RESEARCH REVIEW

FOURTH QUARTER 2017

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There were many notable, attention-grabbing headlines in the fourth quarter of 2017, including a mid-December Federal Reserve interest rate hike, ongoing improvement in crude oil prices, passage of the highly-anticipated Tax Cuts and Jobs Act, and continued tightening of the U.S. labor market. Across the major asset categories, global equities marched higher, with outsized gains in international markets and domestic large cap. Meanwhile, a flattening yield curve supported long-term Treasury returns. Recent poor momentum in energy infrastructure assets moderated and the sector witnessed impressive gains.

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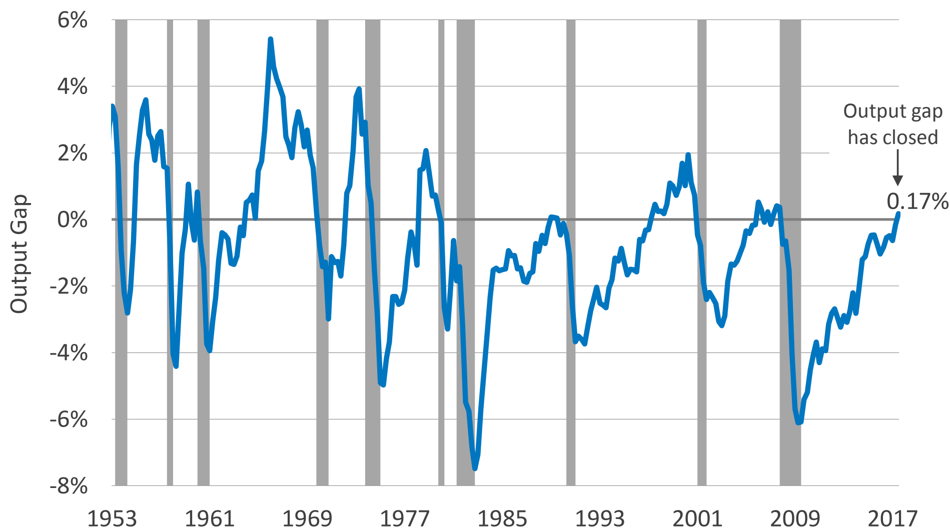
ECONOMIC UPDATE

Fed Hikes Rates, Oil Prices Spike, and the Labor Market Tightens Further

The fourth quarter of 2017 was full of market-moving economic events such as the expected increase of the federal funds rate by the Federal Reserve at their mid-December meeting, increases in crude oil spot prices, passage of the tax bill, and tightening across many U.S. labor market variables. In addition, several key U.S. economic fundamental variables witnessed ongoing improvement, including consumer confidence, growth across leading economic indicators, and growth in core capital expenditures. The U.S. economy appears to have gathered momentum before fiscal stimulus even had the chance to feed into the broader economy. If this momentum continues, the economy may witness higher inflation rates once the stimulus begins to officially impact both corporate and individual bottom lines.

Output gap is a measure of the utilization of economic resources that attempts to approximate the level of slack—or lack thereof—in the U.S. economy. Negative output gap readings indicate the underutilization of resources, or slack, while positive readings indicate the potential over-utilization of resources. Bearing in mind that data is reported on a quarterly lag, in the fourth quarter, the output gap increased to its highest level since fourth quarter 2007.

U.S. OUTPUT GAP AND BUSINESS CYCLES



Data sources: CBO, NBER, Bloomberg, L.P.; Data as of 3Q 2017
Note: Positive readings indicate over-utilization and vice versa

The output gap has closed at a time when many other key indicators have tripped "late-cycle" status, including elevated valuations across most risky asset categories, near-peak levels of consumer confidence, a flattening Treasury yield curve, and a recent (modest) slowdown in the pace of monthly job gains.

The passage of the Tax Cuts and Jobs Act is a key wildcard in the persistence of the current economic expansion. The Act is predicted to serve as a near-term tailwind behind domestic economic conditions, and a likely counterbalance will include the deliberate tightening of monetary conditions by the Federal Reserve, including further increases in the federal funds rate and the evolution of the balance sheet wind-down process.

To summarize, the U.S. economy appears to have gathered steam in the fourth quarter 2017, despite the fact that the Fed's fiscal stimulus has yet to directly impact economic conditions. The risk of "overheating" remains a concern, however, as many key indicators continue to signal a somewhat mature business cycle expansion. While looming fiscal stimulus is likely to keep the current expansion on track, a key macro risk will be the Fed's deliberate unprecedented tightening of monetary accomodations.

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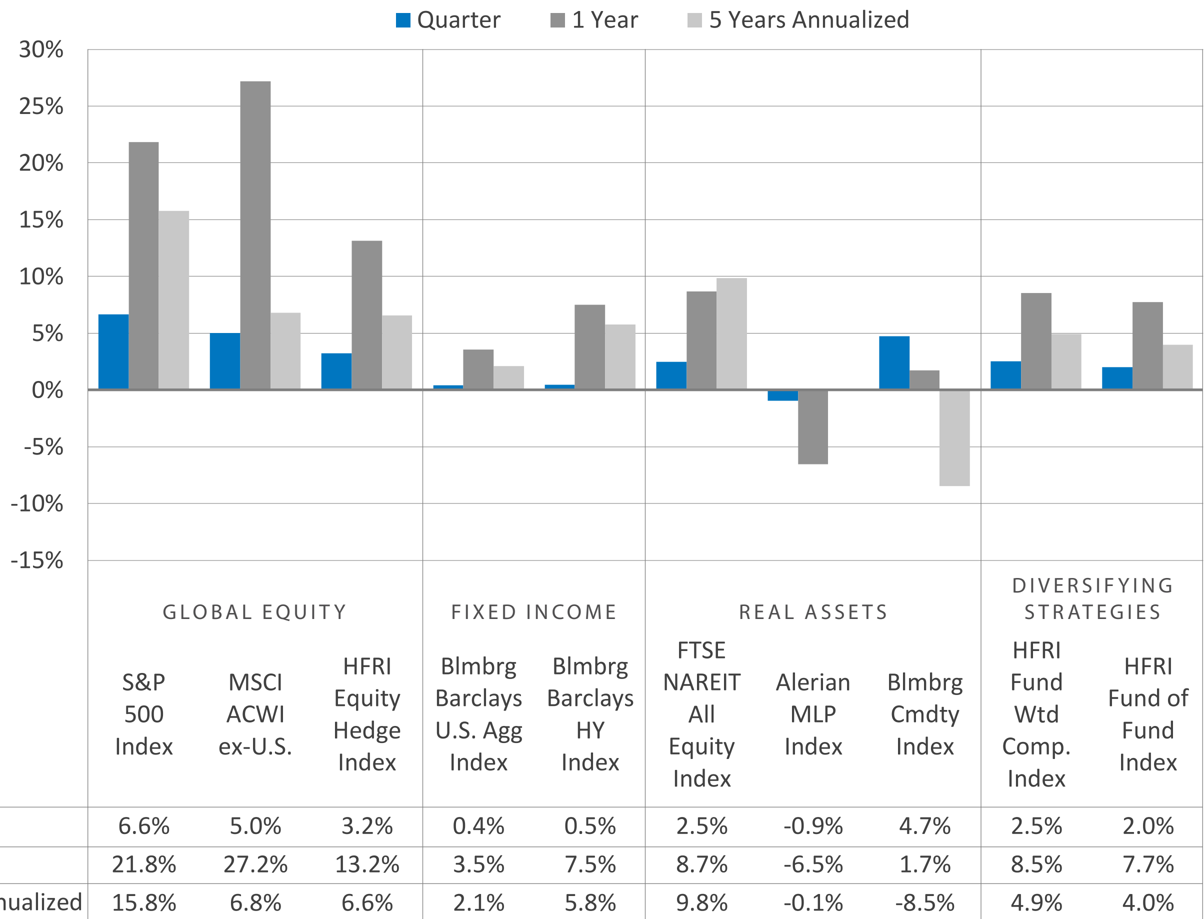
MARKET SUMMARY

FOURTH QUARTER 2017



	S&P 500 Index	MSCI ACWI ex-U.S.	HFRI Equity Hedge Index	Blmbrg Barclays U.S. Agg Index	Blmbrg Barclays HY Index	FTSE NAREIT All Equity Index	Alerian MLP Index	Blmbrg Cmdty Index	HFRI Fund Wtd Comp. Index	HFRI Fund of Fund Index
Quarter	6.6%	5.0%	3.2%	0.4%	0.5%	2.5%	-0.9%	4.7%	2.5%	2.0%
1 Year	21.8%	27.2%	13.2%	3.5%	7.5%	8.7%	-6.5%	1.7%	8.5%	7.7%
5 Years Annualized	15.8%	6.8%	6.6%	2.1%	5.8%	9.8%	-0.1%	-8.5%	4.9%	4.0%

Data sources: Lipper, HedgeFund Research

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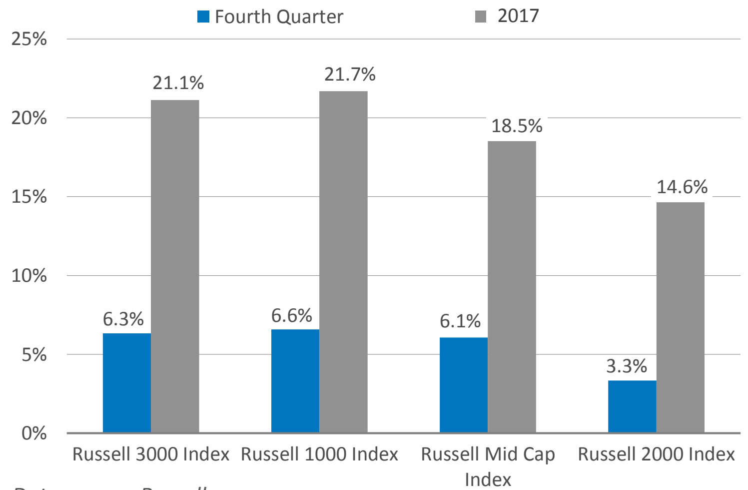
GLOBAL EQUITY

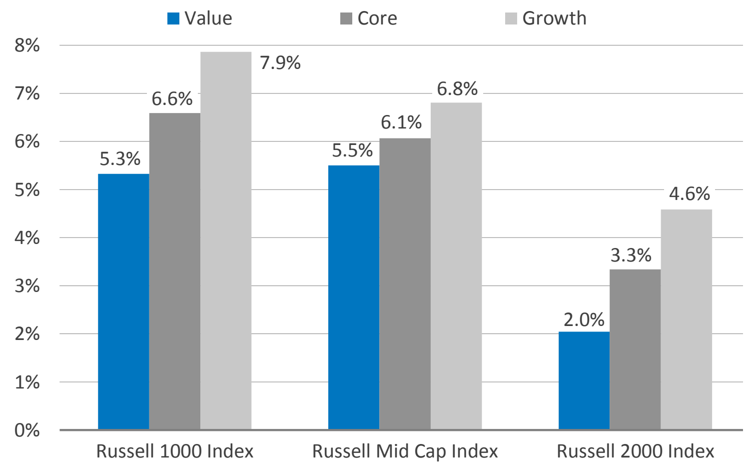
- The U.S. equity markets performed well for the fourth quarter, adding to an already strong year. There were three primary drivers behind the quarter's strong returns: strong corporate earnings, continued economic growth—including the lowest unemployment level since 2000—and U.S. tax reform. The U.S. is currently experiencing the second-largest bull market in its history, and some speculators believe that the recent tax reform will only add to the run-up.
- The fourth quarter followed pace with the rest of 2017, having both continued positive returns and low volatility. Growth outperformed value for the quarter, with tech stocks returning the most out of the sectors. Large-cap outperformed both small- and mid-cap stocks. Moreover, U.S. stocks experienced positive returns for every month of the year—an event that has not occurred since the late 1950s.
- In continental Europe, the UK market experienced some of the strongest returns for the quarter. Overall, the rest of Europe's returns for the quarter were unimpressive, lagging both emerging and frontier markets. The political landscape in Europe has given investors pause, and many are keen to wait and observe events as they unfold. The three primary reasons investors have taken a step back in Europe are the Catalonian independence vote in Spain, the upcoming Italian elections, and the continued uncertainty surrounding Brexit.
- There were two major contributors to emerging markets performance for the quarter: Asia and technology. In particular, Chinese and Korean technology companies reported strong earnings that helped the emerging market technology sector's astounding 60% gains in 2017 .
- Maintaining the pattern from earlier quarters, the dollar continued to weaken amid increasing inflationary pressures in the U.S., contributing positively to both frontier and emerging markets performance.

RUSSELL INDICES PERFORMANCE



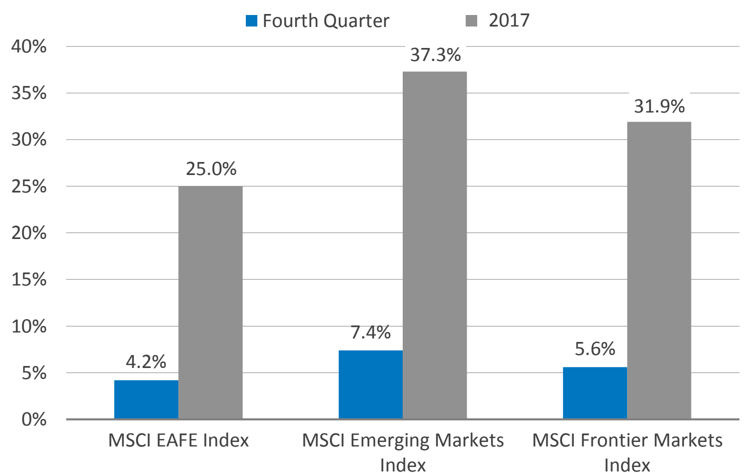
Data source: Russell

RUSSELL INDICES PERFORMANCE



Data source: Bloomberg, L.P.

MSCI INDICES PERFORMANCE (U.S. Dollars)



Data source: MSCI

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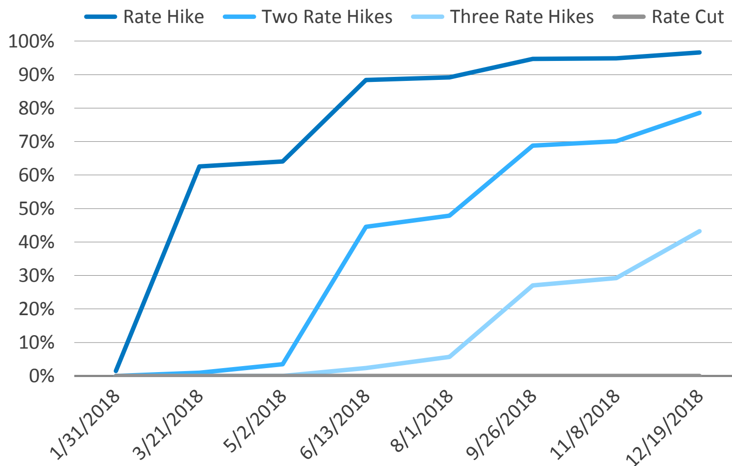
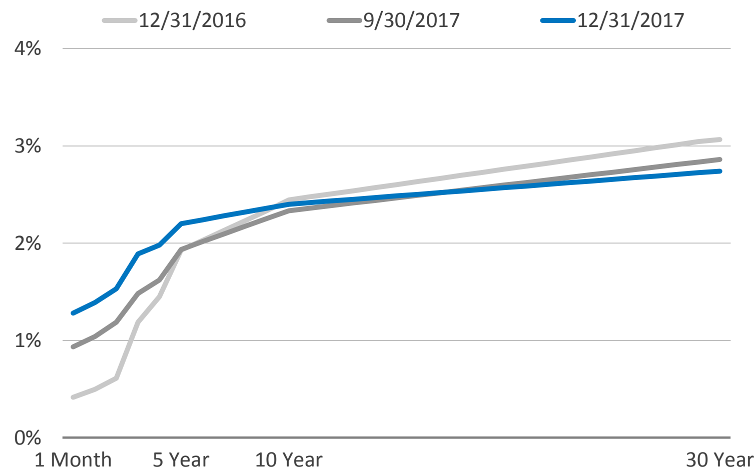
IMPLIED PROBABILITY OF U.S. INTEREST RATE HIKES



Data source: CME Group

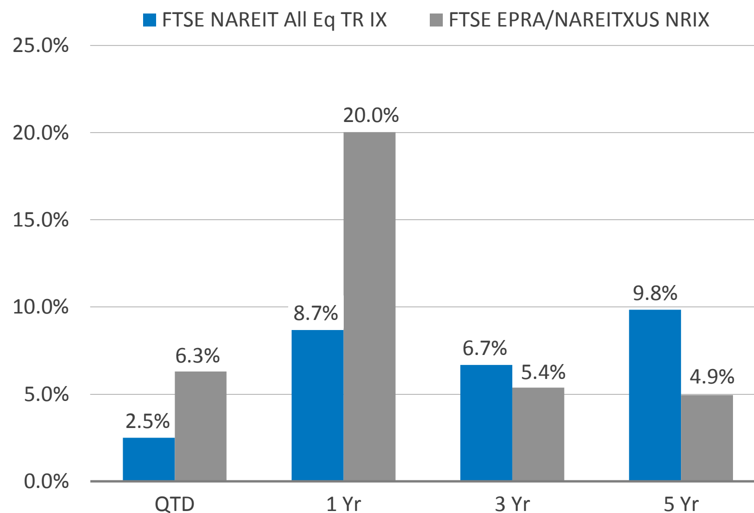
U.S. TREASURY YIELD CURVE



Data source: U.S. Department of the Treasury

DOMESTIC vs. INTERNATIONAL REIT RETURNS

As of December 31, 2017



Data source: Bloomberg, L.P.

FIXED INCOME

MARKET DRIVERS

- Strength of the U.S. dollar in an environment of low inflation contributed to dollar-denominated emerging market (EM) debt outperforming locally denominated EM debt.
- The Federal Reserve raised rates in December, hiking the federal funds rate by 25bps (basis points) in the third rate hike of 2017.
- The Federal Reserve's December rate hike is expected to cost consumers an additional $1.5 billion in credit card debt through 2018, and additional rate hikes are expected to add to these debt levels.

MARKET MOVEMENT

- U.S. investment-grade corporate credit outperformed high yield by 70bps for the quarter, with spreads tightening by 8bps to 93bps amid strong demand for investment-grade bonds and elevated valuations in high yield.
- Euro zone bond prices rose as the European Central Bank (ECB) announced its intention to extend its bond-buying program through September 2018. While the ECB plans to continue this stimulus, the amount of bond purchases will be reduced from €60 million to €30 million a month.

REAL ASSETS

REAL ESTATE

- The U.S. REIT market posted positive returns for both the quarter and the year. Returns were driven by the following top-performing sectors: infrastructure (+35.4%), data centers (+20.6%), manufactured homes (+24.9%), and the industrial sector (+20.6%).
- Infrastructure and data center REIT returns were driven by increased demand for mobile and cloud data streaming, whereas industrial REITs saw positive returns from continued demand growth due in part to ecommerce advancement and expansion.
- Internationally, REITs continued to post positive returns due to favorable supply and demand dynamics.

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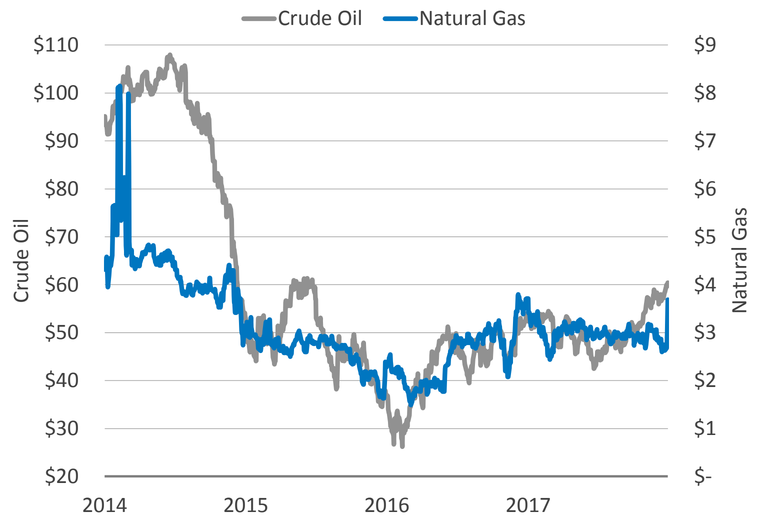
NATURAL RESOURCES

- Oil and natural gas prices rallied throughout the fourth quarter, with OPEC and Russia coming to an agreement regarding production cuts in 2018. A key area to continue to watch is rising total production in the United States, as current production is at 9.6 million barrels a day, just breaking the prior peak of 9.6 million in April 2015.
- Natural gas prices spiked at year-end in response to cold weather, with the most severe jumps occurring in the Northeast, where prices increased ten-fold, illustrating the infrastructure weakness in supplying that portion of the country.
- Commodities as a whole gained 4.7% during the quarter, with the all metals complex and energy sector contributing to returns. Supply and demand were favorable for all three major commodity sectors during the quarter; however, the metals complex continues to benefit the most due to recent economic growth and optimism for more in 2018.

PRICE OF CRUDE OIL AND NATURAL GAS
As of December 31, 2017



Data source: Energy Information Agency

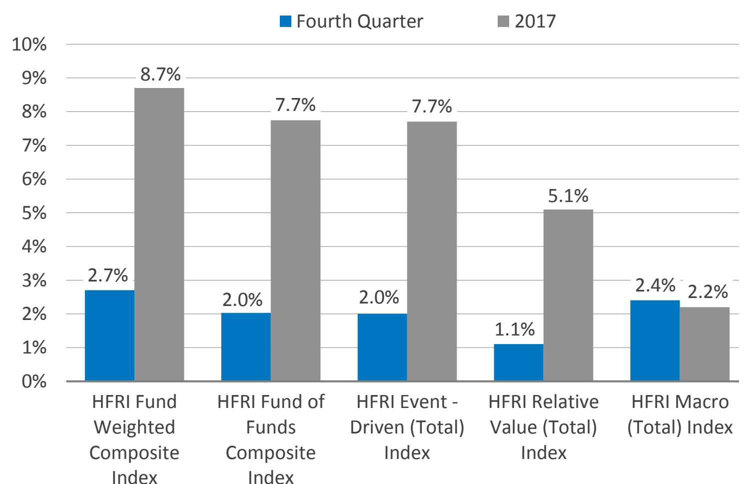
MASTER LIMITED PARTNERSHIPS

- MLP performance continued to become less correlated with the price of crude oil, but concern of potential negative impacts from debated tax reform—which did not reach the final bill—and tax-loss harvesting at year-end, kept returns in negative territory. The late-year jump in natural gas prices benefited MLPs, but much of the cold weather hit after December 31 and did not support returns for the year.

DIVERSIFYING STRATEGIES

- Strategies that benefit from volatility and dispersion across and within asset classes—such as certain relative value and global macro strategies—generated muted returns for the quarter. Volatility levels continued to hover near record lows throughout the quarter.
- Systematic macro strategies generated strong performance to end the year, reversing losses from the prior several quarters. The continuance of bullish trends in equities and commodities, as well as bearish momentum for the U.S. dollar provided a fertile trading environment for trend followers.

HFRI INDICES PERFORMANCE (U.S. Dollars)



Data source: HedgeFund Research

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All data is as of December 31, 2017 unless otherwise noted.

INDICES

The Alerian MLP Index is a composite of the 50 most prominent energy Master Limited Partnerships that provides investors with an unbiased, comprehensive benchmark for this emerging asset class.

Barclays Capital Fixed Income Indices is an index family comprised of the Barclays Capital Aggregate Index, Government/Corporate Bond Index, Mortgage-Backed Securities Index, and Asset-Backed Securities Index, Municipal Index, High-Yield Index, and others designed to represent the broad fixed income markets and sectors within constraints of maturity and minimum outstanding par value. See https://ecommerce.barcap.com/indices/index.dxml for more information.

The CBOE Volatility Index (VIX) is an up-to-the-minute market estimate of expected volatility that is calculated by using real-time S&P 500 Index option bid/ask quotes. The Index uses nearby and second nearby options with at least 8 days left to expiration and then weights them to yield a constant, 30-day measure of the expected volatility of the S&P 500 Index. FTSE Real Estate Indices (NAREIT Index and EPRA/NAREIT Index) includes only those companies that meet minimum size, liquidity and free float criteria as set forth by FTSE and is meant as a broad representation of publicly traded real estate securities. Relevant real estate activities are defined as the ownership, disposure, and development of income-producing real estate. See www.ftse.com/Indices for more information.

HFRI Monthly Indices (HFRI) are equally weighted performance indexes, compiled by Hedge Fund Research Inc. (HFX), and are used by numerous hedge fund managers as a benchmark for their own hedge funds. The HFRI are broken down into 37 different categories by strategy, including the HFRI Fund Weighted Composite, which accounts for over 2000 funds listed on the internal HFR Database. The HFRI Fund of Funds Composite Index is an equal weighted, net of fee, index composed of approximately 800 fund- of- funds which report to HFR. See www.hedgefundresearch.com for more information on index construction.

J.P. Morgan's Global Index Research group produces proprietary index products that track emerging markets, government debt, and corporate debt asset classes. Some of these indices include the JPMorgan Emerging Market Bond Plus Index, JPMorgan Emerging Market Local Plus Index, JPMorgan Global Bond Non-US Index and JPMorgan Global Bond Non-US Index. See www.jpmorgan.com for more information.

Merrill Lynch high yield indices measure the performance of securities that pay interest in cash and have a credit rating of below investment grade. Merrill Lynch uses a composite of Fitch Ratings, Moody's and Standard and Poor's credit ratings in selecting bonds for these indices. These ratings measure the risk that the bond issuer will fail to pay interest or to repay principal in full. See www.ml.com for more information.

Morgan Stanley Capital International – MSCI is a series of indices constructed by Morgan Stanley to help institutional investors benchmark their returns. There are a wide range of indices created by Morgan Stanley covering a multitude of developed and emerging economies and economic sectors. See www.morganstanley.com for more information.

Russell Investments rank U.S. common stocks from largest to smallest market capitalization at each annual reconstitution period (May 31). The primary Russell Indices are defined as follows: 1) the top 3,000 stocks become the Russell 3000 Index, 2) the largest 1,000 stocks become the Russell 1000 Index, 3) the smallest 800 stocks in the Russell 1000 Index become the Russell Midcap index, 4) the next 2,000 stocks become the Russell 2000 Index, 5) the smallest 1,000 in the Russell 2000 Index plus the next smallest 1,000 comprise the Russell Microcap Index. See www.russell.com for more information.

S&P 500 Index consists of 500 stocks chosen for market size, liquidity and industry group representation, among other factors by the S&P Index Committee, which is a team of analysts and economists at Standard and Poor's. The S&P 500 is a market-value weighted index, which means each stock's weight in the index is proportionate to its market value and is designed to be a leading indicator of U.S. equities, and meant to reflect the risk/return characteristics of the large cap universe. See www.standardandpoors.com for more information.

Information on any indices mentioned can be obtained either through your consultant or by written request to information@feg.com

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RESEARCH AND INVESTMENTS TEAM

CHERYL A. BARKER
Senior Research Liaison
Global Equities

NOLAN M. BEAN, CFA, CAIA
Managing Principal
Head of Institutional Investments

KEITH M. BERLIN
Senior Vice President
Director of Global Fixed Income and Credit

PATRICK BONNELL
Research Analyst
Global Fixed Income and Credit

CHRISTIAN S. BUSKEN
Senior Vice President
Director of Real Assets

KEVIN J. CONROY, CFA, CAIA
Vice President
Hedged Strategies

MATT DENBLEYKER
Vice President
Real Asset Research Analyst

BRAD DERFLINGER, CFA
Vice President
Assistant Portfolio Manager,
Risk Management

GREGORY M. DOWLING, CFA, CAIA
Managing Principal
Chief Investment Officer,
Head of Research

SUSAN MAHAN FASIG, CFA
Managing Principal
Portfolio Manager, Private Investments

ANTHONY L. FESTA, CFA
Managing Principal
Head of Portfolio Strategy

MICHAEL B. FRANKE, CFA
Senior *Research* Analyst
Hedged Strategies

ANANYA HANDA
Research Analyst
Global Fixed Income and Credit

EMILY C. HOGYA
Portfolio Analyst

BRIAN A. HOOPER
Vice President
Global Equities

GREGORY D. HOUSER, CFA, CAIA
Director
Research

XAVIER A. JIMENEZ
Research Analyst
Real Assets

MARK A. KOENIG, CFA
Senior Vice President
Director of Quantitative Analysis

J. ALAN LENAHAN, CFA, CAIA
Managing Principal
Chief Investment Officer,
Head of Portfolio Management

CHARLIE W. LUECKE
Senior Research Analyst
Private Equity

LAUREN M. MAYERNIK
Research Analyst
Private Equity

SEAN P. MCCHESNEY
Vice President
Hedged Strategies

MICHAEL J. OYSTER, CFA
Managing Principal
Chief Investment Strategist

MICHAEL J. O'CONNOR, CFA, CAIA
Vice President
Assistant Portfolio Manager,
Public Investments

SAMUEL A. RAGAN
Senior Research Analyst
Global Equities

BEN SULLIVAN
Research Analyst
Global Equities

G. SCOTT TABOR, CAIA
Senior Vice President
Private Capital

STEVEN G. THIEME, CFA
Senior Research Analyst
Hedged Equity

NATHAN C. WERNER, CFA, CAIA
Senior Vice President
Director of Private Equity

201 East Fifth Street
Suite 1600
Cincinnati, Ohio 45202

513.977.4400
information@feg.com
www.feg.com

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Research and Investments Team as of date of publication.

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