

# NOVEMBER 2015 IN REVIEW

December Update | As of November 30, 2015

## ECONOMY: SHARP RISE IN JOB CREATION SURPRISES MARKET

### Economic Data

November economic data, which mostly capture economic activity from October, continue to signal slow but steady growth by the U.S. economy. With labor markets continuing to improve, wage growth strengthening, and household wealth growing, the U.S. consumer remains strong. On the business side, a robust services sector continues to offset a slowdown in manufacturing, which has been hampered by a strong dollar, low oil prices, and slowing growth in China.

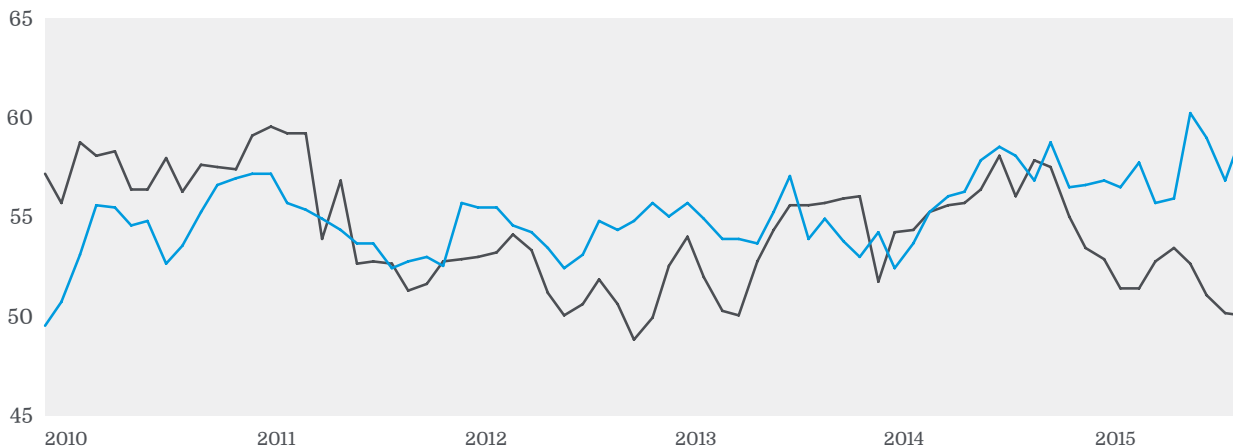
The sharp rise in job creation in October was the single data point that received the most market attention this month, both for the signal it sent about overall economic health and the expected impact it

might have on the Federal Reserve's (Fed) decision about when to start raising rates. Non-farm payrolls grew by 271,000 versus consensus expectations of 185,000, almost doubling September's disappointing 137,000 increase. In addition, the unemployment rate fell to 5.0%, below the long-term natural rate of unemployment (as determined by the Congressional Budget Office [CBO]) for the first time since February 2008. Job creation was accompanied by improved wage growth, as average hourly earnings rose 0.4% versus expectations of a 0.2% increase.

Despite improving employment data, consumers remained cautious. The Conference Board Consumer Confidence Index for November rose modestly but missed expectations, while the University of

### SERVICE SECTOR GROWTH REMAINS STRONG DESPITE MANUFACTURING SLOWDOWN

● ISM Non-Manufacturing Index ● ISM Manufacturing PMI



Source: LPL Research, Institute for Supply Management, Haver Analytics 11/30/15

Over 50 indicates expansion.

Michigan Sentiment Index for November fell sharply. The impact on spending habits was small: retail sales and personal spending for October both rose but missed consensus estimates, complemented by an increase in the savings rate to 5.6%, the highest level since December 2012.

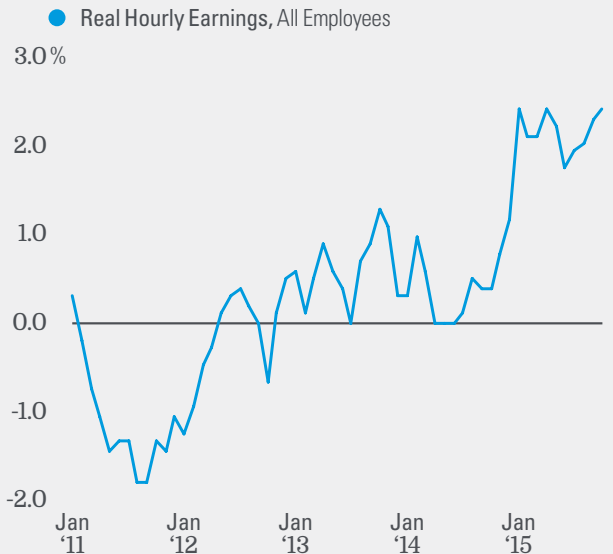
November reports provided mixed signals on stabilization in the manufacturing sector. The closely followed Institute for Supply Management's (ISM) manufacturing Purchasing Managers' Index (PMI) for October barely remained in expansionary territory at 50.1 (over 50 indicates expansion), but other indicators were more positive. Durable goods orders rose 3%, nearly doubling consensus expectations, with strength in core capital goods. Industrial production fell, but the decline was entirely in the utilities and mining sectors, while manufacturing rose after two months of declines. On balance, there are some signs of stabilization in manufacturing but uncertainty remains. The services sectors, however, which now make up approximately 80% of the private economy, showed continued strength as the ISM non-manufacturing PMI handily topped expectations.

The Conference Board's Leading Economic Index (LEI), an aggregate of economic data that tend to lead changes in economic activity, rose 0.6% in October, edging out consensus estimates, after modestly contracting in September. The year-over-year change accelerated to 3.5%, which has historically been associated with a 10–15% chance of recession in the next 12–18 months. Breadth was strong among the indicators that make up the LEI, with 9 out of 10 making a positive contribution, led by interest rate spreads and stock prices. The only negative contributor was the new orders component of ISM's PMI, highlighting that manufacturing weakness, while providing some insight on economic conditions, needs to be looked at in its larger economic context.

### Central Banks

Global central banks maintained broadly supportive monetary policy in November to try to counter low inflation and stimulate growth. Of the G20 major economies, only three—Argentina, Brazil, and South

### WAGE GROWTH IS STARTING TO ACCELERATE



Source: LPL Research, Bureau of Labor Statistics, Haver Analytics 11/30/15

Africa—have been raising rates. While the People's Bank of China did not lower its primary policy rate in November, it continues to tinker with targeted actions, lowering the rate on short-term loans to commercial lenders.

The U.S. Fed continues to signal that it will likely raise rates at its December 15–16 policy meeting. Entering November, fed fund futures markets implied an approximately 50% probability of a rate hike in December, but that number quickly jumped to over 70% following Fed Chair Janet Yellen's November 4 testimony before the House Financial Services Committee, including her description of a December rate hike as a "live possibility," which was further reinforced by the strong employment report two days later. The release of the minutes from the October 27–28 Fed policy meeting on November 18 provided further confirmation that the Fed remained on track for a potential December liftoff, noting that "most participants" believed the conditions for raising rates would be met by the December meeting.

## GLOBAL EQUITIES: DOMESTIC EQUITIES HOLD THEIR GROUND HEADING INTO DECEMBER

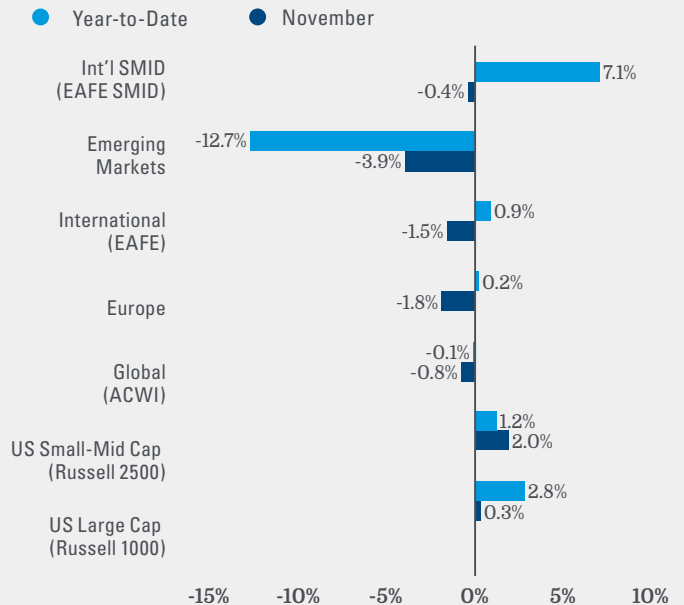
### U.S.

U.S. equities, as measured by the S&P 500 Index, edged 0.3% higher in November and stood at +3.0% year to date as we head into the final month of 2015. Investors took a “wait and see” attitude in a month that saw growing expectations of an initial Fed rate hike in December, a strengthening dollar, and the shock of the tragic events in Paris. With economic data coming in near expectations and a largely neutral homestretch drive from third quarter 2015 earnings, there was little by way of immediate catalysts to drive stocks higher.

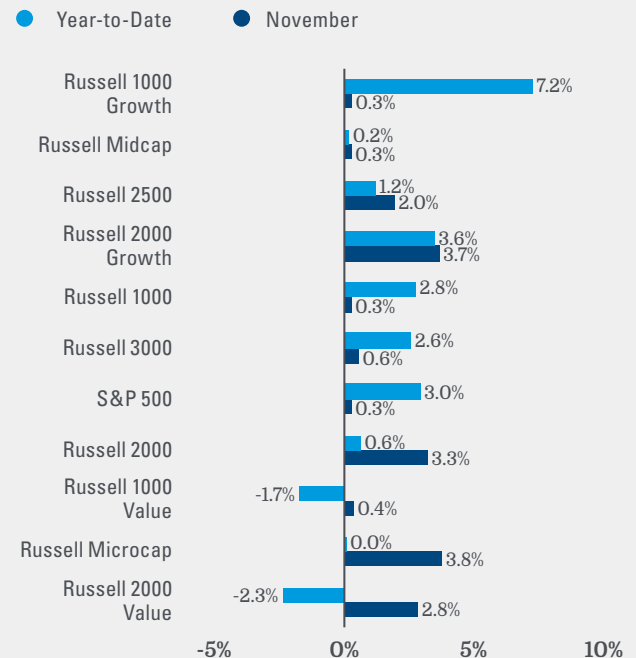
Small cap stocks, which have lagged behind large cap for most of the year, as measured by the Russell 1000 and 2000 Indexes respectively, made up some ground in November, likely helped by their higher domestic exposure given dollar strength and a possible shift among investors from tax loss harvesting to positioning portfolios for 2016. Investors were largely indifferent between value and growth for large and mid caps, as measured by Russell style indexes, but growth held an edge for small caps, helped by greater exposure to the technology sector.

Performance dispersion among sectors, as measured by S&P GICS Sector Indexes, was relatively narrow this month. The prospect of a Fed rate hike had a clear impact on sector performance, with the more rate-sensitive utilities, telecom, and consumer staples sectors sitting at the bottom of the sector rankings, while financials, which may benefit from upward pressure on rates, posted the strongest sector performance. Cyclical broadly outperformed defensives, but in a low-return month, their lower rate sensitivity likely played a larger role than their greater exposure to economic activity. Energy, however, failed to keep up with the other cyclicals, as falling oil prices continued to weigh on sector prospects.

### GLOBAL INDEX PERFORMANCE



### DOMESTIC INDEX PERFORMANCE



Source: LPL Research, FactSet 11/30/15

Indexes are unmanaged and cannot be invested into directly. Past performance is no guarantee of future results.

Stock investing involves risk, including loss of principal.

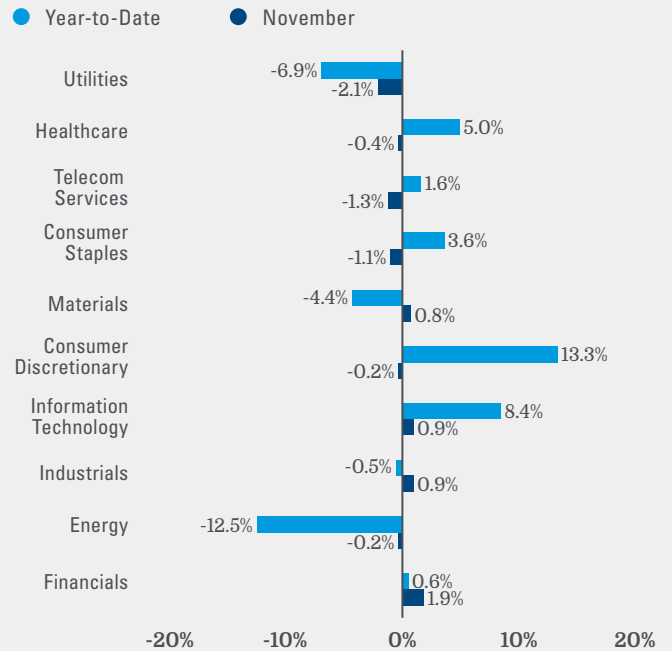
International and emerging markets investing involves special risks, such as currency fluctuation and political instability, and may not be suitable for all investors.

Over the course of November, approximately a quarter of S&P 500 companies reported third quarter earnings as earnings season wound down. As of the end of the month, with 97% of S&P 500 companies having reported, blended operating earnings growth for the third quarter stood at -0.8%, according to Thomson Reuters estimates, just slightly ahead of the blended estimate for the quarter at the end of October. The earnings beat rate of 70% was in-line with the last four quarters, but a strong dollar and lower oil prices have weighed an estimated over 8% combined on revenue growth, leaving only 43% of companies outperforming on a blended revenue growth rate of -4.4%. Aside from the very small telecom sector, healthcare and consumer discretionary were the clear leaders during earnings season on both revenue and profit growth.

**International**

International stocks, as represented by the MSCI EAFE (foreign developed) and MSCI Emerging Markets Indexes both posted losses in November and continued to underperform the S&P 500 on a year-to-date basis. European stocks did bounce back from the impact of the terror attacks in Paris as investors priced in the resiliency of the European economy, but a weak earnings season weighed on returns. Japanese stocks also made a negative contribution to performance on a string of poor economic results and no further move by the Bank of Japan expanding its quantitative easing program. Emerging market declines were broad based, with weak commodity prices weighing on major commodity exporters, while Chinese stocks saw some heavy selling late in the month after the government revealed it was putting several brokerage firms under investigation.

**S&P 500 SECTOR PERFORMANCE**



Source: LPL Research, Bloomberg, FactSet 11/30/15

Indexes are unmanaged and cannot be invested into directly. Past performance is no guarantee of future results.

Because of its narrow focus, sector investing will be subject to greater volatility than investing more broadly across many sectors and companies.

## FIXED INCOME: YIELD CURVE FLATTENS AS DECEMBER RATE HIKE EXPECTATIONS INCREASE

Interest rates rose across the maturity spectrum over November, as the market gradually priced in a likely rate increase by the Fed in December. Yields on 10- and 30-year Treasuries increased a modest 0.05%. Short-term Treasury yields were up more sharply, with the 2-year yield rising by 0.19% to 0.94% from 0.75%. The yield curve flattened as a result. The overall rise in interest rates was a headwind for fixed income—the Barclays U.S. Aggregate returned -0.3% for the month with interest income more than offset by price declines due to the rise in interest rates.

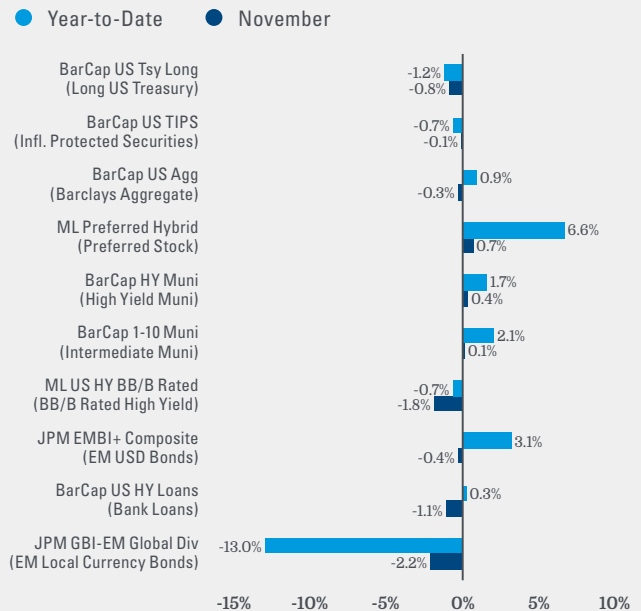
Despite a relatively flat month for equity markets (S&P 500 up 0.3% during the month), economically sensitive portions of the fixed income market experienced a challenging November. High-yield returned -1.8% on the month and bank loans returned -1.1%. Continued fears over defaults in high-yield energy were refreshed when WTI crude oil tested its cycle lows, closing near \$40 per barrel mid-month. Dollar-denominated emerging markets debt, despite continued weakness in commodities, held up relatively well during November, returning -0.4%.

Foreign bonds performed well, but continued dollar strength was a headwind for unhedged foreign exposure. Unhedged foreign bonds returned -2.8%, with hedged foreign returning 0.4%, due to a 3.3% rise in the U.S. Dollar Index over the month.

Municipals enjoyed a strong month of performance, as prices held up better than Treasuries in the rising interest rate environment. The Barclays Municipal 7 Year (6–8) Index returned 0.2% during November, while the Barclays Treasury Index returned -0.4%.

Preferreds fared very well during November, returning 0.7%, as investors seeking yield rotated from high-yield bonds to other high-yielding securities. Additionally, the relative outperformance of long-term bonds was a tailwind, as preferreds are either perpetual (have no maturity) or are very long term, with maturities of 30 to 50 years. These drivers were enough to push prices higher despite rising interest rates and preferred securities' interest rate sensitivity.

### FIXED INCOME PERFORMANCE



### US TREASURY YIELDS

Security	10/31/15	11/30/15	Change in Yield
3 Month	0.08	0.22	0.14
2 Year	0.75	0.94	0.19
5 Year	1.52	1.65	0.13
10 Year	2.16	2.21	0.05
30 Year	2.93	2.98	0.05

### AAA MUNICIPAL YIELDS

Security	10/31/15	11/30/15	Change in Yield
2 Year	0.65	0.70	0.05
5 Year	1.33	1.39	0.06
10 Year	2.28	2.32	0.04
20 Year	3.76	3.79	0.03
30 Year	4.43	4.46	0.03

Source: LPL Research, Bloomberg, FactSet 11/30/15

Indexes are unmanaged and cannot be invested into directly. Past performance is no guarantee of future results.

Bonds are subject to market and interest rate risk if sold prior to maturity. Bond values and yields will decline as interest rates rise, and bonds are subject to availability and change in price.

Bank loans are loans issued by below investment-grade companies for short-term funding purposes with higher yield than short-term debt and involve risk.

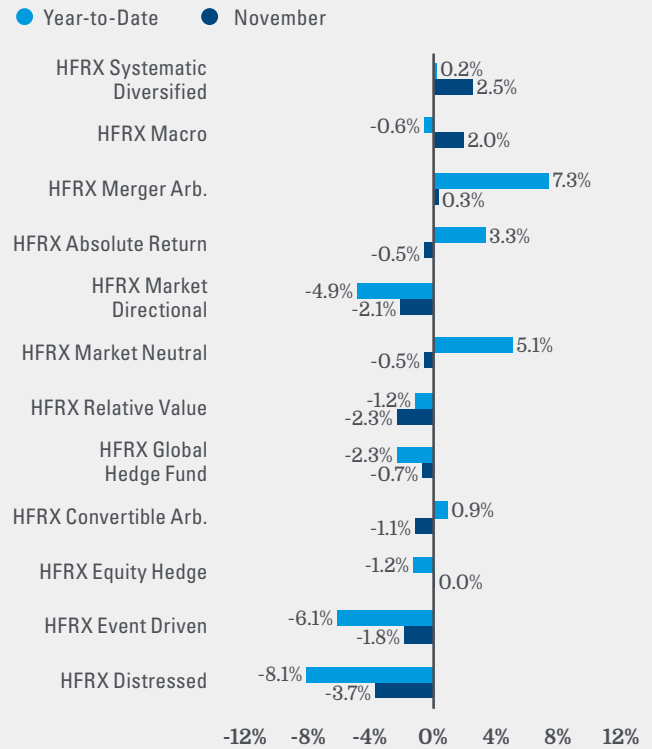
## ALTERNATIVES: MIXED PERFORMANCE FOR AI IN NOVEMBER

November performance was mixed by strategy type, with systematic and discretionary macro managers delivering strong returns, while credit-related indexes led monthly losses. Gains from systematic macro managers (HFRX Systematic Diversified Index up 2.5%) were driven by short commodity exposure, as the long-term downtrends in WTI crude oil, gold, and wheat contracts all continued during the month. Discretionary macro strategies (HFRX Macro Index up 2.0%) continue to benefit from long U.S. dollar positioning, which has been supported by an increasing number of market participants expecting a federal funds rate hike in December.

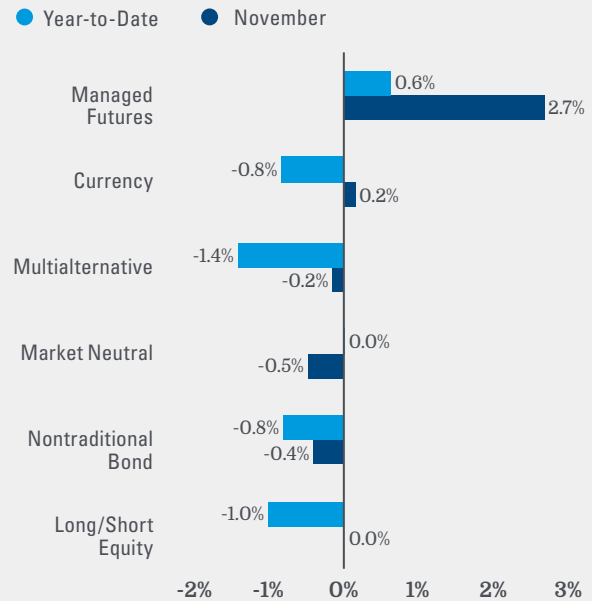
Returns in the long/short space, as measured by the HFRI Equity Hedge Index, were rather dispersed and driven by certain factor exposures. Strategies with overweight exposure to small caps performed well, as the 3.3% return from the Russel 2000 easily outpaced the 0.3% Russell 1000 return. While this long small cap exposure was an overall positive, the rally did limit alpha on the short side. This was evident in the HFRI Equity Market Neutral Index, which fell 0.5%, the first monthly loss since July, as losses from shorting small cap firms outweighed gains seen in their long exposure. Further, hedging strategies continue to have significant long exposure to the technology sector, whose 8.4% year-to-date return has been a large contributor to overall performance.

Distressed strategies continue to struggle, as the HFRI Distressed Index fell 3.7% and is now down 8.1% year to date. While we are aware that a portion of these losses may be temporary, as managers value positions monthly while anticipating a catalyst to unfold over the long term, the environment remains difficult.

### HFRX INDEX PERFORMANCE



### MORNINGSTAR INDEX PERFORMANCE



Source: LPL Research, FactSet 11/30/15

Indexes are unmanaged and cannot be invested into directly. Past performance is no guarantee of future results.

Alternative strategies may not be suitable for all investors and should be considered as an investment for the risk capital portion of the investor's portfolio. The strategies employed in the management of alternative investments may accelerate the velocity of potential losses.

## LIQUID REAL ASSETS RESUME DOWNTREND

After a brief respite in October, liquid real assets (LRA) suffered greatly in November. The backdrop of a stronger dollar and higher interest rates set the stage for a decline in nearly every individual component of the category. Of the 22 commodities in the Bloomberg Commodity Index, only 2 ended the month with positive returns. The S&P 500 eked out a negligible positive return (0.3%) and the 10-year Treasury yield went from 2.16% at October's month-end to 2.21% at the end of November. There was some volatility in rates as the 10-year Treasury yield had a high closing of 2.36% intra-month.

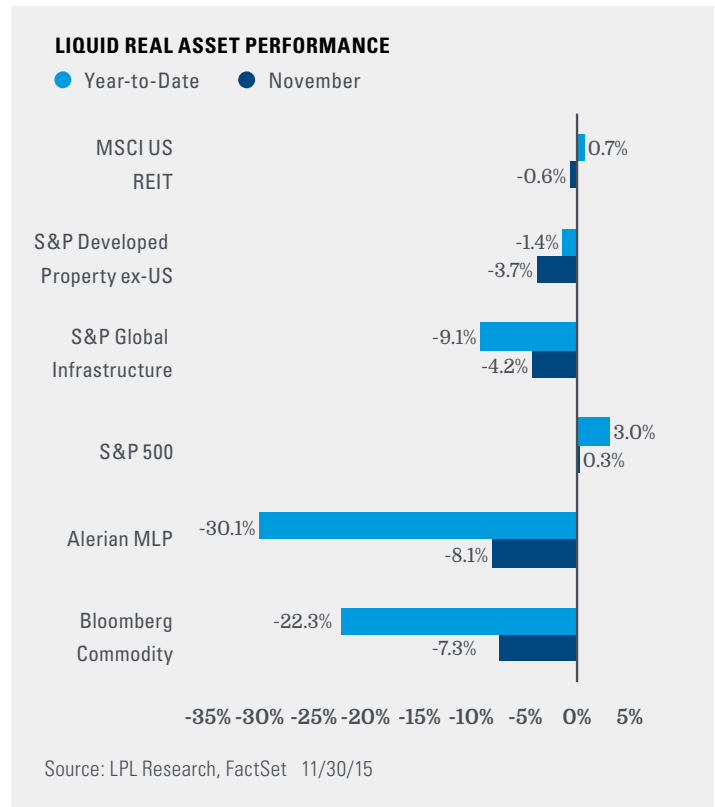
### MLPs & Global Listed Infrastructure

As was the trend with other real assets, master limited partnerships (MLP) resumed their longer-term downtrend after seeing positive returns in October. The Alerian MLP Index returned -8.1% in November, which erased its 8.6% gain in October. This performance can be ascribed to the continuing negative sentiment around the asset class as well as a correlation to oil prices, which were also down in November. On a positive note, the market saw a handful of equity issuances, which were digested relatively well. This gives us hope that the much discussed difficulty in accessing the equity capital markets may be abating. In the near term we expect more volatility for MLPs and, for better or worse, expect that the high correlation with oil prices will continue.

Global listed infrastructure, as measured by the S&P Global Infrastructure Index, returned -4.2% in November. This continues the "up-and-down" theme for the year, as we have now seen negative monthly returns for the index in six months of the year and positive monthly returns in five months. The index was positively affected last month by energy infrastructure, an impact that was reversed this month as energy assets were dragged down by lower oil prices.

### REITs

Against the backdrop of actual rising interest rates as well as increased expectations for the Fed's rate hiking campaign to begin, real estate investment trusts (REIT) (as measured by the MSCI U.S. REIT Index) returned -0.6% for the month. Retail REITs reversed a large gain in October and significantly underperformed



the index, while residential REITs significantly outperformed. Going forward, the prospect of rising rates may put pressure on the asset class.

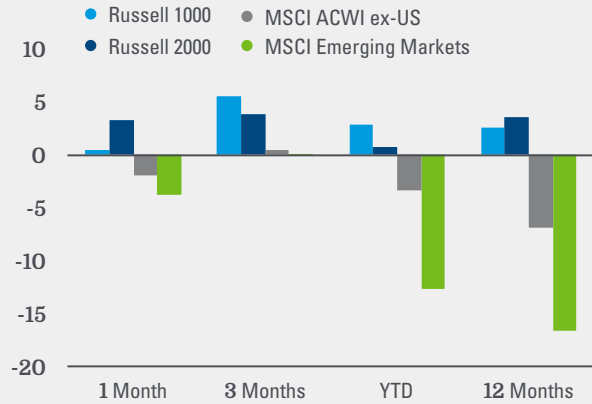
### Commodities

Commodities broadly were lower for the month, with the Bloomberg Commodity Index returning -7.3%. This was largely influenced by oil, as WTI crude prices decreased 10.6% and Brent crude decreased 6.9%. Copper continued its decline, posting a -11.6% return in November. Agricultural commodities didn't fare any better, but sugar and soybean oil did manage positive returns. As noted above, these two commodities were the only constituents of the Bloomberg Commodity Index that had positive returns. It should be noted that the U.S. dollar (as measured by the U.S. Dollar Index) appreciated 3.4% against the index's trade-weighted currency basket.

Commodity-linked investments may be more volatile and less liquid than the underlying instruments or measures, and their value may be affected by the performance of the overall commodities baskets as well as weather, geopolitical events, and regulatory developments.

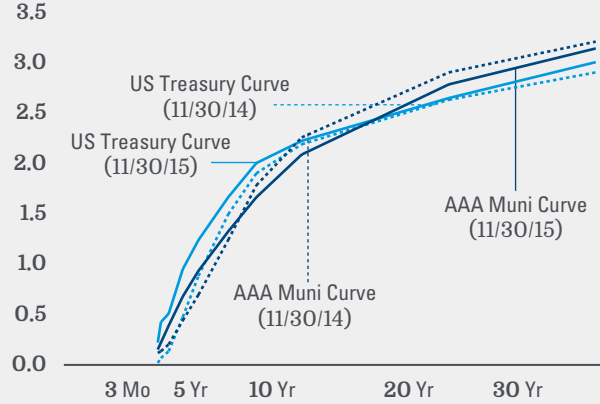
# MONTHLY PERFORMANCE REPORT

## EQUITY PERFORMANCE



Source: LPL Research, Bloomberg, FactSet 11/30/15

## DOMESTIC YIELD CURVE



Source: LPL Research, Bloomberg, FactSet 11/30/15

		1 Mo	3 Mos	YTD	12 Mos
Large Cap	S&P 500	0.30	6.07	3.01	2.75
	DJIA	0.71	7.88	1.76	1.87
	Russell 1000	0.33	5.48	2.77	2.53
	Russell 1000 Value	0.38	4.70	-1.71	-1.11
	Russell 1000 Growth	0.28	6.22	7.24	6.12
	Russell 2000	3.25	3.72	0.64	3.51
Small/Mid Cap	Russell 2000 Value	2.84	4.84	-2.32	0.35
	Russell 2000 Growth	3.66	2.63	3.56	6.63
	Russell Microcap	3.80	3.00	0.00	5.11
	Russell Midcap	0.25	2.64	0.25	0.46
	Russell Midcap Value	0.29	2.86	-1.74	-1.00
	Russell Midcap Growth	0.22	2.41	2.11	1.82
All Cap	Russell 3000	0.55	5.34	2.58	2.58
	Russell 3000 Value	0.58	4.71	-1.77	-1.01
	Russell 3000 Growth	0.53	5.94	6.93	6.14
International Markets	MSCI EAFE	-1.54	0.81	0.95	-2.52
	MSCI ACWI ex-US	-2.05	0.41	-3.46	-6.91
	MSCI Europe	-1.82	0.32	0.22	-4.06
	MSCI Japan	-0.99	1.71	9.52	7.97
	MSCI AC Asia Pacific ex-Japan	-2.51	2.46	-9.44	-11.32
	MSCI EAFE SMID	-0.40	2.39	7.12	6.00

		1 Mo	3 Mos	YTD	12 Mos
Int'l -Continued	MSCI ACWI ex-US SMID	-1.07	1.93	1.51	-0.15
	MSCI Emerging Mkts	-3.89	-0.09	-12.70	-16.68
	MSCI EMEA	-6.17	-6.04	-13.47	-22.00
	MSCI Latin America	-4.17	-6.10	-27.77	-34.35
	MSCI Frontier Markets	-4.42	-3.12	-13.82	-17.29
	Consumer Discretionary	-0.24	8.14	13.26	14.36
Sectors -S&P500 GICS	Consumer Staples	-1.11	5.19	3.63	2.55
	Energy	-0.24	3.76	-12.48	-12.05
	Financials	1.89	5.03	0.61	2.44
	Healthcare	-0.41	1.22	5.02	3.64
	Industrials	0.93	8.19	-0.54	-0.68
	Information Technology	0.87	10.60	8.41	6.56
	Materials	0.83	6.04	-4.40	-5.04
	Telecom Services	-1.26	1.95	1.62	-4.60
	Utilities	-2.14	1.81	-6.87	-3.59

Source: LPL Research, Bloomberg, FactSet 11/30/15

(Data continued on following page.)

All data represent total returns, where applicable. Information contained in this report is from sources deemed to be reliable. We cannot guarantee the accuracy or completeness of such information and we assume no liability for damages resulting from or arising out of the use of such information. Further, please note that past performance is not indicative of future results.



	1 Mo	3 Mos	YTD	12 Mos
BarCap US Agg	-0.26	0.43	0.88	0.97
BarCap 1-10 Muni	0.00	0.96	1.94	1.88
BarCap HY Muni	0.40	3.78	1.65	2.20
BarCap Inv. Grade Credit	-0.22	0.95	0.10	0.16
BarCap Muni Long Bond -22+	0.88	2.06	3.38	4.44
BarCap US Agg Securitized MBS	-0.14	0.51	1.54	1.70
BarCap US TIPS	-0.10	-0.44	-0.65	-1.77
BarCap US Treasury Interm	-0.34	0.09	1.37	1.10
BarCap US Treasury Long	-0.82	0.16	-1.20	1.63
BarCap US High Yield Loans	-1.08	-1.91	0.26	-1.06
ML Preferred Stock Hybrid	0.72	2.71	6.64	6.47
ML US High Yield BB/B Rated	-1.81	-1.34	-0.59	-1.74
ML US Convert ex-Mandatory	-0.49	-0.03	-0.73	-1.69
JPM GBI Global ex-US Hedged	0.36	1.80	1.91	3.14
JPM GBI Global ex-US Unhedged	-2.80	-1.86	-6.29	-7.00
JPM GBI-EM Global Div	-2.16	-0.77	-12.98	-18.14
JPM ELMI+	-1.37	0.35	-6.57	-9.07
JPM EMBI+ Composite	-0.36	1.96	3.14	0.61

Fixed Income

	1 Mo	3 Mos	YTD	12 Mos
HFRX Absolute Return	-0.51	0.89	3.29	2.62
HFRX Market Directional	-2.07	-3.28	-4.89	-5.06
HFRX Convertible Arb.	-1.12	-1.01	0.91	-0.07
HFRX Distressed	-3.68	-6.16	-8.11	-9.03
HFRX Equity Hedge	0.04	-0.18	-1.24	-1.78
HFRX Market Neutral	-0.53	2.56	5.10	5.11
HFRX Event Driven	-1.85	-2.92	-6.06	-6.50
HFRX Merger Arb.	0.30	2.50	7.34	7.72
HFRX Relative Value Arb.	-2.25	-2.42	-1.20	-3.21
HFRX Global Hedge Fund	-0.72	-1.36	-2.34	-3.07
HFRX Macro Index	1.97	0.45	-0.57	-0.23
HFRX Systematic Diversified	2.54	1.09	0.19	1.24
Bloomberg Commodity	-7.25	-10.82	-22.26	-28.19
DJ Wilshire REIT	-0.55	8.80	2.25	4.09
Alerian MLP	-8.08	-14.58	-30.09	-34.03

Alternatives

	Latest Mo End (11/30/15)	3 Mos Ago (09/30/15)	Latest Yr End (12/31/14)	12 Mos Ago (11/30/14)
US Dollar Index Value	100.20	95.93	90.28	88.22
USD vs. Yen	123.22	121.18	119.69	118.65
Euro vs. USD	1.06	1.12	1.21	1.24
Gold (\$ per Troy Ounce)	1064.50	1134.40	1182.90	1168.50
Crude Oil (\$ per Barrel)	41.65	49.20	53.27	66.15

Currency

Cmdtys

## IMPORTANT DISCLOSURES

The opinions voiced in this material are for general information only and are not intended to provide or be construed as providing specific investment advice or recommendations for your clients. Any economic forecasts set forth in the presentation may not develop as predicted and there can be no guarantee that strategies promoted will be successful. There is no assurance that the techniques and strategies discussed are suitable for all investors or will yield positive outcomes. The purchase of certain securities may be required to affect some of the strategies.

### Stock and Pooled Investment Risks

There is no guarantee that a diversified portfolio will enhance overall returns or outperform a non-diversified portfolio. Diversification does not ensure against market risk.

Investments in specialized industry sectors have additional risks, which are outlined in the prospectus. Please read the fund's prospectus for more information on risks, fees, and other important information.

### Bond and Debt Equity Risks

Government bonds and Treasury bills are guaranteed by the U.S. government as to the timely payment of principal and interest and, if held to maturity, offer a fixed rate of return and fixed principal value. However, the value of fund shares is not guaranteed and will fluctuate.

High-yield/junk bonds are not investment-grade securities, involve substantial risks, and generally should be part of the diversified portfolio of sophisticated investors.

Investing in foreign and emerging markets debt securities involves special additional risks. These risks include, but are not limited to, currency risk, geopolitical and regulatory risk, and risk associated with varying settlement standards.

Municipal bonds are subject to availability, price, and to market and interest rate risk if sold prior to maturity. Bond values will decline as interest rate rise. Interest income may be subject to the alternative minimum tax. Federally tax-free but other state and local taxes may apply.

Treasury Inflation-Protected Securities (TIPS) help eliminate inflation risk to your portfolio, as the principal is adjusted semiannually for inflation based on the Consumer Price Index (CPI)—while providing a real rate of return guaranteed by the U.S. government. However, a few things you need to be aware of is that the CPI might not accurately match the general inflation rate; so the principal balance on TIPS may not keep pace with the actual rate of inflation. The real interest yields on TIPS may rise, especially if there is a sharp spike in interest rates. If so, the rate of return on TIPS could lag behind other types of inflation-protected securities, like floating rate notes and T-bills. TIPS do not pay the inflation-adjusted balance until maturity, and the accrued principal on TIPS could decline, if there is deflation.

### Alternative Risks

Currency risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

Investing in real estate/REITs involves special risks such as potential illiquidity and may not be suitable for all investors. There is no assurance that the investment objectives of this program will be attained.

Investing in MLPs involves additional risks as compared with the risks of investing in common stock, including risks related to cash flow, dilution, and voting rights.

MLPs may trade less frequently than larger companies due to their smaller capitalizations, which may result in erratic price movement or difficulty in buying or selling. MLPs are subject to significant regulation and may be adversely affected by changes in the regulatory environment, including the risk that an MLP could lose its tax status as a partnership. Additional management fees and other expenses are associated with investing in MLP funds.

Currency risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

Long/short equity funds are subject to normal alternative investment risks, including potentially higher fees; while there is additional management risk, as the manager is attempting to accurately anticipate the likely movement of both their long and short holdings. There is also the risk of "beta-mismatch," in which long positions could lose more than short positions during falling markets.

Global macro strategies attempt to profit from anticipated price movements in stock markets, interest rates, foreign exchange and physical commodities. Global macro risks include but are not limited to imperfect knowledge of macro events, divergent movement from macro events, loss of principal, and related geopolitical risks.

Event driven strategies, such as merger arbitrage, consist of buying shares of the target company in a proposed merger and fully or partially hedging the exposure to the acquirer by shorting the stock of the acquiring company or other means. This strategy involves significant risk as events may not occur as planned and disruptions to a planned merger may result in significant loss to a hedged position.

## DEFINITIONS

Different agencies employ different rating scales for credit quality. Standard & Poor's (S&P) and Fitch both use scales from AAA (highest) through AA, A, BBB, BB, B, CCC, CC, C to D (lowest). Moody's uses a scale from Aaa (highest) through Aa, A, Baa, Ba, B, Caa, Ca to C (lowest).

A leading economic indicator is a commonly used signal of economic change. Examples of leading indicators include production workweek, building permits, unemployment insurance claims, money supply, inventory changes, and stock prices. The Fed watches many of these indicators as it decides what to do about interest rates.

The Consumer Confidence Index is based on consumers' perceptions of current business and employment conditions, as well as their expectations for six months hence regarding business conditions, employment, and income. Three thousand households across the country are surveyed each month. In general, while the level of consumer confidence is associated with consumer spending, the two do not move in tandem each and every month.

The U.S. Institute for Supply Managers (ISM) manufacturing index is an economic indicator derived from monthly surveys of private sector companies, and is intended to show the economic health of the U.S. manufacturing sector. A PMI of more than 50 indicates expansion in the manufacturing sector, a reading below 50 indicates contraction, and a reading of 50 indicates no change.

The Consumer Sentiment Index refers to a report published by the University of Michigan, in which the University's Consumer Survey Center questions 500 households each month on their financial conditions and attitudes about the economy. Consumer sentiment is important because it is directly related to the strength of consumer spending. Preliminary estimates for a month are released at mid-month. Final estimates for a month are released near the end of the month."

Purchasing Managers' Indexes (PMI) are economic indicators derived from monthly surveys of private sector companies, and are intended to show the economic health of the manufacturing sector. A PMI of more than 50 indicates expansion in the manufacturing sector, a reading below 50 indicates contraction, and a reading of 50 indicates no change. The two principal producers of PMIs are Markit Group, which conducts PMIs for over 30 countries worldwide, and the Institute for Supply Management (ISM), which conducts PMIs for the US.

Alpha: Measures the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by Beta. A positive (negative) Alpha indicates the portfolio has performed better (worse) than its Beta would predict.

Risk-on risk-off refers to changes in investment activity in response to global economic patterns. During periods when risk is perceived as low, risk-on risk-off theory states that investors tend to engage in higher-risk investments. When risk is perceived as high, investors have the tendency to gravitate toward lower-risk investments.

## INDEX DEFINITIONS

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. The index, which is calculated using a float-adjusted, capitalization-weighted methodology, is disseminated in real time on a price-return basis (NYSE: AMZ) and on a total-return basis (NYSE: AMZX).

The **Barclays U.S. Aggregate Bond Index** is a broad-based flagship benchmark that measures the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS, and CMBS (agency and non-agency).

The **Barclays U.S. Aggregate Securitized MBS Index** tracks agency mortgage backed pass-through securities (both fixed-rate and hybrid (ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

The **Barclays Capital High Yield Index** covers the universe of publicly issued debt obligations rated below investment grade. Bonds must be rated below investment grade or high yield (Ba1/BB+ or lower), by at least two of the following ratings agencies: Moody's, S&P, and Fitch. Bonds must also have at least one year to maturity, have at least \$150 million in par value outstanding, and must be U.S. dollar denominated and nonconvertible. Bonds issued by countries designated as emerging markets are excluded.

The **Barclays 7-year Municipal Bond Index** is the 7 Year (6-8 year) component of the Barclays Municipal Bond, which is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market.

The **Barclays Corporate Investment Grade Credit Index** is a broad-based benchmark that measures the investment-grade, U.S. dollar-denominated, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-U.S. industrial, utility, and financial issuers that meet specified maturity, liquidity, and quality requirements.

The **Barclays U.S. High-Yield Loan Index** tracks the market for dollar-denominated floating-rate leveraged loans. Instead of individual securities, the U.S. High-Yield Loan Index is composed of loan tranches that may contain multiple contracts at the borrower level.

The **Barclays Municipal High Yield Bond Index** is comprised of bonds with maturities greater than one year, having a par value of at least \$3 million issued as part of a transaction size greater than \$20 million, and rated no higher than 'BB+' or equivalent by any of the three principal rating agencies. (The long and the short are subindexes of the Municipal Bond Index, based on duration length.)

The **Barclays U.S. TIPS Index** is a rules-based, market value-weighted index that tracks Inflation-Protected Securities issued by the U.S. Treasury. The U.S. TIPS Index is a subset of the Global Inflation-Linked Index, with a 36% market value weight in the index (as of December 2007), but is not eligible for other nominal treasury or aggregate indexes. In order to prevent the erosion of purchasing power, TIPS are indexed to the nonseasonally adjusted Consumer Price Index for All Urban Consumers, or the CPI-U (CPI).

The **Barclays U.S. Treasury Index** is an unmanaged index of public debt obligations of the U.S. Treasury with a remaining maturity of one year or more. The index does not include T-bills (due to the maturity constraint), zero coupon bonds (strips), or Treasury Inflation-Protected Securities (TIPS). (The long and the intermediate are subindexes of the U.S. Treasury Index, based on duration length.)

The **Bloomberg Commodity Index** is calculated on an excess return basis and composed of futures contracts on 22 physical commodities. It reflects the return of underlying commodity futures price movements.

The **BofA Merrill Lynch BB-B U.S. High Yield Constrained Index** contains all securities in the BofA Merrill Lynch US High Yield Index rated BB+ through B- by S&P (or equivalent as rated by Moody's or Fitch), but caps issuer exposure at 2%. Index constituents are capitalization-weighted, based on their current amount outstanding, provided the total allocation to an individual issuer does not exceed 2%.

The **BofA Merrill Lynch U.S. Convertibles Ex-Mandatory Index** is a rule-driven Index designed to capture the organic evolution of the U.S. convertible market and adjust automatically based on any changes in the market such as size of the market, industry skew, structure popularity, issuer size or equity sensitivity. The index rules include issues: U.S. dollar denominated greater than \$50M in aggregate market value that are publicly traded (including 144A) in the U.S. market but are not currently in bankruptcy. Exclusions are synthetic convertibles and mandatory convertibles.

The **Dow Jones Industrial Average Index** is comprised of U.S.-listed stocks of companies that produce other (non-transportation and non-utility) goods and services. The Dow Jones industrial averages are maintained by editors of The Wall Street Journal. While the stock selection process is somewhat subjective, a stock typically is added only if the company has an excellent reputation, demonstrates sustained growth, is of interest to a large number of investors, and accurately represents the market sectors covered by the average. The Dow Jones averages are unique in that they are price weighted; therefore, their component weightings are affected only by changes in the stocks' prices.

The **Dow Jones U.S. Select REIT Index** (formerly the DJ Wilshire REIT) intends to measure the performance of publicly traded REITs and REIT-like securities. The index is a subset of the Dow Jones U.S. Select Real Estate Securities Index (RESI), which represents equity REITs and real estate operating companies (REOCs) traded in the U.S. The indices are designed to serve as proxies for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate.

The **HFRX Absolute Return Index** is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies; including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage, and relative value arbitrage.

The **HFRX Distressed Restructuring Index** strategies employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings. Managers are typically actively involved with the management of these companies, frequently involved on creditors' committees in negotiating the exchange of securities for alternative obligations, either swaps of debt, equity, or hybrid securities. Managers employ fundamental credit processes focused on valuation and asset coverage of securities of distressed firms; in most cases portfolio exposures are concentrated in instruments that are publicly traded, in some cases actively and in others under reduced liquidity, but in general for which a reasonable public market exists. In contrast to special situations, distressed strategies employ primarily debt (greater than 60%) but also may maintain related equity exposure.

The **HFRX Equity Hedge Index**, also known as long/short equity, combines core long holdings of equities with short sales of stock or stock index options. Equity hedge portfolios may be anywhere from net long to net short, depending on market conditions. Equity hedge managers generally increase net long exposure in bull markets and decrease net long exposure (or even are net short) in a bear market. Generally, the short exposure is intended to generate an ongoing positive return in addition to acting as a hedge against a general stock market decline. Stock index put options are also often used as a hedge against market risk. Profits are made when long positions appreciate and stocks sold short depreciate. Conversely, losses are incurred when long positions depreciate or the value of stocks sold short appreciates. Equity hedge managers' source of return is similar to that of traditional stock pickers on the upside, but they use short selling and hedging to attempt to outperform the market on the downside.

The **HFRX Equity Market Neutral Index** strategies employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. These can include both factor-based and statistical arbitrage/trading strategies. Factor-based investment strategies include strategies in which the investment thesis is predicated on the systematic analysis of common relationships between securities. In many but not all cases, portfolios are constructed to be neutral to one or multiple variables, such as broader equity markets in dollar or beta terms, and leverage is frequently employed to enhance the return profile of the positions identified. Statistical arbitrage/trading strategies consist of strategies in which the investment thesis is predicated on exploiting pricing anomalies that may occur as a function of expected mean reversion inherent in security prices; high frequency techniques may be employed and trading strategies may also be employed on the basis on technical analysis or opportunistically to exploit new information the investment manager believes has not been fully, completely, or accurately discounted into current security prices. Equity market neutral strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

The **HFRX Event Driven Index** managers maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety, including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance, or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company-specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

The **HFRX Global Hedge Fund Index** is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies, including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage, and relative value arbitrage. The strategies are asset weighted based on the distribution of assets in the hedge fund industry.

The **HFRX Macro Index** strategy managers trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency, and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top-down and bottom-up theses, quantitative and fundamental approaches, and long- and short-term holding periods. Although some strategies employ RV techniques, macro strategies are distinct from RV strategies in that the primary investment thesis is predicated on predicted or future movements in the underlying instruments, rather than realization of a valuation discrepancy between securities. In a similar way, while both macro and equity hedge managers may hold equity securities, the overriding investment thesis is predicated on the impact movements in underlying macroeconomic variables may have on security prices, as opposed to EH, in which the fundamental characteristics on the company are the most significant and integral to investment thesis.

The **HFRX Macro: Systematic Diversified CTA Index** strategies have investment processes typically as function of mathematical, algorithmic, and technical models, with little or no influence of individuals over the portfolio positioning. Strategies employ an investment process designed to identify opportunities in markets exhibiting trending or momentum characteristics across individual instruments or asset classes. Strategies typically employ a quantitative process that focuses on statistically robust or technical patterns in the return series of the asset, and they typically focus on highly liquid instruments and maintain shorter holding periods than either discretionary or mean reverting strategies. Although some strategies seek to employ counter trend models, strategies benefit most from an environment characterized by persistent, discernible trending behavior. Systematic diversified strategies typically would expect to have no greater than 35% of the portfolio in either dedicated currency or commodity exposures over a given market cycle.

The **HFRX Market Directional Index** is comprised of all eligible hedge fund strategies, including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage, and relative value arbitrage. As a component of the optimization process, the index selects constituents which characteristically exhibit higher volatilities and higher correlations to standard directional benchmarks of equity, bond market, and hedge fund industry.

The **HFRX Merger Arbitrage Index** strategies employ an investment process primarily focused on opportunities in equity and equity-related instruments of companies that are currently engaged in a corporate transaction. Merger arbitrage involves primarily announced transactions, typically with limited or no exposure to situations that pre- or post-date, or situations in which no formal announcement is expected to occur. Opportunities are frequently presented in cross border, collared, and international transactions that incorporate multiple geographic regulatory institutions, with typically involve minimal exposure to corporate credits. Merger arbitrage strategies typically have over 75% of positions in announced transactions over a given market cycle.

The **HFRX Relative Value Arbitrage Index** includes managers who maintain positions in which the investment thesis is predicated on the realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative, or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. RV position may be involved in corporate transactions also, but as opposed to ED exposures, the investment thesis is predicated on the realization of a pricing discrepancy between related securities, as opposed to the outcome of the corporate transaction.

The **HFRX RV: FI-Convertible Arbitrage Index** includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a convertible fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between the price of a convertible security and the price of a non-convertible security, typically of the same issuer. Convertible arbitrage positions maintain characteristic sensitivities to credit quality the issuer, implied and realized volatility of the underlying instruments, levels of interest rates and the valuation of the issuer's equity, among other more general market and idiosyncratic sensitivities.

The **J.P. Morgan GBI Global ex-U.S. Hedged Index** tracks fixed rate issuances from high-income countries spanning the globe, launched in 1989.

The **JPM GBI Global ex-U.S. Unhedged Index** generally tracks fixed rate issuances from high-income countries spanning North America, Europe, and Asia, not including the United States.

The **JPM GBI-EM Global Diversified Index** limits the weights of those index countries with larger debt stocks by only including a specified portion of these countries as eligible, current face amounts of debt outstanding.

The **JPM ELMI+ and JPM ELMI+ Composite Indexes** measure the performance of debt issued by emerging markets in the local currency.

The **Merrill Lynch Preferred Stock Hybrid Securities Index** is an unmanaged index consisting of a set of investment-grade, exchange-traded preferred stocks with outstanding market values of at least \$50 million that are covered by Merrill Lynch Fixed Income Research.

The **MSCI AC Asia Pacific ex-Japan Index** captures large and mid cap representation across four of five developed markets countries (excluding Japan) and eight emerging markets countries in the Asia Pacific region. With 682 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The **MSCI ACWI ex-U.S. Index** captures large and mid cap representation across 22 of 23 developed markets (DM) countries (excluding the U.S.) and 23 emerging markets (EM) countries. With 1,839 constituents, the index covers approximately 85% of the global equity opportunity set outside the U.S.

The **MSCI ACWI ex-U.S. SMID Cap Index** captures mid and small cap representation across 22 of 23 developed market (DM) countries (excluding the U.S.) and 23 emerging markets countries. With 5,164 constituents, the index covers approximately 28% of the free float-adjusted market capitalization in each country.

The **MSCI EAFE Index** is recognized as the pre-eminent benchmark in the United States to measure international equity performance. It comprises the MSCI country indexes that represent developed markets outside of North America: Europe, Australasia, and the Far East.

The **MSCI EAFE SMID Cap Index** captures mid and small cap representation across developed market countries around the world, excluding the U.S. and Canada. With 2,695 constituents, the index covers approximately 28% of the free float-adjusted market capitalization in each country.

The **MSCI Emerging Markets Index** captures large and mid cap representation across 23 emerging markets (EM) countries. With 822 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The **MSCI Emerging Markets EMEA Index** captures large and mid cap representation across eight emerging markets (EM) countries in Europe, the Middle East and Africa (EMEA). With 162 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The **MSCI Emerging Markets (EM) Latin America Index** captures large and mid cap representation across five emerging markets (EM) countries in Latin America. With 137 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The **MSCI Europe Index** is a free float-adjusted, market capitalization-weighted index that is designed to measure the equity market performance of the developed markets in Europe.

The **MSCI Frontier Markets Index** captures large and mid cap representation across 24 frontier markets (FM) countries. The index includes 127 constituents, covering about 85% of the free float-adjusted market capitalization in each country.

The **MSCI Japan Index** is a free float-adjusted, market capitalization-weighted index that is designed to track the equity market performance of Japanese securities listed on Tokyo Stock Exchange, Osaka Stock Exchange, JASDAQ, and Nagoya Stock Exchange.

The **MSCI U.S. REIT Index** is a free float-adjusted market capitalization index that is comprised of equity REITs. The index is based on MSCI USA Investable Market Index (IMI), its parent index that captures large, mid, and small caps securities. With 139 constituents, it represents about 99% of the U.S. REIT universe and securities are classified in the REIT sector according to the Global Industry Classification Standard (GICS). It, however, excludes mortgage REITs and selected specialized REITs.

The **Russell 1000 Index** measures the performance of the large cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.

The **Russell 1000 Value Index** measures the performance of the large cap value segment of the U.S. equity universe.

The **Russell 1000 Growth Index** measures the performance of the large cap growth segment of the U.S. equity universe.

The **Russell 2000 Index** measures the performance of the small cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000 Index representing approximately 10% of the total market capitalization of that index.

The **Russell 2000 Growth Index** measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

The **Russell 2000 Value Index** measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

The **Russell 2500 Index** is a broad index featuring 2,500 stocks that cover the small and mid cap market capitalizations. The Russell 2500 is a market capitalization-weighted index that includes the smallest 2,500 companies covered in the Russell 3000 universe of U.S.-based listed equities.

The **Russell 3000 Index** measures the performance of the largest 3,000 U.S. companies representing approximately 98% of the investable U.S. equity market.

The **Russell 3000 Growth Index** measures the performance of the broad growth segment of the U.S. equity universe. It includes those Russell 3000 companies with higher price-to-book ratios and higher forecasted growth values.

The **Russell 3000 Value Index** measures the performance of the broad value segment of U.S. equity value universe. It includes those Russell 3000 companies with lower price-to-book ratios and lower forecasted growth values.

The **Russell Microcap Index** measures the performance of the microcap segment of the U.S. equity market. Microcap stocks make up less than 3% of the U.S. equity market (by market cap) and consist of the smallest 1,000 securities in the small-cap Russell 2000 Index, plus the next 1,000 smallest eligible securities by market cap.

The **Russell Midcap Index** offers investors access to the mid cap segment of the U.S. equity universe. The Russell Midcap Index is constructed to provide a comprehensive and unbiased barometer for the mid cap segment and is completely reconstituted annually to ensure that larger stocks do not distort the performance and characteristics of the true mid cap opportunity set. The Russell Midcap Index includes the smallest 800 securities in the Russell 1000.

The **Russell Midcap Growth Index** offers investors access to the mid cap growth segment of the U.S. equity universe. The Russell Midcap Growth Index is constructed to provide a comprehensive and unbiased barometer of the mid cap growth market. Based on ongoing empirical research of investment manager behavior, the methodology used to determine growth probability approximates the aggregate mid cap growth manager's opportunity set.

The **Russell Midcap Value Index** offers investors access to the mid cap value segment of the U.S. equity universe. The Russell Midcap Value Index is constructed to provide a comprehensive and unbiased barometer of the mid cap value market. Based on ongoing empirical research of investment manager behavior, the methodology used to determine value probability approximates the aggregate mid cap value manager's opportunity set.

The **S&P 500 Index** is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

The **S&P Global Infrastructure Index** is comprised of 75 of the largest publicly listed infrastructure companies that meet specific investability requirements. The index is designed to provide liquid exposure to the leading publicly listed companies in the global infrastructure industry, from both developed markets and emerging markets.

The **S&P Utilities Index** is comprised primarily of companies involved in water and electrical power and natural gas distribution industries.

The **S&P Developed Ex-U.S. Property** defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.

The **USD Index** measures the performance of the U.S. dollar against a basket of foreign currencies: EUR, JPY, GBP, CAD, CHF and SEK. The U.S. Dollar Index goes up when the dollar gains "strength" compared to other currencies.

This research material has been prepared by LPL Financial LLC.

To the extent you are receiving investment advice from a separately registered independent investment advisor, please note that LPL Financial LLC is not an affiliate of and makes no representation with respect to such entity.

Not FDIC or NCUA/NCUSIF Insured | No Bank or Credit Union Guarantee | May Lose Value | Not Guaranteed by Any Government Agency | Not a Bank/Credit Union Deposit

RES 5307 1215 | Tracking #1-445888 (Exp. 12/16)