
Why own stocks?

Three elements for long-term investors
to consider when investing in stocks

Alexander Sagal
Equity Sector Analyst

Joseph Buffa
Equity Sector Analyst



Key takeaways

Why should someone invest in stocks? Historically, stocks have performed well when compared to other asset groups and have typically outpaced inflation. We believe stocks play an important role inside a well-diversified portfolio. Before allocating capital to this asset group, we recommend investors consider the following elements:

Performance • Volatility • Diversification

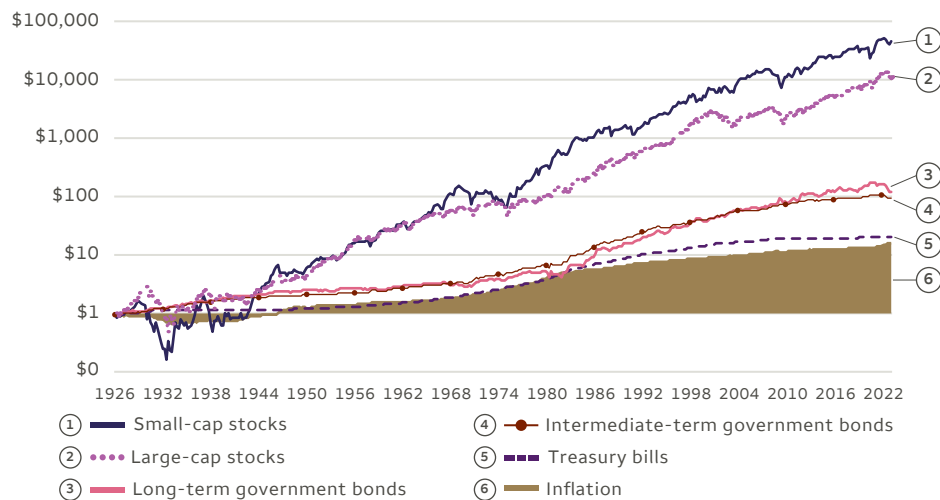
Performance

Stocks have historically produced robust returns

The chart below shows the hypothetical outcome of \$1 invested in different U.S. asset classes in 1926 and held through 2022. All income is reinvested in this illustration; in other words, dividends received purchased more shares of stock and interest payments from bonds purchased more bonds. The study shows that small- and large-cap stocks have significantly outperformed government bonds and Treasury bills over this 97-year period. It shows that the \$1 investment in small-cap stocks grew 11.8% on a nominal, annualized basis and large-cap stocks averaged 10.1%. Long-term government bonds advanced 5.2%, intermediate-term government bonds grew 4.9%, and Treasury bills advanced 3.2%.

What investors may not appreciate when looking at Figure 1 is how dramatically stocks have outperformed other asset classes over the long term as the chart uses a logarithmic scale for the vertical axis in order to fit on a single page.

Figure 1: Hypothetical \$1 Investment in U.S. Capital Markets: 1926 – 2022



Assets class	Ending value	Annualized return
Small-cap stocks	\$49,052	11.8%
Large-cap stocks	\$11,535	10.1%
Long-term government bonds	\$131	5.2%
Intermediate-term government bonds	\$101	4.9%
Treasury bills	\$22	3.2%
Inflation	\$17	2.9%

Sources: Morningstar Direct, Wells Fargo Investment Institute. This information is hypothetical and is provided for illustrative purposes only. It is not intended to represent any specific return, yield, or investment, nor is it indicative of future results. Chart shows the hypothetical value of \$1 invested at the beginning of 1926 to the end of 2022. Performance results assume reinvestment of income and no transaction costs or taxes that would be applicable to an actual investment. In addition, the calculation of return does not take into account inflation over the time period. An index is unmanaged and not available for direct investment. **Hypothetical and past performance is no guarantee of future results.** Please see the end of the report for the definitions of the representative indices and the risks involved with the various asset classes.

What this means for investors

Expect stocks to be a top-performing asset group

U.S. large-cap stocks have produced an average annual return of 10.1%, outperforming most other asset classes over the long term.

Stick to your plan

In 2022, U.S. stocks turned in their worst annual performance since the great financial crisis. Investor sentiment toward this asset class could be low, but we believe a well-diversified stock portfolio will continue to outperform fixed income and cash alternatives over the long run.

Stocks can provide income, too

While investors tend to use bonds as their main income-producing investment, stocks also provide income returns in the form of dividends. Since 1926, large-cap stocks have produced an average dividend return of 3.9% each year.

Why investors should consider total return

If we focus on shorter time frames that may be more relevant for an investor, a similar story emerges. Reviewing rolling periods of one month to 20 years going back to 1926, stocks again show superior returns. In periods that we would consider long term (five years and longer), large-cap stocks outperformed long-term government bonds more than 70% of the time.

Table 1: Performance of stocks versus bonds

Time period	Total periods	Times stocks had positive returns (#)	Times stocks had positive returns (%)	Times stocks outperformed bonds (#)	Times stocks outperformed bonds (%)
1 month	1,164	728	63%	669	57%
1 year	97	71	73%	61	63%
5 years	93	81	87%	68	73%
10 years	88	84	95%	74	84%
15 years	83	83	100%	69	83%
20 years	78	78	100%	71	91%

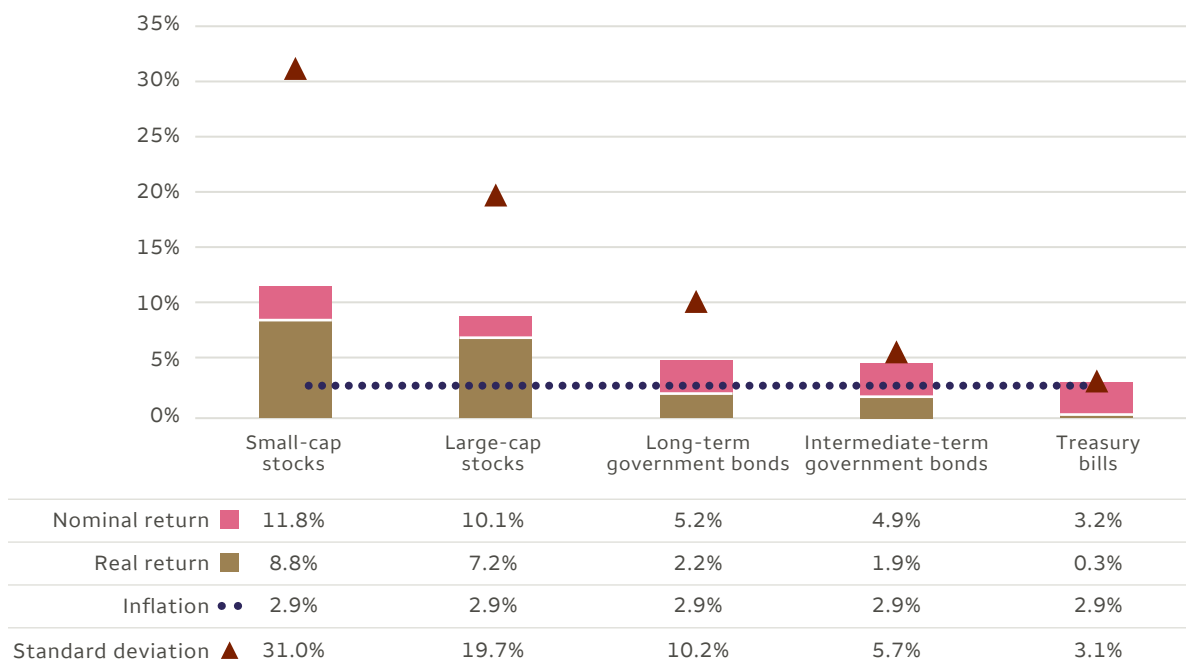
Sources: Morningstar Direct and Wells Fargo Investment Institute. All periods of one year and greater are calculated yearly over rolling time periods. Data is from 1926 – 2022. This information is hypothetical and is provided for illustrative purposes only. It is not intended to represent any specific return, yield, or investment, nor is it indicative of future results. Index returns do not represent investment performance. An index is unmanaged and not available for direct investment. **Hypothetical and past performance is no guarantee of future results.** Please see the end of the report for the definitions of the representative indices and the risks involved with the various asset classes.



Outpacing inflation over the long term

The returns we have examined thus far are nominal returns, meaning they ignore the effects of inflation. Adjusting nominal returns for the nearly ever-present force that eats away at spending power gets us to real returns. Theoretically, if inflation in any given year is 3%, an individual's income would need to grow by 3% to simply maintain purchasing power. Therefore, an investor needs some level of growth above inflation, real growth, to make headway. Over the 97-year period shown in Figure 2, inflation averaged 2.9% per year. Subtracting that from our previously noted returns provides real returns for the asset classes — 8.8% for small-cap stocks, 7.2% for large-cap stocks, 2.2% for long-term government bonds, 1.9% for intermediate-term government bonds, and 0.3% for Treasury bills. Stocks again came out on the top of the heap, providing returns that comfortably exceeded inflation on a real basis. Returns and their associated standard deviations are summarized in the figure below.

Figure 2: Summary of long-term returns: 1926 – 2022



Standard Deviation is a statistical measure of the volatility of an asset's returns. The higher the standard deviation, the greater volatility has been.

Sources: Morningstar Direct, Wells Fargo Investment Institute. This information is hypothetical and is provided for illustrative purposes only. It is not intended to represent any specific return, yield, or investment, nor is it indicative of future results. Performance results assume reinvestment of income and no transaction costs or taxes that would be applicable to an actual investment. An index is unmanaged and not available for direct investment. Index returns do not represent investment performance. An index is unmanaged and not available for direct investment. **Hypothetical and past performance is no guarantee of future results.** Please see the end of the report for definitions of the representative indices and the risks involved with the various asset classes.

Volatility

Corrections are inevitable, but not predictable

We have seen the stock market rise and fall many times throughout history. Using the history of the stock market to understand typical market behavior can be an important tool to provide perspective so investors can prepare appropriately. We believe market corrections are inevitable, but not predictable. On average since 1928:

- Dips in the stock market — defined as a decline of 5% or more — have occurred more than three times a year.
- Corrections in the stock market — defined as a decline of 10% or more — have occurred about one time a year.
- Bear markets — defined as a decline of 20% or more — have occurred once every three to four years and are usually tied to recessions.

Table 2: Declines in the S&P 500 Index since 1928

Type of correction	Dips (decline of 5% or more)	Corrections (decline of 10% or more)	Bear market (decline of 20% or more)
Occurrences since 1928	327	102	27
Occurrences per year	3.4 per year	1.1 per year	1 every 3.5 years

S&P 500 Index annualized return since 1928: 9.9%

Sources: FactSet, Wells Fargo Investment Institute. Declines are based on price index only and do not include dividends. This information is hypothetical and is provided for illustrative purposes only. It is not intended to represent any specific return, yield, or investment, nor is it indicative of future results. Index returns do not represent investment performance. Returns shown are calendar year returns from 1928 to 2022.

While recent market declines may have been unsettling, we think this volatility is normal compared to historical standards. If you are a long-term investor, you will likely experience many market pullbacks.

What this means for investors

Long-term investors will likely experience many market pullbacks

If you plan on investing in the stock market over many decades, you will likely experience many dips, corrections, and bear markets. Pullbacks are a normal part of investing, so we recommended that you stick to your plan, especially through challenging environments.

Pullbacks can be opportunities

Market corrections and downturns can be difficult to endure. However, sell-offs can potentially offer opportunities for investors to purchase high-quality stocks at lower prices.

Consider investing regularly with dollar cost averaging

Dollar cost averaging involves investing the same amount of money in a target security at regular intervals, regardless of price. By using dollar cost averaging, investors may lower their average cost per share by buying more shares when prices are lower and less when they are higher.

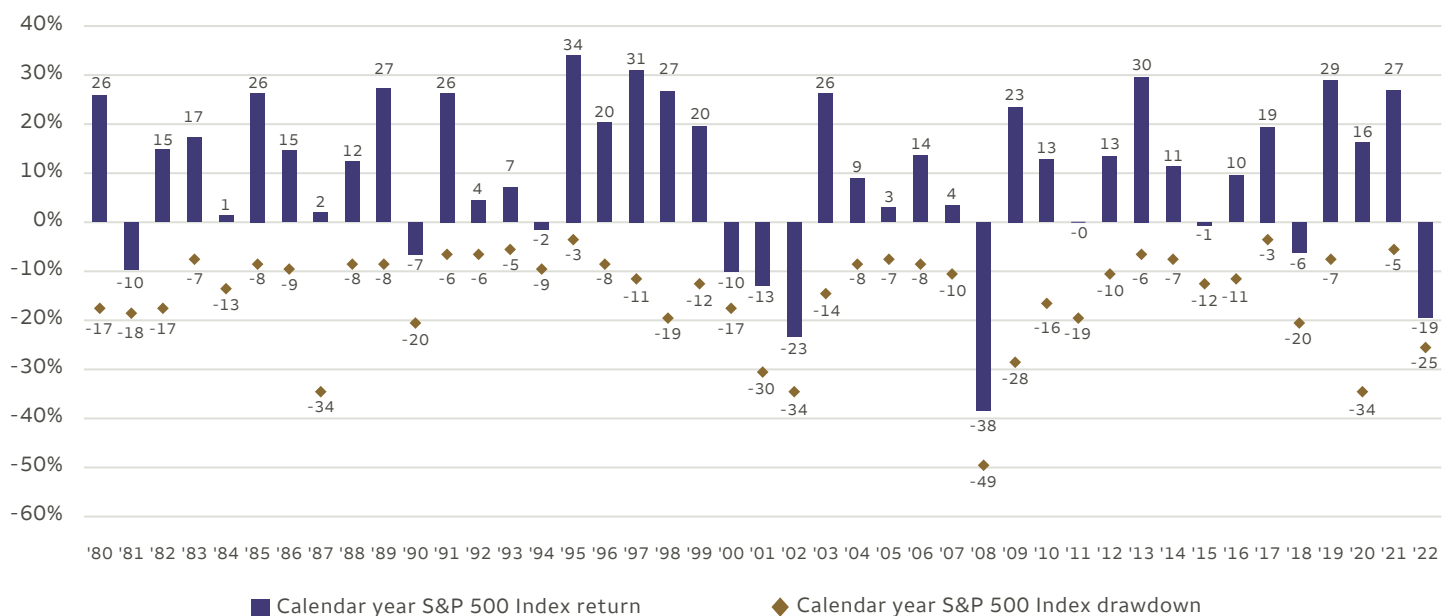




Pullbacks can be opportunities

Each year, stock prices move up and down. The chart below represents stock returns as well as drawdowns in a given year, with the blue bar representing the percent change in the stock market (as measured by the S&P 500 Index) at the end of the year and the red dots showing the percent declines in the stock market during the year. Since 1980, stocks have dropped an average of 14% during the calendar year. During the same period, stocks generally rebounded, rising in 32 of the 43 years. The actual yearly returns have averaged about 10%. This illustrates the potential benefit of adding stocks to your portfolio when they drop.

Figure 3: Annual returns and drawdowns of the S&P 500 Index



Sources: FactSet, Wells Fargo Investment Institute. Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. This information is hypothetical and is provided for illustrative purposes only. It is not intended to represent any specific return, yield, or investment, nor is it indicative of future results. Index returns do not represent investment performance. Returns shown are calendar year returns from 1980 to 2022.

Diversification

Think twice before reducing or eliminating a sector

While we may have a strong feeling of how the future will look, unforeseeable events often alter reality. As a result, making too large of a bet on any one particular outcome increases investor risk significantly, and investment strategies based on concentrated positions involve higher risk.

The foundation of modern portfolio theory suggests that having a well-diversified mix of major asset groups — primarily stocks, bonds, and cash alternatives — may help investors take advantage of different market environments and optimally balance risk and return. By drastically reducing or removing an asset group, such as stocks, investors may take on additional risk as they become more concentrated in their remaining investments.

In addition to the increased risk, consider the potential costs of a concentrated strategy. For example, many investors, nervous after the 2008 – 2009 financial crisis, moved assets out of the market — effectively, this left them holding significant concentrations in cash alternatives. While cash alternatives as an asset class have very low volatility, the opportunity cost realized because of those decisions was significant. From March 9, 2009 through August 31, 2023, equities were up more than 778% and bonds returned 44% while cash alternatives realized little return.¹

We believe investors should take care to diversify among equity positions as well. It can be detrimental to rely too heavily on any one sector or security. As shown in the table below, year-to-year sector returns are volatile, and relying on just one or a few sectors may result in total return outcomes that are very different than the broader market.²

1. Morningstar Direct. Data as of August 31, 2023. Equities based on the S&P 500 Index and bonds on the Bloomberg Barclays U.S. Aggregate Bond Index.

2. See page 10 for an overview of the characteristics of different equity investments.

What this means for investors

Start with an investment plan

Once investors determine their investment objective and the amount of risk they are comfortable with, they can establish a long-term investment plan with an appropriate asset allocation (investment mix) strategy.

Keep an eye on the future

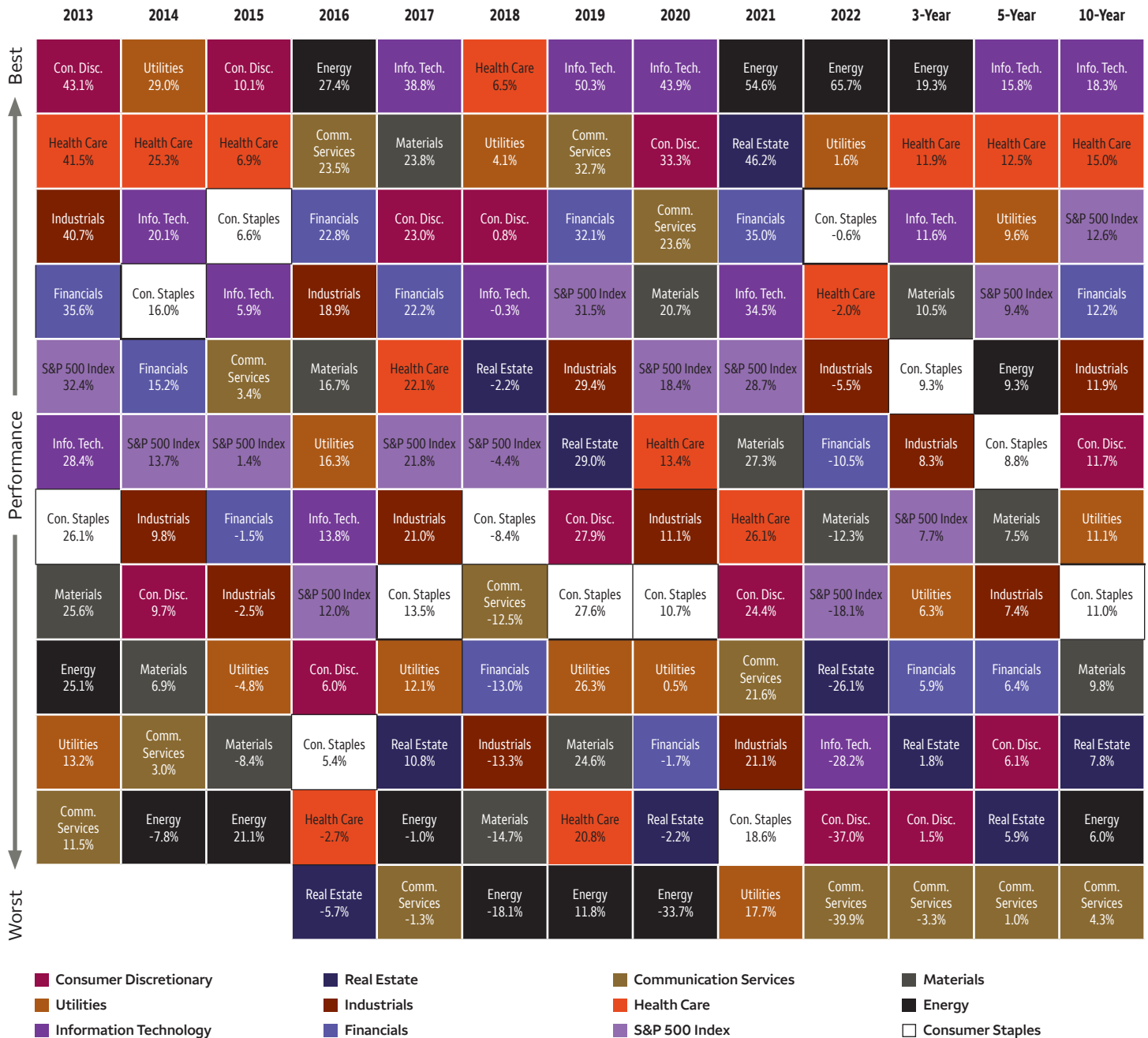
An investment plan and asset allocation strategy can help prepare for what is happening now, what may happen in the short term, and, just as importantly, what could happen in the long term. Investors may need to adjust their objectives over time, and stocks can be part of a wide variety of plans.

Stay diversified

If investors become too reliant on any one particular asset group, whether it is stocks, bonds, or cash alternatives, portfolios may lack diversification and expose investors to excess risk.



Annual S&P 500 Index performance by sector



Sources: FactSet, Wells Fargo Investment Institute. Data as of December 31, 2022, Total return includes dividends reinvested on ex-date. **Past performance is no guarantee of future results.** You cannot invest directly in an index or industry. Sector performance is based on the Global Industry Classification Standards (GICS) in which each company in the S&P 500 is assigned to one of 11 sectors according to the definition of its principal activity. Performance reflects 9/28/2018 GICS reclassifications. Communication Services sector performance prior to 9/28/2018 reflects the performance of the former Telecommunications sector. The Real Estate sector was established as a standalone GICS sector on 8/31/2016.

Overview of equity investments

Common stock, also known as equity, is an investment security that represents ownership of a publicly traded company. Common stockholders own the rights to claim a share in the company's profits and can even exercise control over it by participating in various proxy votes like the election of the board of directors in addition to other corporate policies. Common stock owners can profit from the capital appreciation of the securities, and they are entitled to their proportionate part of a company's assets and a percentage of its profits if the stock pays a dividend. Common stock can be considered a relatively risky investment because it can potentially lose all its value. However, it can also potentially increase in value over time. The value of the stock is set by many people trading it in a free, open market, most often a stock exchange. The price of a stock fluctuates according to supply and demand, and many factors influence both.

Exchange-traded products or exchange traded funds (ETPs or ETFs) are baskets of securities that typically seek to track the market performance of an index, such as the S&P 500 Index, before fees and expenses. They are traded like individual stocks on a stock exchange, meaning the price can change throughout the day — unlike a mutual fund, the shares of which can only be redeemed once a day at net asset value. As an investor, you are purchasing shares of the overall portfolio, not the actual shares of the underlying investments or index components; however, you are entitled to the dividends or earned interest as distributed by the fund. Because ETPs and ETFs are traded on public stock exchanges and are held in brokerage accounts, they are generally easily bought, sold or transferred.

Mutual funds pool money from many investors, and they invest the combined holdings in a single portfolio of securities that may include stocks, bonds, and other securities as well as cash and cash alternatives. They are generally professionally managed according to stated investment objectives found in the fund's prospectus. An investor then owns shares of the mutual fund and not the individual securities the fund holds.

Stock categories based on geographic region

1. **U.S. stocks**
Stocks that have a primary listing on a U.S. exchange and are incorporated in the U.S. are considered U.S. stocks.
2. **Developed market ex-U.S. stocks**
Stocks that are incorporated or have a primary listing on an exchange in a developed market such as the United Kingdom, Japan, Australia, Canada, and Germany are considered developed market ex-U.S. stocks.
3. **Emerging market stocks**
Stocks that are incorporated or have a primary listing on an exchange in an emerging market which have developing capital markets and less-stable economies such as India, China, Egypt, South Africa, and Mexico are considered emerging market stocks.
4. **Frontier market stocks**
Stocks that are incorporated or have a primary listing on a frontier market which has an even less stable economy and financial market than emerging markets such as Libya, Senegal, Vietnam, and Bangladesh are considered frontier market stocks.

Stock categories based on market capitalization

1. **Mega-cap stocks**
Stocks with a market cap greater than \$222 billion
2. **Large-cap stocks**
Stocks with a market cap between \$44 billion and \$222 billion
3. **Mid-cap stocks**
Stocks with a market cap between \$8 billion and \$44 billion
4. **Small-cap stocks**
Stocks with a market cap between \$2 billion and \$8 billion
5. **Micro-cap stocks**
Stocks with a market cap less than \$2 billion

Wells Fargo Investment Institute leverages Morningstar's breakpoints to determine where a stock falls into this spectrum.

Market research and advice

Global Securities Research (GSR) is a division of Wells Fargo Investment Institute. The equity research team within GSR offers a full range of strategies by providing investment professionals and clients with a thoughtful approach to fundamental research. The team offers company-specific recommendations across all sectors, fresh ideas for clients with different levels of risk tolerance, and various lists to help meet investor needs.

Global Securities Research equity recommended lists

List	Composition
Core List	Comprised of blue chip, industry-leading companies that we believe can withstand the test of time. The objective is to provide a list of high-quality stocks that can be used to build a well-diversified portfolio or can be used to supplement an existing portfolio.
Diversified Stock Income Plan List (DSIP)	Focuses on companies that we believe will provide consistent annual dividend growth over a long-term investment horizon. Our objective is to provide a broad list of high quality, industry leading companies from which an investor can assemble a well-diversified portfolio. Through consistent dividend growth, our goal is to help investors stay ahead of the wealth eroding effects of inflation.
Dynamic Growth Equity List	Focuses on companies that we believe offer an above average growth potential and may be on track to become leaders in the markets they serve. Our objective is to offer investors a list of stocks that they can use to help build a well-diversified portfolio or to fill holes in an existing portfolio.
Equity Select List	Includes companies which each Global Securities Research equity sector analyst believes are appropriate for long-term investment. It includes companies across all 11 economic sectors with representation across many sub-industries in the market, providing broad exposure to various shareholder return structures, with an overarching theme of selecting high quality companies. The list assumes a long-term holding period (five-plus years) and can be used to build or supplement a well-diversified equity portfolio.
Focus List	A concentrated list of stocks that represents a combination of equity sector guidance from Global Investment Strategy and security selection from Global Securities Research. The objective is to exceed the total return of the S&P 500 Index over an approximate one-year timeframe.
High Yield Equity Income List	Focuses on companies with higher dividend yields than the broader market. Our objective is to provide a diverse list of high yielding stocks with secure dividend streams that an investor can utilize as part of an income-producing portfolio and are willing to accept a higher level of risk.
International Equity List	Designed to provide exposure to non-U.S. domiciled companies. While leaning toward large, well-known industry leaders, often with global operations, the strategy is flexible, and may include companies with a regional or country focus, or companies that have a comparatively small, but growing international presence. We envision this strategy complementing an otherwise domestic equity portfolio with an investing horizon of three to five years. Adding international investments to a portfolio can introduce new opportunities for investors, as well as additional risks to consider versus a purely U.S.-focused portfolio.
Small and Mid-Cap List (SMID)	Includes stocks representing companies with market capitalizations ranging from \$1.0 billion to \$20 billion at the time of addition. The objective is to exceed the total return of the S&P 1000 Index over a minimum one-year time horizon.
Value Equity List	Focuses on companies that we believe are trading below their underlying intrinsic value and have the potential to reduce or eliminate this valuation discount. Our objective is to provide investors a list of stocks that may generate attractive returns as the stock price approaches what we believe to be the underlying value of the company.

NOTES

Regarding Figures 1 and 3: Large-cap stocks are represented by the Standard & Poor's (S&P) Composite from 1926 – 1928, the S&P 90 Index from 1928 through February 1957 and the S&P 500 Index thereafter. Small-cap stocks are represented by the lowest 5% of the market universe defined as the aggregate of the NYSE, NYSE Amex, and NASDAQ National Market System or companies smaller than the 1,500th largest U.S. company in the same market universe, whichever results in a higher market capitalization break. Long-term government bonds are represented by U.S. government bonds with a maturity of about 20-years, intermediate-term bonds are represented by the U.S. government bonds with a maturity of about 5.5 years, and Treasury bills by the 30-day U.S. Treasury bill. Inflation is measured by the Consumer Price Index, which measures changes in the price level of a market basket of consumer goods and services.

Regarding Table 1: Stocks are represented by the Standard & Poor's Composite from 1926-1928, the S&P 90 Index from 1928 through February 1957 and the S&P 500 Index thereafter. Bonds are represented by the Ibbotson Long-Term Government Bond Index.

DEFINITIONS

An index is unmanaged and not available for direct investment.

S&P 90 Index – In 1928 Standard & Poor's realized the need to disseminate its market indicator information more frequently. Instead of trying to calculate the 233 Composite on an hourly or even a daily basis, which would have been difficult to do in an era before sophisticated calculators or computers were available, Standard & Poor's created a more manageable subset of stocks. This new index was the first daily, and then the first hourly index published by Standard & Poor's. Comprised of 50 Industrial, 20 Railroad, and 20 Utility stocks, it became known as the S&P 90 Stock Composite Index.

S&P 500 Index is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the U.S. stock market.

RISK CONSIDERATIONS

Asset allocation and diversification are investment methods used to help manage risk. They do not guarantee investment returns or eliminate risk of loss including in a declining market.

All investments are subject to market risk which means their value may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors due to numerous factors some of which may be unpredictable. Be sure you understand and are able to bear the associated market, liquidity, credit, yield fluctuation and other risks involved in an investment in a particular strategy.

Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities. There is no guarantee dividend-paying stocks will return more than the overall market.

The prices of small and mid-cap company stocks are generally more volatile than large company stocks. They often involve higher risks because smaller companies may lack the management expertise, financial resources, product diversification and competitive strengths to endure adverse economic conditions. Micro-cap stocks are considered more risky than small-cap stocks. Publicly available information about these stocks can be extremely difficult to find, making it less likely that quoted prices in the market will be based on full and complete information about the company.

Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging and frontier markets.

Investments in fixed-income securities are subject to interest rate, credit/default, liquidity, inflation and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. This risk is higher when investing in high yield bonds, also known as junk bonds, which have lower ratings and are subject to greater volatility. If sold prior to maturity, fixed income securities are subject to market risk. All fixed income investments may be worth less than their original cost upon redemption or maturity. Although Treasuries are considered free from credit risk they are subject to other types of risks. These risks include interest rate risk, which may cause the underlying value of the bond to fluctuate.

U.S. government securities are backed by the full faith and credit of the federal government as to payment of principal and interest. Unlike U.S. government securities, agency securities carry the implicit guarantee of the U.S. government but are not direct obligations. Payment of principal and interest is solely the obligation of the issuer. If sold prior to maturity, both types of debt securities are subject to market risk.

Sector investing can be more volatile than investments that are broadly diversified over numerous sectors of the economy and will increase a portfolio's vulnerability to any single economic, political, or regulatory development affecting the sector. This can result in greater price volatility. **Communication Services** companies are vulnerable to their products and services becoming outdated because of technological advancement and the innovation of competitors. Companies in the communication services sector may also be affected by rapid technology changes; pricing competition, large equipment upgrades, substantial capital requirements and government regulation and approval of products and services. In addition, companies within the industry may invest heavily in research and development which is not guaranteed to lead to successful implementation of the proposed product. Risks associated with the **Consumer Discretionary** sector include, among others, apparel price deflation due to low-cost entries, high inventory levels and pressure from e-commerce players; reduction in traditional advertising dollars, increasing household debt levels that could limit consumer appetite for discretionary purchases, declining consumer acceptance of new product introductions, and geopolitical uncertainty that could affect consumer sentiment. **Consumer Staples** industries can be significantly affected by competitive pricing particularly with respect to the growth of low-cost emerging market production, government regulation, the performance of the overall economy, interest rates, and consumer confidence. The **Energy** sector may be adversely affected by changes in worldwide energy prices, exploration, production spending, government regulation, and changes in exchange rates, depletion of natural resources, and risks that arise from extreme weather conditions. Investing in the **Financial** services companies will subject an investment to adverse economic or regulatory occurrences affecting the sector. Some of the risks associated with investment in the **Health Care** sector include competition on branded products, sales erosion due to cheaper alternatives, research and development risk, government regulations and government approval of products anticipated to enter the market. There is increased risk investing in the **Industrials** sector. The industries within the sector can be significantly affected by general market and economic conditions, competition, technological innovation, legislation and government regulations, among other things, all of which can significantly affect a portfolio's performance. **Materials** industries can be significantly affected by the volatility of commodity prices, the exchange rate between foreign currency and the dollar, export/import concerns, worldwide competition, procurement and manufacturing and cost containment issues. **Real estate** investments have special risks, including possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions. Risks associated with the **Technology** sector include increased competition from domestic and international companies, unexpected changes in demand, regulatory actions, technical problems with key products, and the departure of key members of management. Technology and Internet-related stocks, especially smaller, less-seasoned companies, tend to be more volatile than the overall market. **Utilities** are sensitive to changes in interest rates, and the securities within the sector can be volatile and may underperform in a slow economy. An investment that is concentrated in a specific sector may be subject to a higher degree of market risk.

The investment return and principal value of a mutual fund will fluctuate and shares, when sold, may be worth more or less than their original cost.

Exchange-Traded Funds (ETFs) and Exchange-Traded Products (ETPs) seek investment results that, before expenses, generally correspond to the price and yield of a particular index. There is no assurance that the price and yield performance of the index can be fully matched. Exchange Traded Funds are subject to risks similar to those of stocks. Investment returns may fluctuate and are subject to market volatility, so that an investor's shares, when redeemed or sold, may be worth more or less than their original cost.

Bond rating firms, such as Moody's, Standard & Poor's and Fitch, use different designations consisting of upper- and lower-case letters 'A' and 'B' to identify a bond's credit quality rating. 'AAA' and 'AA' (high credit quality) and 'A' and 'BBB' (medium credit quality) are considered investment grade. Credit ratings for bonds below these designations ('BB', 'B', 'CCC', etc.) are considered low credit quality, and are commonly referred to as "junk bonds".

Global Securities Research (GSR) is a division of Wells Fargo Investment Institute, Inc. (WFII). WFII is a registered investment adviser and wholly owned subsidiary of Wells Fargo Bank, N.A., a bank affiliate of Wells Fargo & Company.

The information in this report was prepared by Global Securities Research (GSR). Opinions represent GSR's opinion as of the date of this report and are for general information purposes only and are not intended to predict or guarantee the future performance of any individual security, market sector or the markets generally. GSR does not undertake to advise you of any change in its opinions or the information contained in this report. Wells Fargo & Company affiliates may issue reports or have opinions that are inconsistent with, and reach different conclusions from, this report. Past performance is no guarantee of future results.

The information contained herein constitutes general information and is not directed to, designed for, or individually tailored to, any particular investor or potential investor. This report is not intended to be a client-specific suitability or best interest analysis or recommendation, an offer to participate in any investment, or a recommendation to buy, hold or sell securities. Do not use this report as the sole basis for investment decisions. Do not select an asset class or investment product based on performance alone. Consider all relevant information, including your existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon. The material contained herein has been prepared from sources and data we believe to be reliable but we make no guarantee to its accuracy or completeness.

Global Securities Research publishes several theme-based lists of recommended equity securities. Each list is based on a specific investment objective and time horizon which may be different from the other lists. This may cause Global Securities Research to recommend an equity security to be added to one list and removed from another list. Thus, one list may contain different recommendations or conclusions that could result in short-term price movements contrary to the recommendations in another list.

Wells Fargo Advisors is registered with the U.S. Securities and Exchange Commission and the Financial Industry Regulatory Authority, but is not licensed or registered with any financial services regulatory authority outside of the U.S. Non-U.S. residents who maintain U.S.-based financial services account(s) with Wells Fargo Advisors may not be afforded certain protections conferred by legislation and regulations in their country of residence in respect of any investments, investment transactions or communications made with Wells Fargo Advisors.

Wells Fargo Advisors is a trade name used by Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC, Members SIPC, separate registered broker-dealers and non-bank affiliates of Wells Fargo & Company.