WELLS FARGO
Investment Institute

2019 Midyear **Outlook**

Eyes Forward: Opportunities and Obstacles

JUNE **2019**

A letter to investors from Darrell L. Cronk

June 2019

Drivers, pilots, and sailors feel keenly the risk of drifting off course, of losing their forward focus. So should investors. Our full-year 2019 theme, the end of easy, is playing out quite clearly. We were buyers into the downtrends of late 2018 and have used strong first-half 2019 returns to take some gains and reduce positions back to our long-term strategic targets. Hence, our midyear postscript to the end of easy is eyes forward, which is to say, look past the fleeting distractions in the daily news and stick close to long-term strategic target allocations. Benjamin Graham was correct to note the importance of investors being realists when outlooks turn overly optimistic or pessimistic.

At midyear, neither recession nor material overheating conditions loom large. Global growth remains unsynchronized as strength has come from the U.S. and emerging markets while Europe and Japan have lagged. Asset returns for the first half outpaced economic activity, delivering market performance that typically requires a year or two to accrue. Resilient labor markets alongside a turn toward patient global central bank monetary policy have calmed recession fears and should extend the life of this record-long expansion.

Current equity valuations are only slightly above historical levels, interest rates remain low, inflation has been contained, and currency volatility appears to be abating, allowing for second-half conditions to support markets. Challenges do lie ahead, however. Global trade is still contracting, the second-half calendar is full of possible geopolitical stumbling blocks, consumer spending has downshifted, and business capital spending remains below expectations.

> *"The intelligent investor is a realist who sells to optimists and buys from pessimists."*
>
> –Benjamin Graham, author of *The Intelligent Investor*

We believe the second half of this year does offer positive growth momentum. We do not believe, however, that now is a time to turn either too aggressive or too conservative with portfolio positioning. Instead, we think now is a much better time for investors to realign their portfolios with their long-term goals, after several quarters of market volatility likely have disrupted that alignment. The following pages detail the many potential opportunities and also highlight some practices that will help you keep a forward focus.

On behalf of my Wells Fargo Investment Institute colleagues, I am pleased to offer timely and actionable investment advice. We trust that this guidance will help you achieve your investment plan and goals. We value most highly the trust of our clients and wish you continued investment success in 2019.

Darrell L. Cronk, CFA
President, Wells Fargo Investment Institute
Chief Investment Officer, Wealth and Investment Management

Investment and Insurance Products: NOT FDIC Insured ▶ NO Bank Guarantee ▶ MAY Lose Value

Global economy .... page 4

- We still expect positive U.S. economic growth but a more mixed international economic outlook.
- The slowdown in economic growth globally should contain inflation at moderate levels.

Global equities........ page 6

- With a neutral outlook for S&P 500 Index equities, we recommend staying invested with a focus on high-quality, higher-growth sectors.
- We suggest rebalancing to increase diversification and exposure toward emerging market equities, where economic growth and valuations remain attractive.

Global fixed income .... page 8

- With our expectation that the Federal Reserve (Fed) will cut rates at least once between now and year-end, investors should adopt a neutral maturity and duration position.
- We favor increasing credit quality because we remain unfavorable on high-yield debt.

Global real assets .... page 10

- Commodities rebounded in the first half of 2019. We foresee balanced upside and downside risks in the second half of the year.
- Real estate investment trusts (REITs) likely will underperform other real assets through year-end.

Global alternative investments........ page 12

- Shorting is becoming easier, in our view, which should drive returns within equity hedge and relative value.
- Given that we're seeing late-cycle dynamics, within private capital we have a preference for strategies focused on the small, the niche, and the distressed.

Five ways to run with an aging bull........ page 14

1) Rebalance when volatility strikes.
2) Reduce price volatility with income-generating assets.
3) Use cash to your advantage.
4) Consider greater exposure to emerging market equities and sectors that represent higher-quality earnings.
5) Add strategies that can benefit from various market conditions.

Selected year-end 2019 forecasts

See page 16 for our complete economic and market forecasts

2.1%
U.S. GDP growth

1.7%
U.S. inflation Consumer Price Index

2,800–2,900
S&P 500 Index

2.00%–2.25%
Federal funds rate

2.00%–2.50%
10-year U.S. Treasury note yield

$60–$70
West Texas Intermediate crude oil per barrel

Source: Wells Fargo Investment Institute (WFII), June 11, 2019

Forecasts and targets are based on certain assumptions and on our current views of market and economic conditions, which are subject to change.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

Global economy

Slow global growth, no recession

Peter Donisanu
Investment Strategy Analyst

Craig Holke
Investment Strategy Analyst

Peter Wilson
Global Fixed Income Strategist

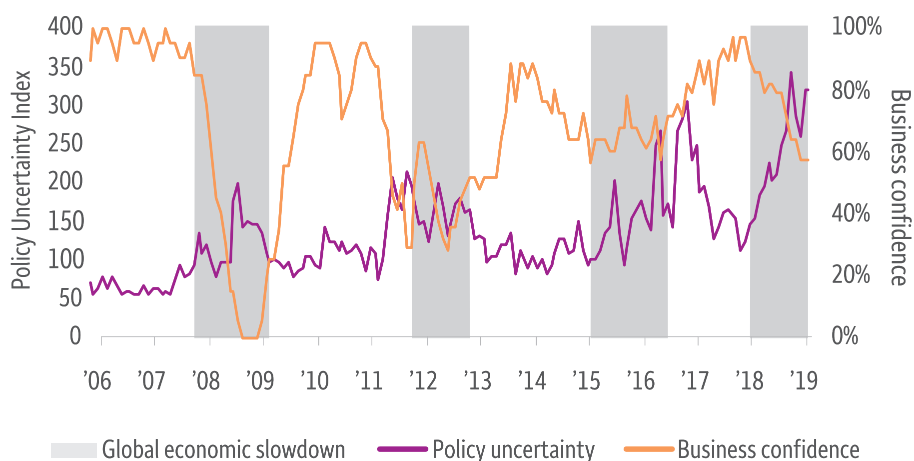
Most regions look stable, but weaker in Europe and Japan

Our outlook for the second half of 2019 is for positive economic growth of varying strength around the world. A U.S. economic recession appears unlikely, and emerging economies probably will show stable growth. But European and Japanese economic growth seems comparatively weaker and may not stabilize until political uncertainties around Brexit and trade disputes fade. We also anticipate slightly higher but benign global inflation.

Rising political uncertainties since early 2018 have constrained economic confidence and still seem to be the main economic risk (see the chart below). Fortunately, fiscal and monetary policymakers in the U.S., Europe, and China have added stimulus measures, and more global central banks are likely to cut interest rates. A U.S.-China trade agreement could help restore positive global

Rising political uncertainty tends to dampen business confidence

Major political uncertainties such as Brexit and trade disputes have tended to depress business confidence. We hope to see the resolution of some of these uncertainties later in 2019.



Sources: Wells Fargo Investment Institute; Markit; Bloomberg; and Baker, Bloom, and Davis. Monthly data from January 31, 2006, to April 30, 2019.

Global economic slowdown periods defined by the Organisation for Economic Co-operation and Development (OECD). Policy uncertainty is represented by the Global Economic Policy Uncertainty Index produced by Baker, Bloom, and Davis. It measures changes in news coverage about policy-related economic uncertainty, tax code expiration data, and economic forecaster disagreements. Business confidence measures the share of global manufacturing purchasing managers' indices (PMIs) in expansionary territory (above 50). A PMI is a measure of dominant trends in manufacturing and is considered a leading indicator of economic activity.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

trade growth and may particularly benefit Europe and Japan. However, business spending and global trade in materials and industrial goods are likely to remain constrained while the scope and timing of that agreement are unclear.

The U.S. and China anchor the global outlook

Ongoing U.S. job and wage gains and low debt costs should support positive yet modest household consumption growth. We expect 2019 U.S. economic growth to average 2.1% even after the economy's unexpected first-quarter strength. After all, businesses remain cautious about investments and are likely to let their inventories shrink in the balance of 2019. Modest household spending growth and restrained business investment should slow the economy from the 2.9% pace of 2018.

Weak economic growth in Europe and Japan could stabilize if political issues begin to settle and economic confidence rebounds. These economies should find underlying support in solid labor markets and household spending. The key for the developed markets should be the easing of trade tensions, avoiding the instability of snap elections in Italy, and finalizing Brexit.

Election-related policy uncertainties in India and Latin America led us to slightly downgrade emerging market economic growth, but China and East Asia should backstop the group as a whole. Steady Chinese private sector spending should promote positive economic growth and trade with other emerging economies. Chinese stimulus measures are modest and designed to offset the negative impacts of domestic economic reforms and the trade dispute with the U.S.

We do not currently expect major currency volatility

We have reduced our expectations for dollar depreciation and now believe that the dollar will remain broadly stable against both developed and emerging market currencies. Interest rate and growth differentials, as well as uncertainty over trade, should continue to support the dollar, but expectations of a Fed rate cut and an eventual U.S.-China agreement will cap dollar strength. Sluggish growth, low inflation, and persistent political risk should constrain significant euro appreciation, but the yen may benefit from prolonged trade uncertainty.

Key takeaways

- Conditions globally should support continued economic growth, although with important regional differences.
- Strong labor markets around the world should support personal spending, but business spending remains tepid while policy uncertainties persist.

What it means for investors

- While we expect softer global growth this year, a U.S. economic recession seems unlikely.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

Earnings growth and trade disputes

Audrey Kaplan
Head of Global Equity Strategy

Scott Wren
Senior Global Equity Strategist

Ken Johnson, CFA
Investment Strategy Analyst

Craig Holke
Investment Strategy Analyst

U.S. earnings growth slow but positive

On balance, we foresee 3.3% earnings growth for both the S&P 500 and Russell Midcap indices. Positive economic growth supports earnings, but ongoing trade dispute escalation remains a headwind. Regarding valuations, falling world interest rates are driving strong equity demand and support valuations at the 20-year average level (for the S&P 500 Index) or slightly below (for the Russell Midcap Index). Specifically, we project price/earnings (P/E) ratios based on 12-month forward consensus earnings estimates at 16.5 and 17.0 for U.S. large-cap and mid-cap companies, respectively. This fair valuation for large caps drives our neutral outlook for large and mid caps.

U.S. small-cap companies historically have had weaker balance sheets and less access to credit than larger companies and generally cannot implement meaningful share buybacks. We anticipate 5.0% earnings growth, slower than in 2018 and significantly below Wall Street estimates that began 2019 above 30% and were revised to 17% during the first quarter. As the consensus estimate declines toward our forecast, we expect more earnings downgrades and corresponding price volatility. Consequently, small-cap forward valuations should come in below their historical average (which is a P/E ratio of approximately 25.5), at a forward P/E ratio of 22.0. We reaffirm our unfavorable rating, as rising volatility, disappointing first-quarter earnings, and expected second-quarter earnings should cause the Russell 2000® Index to lag other U.S. market indices.

We favor cyclical sectors over defensive ones

We largely favor cyclical sectors, whose earnings growth should improve with economic growth and whose quality factors—including return on equity and debt exposure—are favorable in a maturing economic expansion. We rate Information Technology and Industrials as most favorable and do not favor defensive sectors, which may underperform cyclical sectors as long-term yields approach our year-end targets. We currently rate the Utilities sector as most unfavorable.

Developed (ex-U.S.) international equities pose risks

MSCI EAFE Index earnings growth relies heavily on exports and thus may lag U.S. and emerging market earnings growth until trade tensions and Brexit uncertainties ease. We expect developed market earnings-per-share growth to be lower than U.S. large-cap growth—2.2% versus 3.3%, respectively. Our

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

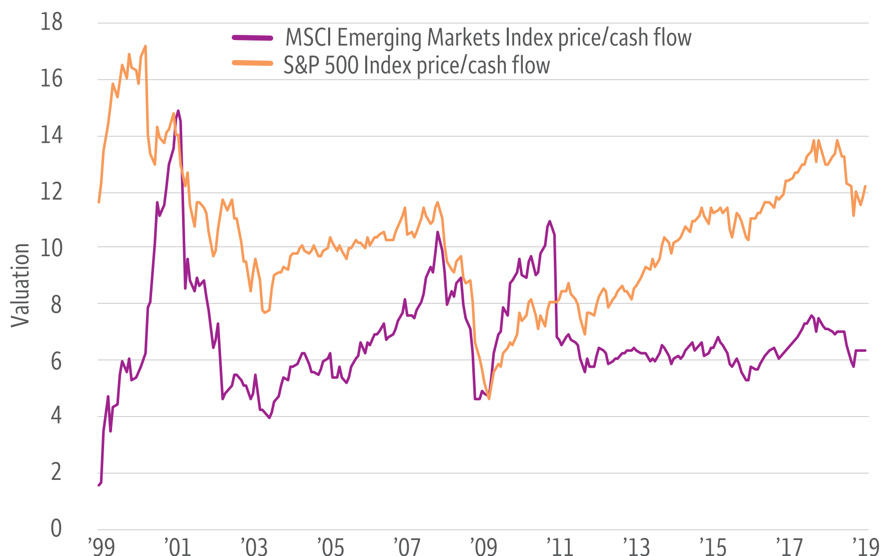
valuation outlook is conservative. The MSCI EAFE Index has traded at approximately 15 times forward earnings since 2012, and we believe a forward P/E multiple of 13.5 is achievable in 2019. Positive earnings growth but risk for lower valuations leave us neutral.

Emerging market equity valuations look attractive

Ambiguity on trade and its impact on global growth are headwinds for emerging markets, but several factors reinforce our favorable rating—growth among consumer-oriented companies is strong, corporate profits are improving, and China's government is injecting economic stimulus. We expect 2.4% earnings growth in the MSCI Emerging Markets Index and find the stocks attractively valued. The graph below shows a wider-than-average price/cash flow discount for emerging market stocks relative to U.S. large-cap stocks. A U.S.-China trade deal could revalue price/cash flow closer to U.S. valuation levels.

Emerging markets look cheap relative to U.S. large caps

Based on price/cash flow, emerging market equities currently trade at their most significant discount in years to U.S. large-cap equities.



Sources: FactSet and Wells Fargo Investment Institute. Monthly data from August 31, 1998, to April 30, 2019.

Past performance is not a guarantee of future results.

Key takeaways

- Emerging market equities offer the highest return potential over the balance of the year, based on our analysis.
- Trade disputes involving the U.S. create headwinds for earnings growth, but low interest rates support most U.S. valuations near recent levels.

What it means for investors

- Investors who are not at their target allocations for emerging market equities might consider rebalancing from potentially over-allocated asset classes, especially small-cap U.S. equities.
- As we move further through this long cycle, we want to focus on sectors that offer attractive quality characteristics, such as a high return on equity and low leverage.

Favored asset class

- Emerging Markets

Favored equity sectors

- Information Technology
- Industrials

Favored international regions

- Emerging Asia
- Latin America

The implications of a Fed rate cut

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

George Rusnak, CFA
Co-Head of Global Fixed Income Strategy

Luis Alvarado
Investment Strategy Analyst

The Fed may have to change direction

Publicly the Fed appears content to leave rates unchanged, but market participants are pricing in two or more rate cuts by year-end. Our new 2019 federal funds rate target is 2.00%-2.25%, implying one rate cut by year-end 2019. While the Fed remains data dependent, we believe that further significant escalation in tariffs, or a much slower economy than we expect, could compel additional rate adjustments. Regarding quantitative easing, the Fed previously stated that its balance sheet roll-off operation would end this September, leaving a significantly larger balance sheet than we previously had anticipated.

We have reduced our year-end 10- and 30-year Treasury forecast ranges by half a percentage point each, to 2.00%-2.50% and 2.25%-2.75%, respectively. Despite our modestly lower interest rate view, we still favor a neutral fixed-income portfolio position, both in terms of the yield curve and duration.*

Yield-curve inversion—or higher shorter-term than longer-term interest rates—has been one of the biggest stories for fixed-income investors this year. Portions of the yield curve inverted during the first half of the year, and the risk of a meaningful yield-curve inversion before year-end is elevated.

An inverted yield curve and the economy

Our favored way to measure yield-curve inversion is by looking at the 1-year to 10-year part of the yield curve (see the graph on the next page). If we see this key area of the yield curve invert by 25 basis points (0.25%) or for four consecutive weeks, we would view this as consistent with increasing risk of a more challenging economic environment. We would remind investors that the economy can continue to expand after an initial yield-curve inversion and that risk assets also can continue to perform well. However, given the powerful message that an inverted yield curve historically has delivered, investors should remain watchful, informed, and vigilant.

Outlook for debt markets

During the first half of 2019, we saw a meaningful decline in high-yield debt spreads (a measure of added yield over the risk-free rate, often the 10-year Treasury yield). As a result, we recommend investors move up in credit quality.

*Duration is a measure used to determine bond or bond portfolio sensitivity to movements in interest rates. Generally, the longer the duration the more sensitive a bond or bond portfolio is to changes in interest rates.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

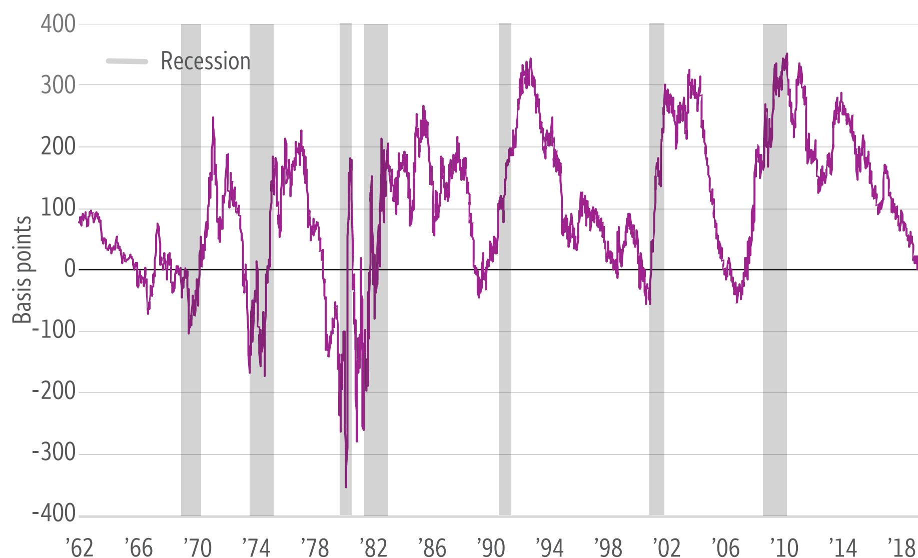
Current spread levels do not reflect an appropriate reward given current risk levels and deteriorating fundamentals, in our view.

Changes to the tax code have led to strong demand for municipal securities. We remain favorable on this fixed-income sector. We expect demand to remain strong in certain high-tax states. Yet, with the increase in valuations and limited supply, investors should be selective in their purchases.

We remain unfavorable on international developed market debt. Europe continues to struggle with significant volumes of negative-yielding sovereign debt; persistent and exceptionally low rates warrant our unfavorable view. After holding a favorable view for much of the emerging market debt rally, we now favor a neutral stance. Valuations look expensive, and this fixed-income asset class may not perform as well in the second half of 2019.

The gap between 10-year and 1-year Treasury yields could signal economic weakness

If we see the 1-year Treasury yield trading above the 10-year Treasury yield by 0.25% or for four consecutive weeks, we would view this as foreshadowing a more challenging economic environment.



Sources: Bloomberg and Wells Fargo Investment Institute. Weekly data from January 5, 1962, to May 15, 2019.

The difference between the 10-year and the 1-year Treasury yield measures the spread between short- and long-term interest rates. One hundred basis points equal 1%. Yields represent past performance and fluctuate with market conditions. **Past performance is no guarantee of future results**.

Key takeaways

- Interest rates are likely to remain relatively low through year-end.
- Yield-curve inversion remains a risk. A meaningful inversion could foreshadow a more difficult economic environment.

What it means for investors

- We favor a neutral duration stance because we view interest rate risk as limited through year-end.
- We believe that investors should be selective and favor higher-quality issuers. For municipal bonds, we favor securities with dedicated revenue streams.

Favored asset class

- U.S. Short Term Taxable Fixed Income

Favored fixed-income sectors

- Municipal Securities
- Preferred Securities
- Residential Mortgage-Backed Securities

Global real assets

First half strong but a mixed outlook

John LaForge
Head of Real Asset Strategy

Austin Pickle, CFA
Investment Strategy Analyst

Early-year performance will be hard to duplicate

At their peak levels in the first half of the year, prices had appreciated by 19% for master limited partnerships (MLPs) as measured by the Alerian MLP Index, by 15% for REITs as measured by the FTSE EPRA/NAREIT Developed Index, and by 9% for commodities as measured by the Bloomberg Commodity Index. Slow macroeconomic growth probably cannot supply the tailwind to maintain these returns in the second half. Investors are buying REITs for their defensive characteristics, but these investments would likely need lower long-term interest rates to keep moving higher. Commodity prices could stagnate if global economic trends do not improve. The one exception might be MLPs, whose valuations are compelling enough that investors may keep buying the group even if oil prices stagnate or fade.

REITs—fundamentals are slowly weakening

REIT fundamentals were weakening before 2019, and the trend seems likely to continue. We remain unfavorable on the group. In this aging economic expansion, REITs should struggle as real estate demand weakens. However, there are two main upside risks to our unfavorable rating. First, interest rates could fall further and encourage demand, even as the cycle ages. Second, if the U.S. economy is not mature, as we believe, but is instead closer to the middle of its expansion, then REIT valuations could have more room to rise.

Commodities—better global growth is needed

Some notable divergence in commodity prices is likely to persist into year-end. Crude-oil prices are likely to take additional support from tensions over U.S. sanctions against Iran. However, other commodity groups—precious metals and food—are not pulling their weight. Without a stronger global economy, and without help from food and precious metals, the broad commodity asset class may struggle to rally further. Thus, we recently downgraded commodities from favorable to neutral.

Our views on oil and gold support our neutral commodity outlook. The supply and demand balance, and elevated oil geopolitics, should support per barrel prices in our unchanged target range—which is $60 to $70 for West Texas Intermediate (WTI) and $65 to $75 for Brent oil. Gold could trade toward the top end of our $1,250 to $1,350 per troy ounce range if investors demand gold as a

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

hedge against a weaker dollar or equity volatility. We see limited upside risk above the target ranges for both gold and crude oil.

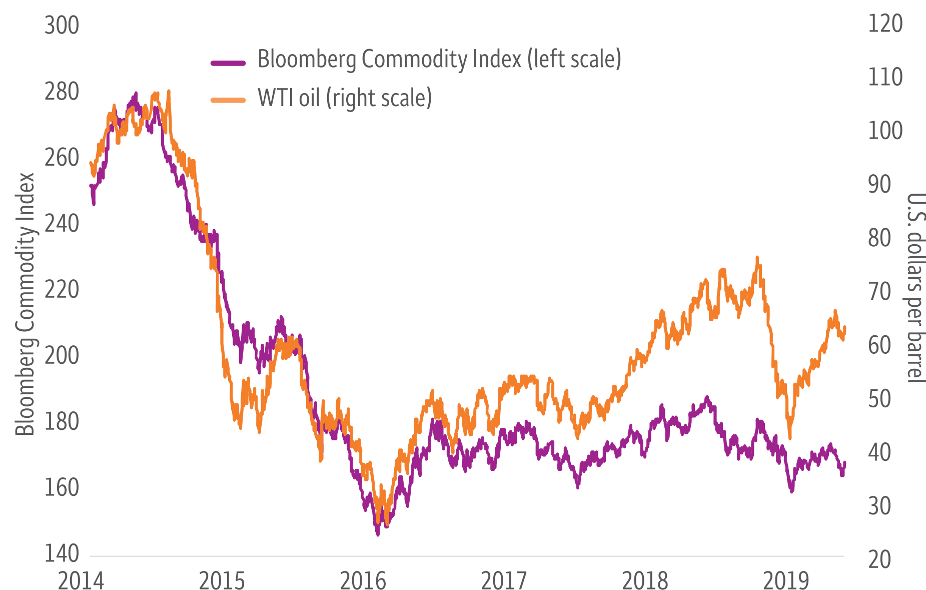
MLPs—good values and a solid energy backdrop

MLPs were the best-performing real asset group through April 2019, and more upside could be coming. Valuations as measured by the Alerian MLP Index still look inexpensive—the ratio of current enterprise value/EBITDA* is 9.7, which is a 20% discount to the five-year average of 12.2. Furthermore, the U.S. energy backdrop remains solid, and MLP management teams have cleaned up their financials. MLPs could continue to perform well even if oil prices stagnate or partially retreat. Hence, we have a favorable rating on the group.

*EBITDA is earnings before interest, taxes, depreciation, and amortization.

As oil goes in the second half, the commodity index might follow

The first-half rally in oil helped bolster returns for the broad commodity index, but we see limited further upside for oil. Without help from other parts of the commodity complex, the broad commodity asset class may struggle to rally further.



Sources: Bloomberg and Wells Fargo Investment Institute. Daily data from January 31, 2006, to May 15, 2019.

West Texas Intermediate (WTI) crude oil is a light, sweet (that is, low sulfur) crude oil, which is the main type of U.S. crude oil traded in U.S. futures markets. **Past performance is no guarantee of future results**.

Key takeaways

- REIT fundamentals are slowly weakening, while MLP fundamentals remain strong.
- Commodity prices may stagnate if global economic trends do not accelerate.

What it means for investors

- REITs likely will underperform other real assets.
- We expect MLPs to outperform both commodities and REITs.

Favored real asset

- MLPs

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

Positioning for a late-cycle environment

Adam Taback
Head of Global Alternative Investments

James Sweetman
Senior Global Alternative Investment Strategist

Justin Lenarcic
Global Alternative Investment Strategist

Yegin Chen, Ph.D.
Global Alternative Investment Strategist

Hedge funds—a focus on shorting and credit

We continue to focus on hedge fund strategies in which short positions are more feasible, such as equity hedge and relative value. We are also keen on strategies that can capitalize on global credit market dislocations, such as event driven. The chart on the next page illustrates the increase in credit stress. The growth of global debt postcrisis, the deterioration in underwriting standards, the utilization of debt for leveraged buyouts and other merger and acquisition activity, and the maturing credit cycle all result in a bias toward credit as the epicenter of hedge fund opportunities.

Our playbook for credit-oriented hedge funds involves two strategies—relative value and event driven—that can capitalize on the evolution of corporate credit from stress, to distress, to default. We maintain a neutral cyclical view on the macro strategy, where conditions favor the discretionary managers over the systematic ones. Abrupt monetary policy reversals, inverted yield curves, and geopolitical stress tend to favor discretionary approaches over the trend-following that characterizes systematic strategies. We continue to expect the more nimble discretionary strategy to outperform its trend-following, systematic macro counterpart.

We also expect that hedge fund performance will show greater dispersion than in previous years. Even managers within a similar strategy—such as relative value or, more specifically, long/short credit—are likely to generate widely different results. Specific manager selection will be very important for investors.

Private capital—opportunities throughout the cycle

We believe that opportunities exist for private capital investors throughout the business cycle. In particular, we prefer to focus on smaller, niche, global investments, and especially smaller funds that can capitalize on idiosyncratic events as opposed to broad dislocations. We also believe that much of the private capital opportunity set comes from locating the companies or assets that face a mispricing yet provide potential for restructuring.

Long-term trends within Health Care should continue to provide an opportunity set for private capital investors, with key areas including the intersection of biotechnology and pharmaceuticals (biopharmaceuticals), medical technology and equipment, and medical service providers (especially in emerging markets). A notable opportunity set involves health care venture investing in Asia.

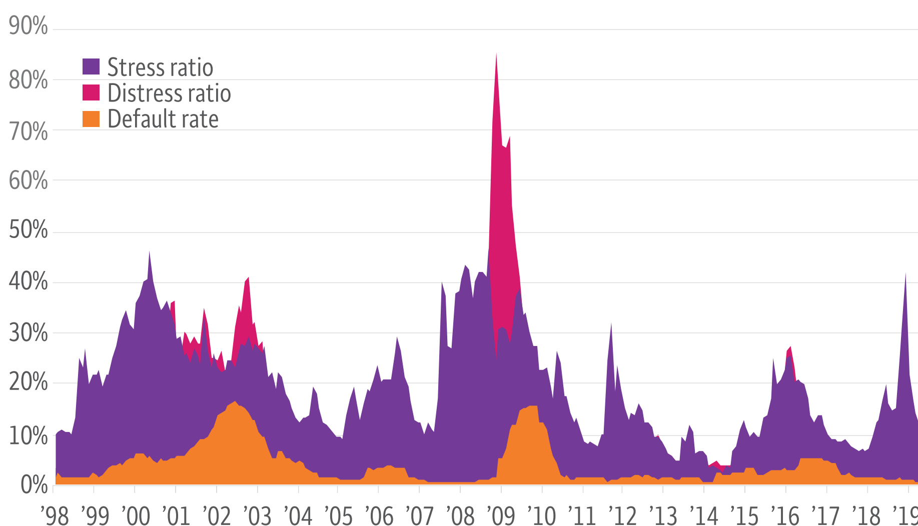
Please see pages 18 to 20 for important notes, definitions, and risk considerations.

Among private debt strategies, we are most constructive on distressed and special situations that result in complexity that the market misunderstands. Furthermore, these strategies have low correlations with the broader equity and fixed-income markets. These funds may focus on several types of corporate and related debt in a range of situations, and their managers potentially could generate solid returns even in a relatively benign economic and credit environment.

We see particular opportunities in secondary strategies, including the well-established fund secondary strategy—but also the newer secondary direct strategy (a niche private equity strategy involving the acquisition or sale of equity stakes in private companies by equity holders, which may include company founders, employees, or private equity investors). Furthermore, a number of macroeconomic and geopolitical factors globally lead to the expectations for a rich opportunity set for value-add and opportunistic private real estate funds over the next few years.

Corporate credit trends in stress, distress, and defaults

A recent spike in the stress ratio indicates that issuers may struggle to meet debt obligations. Historically, a higher stress ratio presages a higher percentage of issuers falling into the more-serious distressed and default classifications.



Sources: Bloomberg and Strategas Research Partners, April 2019. Monthly data from January 1998 to April 2019.

For illustrative purposes only. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Please see Notes at the end of this report for other information about the chart.

Key takeaways

- A preference for the small, the niche, and the distressed epitomizes our expectations for where the opportunities lie as both the credit and business cycles mature.
- With increases in volatility come increases in disruption, stress, and illiquidity, all of which benefit hedge fund and private capital strategies.

What it means for investors

- Investors can develop and begin building an asset allocation plan that is positioned to capitalize on a maturing credit cycle.
- We favor incorporating both defensive-oriented hedge fund strategies and opportunistic private capital strategies that can complement each other.

Favored private capital strategies

- Private Equity (Small Cap Buyout and Specialty)
- Private Debt (Small Cap Direct Lending and Specialty)
- Private Real Estate (Opportunistic)

Favored hedge fund strategies

- Relative Value (Long/Short Credit and Structured Credit)
- Equity Hedge (Directional)
- Event Driven (Distressed)

Alternative investments are not suitable for all investors and are only open to "accredited investors" or "qualified investors" within the meaning of the U.S. securities laws. They are speculative, highly illiquid, and designed for long-term investment and not as trading vehicles.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

Five ways to run with an aging bull

Tracie McMillion, CFA
Head of Global Asset Allocation Strategy

Paul Christopher, CFA
Head of Global Market Strategy

Sameer Samana, CFA
Senior Global Market Strategist

Michael Taylor, CFA
Investment Strategy Analyst

1) Rebalance when volatility strikes.

In most asset classes, we suggest taking steps to maintain the strategic or long-term target allocation designed to achieve an investor's long-term goals. As markets rise, the positions may need to be trimmed and the cash held or reallocated to markets where valuations are better. As markets fall, the opportunity may arise to restore the target allocation.

2) Reduce price volatility with income-generating assets.

Income is a sometimes overlooked component of portfolio returns, as shown in the graph on the next page. Based on a Wells Fargo Investment Institute Moderate Growth and Income portfolio model, nearly one-third of the total return would have come from income during this economic expansion since 2009. To potentially improve the income-generating ability of a portfolio, you can lengthen the duration of your high-quality bonds (using a neutral overall duration and yield-curve profile). Dividend-paying stocks and REITs offer additional streams of portfolio income. We view the current difference between the yields of lower-quality and higher-quality bonds as not worth the increase in default and market risk.

3) Use cash to your advantage.

We expect equity markets to remain volatile. On rallies that take benchmark indices (for example, the S&P 500 Index) above our target levels shown on page 16, we suggest realizing some of the gains and placing the proceeds in cash—to await a better entry point in the coming months. If a portfolio already holds a sizable amount of cash, there is no need to raise more; instead, investors should be prepared to invest cash should markets correct in the coming months. Another potential strategy is dollar cost averaging, which involves investing cash over time to take advantage of market fluctuations.*

4) Consider greater exposure to emerging market equities and sectors that represent higher-quality earnings.

Investing in international assets is an important way to diversify a portfolio. In recent years, U.S. equity markets have led global markets, but that trend may be changing. Currently, we are favorable on emerging market equities. Valuations in many emerging markets look attractive, and recent economic data point to stable economies in China and other developing countries. Within U.S. equity markets, we favor sectors such as Information Technology and Industrials, areas of the market with higher-quality earnings.

*A periodic investment plan such as dollar cost averaging does not ensure a profit or protect against a loss in declining markets. Since such a strategy involves continuous investment, the investor should consider his or her ability to continue purchases through periods of low price levels.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

5) Add strategies that can benefit from various market conditions.

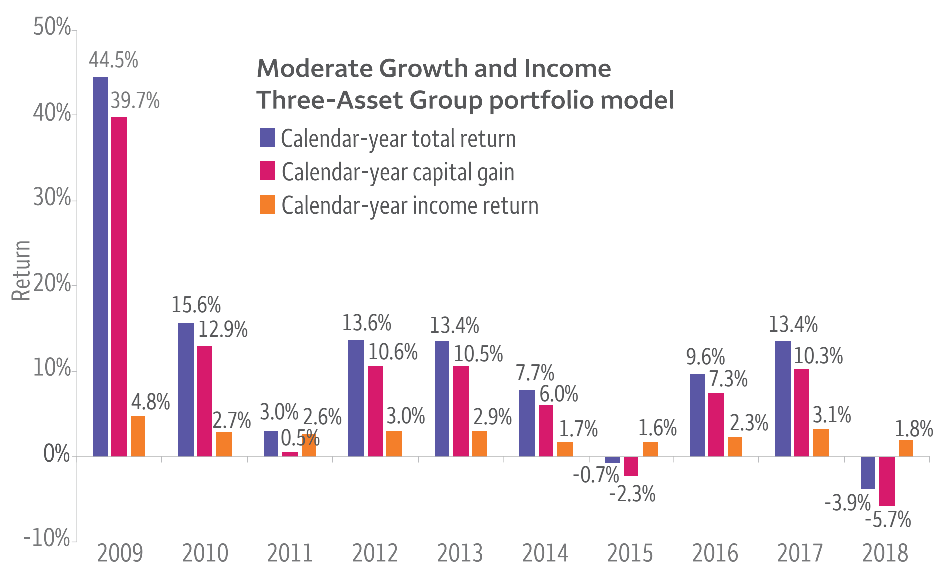
A bear market can occur with little warning, so adding assets that can profit in both up and down markets may help prepare a portfolio for possible downturns. The hedge fund strategies we currently favor are equity hedge, relative value, and event driven. Private equity and private debt may also attract long-term investors. These asset classes can provide access to innovative, fast-growing companies and to high-yielding debt. Now may be a good time for qualified investors to begin building an allocation to private debt, ahead of an eventual economic downturn that could provide opportunities for distressed debt managers. Also for qualified investors, additional potential opportunities are available utilizing options.

Alternative investments are not suitable for all investors and are only open to "accredited investors" or "qualified investors" within the meaning of the U.S. securities laws. They are speculative, highly illiquid, and designed for long-term investment and not as trading vehicles.

Options involve risk and are not suitable for all investors. Before opening an option position, please read "Characteristics and Risks of Standardized Options" carefully before investing. This document is available from your financial professional or the Options Clearing Corporation, 125 S. Franklin Street, Suite 1200, Chicago, Illinois 60606. Supporting documentation for any claims, comparison, recommendations, statistics or other technical data will be supplied upon request.

Income has added to returns in positive years and has mitigated losses in negative years

Even though capital gains tend to dominate total returns during a low-yielding environment, income still has a role to play in dampening portfolio volatility.



Sources: Wells Fargo Investment Institute and Bloomberg. Data from January 1, 2009, to December 31, 2018.

Performance results for the Moderate Growth and Income Three-Asset Group portfolio model are hypothetical and for illustrative purposes only. Index returns do not represent investment performance or the results of actual trading. Index returns reflect general market results; assume the reinvestment of dividends and other distributions; and do not reflect deductions for fees, expenses, or taxes applicable to an actual investment. An index is unmanaged and not available for direct investment. **Hypothetical and past performance is no guarantee of future results.** Please see Notes at the end of this report for the composition of the portfolio, definitions of indices, and descriptions of asset-class risks.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

Economic and market forecasts

We expect moderating economic growth and inflation, but a sharper slowdown in Europe and Japan.

We expect a stable U.S. dollar

We have a neutral outlook on U.S. large- and mid-cap equities but an unfavorable view of small-cap equities.

We expect the Fed to cut rates at least once between now and year-end.

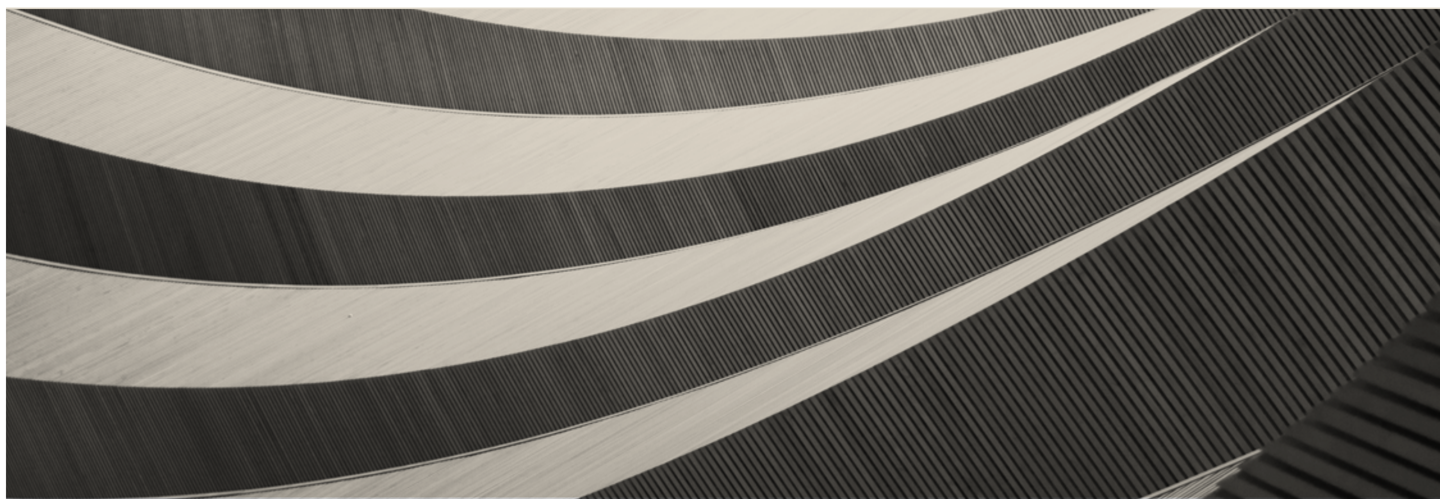
We expect most commodity prices to be steady into year-end 2019.

Global economy	2019 (year-end target)	2018 (Actuals)	2017 (Actuals)
U.S. GDP growth	2.1%	2.9%	2.2%
U.S. inflation	1.7%	2.5%	2.1%
U.S. unemployment rate	3.7%	3.9%	4.1%
Global GDP growth	3.3%	3.6%	3.7%
Developed market GDP growth	1.7%	1.8%	2.3%
Developed market inflation	1.6%	1.6%	1.7%
Emerging market GDP growth	4.4%	4.9%	4.7%
Emerging market inflation	4.3%	6.9%	5.2%
Eurozone GDP growth	1.2%	1.9%	2.7%
Eurozone inflation	1.5%	1.5%	1.4%
Dollar/euro exchange rate	$1.11–$1.19	$1.15	$1.20
Yen/dollar exchange rate	¥104–¥114	¥110	¥113
Global equities			
S&P 500 Index	2,800–2,900	2,507	2,674
Earnings per share	$167	$162	$134
Russell Midcap Index	2,200–2,300	1,857	2,078
Earnings per share	$128	$124	$95
Russell 2000 Index (small cap)	1,450–1,550	1,349	1,536
Earnings per share	$65	$62	$45
MSCI EAFE Index	1,850–1,950	1,720	2,051
Earnings per share	$135	$132	$132
MSCI Emerging Markets Index	1,070–1,170	966	1,158
Earnings per share	$84	$82	$81
Global fixed income			
10-year U.S. Treasury yield	2.00%–2.50%	2.68%	2.40%
30-year U.S. Treasury yield	2.25%–2.75%	3.01%	2.74%
Federal funds rate	2.00%–2.25%	2.40%	1.31%
Global real assets			
West Texas Intermediate crude price (barrel)	$60–$70	$45	$60
Brent crude price (barrel)	$65–$75	$54	$67
Gold price (troy ounce)	$1,250–$1,350	$1,281	$1,309

Sources: FactSet, Bloomberg, International Monetary Fund, and Wells Fargo Investment Institute, June 11, 2019. GDP=gross domestic product. Wells Fargo Investment Institute forecasts and targets. Forecasts and targets are based on certain assumptions and on our current views of market and economic conditions, which are subject to change.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

Risks to our views



Global economy

- Continued uncertainty surrounding trade and tariffs, a no-deal Brexit, or even a U.S. government shutdown—individually or in combination—could weaken confidence and global economic growth.
- Further U.S. dollar appreciation could raise the cost of U.S. exports and borrowing costs for foreign entities and might signal lower overseas revenues for U.S. businesses.

Global equities

- Our forecasts hinge on the continuing modest growth/modest inflation economic environment that we expect domestically, along with stabilization in the global economy.
- Increasing trade frictions are a risk to our equity outlook. Should U.S.-China trade talks fail or disappoint, it is likely that global stock markets would react negatively.

Global fixed income

- The U.S. economy is near an inflection point. If the Fed has not engineered a soft landing, the current level of interest rates may prove overly restrictive, which could lead to recessionary conditions over time.
- Conversely, an accelerating economy may mean that the Fed prematurely ended its rate-hike cycle, in which case inflation and interest rates may move higher than expected.

Global real assets

- If long-term interest rates drop meaningfully lower, REITs could outperform. Moreover, REITs classically struggle late in economic expansions; should the U.S. economic expansion prove to be earlier in the cycle than expected, REITs may not underperform.
- A meaningful reacceleration or deceleration of global economic growth is the main risk to our neutral commodity stance.

Global alternative investments

- An accelerated threat of recession could lead to underperformance from structured credit strategies and potentially lead to a sharp rise in equity correlations, hampering equity hedge.
- A return to quantitative (and monetary) easing—which is not our baseline scenario—could reduce the pressure on debt-laden balance sheets and push out the timing of the next distressed cycle.

Alternative investments are not suitable for all investors and are only open to "accredited investors" or "qualified investors" within the meaning of the U.S. securities laws. They are speculative, highly illiquid, and designed for long-term investment and not as trading vehicles.

Please see pages 18 to 20 for important notes, definitions, and risk considerations.

Notes

Corporate credit chart, page 13

The stress ratio is calculated by dividing the total face value of bonds priced between $75 and $95 in the ICE BofAML Developed Markets High Yield Index by the total face value of bonds within the index. The distress ratio is calculated by dividing the total face value of bonds priced below $75 in the ICE BofAML Developed Markets High Yield Index by the total face value of bonds within the index. Default rates are the percentage of borrowers in an index who failed to make a scheduled principal or interest payment over the past 12 months.

Moderate growth and income total return chart—composition, page 15

Moderate Growth and Income: 3% Bloomberg Barclays U.S. Treasury Bill 1–3 Month Index, 4% Bloomberg Barclays U.S. Aggregate (1–3 year), 16% Bloomberg Barclays U.S. Aggregate (5–7 year), 7% Bloomberg Barclays U.S. Aggregate (10+ year), 6% Bloomberg Barclays U.S. Corporate High Yield Bond Index, 3% JPM GBI Global Ex-U.S. Index, 5% JPM EMBI Global Index, 21% S&P 500 Index, 9% Russell Midcap Index, 8% Russell 2000 Index, 6% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 5% FTSE EPRA/NAREIT Developed Index, 2% Bloomberg Commodity Index.

Definitions

The **Alerian MLP Index** is a float-adjusted, capitalization-weighted index, whose constituents represent approximately 80% of total float-adjusted market capitalization, and is disseminated real-time on a price-return basis (AMZ) and on a total-return basis (AMZX).

The **Bloomberg Barclays 1–3 Month Treasury Bill Index** includes all publicly issued zero-coupon U.S. Treasury bills that have a remaining maturity of less than three months and more than one 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 nonconvertible.

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

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

The **Bloomberg Barclays U.S. Aggregate 10+ Year Bond Index** is unmanaged and is composed of the Bloomberg Barclays U.S. Government/Credit Index and the 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.

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

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

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

The **ICE BofAML Developed Markets High Yield Index** is a market-capitalization-weighted index that tracks the performance of below-investment-grade corporate debt publicly issued in the major domestic or eurobond markets. Qualifying securities must have a below-investment-grade rating (based on an average of Moody's, S&P, and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule, and a minimum amount outstanding of USD 250 million, EUR 250 million, GBP 100 million, or CAD 100 million.

The **J.P. Morgan 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, the United Kingdom, Denmark, the Netherlands, and France.

The **J.P. Morgan Emerging Market Bond Index Global** (EMBI Global) 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.

The **MSCI EAFE Index** is a free-float-adjusted market-capitalization-weighted index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.

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

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The **Russell Midcap Index** measures the performance of the 800 smallest companies in the Russell 1000 Index.

The **Russell 1000 Index** measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 92% of the total market capitalization of the Russell 3000 Index.

The **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.

The **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.

The **S&P 500 Index** is an unmanaged index generally considered representative of the U.S. stock market.

Risk considerations

All investing involves risks, including the possible loss of principal. There can be no assurance that any investment strategy will be successful and meet its investment objectives. Investments fluctuate with changes in market and economic conditions and in different environments due to numerous factors, some of which may be unpredictable. Asset allocation and diversification do not guarantee investment returns or eliminate risk of loss. Each asset class has its own risk and return characteristics, which should be evaluated carefully before making any investment decision. 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. Some of the risks associated with the representative asset classes include:

General market risks

Stock markets, especially foreign markets, are volatile. A stock's value may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. International investing has additional risks including those associated with currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging markets. Investing in small- and mid-cap companies involves additional risks, such as limited liquidity and greater volatility.

Investments in fixed-income securities, including municipal securities, are subject to market, interest rate, credit, liquidity, inflation, prepayment, extension, and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in a decline in the bond's price. High-yield fixed-income securities are considered speculative, involve greater risk of default, and tend to be more volatile than investment-grade fixed-income securities. Municipal securities may also be subject to the alternative minimum tax and legislative and regulatory risk, which is the risk that a change in the tax code could affect the value of taxable or tax-exempt interest income. 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.

Similar to bonds, preferred securities are interest rate sensitive. Their dividends are not guaranteed and are subject to change. Some preferred securities include a call provision, which may negatively affect the return of the security. A prerefunded bond is a callable bond collateralized by high-quality securities, typically Treasury issues. U.S. government securities are backed by the full faith and credit of the federal government as to payment of principal and interest if held to maturity. Although free from credit risk, they are subject to interest rate risk. Mortgage-related and asset-backed securities are subject to prepayment and call risks in addition to the risks of investing in debt securities. Call risk is the risk that the issuer will redeem the issue prior to maturity. This may result in reinvestment risk, which means the proceeds will generally be reinvested in a less favorable environment. Changes in prepayments may significantly affect yield, average life, and expected maturity.

Sector investing

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. 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. 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, which can significantly affect a portfolio's performance.

Alternative investments

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, and less regulation and higher fees than mutual funds. Hedge fund, private equity, private debt, and private real estate fund investing involve 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.

Private debt strategies seek to actively improve the capital structure of a company, often through debt restructuring and deleveraging measures. Such investments are subject to potential default, limited liquidity, the creditworthiness of the private company, and the infrequent availability of independent credit ratings for private companies. Investing in distressed companies is speculative and involves a high degree of risk. Because of their distressed situation, these securities may be illiquid, have low trading volumes, and be subject to substantial interest rate and credit risks.

Hedge fund strategies, such as Equity Driven, Equity Hedge, Relative Value, Structured Credit, Long/Short Credit, and Discretionary Macro, 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 because 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.

Real assets

Real assets are subject to the risks associated with real estate, commodities, MLPs, and other investments and may not be suitable for all investors.

The commodities markets, including investments in gold and other precious metals, 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. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity. Products that invest in commodities may employ more complex strategies, which may expose investors to additional risks. Investment in securities of MLPs involves certain risks that differ from an investment in the securities of a corporation. MLPs may be sensitive to price changes in oil, natural gas, etc.; regulatory risk; and rising interest rates. A change in the current tax law regarding MLPs could result in the MLP being treated as a corporation for federal income tax purposes, which would reduce the amount of cash flows distributed by the MLP. In addition, there are certain tax risks associated with an investment in MLP units, and conflicts of interest may exist between common unitholders and the general partner, including those arising from incentive distribution payments. Other risks include the volatility associated with the use of leverage, volatility of the commodities markets, market risks, supply and demand, natural and man-made catastrophes, competition, liquidity, market price discount from net asset value, and other material risks. Investment in real estate securities includes risks, such as the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions.

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