RESEARCH REVIEW

JANUARY 2019

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Following late-2018's significant market weakness, most risk sectors rebounded sharply to begin 2019 following the dovish pivot by the Federal Reserve and expectations for fresh Chinese fiscal stimulus that provided a tailwind behind January's risk-on market. Global equities posted strong returns across the broad market during the month, with the most pronounced upward momentum experienced in U.S. small cap. The supportive near-term backdrop for risk also helped drive impressive returns across fixed income markets, particularly for credit-sensitive sectors such as high yield credit and bank loans. Performance among many of the key real assets categories was also solid, with notable strength witnessed in energy infrastructure and REITs.

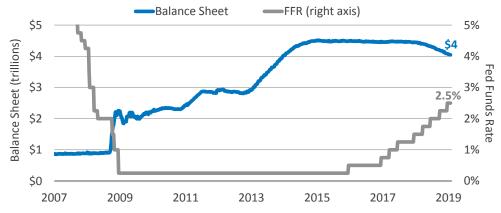


ECONOMIC UPDATE

Continued Fed Dovishness Leads to Strong January Market Performance

Since 2015, the Federal Reserve (Fed) has embarked on a path to monetary normalization through explicit means such as increases to the federal funds rate (FFR) and a partial winding down of their balance sheet, as well as implicitly through forward-guidance measures. After nine 25-basis-point (bps) increases to the FFR and allowing nearly \$500 billion of Treasury and agency securities to roll off the Fed's balance sheet, market conditions have recently evolved to suggest a potentially sooner-than-anticipated end to the Fed's tightening campaign.

FED BALANCE SHEET AND FED FUNDS RATE



Data sources: Federal Reserve, Bloomberg, L.P.; data as of January 30, 2019

Specifically, over the past two months, the Fed has softened their stance on the need for materially tighter near-term monetary conditions, a dovish reversal that has driven market volatility higher to the upside in the first month of 2019.

In a late-November speech, Fed Chairman Jerome Powell noted that interest rates are "just below the broad range of estimates of the level that would be neutral for the economy" Three weeks later, the Fed hiked the FFR by 25 bps at their final policy meeting of 2018, but lowered their dot plot estimate for 2019 rate hikes to reflect two expected hikes, down from the previous estimate of three hikes. An additional dovish move took place in their *Summary of Economic Projections*, which included a downward revision to the "neutral" FFR, from 3.0% to 2.8%.

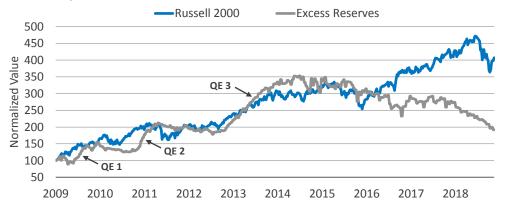
At their January policy meeting, the Fed invoked more dovish sentiment into the market through amended language to their press release materials by stating the committee will be "patient" on the policy tightening front in light of "global economic and financial developments." Furthermore, the Fed included a note stressing flexibility related to the anticipated course of winding down their balance sheet. It appears the Fed is finally acknowledging their policy operations do not occur in a bubble, with cascading effects globally on exchange rates, valuations, and volatility levels, and societal perceptions around the Fed's assumed independence.

While the Fed's ongoing pivot to a less-restrictive anticipated posture was embraced by risk-taking investors in January, the potential for this dynamic to persist likely remains limited. A key reason includes a phenomenon taking place somewhat behind the scenes, that is, a dramatic decrease in excess banking system reserves.

Excess reserves, the offsetting liability on the Fed's balance sheet that resulted from quantitative easing's (QE) asset purchases (also a proxy for banking system liquidity), peaked at \$2.7 trillion in 2014. Through increases to the FFR and a shedding of balance sheet assets, excess reserves have since declined by more than \$1 trillion. The increase in liquidity from QE supported both U.S. equity total returns growth and valuation expansion following the Global Financial Crisis. As such, a reversal of QE and a decline in liquidity, as illustrated by the decline in excess reserves, may represent an inverse relationship and serve as a critical near-term headwind.

EXCESS RESERVES AND RUSSELL 2000 (TR) INDEX

March 18, 2009 to Present



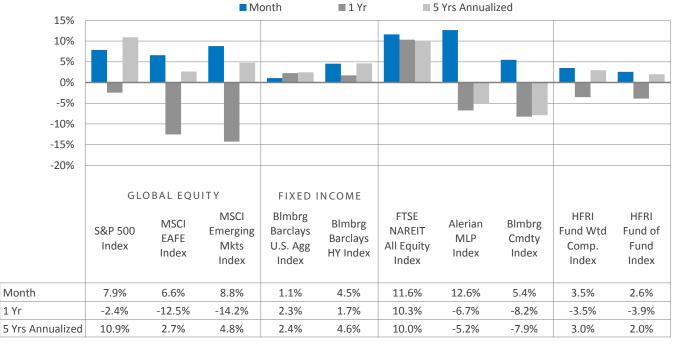
Data sources: Bloomberg, L.P., FEG, LLC; data as of January 30, 2019 Note: All data normalized to the commencement of QE 1 (March 18, 2009)

The above visual, which compares the normalized growth in excess reserves and total returns for U.S. small cap equities since the launch of QE1 in March 2009, highlights the interconnectedness (and recent divergence) between the Fed's expansion and contraction of banking system liquidity and investor animal spirits. As the Fed's balance sheet continues to decline, growth in excess reserves should slow further and is likely to continue serving as a key cyclical macro risk.

In summary, broad market performance in the first month of 2019 was notably strong, which contrasts meaningfully with late-2018 weakness. Growing expectations for fresh rounds of Chinese fiscal stimulus and an ongoing dialing-back of the near-term path of Fed rate hikes and balance sheet wind-down served as primary tailwinds. A lesser-communicated phenomenon in the way of evaporating banking system liquidity, to the tune of a more than \$1 trillion decline since 2014, represents a risk to the downside for both risky assets' returns potential and overall investor animal spirits.

MARKET RETURNS

JANUARY 2019



Data sources: Lipper, HedgeFund Research

GLOBAL EQUITY

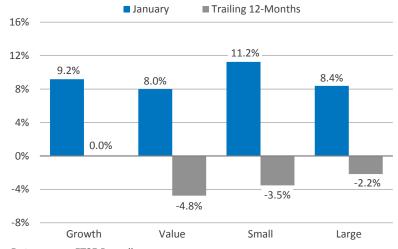
- After a tumultuous December, equity markets rallied for the month of January. Developed and emerging equity markets gained high single-digit returns as markets rallied on dovish Fed signals, potentially improving trade relations between the U.S. and China, and a series of positive earnings reports.
- The resurgence of investors' "risk on" sentiment spurred small capitalization stocks to outperform large cap stocks and growth to outperform value across both large and small cap stocks.
- Positive earnings news from the headline technology names garnered strong doubledigit rallies in most names. A key exception was Apple, which lagged on the first news of declining sales and profits in years.
- European stocks benefitted from the secondary impacts of improving U.S. and China trade discussions as well as dovish comments from the European Central Bank (ECB) that suggested their bond-buying program may resume. British Parliament did not approve the Brexit plan put forth by Theresa May and the European Union, leading the UK market to lag others in the global rally.
- In emerging markets, Chinese technology companies performed in concert with their U.S. counterparts. Brazilian equities maintained their strength amid the start of Bolsonaro's pro-business presidency; negative news in Brazil was centered on the bursting of one of Vale's mining dams that devastated the area and led the company to suspend dividends and share repurchases.

FIXED INCOME

 In January, Fed Chair Jerome Powell shifted to what markets interpreted as a more dovish stance, reiterating the Fed's intention to be "patient" in normalizing monetary policy. Additionally, Powell acknowledged that the Fed would remain flexible in altering the size of their balance sheet, indicating that the roll-off of the balance sheet was no longer on "auto-pilot."

GROWTH CONTINUES TO DOMINATE VALUE; SMALL CAP INCHES BACK DURING JANUARY

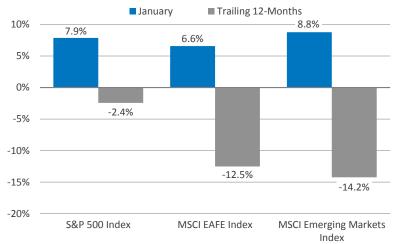
Russell Indicies Performance



Data source: FTSE Russell

EQUITY INDICES PERFORMANCE

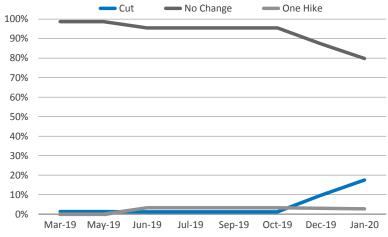
Returns in U.S. Dollars



Data sources: S&P, MSCI

IMPLIED PROBABILITY OF FED RATE HIKE

Through January 2020



Data source: CME Group

- Fixed income markets in the U.S. and Europe responded positively to the Fed and the ECB keeping rates unchanged over the month.
- Overall, lower-quality sectors outperformed higher-quality sectors as high yield optionadjusted spreads tightened, erasing most of the spread widening witnessed in December 2018.
- High yield markets saw new issuance in January after a 41-day period¹ of no new sales, marking the longest period of no issuance in the high yield market on record.

¹https://www.ft.com/content/e81b93ce-1512-11e9-a581-4ff78404524e

REAL ASSETS

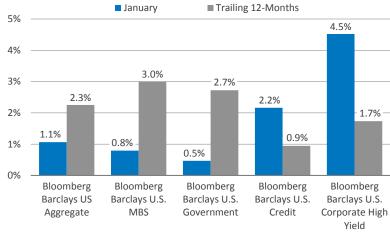
REAL ESTATE

 U.S. REITs, as measured by the FTSE NAREIT Equity TR Index, showed strong performance in the new year. This was a stark contrast to the December sell-off, largely led by investors engaging in taxloss harvesting before year-end. The key demand drivers are in place for nearly all types of commercial real estate, and recent price increases have been supported by growth of net operating income and better fundamentals.

NATURAL RESOURCES

- Crude oil (WTI) started 2019 lower at \$44/barrel over concerns about global growth, rising U.S. output, and uncertainty regarding OPEC's ability to reduce output after their recent production cut agreement; these catalysts caused U.S. crude prices to fall 38% in 2018. However, crude oil prices changed course early in January with three straight weekly gains. An International Energy Agency (IEA) report showed an increasingly tight market after last month's OPEC production-cut agreement started taking effect.
- While the societal collapse in Venezuela continues to garner attention, it has not had a notable impact on the oil market. Venezuelan production output is expected to continue to decline under president Maduro. By the end of the month, crude oil prices reached a high of \$54/barrel, rising 21% in January.

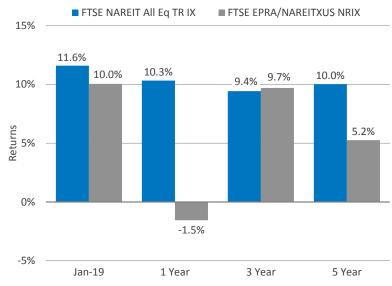
BOND INDICES PERFORMANCE



Data source: Lipper

DOMESTIC vs. INTERNATIONAL RETURNS

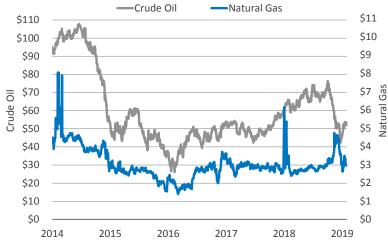
As of January 31, 2019



Data source: Bloomberg, L.P.

PRICE OF CRUDE OIL AND NATURAL GAS

As of January 31, 2019



Data source: Energy Information Agency

 Commodity prices rose in January on the heels of strong gains in the price of crude oil. Industrial metals gained as global macro sentiment improved and demand for copper, zinc, and iron ore is expected to be stronger in the new year.

MASTER LIMITED PARTNERSHIPS

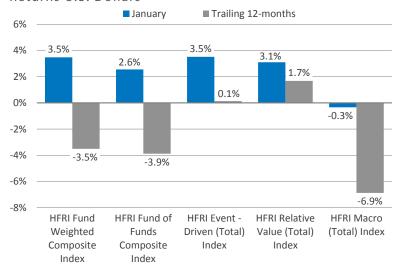
Master Limited Partnerships (MLPs) surged over the month, coming close to reversing the declines witnessed in the fourth-quarter of 2018. Record high oil and gas production in the U.S. and better MLP fundamentals were the main impetus for the strong gains in MLPs. Robust production growth for U.S. oil and natural gas should continue to benefit the volume-driven business of MLP midstream assets. MLP earnings before interest, taxes, depreciation, and amortization (EBITDA) guidance for 2019 appears positive to start the year.

DIVERSIFYING STRATEGIES

- Pacific Gas and Electric (PG&E), the public utility that provides natural gas and electricity to most of Northern California, declared Chapter 11 bankruptcy on January 29.
 PG&E was a popular holding among event-driven hedge funds based on the belief that the company's securities were oversold due to the market's overestimation of its liabilities from the California wildfires in 2017 and 2018. The bankruptcy caused securities across the company's capital structure to sell off in the secondary market, causing pain across the event-driven space.
- After a robust 2018 for deal activity, merger and acquisition deal flow began to slow, particularly the large mega-deals of the past few years. A combination of Fed policy uncertainty, looming trade negotiations, and broad concerns about market turbulence led to a slowing pace of announced deals at a time that large deals were also closing.
- Trend reversals, particularly in equities and energy, drove losses for momentum-based strategies such as systematic macro, which were positioned for further declines in equities and fixed income to occur following the fourth quarter.

HFRI INDICES PERFORMANCE

Returns U.S. Dollars



Data source: HedgeFund Research

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All data is as of January 31, 2019 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.

The FTSE Nareit All Equity REITs Index is a free-float adjusted, market capitalization-weighted index of U.S. equity REITs.

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, and 6) US Equity REITS comprise the FTSE Nareit All Equity REIT 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

RESEARCH AND INVESTMENTS TEAM

LILLIAN B. AMBROSIUS

Research Analyst Global Equities

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, CAIA

Senior Research Analyst

Hedged Strategies

ANANYA HANDA

Research Analyst

Global Fixed Income and Credit

EMILY C. HOGYA

Senior Portfolio Analyst Portfolio Management

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. O'CONNOR, CFA, CAIA

Vice President

Assistant Portfolio Manager,

Public Investments

BENJAMIN C. SULLIVAN

Research Analyst

Global Equities

G. SCOTT TABOR, CAIA

Senior Vice President

Private Capital

STEVEN G. THIEME, CFA, CAIA

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.