WELLS FARGO
INVESTMENT INSTITUTE

# Investment Strategy

WEEKLY GUIDANCE FROM OUR INVESTMENT STRATEGY COMMITTEE

November 27, 2018

## Time Horizon Often Determines Risk Tolerance

**Chris Haverland, CFA**
*Global Asset Allocation Strategist*

### Key takeaways

» *Financial-market volatility in the fourth quarter has put investors' risk tolerance to the test.*

» *Investors had gotten used to low volatility levels during this bull market, and they may feel uneasy about the recent equity market swings.*

### What it may mean for investors

» *An investor's risk tolerance often depends on their investment goals and time horizon.*

» *We believe that it is important to review your asset allocation[1] with your financial professional on a regular basis to make sure it continues to align with your investment goals, risk tolerance, and time horizon.*

Investor risk tolerance has been put to the test in the fourth quarter of 2018. Financial markets have seen a pickup in volatility—with broader equity indices in correction territory (down 10% or more) and some "high-flying" Information Technology stocks entering bear markets (down 20% or more). After the S&P 500 Index corrected earlier this year, some investors were surprised by another downturn only six months later. It is unusual to have two corrections in a calendar year; historically, the S&P 500 Index has corrected (on average) every 11 months. Meanwhile, equity market volatility (measured by the CBOE Volatility Index®, or VIX®[2]) has spiked, but to levels that are closer to the long-term average—not levels that have been seen in prior bear markets. Nonetheless, investors had gotten used to low levels of volatility during this bull market, and they may feel a bit uneasy about the recent market swings.

Investor risk tolerance can depend greatly on investment goals and time horizon. Goals can range from generating income to growing assets—or a blend of the two. Time horizons can be short, intermediate, or long—with most investors accumulating wealth falling into the long-term category. Determining the level of risk one is willing to take to achieve those goals within the stated time horizon is also important. Risk tolerance can range from conservative to aggressive or somewhere in between.

**Asset Group Overviews**



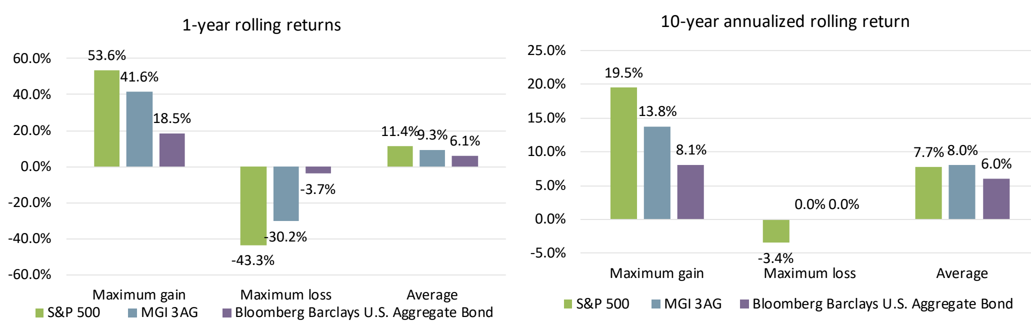
[1] Asset allocation, including strategic asset allocation, does not guarantee investment returns or eliminate risk of loss.
[2] The VIX shows the market's expectation of 30-day volatility. It is constructed using the implied volatilities of a wide range of S&P 500 index options.

# Time Horizon Often Determines Risk Tolerance

Conservative investors have lower risk tolerance and tend to invest in assets with less potential volatility. Meanwhile, investors with aggressive risk tolerance are usually willing to take on more volatility in their portfolios in an effort to achieve their investment objectives. All of these decisions are key to setting an appropriate strategic asset allocation.

Time horizon can influence an investor's willingness to take risk, and it is one component that can help to align investment goals with risk tolerance. Financial markets can be extremely volatile on a short-term basis—and some investors may be unable to tolerate sizable drawdowns in their portfolios—even if those moves are only on paper. Investors with shorter time horizons are more likely to land in the conservative bucket, while investors with longer time horizons often are willing to take on more risk and would land in the moderate or aggressive category. As Chart 1 shows, over shorter time horizons, higher-risk assets, such as equities, can experience significant price swings. Diversified asset allocations generally have seen less volatility. While high-quality fixed income assets historically had some of the lowest volatility, they may not provide enough return alone to meet long-term goals.

**Chart 1. Hypothetical annualized rolling 1-year and 10-year returns (January 1990-October 2018)**




Sources: Morningstar Direct, Wells Fargo Investment Institute; October 31, 2018. MGI 3AG = Wells Fargo Investment Institute Moderate Growth & Income Three Asset Group portfolio. *For illustrative purposes only*. *The MGI 3AG Portfolio is hypothetical. Index returns are not fund returns and are not forecasts of expected gains or losses a portfolio may achieve.* Index returns reflect general market results, assume the reinvestment of dividends and other distributions, and do not reflect deduction for fees, expenses or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Hypothetical and past performance are no guarantee of future results.** Please see the end of this report for the composition of the MGI 3AG Portfolio, the definitions of the indices and the risks associated with the representative asset classes.

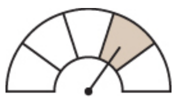
Looking out to a 10-year horizon, the potential for loss is diminished—as market cycles evolve and short-term losses eventually can turn into long-term gains. There is greater potential reward in equities, but the risk is higher. There is lower potential reward in fixed income, but the risk typically is lower. A diversified asset allocation (such as the one shown in Chart 1) historically has captured much of the upside in equities without generating a loss over any 10-year rolling period since 1990. Over the same period, average annual returns for the hypothetical Moderate Growth & Income Portfolio have outpaced both the S&P 500 Index and the Bloomberg Barclays U.S. Aggregate Bond Index (Chart 1).

## Time Horizon Often Determines Risk Tolerance

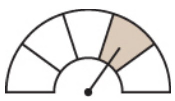
Determining your investment goals, risk tolerance, and time horizon is an important initial step that can help lead to long-term financial success. If your time horizon is short, and recent equity market volatility has been unnerving, then a conservative asset allocation may be the best approach. If your time horizon is long, your willingness to take on risk is likely greater, and your asset allocation can lean more toward growth assets like equities. If your time horizon and risk tolerance are somewhere in between (like most investors), a reasonable balance between growth assets and income-producing assets may be appropriate. We recommend reviewing your asset allocation with your financial professional on a regular basis to make sure it continues to align with your investment goals, risk tolerance, and time horizon.

***Audrey Kaplan***
Head of Global Equity Strategy

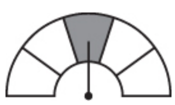
***Ken Johnson, CFA***
Investment Strategy Analyst



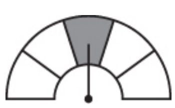
Favorable
U.S. Large Cap Equities



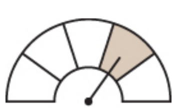
Favorable
U.S. Mid Cap Equities



Neutral
U.S. Small Cap Equities



Neutral
Developed Market
Ex-U.S. Equities



Favorable
Emerging Market Equities

## Turning the spotlight to sector valuation following earnings season and a market downturn

U.S. third-quarter earnings growth was better than expected. Forecast earnings per share (EPS) is anticipated to reach a record high in 2019. But, despite the strong trailing EPS results and solid earnings-growth forecasts, equity markets have seen significant fourth-quarter declines on concerns over Federal Reserve (Fed) rate hikes, trade, Brexit, global growth, and Energy and Information Technology-sector trends. How does valuation look in the midst of this choppiness?

We use four key pillars to evaluate the U.S. equity market. Today, we want to spotlight our 11-sector valuation pillar. Valuation indicators, such as the price-earnings (P/E) ratio, price to free cash flow (P/FCF) ratio, and forecast total yield are three indicators that tend to have high efficacy in predicting sector returns over the next 12 to 18 months. What are sector valuation pillars telling us today versus at the start of this quarter? The table shows our current sector rankings compared to those at the end of the third quarter.

On pure valuation metrics, we rate Financials, Consumer Staples, and Information Technology as the top three sectors today, based upon our sector valuation pillar. Following the recent pullback, the Information Technology sector has improved from third position to second, with a slightly more favorable rating on the P/FCF indicator. The Health Care sector declined modestly on the valuation analysis framework, from #4 to the current #6 ranking (neutral). Utilities declined from #7 to the current #9 ranking. This 11-sector valuation pillar provides a valuation road map to compare fundamental valuation amid price volatility.

### Key takeaways

- The Financials sector began the quarter with a most favorable outlook, and we remain most favorable today, based on our valuation pillar analysis.
- Utilities, Energy, and Real Estate remain expensive, based on a valuation pillar review.

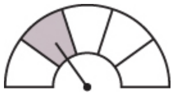
**S&P 500 Index sectors' valuation rankings—based on Wells Fargo Investment Institute analysis (1=Best; 11=Worst)**

| | Value pillar as of November 2018 | | | | Value pillar as of September 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| **Sectors** | Forecast total yield | Trailing P/E | Price/ FCF | Value rank | Forecast total yield | Trailing P/E | Price/ FCF | Value rank |
| **Financials** | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| **Consumer Staples** | 1 | 5 | 6 | 2 | 1 | 4 | 4 | 2 |
| **Information Technology** | 4 | 6 | 2 | 2 | 3 | 6 | 3 | 3 |
| **Industrials** | 3 | 2 | 9 | 4 | 4 | 5 | 8 | 4 |
| **Materials** | 11 | 4 | 3 | 5 | 8 | 3 | 6 | 4 |
| **Health Care** | 6 | 9 | 4 | 6 | 7 | 8 | 2 | 4 |
| **Communication Services** | 10 | 5 | 5 | 7 | 11 | 7 | 5 | 7 |
| **Consumer Discretionary** | 5 | 8 | 7 | 7 | 5 | 9 | 9 | 7 |
| **Utilities** | 9 | 3 | 11 | 9 | 10 | 2 | 11 | 7 |
| **Energy** | 7 | 10 | 8 | 10 | 6 | 10 | 10 | 10 |
| **Real Estate** | 8 | 11 | 10 | 11 | 9 | 11 | 7 | 11 |

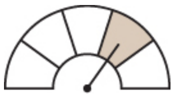
Sources: FactSet, Thomson IBES, Wells Fargo Investment Institute. Data is as of September 28, 2018 and November 20, 2018. *For illustrative purposes only*. Price to Earnings (P/E) is a valuation ratio of a company's current share price compared to its per-share earnings. Price to Free Cash Flow (FCF) is a valuation metric that compares a company's market price to its level of annual free cash flow. Forecast yield is a valuation indicator that measures the combined total of the forecasted dividend yield plus the buyback yield. Buyback yield divides the amount of outstanding shares repurchased (through a share buyback) by the existing market capitalization of a company. Forecast yields should not be interpreted as an indication of how the industries within the sectors will perform in the future. Dividend yield measures the amount of income a stock generates; the higher the yield, the greater the income, and should not be relied upon as a measure of performance a portfolio might achieve. Keep in mind, higher forecast yields may indicate that a company's dividends could be reduced within the next 12 months.

# FIXED INCOME

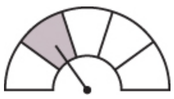
***Brian Rehling, CFA***
Co-Head of Global Fixed Income Strategy



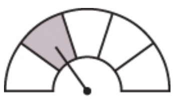
Unfavorable
U.S. Taxable Investment Grade Fixed Income



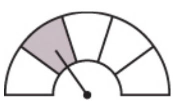
Favorable
U.S. Short-Term Taxable Fixed Income



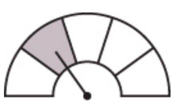
Unfavorable
U.S. Intermediate Term Taxable Fixed Income



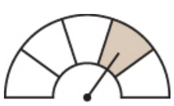
Unfavorable
U.S. Long-Term Taxable Fixed Income



Unfavorable
High Yield Taxable Fixed Income



Unfavorable
Developed Market Ex.-U.S. Fixed Income



Favorable
Emerging Market Fixed Income

## New Year's FOMC

The Federal Open Market Committee (FOMC) consists of 12 members—seven permanent members of the Fed Board of Governors, the president of the Federal Reserve Bank of New York, and four of the Federal Reserve Bank regional presidents that serve one-year rotating terms. Michelle Bowman recently was confirmed by the Senate, bringing the total FOMC voting membership to 10; two Board of Governors positions remain vacant. Nellie Liang and Marvin Goodfriend have been nominated for the remaining vacant Board of Governor positions, but Senate approval appears difficult at this time.

The beginning of each year marks the annual rotation of non-permanent FOMC voting members. In 2019, Thomas Barkin, Raphael Bostic, Mary Daly, and Loretta Mester will no longer be voting members of the Committee. Given these individuals' centrist-to-hawkish views, there have been no votes against monetary policy action to date in 2018.

The new voting members will come from St. Louis, Chicago, Kansas City, and Boston, and they include James Bullard, Charles Evans, Esther George, and Eric Rosengren. The majority of new voting members bring with them similar views to those departing FOMC members, and we believe they should continue to vote with the majority. The exception is James Bullard from St. Louis.

Mr. Bullard has a published view that the appropriate interest-rate policy is commensurate with the current rate policy over the long term, at least until the current regime that has been characterized by low productivity growth, low real interest rates, and no recession, changes. The St. Louis Fed likely provides the low outlying interest-rate "dot plot"[3] on the FOMC participants' assessments of appropriate monetary policy over the next several years. As a result, we expect Jim Bullard to provide a dissenting vote to any 2019 rate-hike announcement.

## Key takeaways

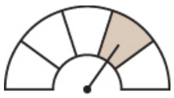
» We expect a rate hike at the December FOMC meeting and continued gradual rate hikes next year. Our current outlook is for three rate hikes over the next 12 months.

» We retain a favorable view of short-term fixed income and expect the yield curve to continue flattening. We remain unfavorable on duration and believe that investors should position duration[4] below that of their individually selected benchmarks.

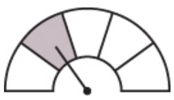
[3] The Federal Reserve dot plot shows the projections of the 16 members of the Federal Open Market Committee (the rate-setting body within the Fed). Each dot represents a member's view on where the fed funds rate should be at the end of the various calendar years shown, as well as the "long run."
[4] Duration measures a bond's price sensitivity to interest-rate changes.

***John LaForge***
Head of Real Asset Strategy

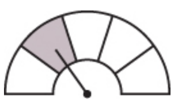
"I suppose if you had to choose just one quality to have that would be it: vitality."
*--John F. Kennedy*



Favorable
Commodities



Unfavorable
Private Real Estate



Unfavorable
Public Real Estate

## Oil and natural gas—a tale of two cities

So far in the fourth quarter, crude oil's -22% loss has garnered most of the attention in "commodity land." Investors seem worried that more oil-price carnage could be coming. We doubt it. Oil prices look to have run their course to the downside, and we believe that the next likely move is higher—not lower. Hedge funds appear to have largely unwound their super-long oil bets from earlier in the year, and managers may now be too short. If this is the case, oil prices could push higher into year-end. Our 2018 target range remains $55-$65 (with a midpoint of $60) for West Texas Intermediate (WTI).

Completely counter to oil's performance, natural gas has soared, up 57% to date in the fourth quarter. Expectations of a colder-than-normal North American winter, combined with lower-than-average storage levels, have conspired to push prices above $4 per million Btu (million British Thermal Units, or MMBtu) for the first time since 2014. The price rally, however, has not been driven completely by cold weather and low storage levels. Financial players also have been a factor. And these financial players may have pushed natural-gas prices too high. The current futures curve, shown as the gray line in the chart below, suggests that natural-gas prices could fall back below $3 per MMBtu as soon as 4-5 months from now.

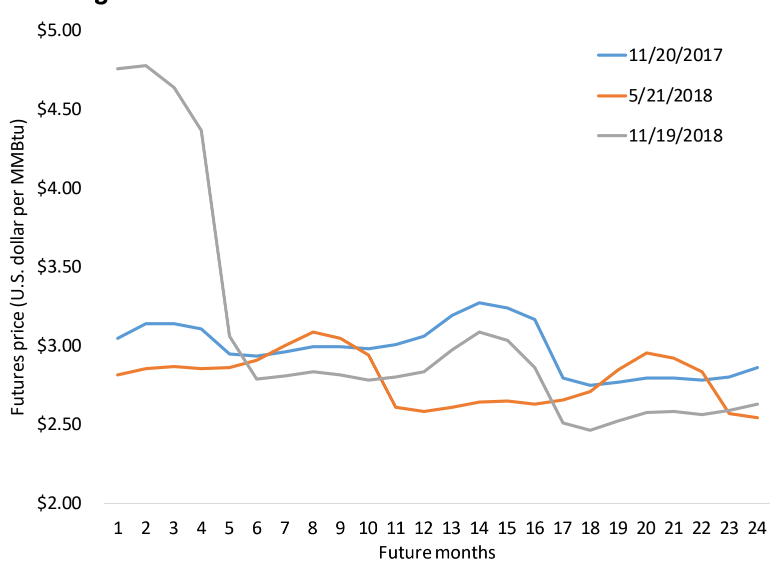
The bottom line is that crude-oil prices have crumbled, while natural-gas prices have soared during this quarter. We're expecting these trades to unwind some, and soon. We are looking for higher crude-oil prices, and lower natural-gas prices by year-end.

### Key takeaways

» We have seen collapsing oil prices and surging natural-gas prices in this quarter.

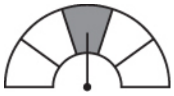
» We expect higher oil prices and lower natural gas prices by year-end.

### Natural gas futures curve

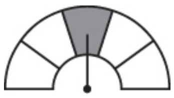



Sources: Sources: Bloomberg, Wells Fargo Investment Institute, November 20, 2018. *For illustrative purposes only*. Legend entries indicate the date the futures curve begins being measured. The blue line indicates what the futures curve looked like starting on 11/20/2017, the orange line starts on 5/21/2018 and the grey line starts on 11/19/2018.

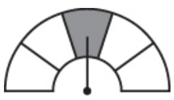
***Justin Lenarcic***
Global Alternative Investment Strategist



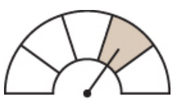
Neutral
Private Equity



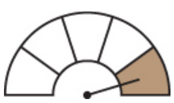
Neutral
Hedge Funds-Macro



Neutral
Hedge Funds-Event Driven



Favorable
Hedge Funds-Relative Value



Most Favorable
Hedge Funds-Equity Hedge

## Stable correlations are critical for our Equity Hedge outlook

The difficulty experienced by many Equity Hedge managers in October likely was associated with the spike in stock correlations shown in the chart below. The optimal environment for stock selection in the hedge fund space exists when correlations are low *and stable*—leading to broader dispersion and the potential for active managers to generate attractive returns across both their long and short portfolios. This environment was largely in place for most of 2017, denoted by the green box in the chart below. Unfortunately, correlations have been much more volatile in 2018, which has undoubtedly hampered Equity Hedge returns.

Heading into 2019, we expect the recent spike in stock correlations to revert in a similar fashion to what happened over the summer months. But expectations for the stability of correlations are key to our outlook for this asset class. Understanding the influence of factors, such as momentum and growth, on Equity Hedge returns will be important—as will continued analysis of crowded positions and the risks they pose for the industry. While the benefits of a long/short equity allocation within a broader portfolio may become increasingly important as the cycle matures, it is equally important to understand the risks developing for Equity Hedge managers.

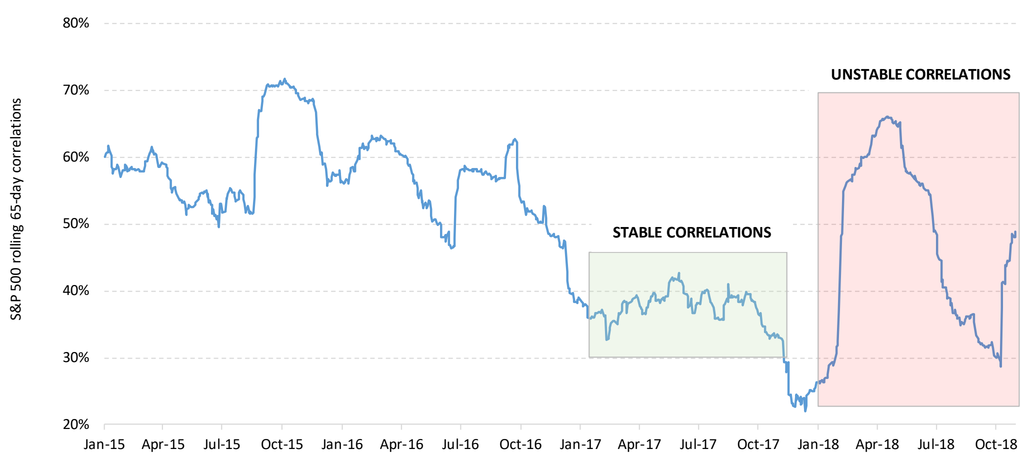
## Key takeaways

» Rolling 65-day stock correlations (within the S&P 500 Index) recently have been more unstable than in 2017, which has hampered returns for many Equity Hedge managers.

» We are carefully watching correlations for indications of a more challenging environment for security selection.

*Alternative investments, such as hedge funds, private equity, private debt and private real estate funds are not suitable for all investors and are only open to "accredited" or "qualified" investors within the meaning of U.S. securities laws.*

## Stock correlations largely have been unstable in 2018




Sources: Strategas Research Partners, Wells Fargo Investment Institute; November 2018. *For illustrative purposes only.* The chart shows that the stocks within the S&P 500 are no longer acting similarly. Lower correlations means a higher dispersion among returns. Correlation represents past performance. It measures the extent to which the stocks within the index have moved in sync; it does not measure the magnitude of the movement. There is no guarantee that future correlations between the stocks within the S&P 500 Index will remain the same. The S&P 500 is a market capitalization-weighed index generally considered representative of the US stock markets. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

## Composition Hypothetical MGI 3 Asset Group Portfolio

The Moderate Growth & Income Portfolio composition is as follows: Bloomberg Barclays U.S. Treasury Bills (1-3 months): 3%; Bloomberg Barclays U.S. Aggregate Bond Index (1-3 year): 4%; Bloomberg Barclays U.S. Aggregate (5-7 year): 16%; Bloomberg Barclays U.S. Aggregate Bond Index (10+ years): 7%; JP Morgan GBI Global Ex-U.S: 3%; Bloomberg Barclays U.S. Corporate High-Yield Bond: 6%; JP Morgan EMBI Global Index: 5%; FTSE EPRA/NAREIT Developed Index: 5%; S&P 500 Index: 21%; Russell Midcap® Index: 9%; Russell 2000® Index: 8%; MSCI EAFE Index: 6%; MSCI Emerging Markets Index: 5%; and Bloomberg Commodity Index: 2%.

## Risk Considerations

Each asset class has its own risk and return characteristics. The level of risk associated with a particular investment or asset class generally correlates with the level of return the investment or asset class might achieve. **Stock markets**, especially foreign markets, are volatile. Stock values may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. **Foreign investing** has additional risks including those associated with currency fluctuation, political and economic instability, and different accounting standards. These risks are heightened in emerging markets. **Small- and mid-cap stocks** are generally more volatile, subject to greater risks and are less liquid than large company stocks. **Bonds** are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. **High yield (junk) bonds** have lower credit ratings and are subject to greater risk of default and greater principal risk. The **commodities** markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in a volatile and uncertain commodities market may cause a portfolio to rapidly increase or decrease in value which may result in greater share price volatility.

## Sector Risks

**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 a 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 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.

Alternative investments, such as hedge funds, private equity/private debt and private real estate funds, are speculative and involve a high degree of risk that is suitable only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. They entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds. Hedge fund, private equity, private debt and private real estate fund investing involves other material risks including capital loss and the loss of the entire amount invested. A fund's offering documents should be carefully reviewed prior to investing.

Hedge fund strategies, such as Equity Hedge, Event Driven, Macro and Relative Value, may expose investors to the risks associated with the use of short selling, leverage, derivatives and arbitrage methodologies. Short sales involve leverage and theoretically unlimited loss potential since the market price of securities sold short may continuously increase. The use of leverage in a portfolio varies by strategy. Leverage can significantly increase return potential but create greater risk of loss. Derivatives generally have implied leverage which can magnify volatility and may entail other risks such as market, interest rate, credit, counterparty and management risks. Arbitrage strategies expose a fund to the risk that the anticipated arbitrage opportunities will not develop as anticipated, resulting in potentially reduced returns or losses to the fund.

## Definitions

**Bloomberg Barclays 1–3 Month U.S. Treasury Bill Index** includes all publicly issued zero-coupon U.S. Treasury Bills that have a remaining maturity of less than 3 months and more than 1 month, are rated investment grade, and have $250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non-convertible.

**Bloomberg Barclays U.S. Aggregate 1–3 Year Bond Index** is unmanaged and is composed of the Barclays U.S. Government/Credit Index and the Barclays U.S. Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities with maturities of 1–3 years.

**Bloomberg Barclays U.S. Aggregate 5–7 Year Bond Index** is unmanaged and is composed of the Barclays U.S. Government/Credit Index and the Barclays U.S. Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities with maturities of 5–7 years.

**Bloomberg Barclays U.S. Aggregate 10+ Year Bond Index** is unmanaged and is composed of the Barclays U.S. Government/Credit Index and the Barclays U.S. Mortgage-Backed Securities Index, and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities with maturities of 10 years or more.

**Bloomberg Barclays U.S. Aggregate Bond Index** is a broad-based measure of the investment grade, US dollar-denominated, fixed-rate taxable bond market.

**Bloomberg Barclays U.S. Corporate High Yield Index** covers the universe of fixed-rate, noninvestment-grade debt.

**Bloomberg Commodity Index** is a broadly diversified index comprised of 22 exchange-traded futures on physical commodities and represents 20 commodities weighted to account for economic significance and market liquidity.

**Chicago Board Options Exchange Volatility Index** (VIX) reflects a market estimate of future volatility, based on the weighted average of the implied volatilities for a wide range of strikes.

**FTSE EPRA/NAREIT Developed Index** is designed to track the performance of listed real-estate companies and REITs in developed countries worldwide.

**JPMorgan Emerging Markets Bond Index Global** (EMBI Global), which currently covers 27 emerging market countries. Included in the EMBI Global are U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

**JPMorgan Global Ex United States Index** (JPM GBI Global Ex-US) is a total return, market capitalization weighted index, rebalanced monthly, consisting of the following countries: Australia, Germany, Spain, Belgium, Italy, Sweden, Canada, Japan, United Kingdom, Denmark, Netherlands, and France.

**MSCI EAFE Index** is designed to represent the performance of large and mid-cap securities across 21 developed markets, including countries in Europe, Australasia and the Far East, excluding the U.S. and Canada.

**MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.

**Russell 2000® Index** measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. Russell 3000® Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

**Russell Midcap® Index** measures the performance of the 800 smallest companies in the Russell 1000 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 US stock market

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