk, and personal financial situation. The plan will help you determine what kinds of investments to include in your portfolio.

With a plan in place, your financial advisor can monitor your portfolio to help ensure that you remain on track to reach your goals.



# Keep the financial markets in perspective

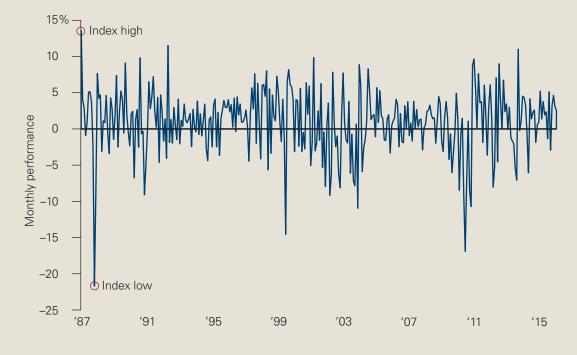
Market cycles play out against a backdrop of economic, social, and political events, and many commentators can't resist trying to assign causes to every hiccup in the markets.

It's often impossible to explain market activities until long after the dust has settled. That's why it's a good idea to take day-to-day market events in stride and stay focused on your longterm objectives.

If you read the business section of the newspaper or watch financial television shows, you'll hear talk of bull and bear markets, market corrections, and the like. As an investor, you should be aware of what these terms mean (see the Glossary on pages 28 and 29), but you should also know that it may not make sense to think about changing your investment approach based on today's headlines.

#### The markets are unpredictable

The chart on page 8 shows just how erratic the stock market can be. From December 31, 1986, through December 31, 2015, the monthly performance of the Standard & Poor's 500 Index ranged from a high of 13.47% (in January 1987) to a low of –21.54% (in October 1987). However, despite the stock market's ups and downs over that 29-year period (including bull and bear markets), the S&P 500 Index averaged a 10.10% annual return, a solid performance for investors focused on the long term.



#### The markets are unpredictable—S&P 500 performance, 1987-2015

Source: Vanguard.

Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

### Tips for dealing with market volatility

One of the most common mistakes investors make during bull markets is to move money into their "winning" investments in hopes of hitting it big. Conversely, during bear markets, investors sometimes lose patience and sell the investments that are declining in value. Unfortunately, investors seldom get this timing right and react too late to capitalize on gains or avoid major losses.

Here are a few tips your financial advisor will agree may help you negotiate the good times and the bad:

Maintain your balance. Hold on to the mix of stocks, bonds, and cash investments that your financial advisor has helped you tailor to your objectives, time horizon, risk tolerance, and personal financial situation. **Continue investing regularly.** Keep making regular contributions to your employer-sponsored retirement plan, IRA, and other investments.

Make changes gradually. If you need to adjust your portfolio, work with your financial advisor to do so gradually.

**Tune out the noise.** These days, investors are bombarded by an amazing amount of financial news and information. Try to ignore all the noise and keep your focus on your long-term goals.

## The major asset classes

An asset class is a group of investments that have similar characteristics. The major asset classes are the basic building blocks of a successful investment portfolio. They include stocks; bonds; and cash investments, such as money market funds, bank certificates of deposit (CDs), and U.S. Treasury bills.

#### Stocks

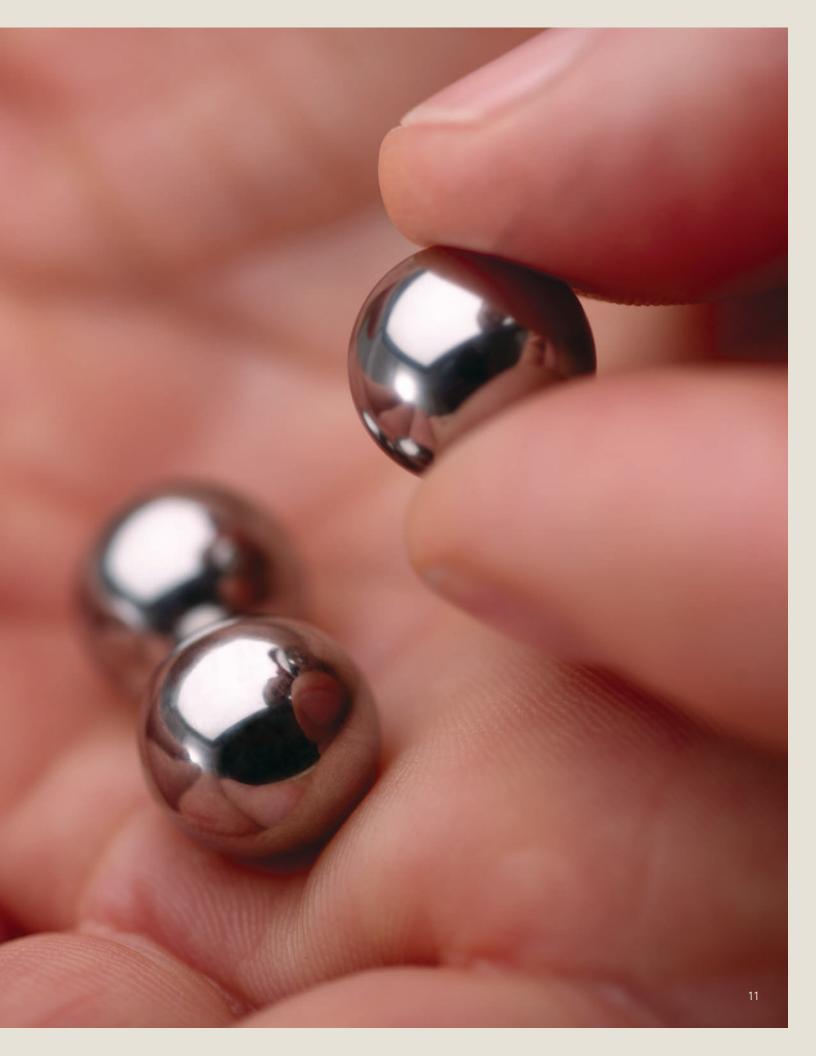
Stocks represent ownership in a publicly held company. This ownership gives you the right to share in that company's future financial performance—whether good or bad. When the company is doing well, it may decide to pay out some of its profits by distributing dividends to shareholders. Or it might reinvest those profits in the company in hopes of increasing future sales, which, in turn, may increase the value of your shares. But if the company runs into trouble, the value of your stock could drop or even be wiped out.

Of the three major asset types, stocks have delivered the highest average return over the long run. That's why many longterm investors make stocks the biggest portion of their portfolios. But while stock returns as a whole have outpaced inflation historically, they can be very volatile in the short term.

#### International stocks

Investing in global markets can reduce a portfolio's volatility and improve its returns. That's because U.S. and international stocks may experience ups and downs at different times—although they may also move in sync, particularly during sharp market declines and rallies.

In return for the diversification that international investments can add to your portfolio, you must be willing to assume additional investment risks, such as currency, country, and liquidity risks, in addition to the risk involved in investing in stocks in general.



#### Bonds

A bond is simply a loan from the bond's purchaser (an investor) to the bond's issuer (a corporation, government, government agency, or some other institution). Typically, the issuer promises to make regular interest payments and to repay the face amount (the principal) of the bond when it comes due (reaches maturity).

Bonds are designed to provide current income, which is important to some investors, especially retirees. Many financial advisors include bonds in their clients' portfolios to help offset some of the volatility of stocks, since bond and stock prices often move in opposite directions. Even when they don't, movements in bond prices tend to be less volatile than those of stocks—and the regular interest payments that bonds generate can be very reassuring when stock prices are dropping. The market value of a bond fluctuates continually because of movements in interest rates. A bond's price can also move up or down because of changes in the financial health of the bond's issuer. Because bonds typically offer periodic payments of a fixed amount of interest, they are sometimes called fixed income investments.

#### Types of bonds

Bonds are issued by a variety of institutions. Three key bond issuers include: U.S. government agencies, state and local governments, and corporations.

**U.S. government.** Treasury securities and securities issued by the Government National Mortgage Association (Ginnie Mae) offer the lowest risk of default. These securities are backed by the full faith and credit of the U.S. government.

U.S. government backing of Treasury or agency securities applies only to the underlying securities and does not prevent share-price fluctuations. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

State and local governments. Municipal bonds are typically issued by state, county, and municipal governments. They are usually issued to finance public improvement projects. Often the interest they pay is exempt from federal income tax and, in some cases, from state and local income taxes. The credit ratings of municipal bonds can vary widely. However, municipal bonds have historically experienced very low default rates.

**Corporations.** Corporate bonds represent loans by investors to corporations. Companies issue bonds to finance a variety of operations as an alternative to issuing shares of stock. Most major corporations issue some type of bond. Corporate bonds can be very safe when issued by strong, reputable companies, or they can be very risky when issued by weak companies.

International bonds. As with international stocks, international bonds can help reduce the overall volatility of your portfolio and improve your investment diversification. International bond investing does, however, present some unique risks, including currency, country, and liquidity risks.

#### Interest rates and bond prices

One of the most important things to know about investing in bonds is that bond prices and interest rates move in opposite directions. When interest rates rise, bond prices fall, and vice versa.

Consider this example: Let's say a person invests \$1,000 in a 20-year Treasury bond that has a 5.5% yield (interest payments totaling \$55 a year). If interest rates were to rise to 6.5%, an investor could buy a \$1,000 bond that pays \$65 a year, so no one would pay \$1,000 for the older bond. In fact, its price would have to drop to \$889 in order for a buyer to receive the same current yield as the 6.5% bond. On the other hand, if interest rates were to fall and Treasury bonds were offered with a 4.5% yield, the price of the original 5.5% bond would rise to \$1,131.<sup>1</sup>

1 This hypothetical illustration does not represent the returns on any particular investments.

Although the income from a municipal bond fund is exempt from federal tax, you may owe taxes on any capital gains realized through the fund's trading or through your own redemption of shares. For some investors, a portion of the fund's income may be subject to state and local taxes, as well as to the federal Alternative Minimum Tax.

#### Cash investments

Cash investments are very short-term debt securities that pay a modest return and are expected to maintain the value of the investor's principal. They are generally appropriate for short-term objectives, such as buying a car, making a down payment on a home, or setting aside funds for an emergency.

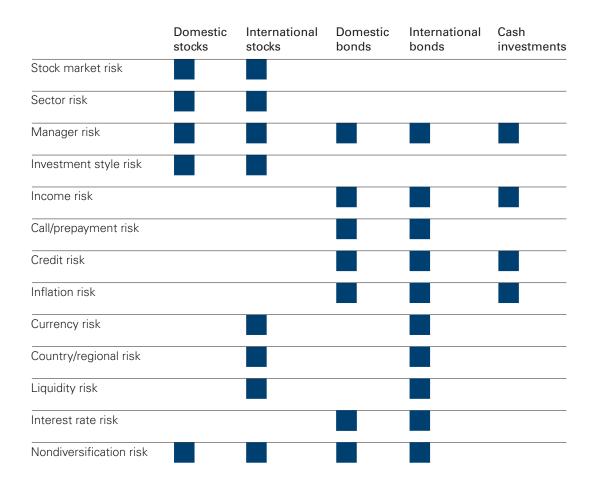
#### Types of cash investments

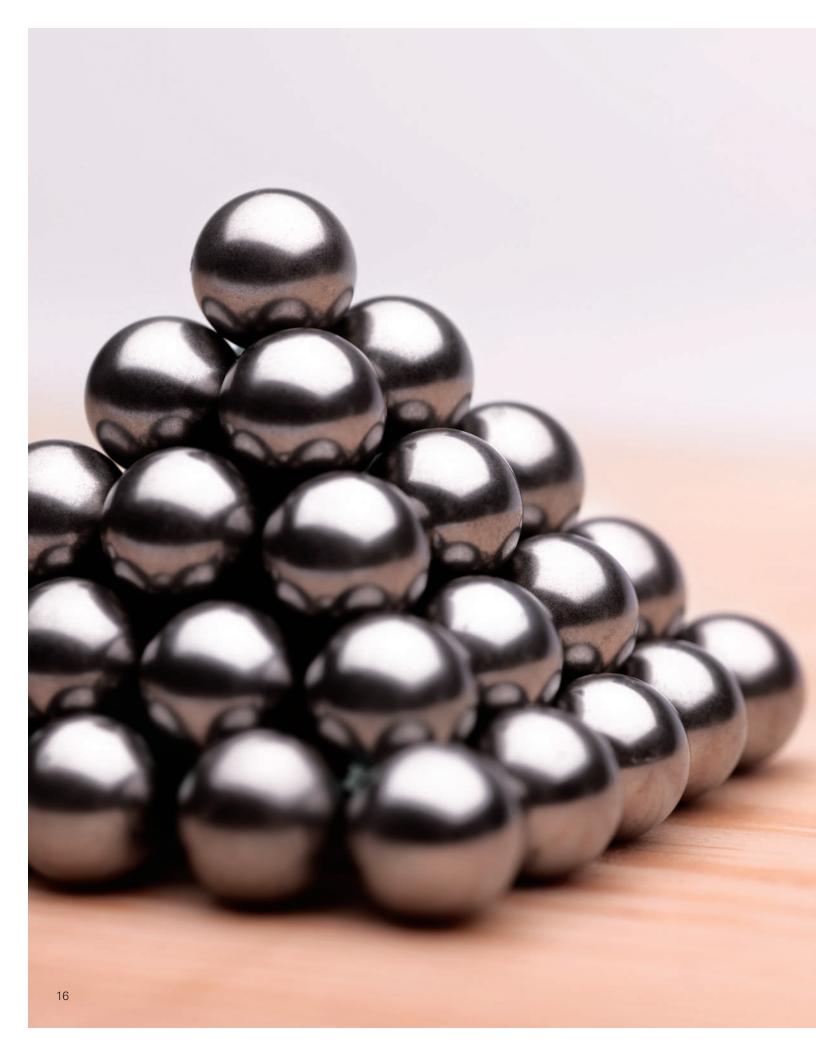
The most common types of cash investments are money market funds, bank savings accounts, short-term CDs, and T-bills. Of those, only money market funds and savings accounts offer real liquidity—the ability to easily withdraw cash without penalty. Money market funds invest in forms of debt, and the values of such investments change as interest rates rise and fall. However, because these securities mature in less than 90 days, the price changes are usually very small. As a result, the managers of money market funds have generally been able to maintain a \$1 share price.

While cash investments have been the least volatile of the three major asset classes, historically they have provided the lowest returns. That's why they are often used as repositories for emergency funds and to provide funding for short-term objectives, such as car and home purchases.

#### Investing is not without risks

Whether you're investing in stocks, bonds, or cash investments, it's important to understand the risks involved. The chart below outlines some common risks associated with investing in the three major asset classes. Brief definitions of each risk can be found in the Glossary on pages 28 and 29. Be sure to consult with your financial advisor if you have questions about investment risks.





# The importance of diversification

Dividing your investments among various asset classes, such as stocks, bonds, and cash, can be daunting, especially with the vast number of securities available.

Working closely with your financial advisor to allocate your assets appropriately is one of the most important steps you can take to control investment risk and position your portfolio for long-term success.

### What's the best asset allocation?

No single asset allocation works for everyone or every situation. The following are some key factors that your financial advisor will consider in determining the best allocation for you to reach your investment goals.

Time horizon. The more time you have until you'll need your money, the greater your ability to weather short-term declines in the prices of your holdings. If your time horizon is at least ten years, your financial advisor will likely emphasize stocks in your investment program. **Risk tolerance.** If you tend to worry whenever the stock market drops significantly, your financial advisor may suggest that you reduce the percentage of stocks in your portfolio. While you'll need some stocks in your portfolio to help achieve your long-term objectives, your financial advisor may suggest balancing them with enough bond and cash investments to help you sleep at night when the markets are unsettled.

Personal financial situation. Examining your personal circumstances is an important step in developing your investment program. Your financial advisor will ask about your job security, level of debt, current savings, emergency funds, and any short-term financial problems to ensure that you have enough shortterm bond and cash investments in your portfolio.

Diversification does not ensure a profit or protect against a loss.

#### Mixing asset classes can help reduce risk

Below are some examples of how asset allocation results in different levels of risk and return over the long term. The returns of these hypothetical portfolios suggest just how unpredictable the markets can be in a given year.



Sources: For U.S. stock market returns, we use the Standard & Poor's 90 Index from 1926 to March 3, 1957; the S&P 500 Index from March 4, 1957, through 1974; the Dow Jones Wilshire 5000 Index from 1975 through April 22, 2005; the MSCI US Broad Market Index from April 23, 2005, through June 2, 2013; and the CRSP US Total Market Index thereafter. For U.S. bond market returns, we use the S&P High Grade Corporate Index from 1926 to 1968, the Citigroup High Grade Index from 1969 to 1972, the Lehman Brothers U.S. Long Credit AA Index from 1973 to 1975, the Barclays U.S. Aggregate Bond Index from 1976 to 2009, and the Barclays U.S. Aggregate Float Adjusted Index thereafter.

These hypothetical illustrations do not represent the return on any particular investments.

#### Portfolio rebalancing

Once your financial advisor has helped you establish a target asset allocation, he or she will suggest a semiannual or annual portfolio review to make sure your allocation stays on track. If your asset allocation drifts away from your original target by a significant amount, it's



likely that your financial advisor may recommend one of the following ways to bring your portfolio back in line:

- Add new money to the asset class that's underrepresented in your portfolio.
- Direct dividends and capital gains distributions from the asset class that exceeds its target to the one that's underrepresented.
- Sell investments in the overrepresented class to buy investments in the underrepresented one.

## Mutual funds and exchange-traded funds (ETFs)

Some experts argue that in order to have a stock portfolio that's well diversified, you'd need to invest in a multitude of carefully chosen stocks that include all major industries and large and small companies. Mutual funds and ETFs offer that opportunity.

#### What is a mutual fund?

The idea behind a mutual fund is simple: Many people pool their money in the fund, which then invests in various securities. Each investor shares proportionally in the fund's investment returns—the income (dividends or interest) paid on the securities and any capital gains or losses caused by the sale of securities held by the fund. Every mutual fund has a manager (also called an investment advisor) who directs the fund's investments according to the fund's objective, such as long-term growth, high current yield, or stability of principal. Depending on its objective, a fund may invest in stocks, bonds, cash investments, or a combination of these types of assets.



#### What are ETFs?

ETFs are bundles of securities that trade like individual stocks or bonds on major exchanges. They offer the advantages of traditional mutual funds, including low costs, relative diversification, and potential tax efficiency, in addition to the trading flexibility of individual stocks and bonds.

Unlike mutual funds, which have their prices set at the end of the trading day, ETFs are priced and traded throughout the business day, and they can be bought and sold through a broker any time the investment markets are open. Keep in mind that investors may pay brokerage commissions when buying or selling ETFs.

Mutual funds and ETFs can be actively managed or indexed, although the vast majority of currently available ETFs are indexed. Here's an explanation of how each approach works.

### How actively managed mutual funds work

Simply stated, an actively managed mutual fund is one in which a fund manager buys and sells securities with the intention of outperforming a particular benchmark. Whatever a fund's primary objective, there are several techniques an active manager can use to try to beat a market benchmark.

One way is to be a smart stock picker. Typically, this is done by taking a top-down or a bottom-up approach.

Top-down managers start by looking at economic trends to help them predict which industries will prosper in the future. Once managers zero in on some industries, they try to identify those industries' most promising companies.

Bottom-up managers look for outstanding companies in any industry, assuming that a great company will do well even if it's in an industry that's not thriving at the moment. Bond fund managers try to beat the market through astute analysis of a bond's creditworthiness and by anticipating changes in interest rates and adjusting the average maturity of their holdings accordingly.

#### How index mutual funds work

An index mutual fund is designed to track the performance of a particular stock or bond index. Indexing uses one of two techniques—replication or sampling—to track the performance of target indexes.

Many stock index funds use the replication method, meaning they hold every security in their target indexes in the same proportion as the indexes. For example, if company A's stock makes up 1% of the value of the S&P 500 Index, then a fund that tracks the S&P 500 Index would invest 1% of its assets in that stock.

Index mutual funds that use the sampling method select a representative sample of securities from the target index that resembles the target index in terms of key risk factors and other characteristics. For instance, if a particular industry makes up 10% of a target index, a stock index fund might invest 10% of its assets in that industry—even though it may not hold every one of the underlying stocks. The sampling method is also used when the target index is so large that it's too expensive and inefficient to buy all the stocks in the index. Bond index funds typically use sampling since many bonds tracked in a broad index are not traded often enough to be obtained at a fair price.

#### Comparing investment vehicles

The chart on page 25 provides a basic comparison of ETFs, index mutual funds, and individual stocks. Turn to your financial advisor whenever you have questions about the differences between these types of investments and the ways in which they can be used in your portfolio.

### Advantages of mutual funds and ETFs

Mutual funds and ETFs are popular investment vehicles offering several advantages.

**Relative diversification.** Within a market segment, the holdings of a single mutual fund or ETF can range from a few securities to hundreds or even thousands. This diversification can reduce the risk of loss due to problems in a particular company or industry.

**Professional management.** Fund managers have access to extensive research, market information, and skilled securities traders.

**Liquidity.** Shares in a mutual fund can be bought and sold any business day, so investors have relatively easy access to their money. ETFs offer the added liquidity of being traded throughout the day.

**Convenience.** Mutual funds offer a wide range of services, including automatic investing and transfers and recordkeeping services to help investors track their transactions, follow their funds' performance, and compile tax information.

### Disadvantages of mutual funds and ETFs

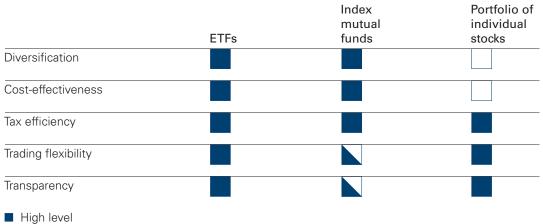
As with any investment, mutual funds and ETFs have some drawbacks.

No guarantees. Unlike bank deposits, mutual fund shares are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other agency of the U.S. government. The value of a mutual fund will fluctuate (except the expected value of a money market fund), so it's possible for investors to lose money if they sell shares for less than they paid for them.

#### Diversification penalty. While

diversification eliminates the risk of the catastrophic loss that could result from owning a single security whose value plummets, it also limits the potential for making a significant gain if a security's value increases dramatically. And, most important, diversification does not protect you from a loss caused by an overall decline in the financial markets.

#### Comparing investment vehicles



Medium level

□ Low level

# Six rules of successful investing

Succeeding as an investor isn't hard—but it does take planning and discipline. Along with the assistance of your financial advisor, these six rules of investing can help you achieve your investment objectives.

#### 1. Live beneath your means

It sounds simple, but it can be hard to do. The fact is that unless you spend less than you earn, you will have nothing to invest. Decide how much you will set aside for investment before you decide how much you're going to spend.

#### 2. Diversify

You can't predict which way the markets will move—or which investments will go up or down—but with your financial advisor's help, you can spread the risk around by investing in a mix of stocks, bonds, and cash investments and by diversifying your investments in each of these asset classes. That way, when some investments underperform, other investments can carry the load, helping to even out the ups and downs of your portfolio.

#### Keep costs down

Investment costs reduce your returns. For instance, a fund manager has to deliver a large enough return to compensate for the fund's expense ratio (the percentage of assets used to pay a fund's annual operating costs) before chalking up the first dollar of return for the fund's shareholders. The higher a fund's costs, the higher the hurdle. Ask your financial advisor about the best ways to control your investment costs.

#### 4. Pay attention to taxes

While investment costs and inflation take a bite out of your returns, taxes can take the biggest bite. Work with your financial advisor to make sure you have the right types of investments in the right accounts.

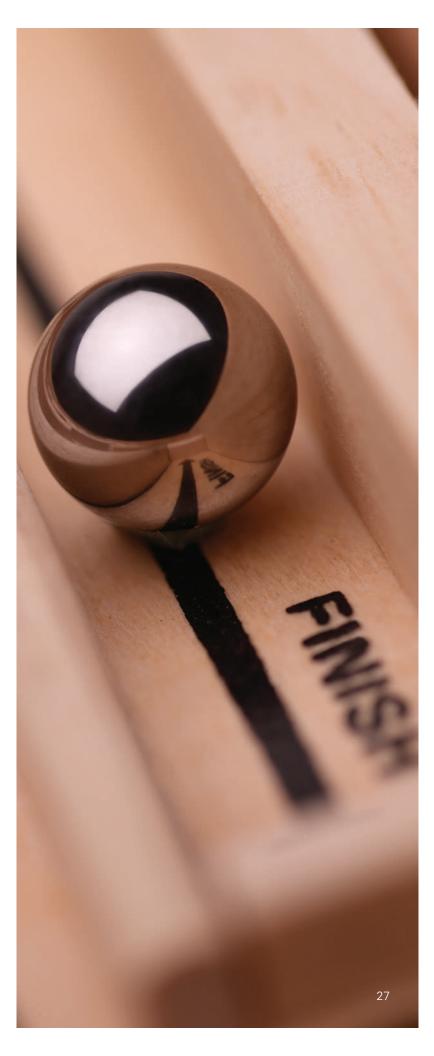
#### 5. Buy and hold for the long run

It's very difficult to predict the ups and downs of the markets often enough to make market-timing a consistently winning strategy. Frequent buying and selling of investments can increase your taxes and trading costs enough to wipe out any gains. So be a buy-andhold investor.

#### 6. Know yourself

Some people can shrug off big market swings; others cannot. Your financial advisor can help determine your investment temperament and make sure you are truly comfortable with the makeup of your portfolio.

Use your understanding of fundamental investment concepts outlined in this guide to bring more value to the discussions you have with your financial advisor as you work to achieve your investment goals.



## Glossary

Bear market. Generally defined as a market that loses value over an extended period of time.

Bull market. A market that gains value over an extended period of time.

Call/prepayment risk. The possibility that some bonds can be called (redeemed by the issuer before they mature) whenever the issuer decides it's advantageous to do so.

When a bond is called, investors must reinvest their money, often at a lower yield. A similar risk—prepayment risk affects mortgage-backed securities such as Ginnie Maes. When interest rates fall, many homeowners refinance their mortgage loans, and the securities backing those loans are paid off.

Compound interest. The accrual of interest earned on an investment and its reinvested earnings.

Country/regional risk. The chance that events in a specific country or region such as political upheaval, financial troubles, or a natural disaster—will adversely affect the value of investments from that country or region. Credit risk. The chance that the issuer of a security will fail to pay interest and principal in a timely manner or that negative perceptions of the issuer's ability to make such payments will cause the price of that security to decline.

Currency risk. The chance that the value of a foreign investment, measured in U.S. dollars, will decrease because of unfavorable changes in currency exchange rates.

Dividend distribution. Payment to fund shareholders of income from interest or dividends generated by the fund's investments.

Income risk. When interest rates decline, a bond or money market fund's yield will too. And that means an investor's income will fall. Because money market funds typically react to increases or decreases in market interest rates more quickly than bond funds, income risk is higher for money market funds than for bond funds.

Inflation risk. The possibility that increases in the cost of living will reduce or eliminate the returns on a particular investment. Interest rate risk. The possibility that the prices of bonds will fall when interest rates rise. The longer a bond's maturity, the greater the risk of significant price fluctuations caused by changes in interest rates. Interest rate risk can be reduced by investing in shorter-term bonds.

Investment style risk. The chance that certain types of stocks will experience cycles during which they perform worse than the overall stock market.

Liquidity risk. The chance that a fund may not be able to sell a security in a timely manner at a desired price.

Manager risk. The chance that a mutual fund's manager will make poor choices and cause the fund to underperform relevant benchmarks or other funds with similar investment objectives.

Market correction. A temporary reverse movement of at least 10% in an otherwise healthy stock or bond market.

Nondiversification risk. The chance that a fund's performance may be hurt disproportionately by the poor performance of relatively few stocks or even a single stock. Sector risk. The chance that significant problems will affect a particular sector or that returns from that sector will trail returns from the overall stock market.

Stock market bubble. A surge in stock prices to levels significantly above the fundamental value of the stock.

Stock market risk. The chance that stock prices overall will decline.

Volatility. The degree of fluctuations in the value of a mutual fund or index.



Vanguard Financial Advisor Services™ P.O. Box 2900 Valley Forge, PA 19482-2900

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Financial advisors: visit advisors.vanguard.com or call 800-997-2798.

Diversification does not ensure a profit or protect against a loss.

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