

NOVEMBER 2017 IN REVIEW

December Update | As of November 30, 2017

ECONOMY:NOVEMBER DATA POINTS TO ACCELERATING GROWTH

Economic Data

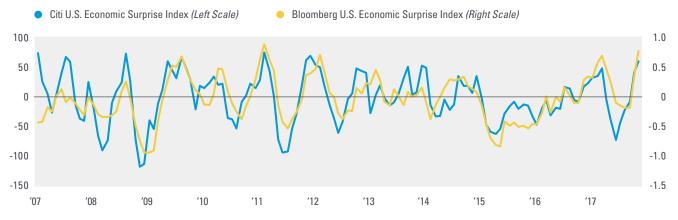
Economic reports released in November 2017, which mostly reflect economic activity in October, largely exceeded economists' consensus expectations with several very strong reports pointing to potential acceleration. With the help of a bounceback in economic activity disrupted by Hurricanes Harvey and Irma, October industrial production and housing data were particularly strong. November economic reports suggest an economy on a growth path modestly higher than the expansion average of 2.2% with few signs of the kind of overheating that could lead to recession. The Bloomberg-surveyed consensus estimates for fourth quarter gross domestic product (GDP) growth stood at 2.7% as of the end of the month.

The Chicago Fed National Activity Index, an aggregate of over 80 monthly indicators, provides one measure of the month's overall strength. The index rose to 0.65

in October (numbers above zero indicate above-trend growth), the strongest single month since January 2012. Overall strength in October was supported, in part, by a solid pickup in industrial production, especially in the manufacturing sector. Overall industrial production rose 0.9% in October, ahead of consensus estimates of 0.5%, while manufacturing production rose 1.3%. The Federal Reserve (Fed) estimated that without the pickup from hurricanesuppressed activity levels industrial production would have risen only 0.3%, but even then the consensus estimate had factored in a much smaller bounceback. The positive overall picture of economic growth also gained support from an upward revision of third quarter GDP from 3.0% to 3.3%, helped by stronger business spending data than originally estimated.

Consumer-oriented reports were mixed in November. October job growth disappointed with 261,000 jobs added to the economy versus expectations of 313,000. October retail sales met modest expectations, rising 0.2%, after a hurricane-influenced 1.9% surge in September. Consumer sentiment remained elevated. The University of Michigan

ECONOMIC SURPRISE INDEXES SUGGEST UNEXPECTED STRENGTH



Source: LPL Research, Bloomberg, Citigroup Global Markets 11/30/17

survey for November fell slightly from October's level but remains near its expansion high, while the Conference Board's survey rose for the fifth consecutive month to a 17-year high.

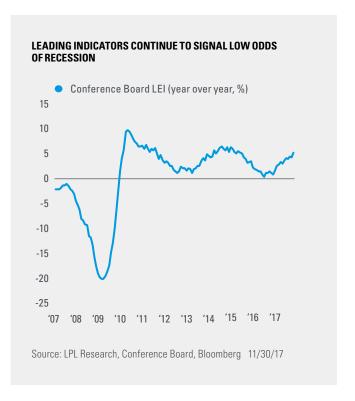
Overall, the economy has continued to grow faster than economist expectations. The Citi U.S. Economic Surprise Index, a standardized average of economic data compared to economist expectations, rose to its highest level since January 2014 in November. Bloomberg's Surprise Index, which uses a longer moving average and therefore responds more slowly, rose to its highest level since March 2011. The steady stream of net positive surprises was due to data breaking to the upside as well as somewhat muted expectations due to increased economic uncertainty related to Hurricanes Harvey and Irma. Surprises continue to be more skewed toward survey-based "soft" data, but surprises based on measures of actual economic activity ("hard" data) continue to improve.

Indicators that tend to lead economic activity suggest steady growth is likely to extend into 2018. The Conference Board's Leading Economic Index (LEI), an aggregate of 10 leading indicators, rose sharply in October, with 9 of the 10 individual components making a positive contribution in October. The year-over-year change of 5.2% is the strongest since May 2015. Positive year-over-year growth has historically been associated with the low chance of a recession in the next year. Strength in leading indicators over the last six months in particular suggests the odds of a recession in the next year remain below the historical average.

Central Banks

The biggest move for central banks in November took place early in the month, when the Bank of England followed through on a widely expected 0.25% rate hike. However, the central bank's postmeeting communications pointed toward a slower path of rate hikes moving forward than many had expected given the potential for Brexit-related headwinds over the next year.

Domestically, the Fed's October 31–November 1 Federal Open Market Committee (FOMC) meeting



was uneventful as expected. There was no rate hike in November, but neither the post-meeting statement nor the meeting minutes released on November 22 did anything to reduce the market's high expectations for a rate hike in December. Both also showed that the Fed remained concerned about below-target inflation.

But, the bigger story out of the Fed in November was staffing. President Trump nominated Jerome (Jay) Powell to be the next Fed chair in a press conference on November 2. Shortly thereafter (November 6), William Dudley, president of the New York Fed, a position that is a permanent voting member of the FOMC, announced he will be retiring in mid-2018 to ensure a successor is in place before his term is up in January 2019. Current chair Janet Yellen could have technically remained on the Fed Board until her term expires in 2024, but on November 20, she confirmed she will be stepping down once Powell is installed as chair. Trump nominated Carnegie Mellon University Professor Marvin Goodfriend for one of the currently open slots on the Fed's seven-seat Board of Governors, leaving the Board with three remaining openings.

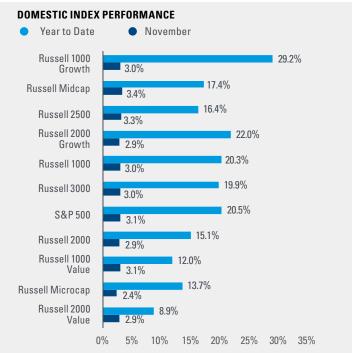
GLOBAL EQUITIES: STEADY MARCH HIGHER CONTINUES FOR U.S. STOCKS

U.S.

The S&P 500 Index returned 3.1% in November to post its eighth straight monthly price gain and record thirteenth straight including dividends. Year to date through November, the S&P 500 has produced an impressive 20.5% return. Should the streak continue through December, it would mark the first time in the S&P 500's history (dating back to 1928*) that the index has produced positive total returns all 12 months in a calendar year. The Dow, which returned 4.2% in November, has produced eight straight monthly gains and a year-to-date return of 25.7%; while the Nasdaq, which gained 2.4% in November, has been higher 12 out of the last 13 months and has returned 29.1% year to date.

November gains were driven by several different factors. First, economic data was solid and mostly above expectations, including the positive revision to third quarter GDP. Data continued to support a robust manufacturing environment, while a strong start to the holiday shopping season provided confirmation of a healthy U.S. consumer. Second, companies reporting third quarter earnings results during November continued to mostly surprise to the upside and provide positive outlooks. And third, throughout the month, markets became more optimistic about tax reform. Specifically, stocks rallied late in the month after news spread of Senator McCain's support, which was followed by reports that a compromise with the few remaining holdouts was likely. As November ended, the path to passage in the Senate had become quite clear, buoying the outlook for corporate profits and investor sentiment.

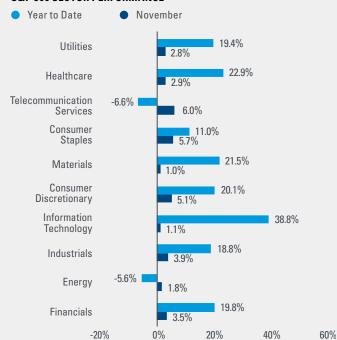
Sector leadership in November generally tracked the relative benefits of tax policy. Telecommunications, a largely domestic sector that pays high tax



Source: LPL Research, FactSet 11/30/17

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

S&P 500 SECTOR PERFORMANCE



Source: LPL Research, FactSet 11/30/17

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Stock investing involves risk, including loss of principal.

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



^{*} Please note: The modern design of the S&P 500 stock index was first launched in 1957. Performance back to 1928 incorporates the performance of its predecessor index, the S&P 90.

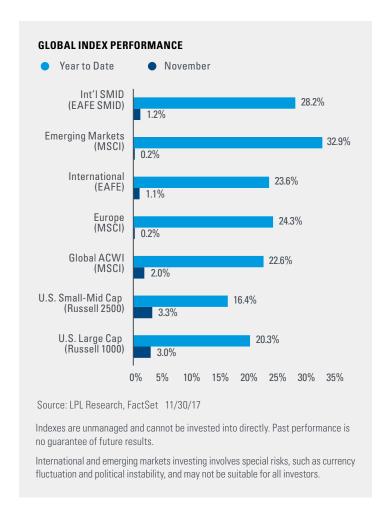
rates, topped all sectors for the month with a 6% return. The sector may have also benefited from the proposed addition of a communications sector to the S&P lineup that will include telecommunications, in addition to media and cable companies. The move, expected in September 2018, could attract more interest for the traditional telecommunication names. Consumer staples and consumer discretionary also outperformed the S&P 500, as retailers are poised to be big beneficiaries of tax reform; early results from the holiday shopping season also helped. On the flip side, technology—a sector that pays among the lowest tax rates—was among the worst performers, though profit-taking after such strong gains in 2017 likely played a role in the weakness.

The growth and value styles produced similar returns in November, based on the Russell 3000 style indexes. The biggest value sector, financials, outpaced the biggest growth sector, technology. However, growth got a boost from consumer discretionary strength and value was dragged down by energy weakness, leaving the styles in line for the month. Growth has been strongly in favor in 2017, with the Russell 3000 Growth Index returning 28.7%, well ahead of the 11.8% return for the Russell 3000 Value Index.

Small caps produced similar returns as large caps in November but remain behind year to date. After getting a boost in September on improved prospects for tax reform, which generally benefits smaller companies more than large, small caps were unable to gain any ground in October or November, even as Republicans moved closer to Congressional approval. Small caps have returned a very respectable 15.1% year to date, but trail the 20.3% return for large caps based on the Russell indexes.

International

Developed international equities posted gains in November, based on the MSCI EAFE Index, but were unable to keep up with the stronger U.S. equity markets during the month. The 1.1% return for the index in November brought the year-to-date gain to a solid 23.6%. The U.S. dollar's 1.6%



decline was a positive driver for U.S.-based investors in overseas equities, but weakness in Europe—despite continued strong regional economic data—offset currency-related gains. In terms of country performance, weakness in the U.K. weighed on the benchmark due largely to bumpy Brexit negotiations. Equities in the Netherlands and Spain also declined. Meanwhile, Japanese equities fared relatively well, as the MSCI Japan Index returned 2.5% for the month.

Despite U.S. dollar weakness and a lack of surprises in global monetary policy, emerging markets equities rose only marginally in November, trailing both U.S. and international developed equity market benchmarks. The MSCI Emerging Markets Index returned just 0.2% for the month, but still leads the major regional equity benchmarks with a 32.9% return year to date. MSCI equity benchmarks for Russia and South Africa outperformed the MSCI EM Index, while those in Taiwan, India, and Brazil lagged.

FIXED INCOME: YIELD CURVE CONTINUES ITS FLATTENING TREND

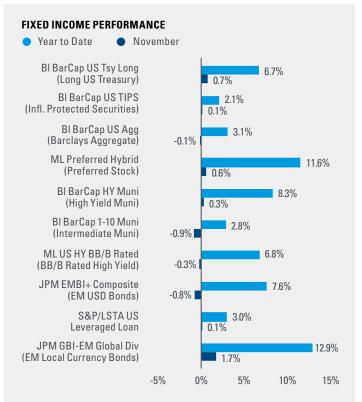
Treasury yields rose across the majority of the maturity spectrum during November, with shorter maturity yields rising substantially over the month. The 2-year Treasury rose by 18 basis points (0.18%), while the 10-year rose by just 4 basis points (0.04%)—pushing the Treasury yield curve to its flattest level of this economic cycle. Inflation expectations were steady over the course of the month. The markets almost fully priced in a December rate hike, which pressed short-term rates higher. Expectations for rate hikes in 2018 moved higher as well, as tax reform progressed throughout the month, potentially heating up the economy and necessitating more rate hikes than absent tax reform.

The upward pressure on yields led to a mixed month for high-quality fixed income. The broad Bloomberg Barclays U.S. Aggregate Bond Index lost -0.1% during the month, with all three of its major segments (Treasuries, investment-grade corporates, and mortgage-backed securities) performing in line with the index. Municipal bonds weakened as heavy issuance weighed on the market; issuers rushed to market to get ahead of tax changes that could make certain types of municipal bonds issued after the end of 2017 ineligible for tax-free status.

Preferred securities were the standout performer of the month, returning 0.6%, as tax reform was a tailwind for financial firms, which are heavy issuers within the asset class. Bank loans returned 0.1%, buoyed by rising short-term interest rates.

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.



U.S. TREASURY YIELDS

Security	10/31/17	11/30/17	Change in Yield
3 Month	1.15	1.27	0.12
2 Year	1.60	1.78	0.18
5 Year	2.01	2.14	0.13
10 Year	2.38	2.42	0.04
30 Year	2.88	2.83	-0.05

AAA MUNICIPAL YIELDS

Security	10/31/17	11/30/17	Change in Yield
2 Year	1.07	1.32	0.25
5 Year	1.44	1.62	0.18
10 Year	2.12	2.21	0.09
20 Year	2.77	2.79	0.02
30 Year	2.95	2.95	0.00

Source: LPL Research, Bloomberg, FactSet 11/30/17

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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.

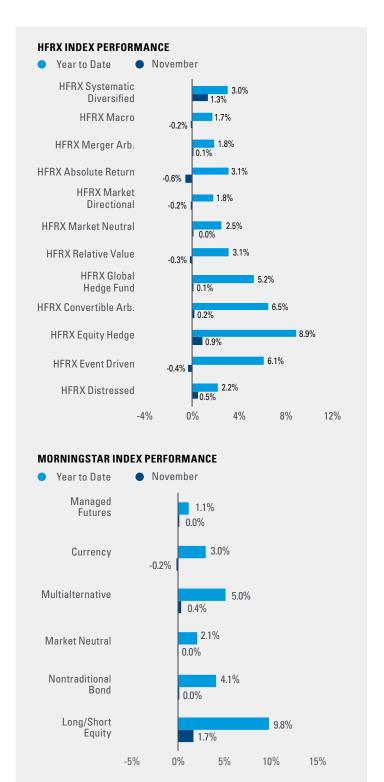


ALTERNATIVES: LONG/SHORT PERFORMANCE IMPACTED BY SECTOR ROTATION

The HFRX Equity Hedge Index returned 0.9%, trailing the 3.1% S&P 500 gain on both an absolute and risk-adjusted basis. Long positions delivered positive returns, however, the industry's growth tilt, specifically an overweight to information technology stocks, acted as a headwind due to the relative underperformance of the sector. Short exposure detracted from overall returns, predominantly due to consumer staples and telecommunication firms increasing in value. This factor rotation away from firms whose share prices have experienced strong momentum also impacted strategies within the HFRX Market Neutral Index, which was marginally positive for the month.

The HFRX Systematic Diversified Index gained 1.3%, as strength within domestic equity markets continued to drive performance. Year to date, the index has now returned 3.0%. While global equity exposure has been the most consistent and largest component of most managed futures models, we've seen a moderate reduction in net equity exposure due to weakness in certain Asian and European markets. Returns within the currency, fixed income, and commodity markets were generally muted, with the exception of long crude oil exposure delivering additional gains.

The HFRX Event-Driven Index declined 0.4%, while subcategory performance was mixed. Broad strength across the credit spectrum has limited the opportunity set within the distressed debt investing space (HFRX Distressed up 0.5% for the month and 2.2% year to date); while common existing positions such as Puerto Rican municipal debt and European non-performing loans have yet to fully develop. The HFRX Merger Arbitrage Index gained 0.1%, as legislative progress on tax reform and greater clarity on the end form continue to occupy the interest of most strategies.



Source: LPL Research, FactSet 11/30/17

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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.

REAL ASSETS: SOLID REIT PERFORMANCE IN OVERALL MIXED MONTH

November was another mixed month for liquid real assets. Domestic and international real estate and global infrastructure produced gains, while commodities and master limited partnerships (MLP) experienced losses.

MLPs

The struggles for MLPs continued in November despite higher oil prices. November's 1.4% decline brought the year-to-date loss for the Alerian MLP Index to 10.8%. A number of factors contributed to the weakness, including slowing distribution growth prospects, as the industry increasingly focuses on balance sheet strength and sustained cash flow growth to help reduce reliance on the capital markets. Concerns about potential adverse effects of tax reform and year-end tax loss selling also weighed on the group during the month.

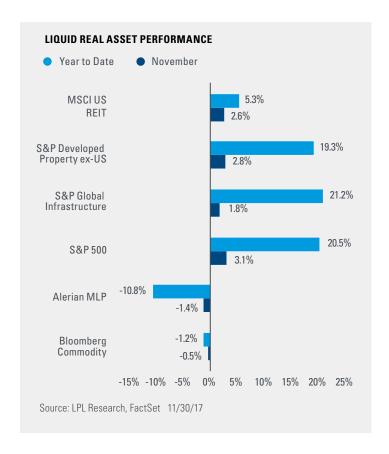
REITs & Global Listed Infrastructure

In November, domestic REITs posted their strongest monthly return since February 2017, but the asset class still modestly underperformed the broad equity market for the month and has done so year to date. Data centers remain this year's top-performing real estate subsector after another strong month. For the first time this year, retail was the top-performing subsector for the month, but it remains the worst performer year to date.

The S&P Global Infrastructure Index produced a gain but underperformed the broad equity market for the second straight month, shrinking the asset class's year-to-date outperformance relative to global equities. The impacts of rising interest rates and central bank tightening, albeit gradual, partly offset currency benefits.

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.



Commodities

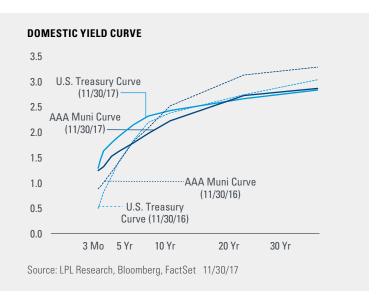
The Bloomberg Commodity Index dipped 0.5% in November, as higher oil prices only partly offset weakness in industrial metals. Oil's 5.5% rally was driven by a combination of factors, including the extension of the OPEC-led production limits through year-end 2018, improving global growth prospects, drawdowns in domestic inventories, and geopolitical tensions. Industrial metal prices, notably copper, fell during the month amid concerns about China's growth outlook and its expanding refinery capacity. Precious metals were down marginally as slightly higher interest rates and the market's preference for riskier assets offset the benefit of a weaker U.S. dollar. Within agriculture, gains in cotton and sugar helped counterbalance losses in grains and livestock.

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.



MONTHLY PERFORMANCE REPORT





		1 Mo	3 Mos	YTD	12 Mos
ap	S&P 500	3.07	7.65	20.49	22.87
	DJIA	4.24	11.22	25.69	30.02
Large Cap	Russell 1000	3.05	7.66	20.35	22.61
Lai	Russell 1000 Value	3.06	6.89	12.03	14.83
	Russell 1000 Growth	3.04	8.42	29.21	30.81
	Russell 2000	2.88	10.23	15.11	18.34
٩	Russell 2000 Value	2.89	10.32	8.88	13.37
Small/Mid Cap	Russell 2000 Growth	2.87	10.15	22.03	23.69
Ξ	Russell Microcap	2.45	10.62	13.70	18.88
mall	Russell Midcap	3.36	8.00	17.43	18.76
S	Russell Midcap Value	3.38	7.06	11.96	13.95
	Russell Midcap Growth	3.34	9.24	24.60	25.03
ď	Russell 3000	3.04	7.85	19.93	22.27
AII Cap	Russell 3000 Value	3.05	7.14	11.76	14.70
⋖	Russell 3000 Growth	3.03	8.56	28.65	30.25
ts	MSCIEAFE	1.06	5.20	23.61	27.86
International Markets	MSCI ACWI ex US	0.83	4.68	24.94	28.18
	MSCI Europe	0.24	4.06	24.34	30.87
	MSCI Japan	2.99	9.99	23.50	24.73
	MSCI AC Asia Pacific ex Japan	0.62	4.41	33.15	31.75
	MSCI EAFE SMID	1.23	5.79	28.20	31.81

		1 Mo	3 Mos	YTD	12 Mos
Int'l -Continued	MSCI ACWI ex US SMID	1.16	4.99	26.98	29.51
	MSCI Emerging Mkts	0.21	3.34	32.91	33.30
Sont	MSCIEMEA	3.44	0.50	17.01	25.49
ţ,	MSCI Latin America	-2.99	-4.99	18.79	19.90
드	MSCI Frontier Markets	1.17	4.54	28.30	31.82
	Consumer Discretionary	5.06	8.18	20.08	20.16
	Consumer Staples	5.67	3.29	11.03	14.55
SOI	Energy	1.76	11.13	-5.62	-3.80
9 00	Financials	3.50	12.02	19.84	24.51
х Р 5	Healthcare	2.92	3.14	22.87	23.77
-S	Industrials	3.86	8.24	18.78	19.38
Sectors -S&P 500 GICS	Information Technology	1.15	9.69	38.82	40.99
	Materials	0.99	8.58	21.48	21.63
	Telecom Services	6.03	1.40	-6.64	0.94
	Utilities	2.75	3.84	19.44	25.34

Source: LPL Research, Bloomberg, FactSet 11/30/17

(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
	BI BarCap US Agg	-0.13	-0.55	3.07	3.21
	Bl BarCap 1-10 Muni	-0.94	-1.42	2.49	3.09
	BI BarCap HY Muni	0.25	-0.01	8.29	9.78
	Bl BarCap Inv. Grade Credit	-0.15	0.08	5.46	6.16
	Bl BarCap Muni Long Bond -22+	0.20	-0.03	6.55	8.23
	BI BarCap US Agg Securitized MBS	-0.14	-0.40	2.14	2.14
	BI BarCap US TIPs	0.13	-0.30	2.07	1.97
	BI BarCap US Treasury Interm	-0.31	-1.03	1.11	1.08
Fixed Income	BI BarCap US Treasury Long	0.72	-1.53	6.70	6.13
	BI BarCap US High Yield Loans	0.07	0.98	2.98	4.31
	ML Preferred Stock Hybrid	0.56	0.49	11.56	11.84
	ML US High Yield BB/B Rated	-0.26	0.97	6.77	8.55
	ML US Convert ex Mandatory	-0.11	3.80	15.69	17.18
	JPM GBI Global ex US Hedged	0.47	0.65	2.10	2.54
	JPM GBI Global ex US Unhedged	2.23	0.22	9.90	8.79
	JPM GBI-EM Global Div	1.68	-1.52	12.93	15.04
	JPM ELMI+	1.65	0.45	10.53	11.08
	JPM EMBI+ Composite	-0.81	-1.05	7.61	9.03

		1 Mo	3 Mos	YTD	12 Mos
	HFRX Absolute Return	-0.57	0.55	3.09	3.30
	HFRX Market Directional	-0.15	0.41	1.81	3.56
	HFRX Convertible Arb.	0.20	1.38	6.49	7.29
	HFRX Distressed	0.47	-0.05	2.20	4.10
	HFRX Equity Hedge	0.87	3.52	8.85	9.05
	HFRX Market Neutral	0.04	0.32	2.47	1.37
es.	HFRX Event Driven	-0.35	0.30	6.06	8.10
Alternatives	HFRX Merger Arb.	0.09	0.55	1.83	2.59
lteri	HFRX Relative Value Arb.	-0.26	0.51	3.11	3.97
₹	HFRX Global Hedge Fund	0.07	1.36	5.22	6.12
	HFRX Macro Index	-0.15	0.72	1.67	2.16
	HFRX Systematic Diversified	1.31	3.13	3.00	3.64
	Bloomberg Commodity	-0.46	1.52	-1.24	0.54
	DJ Wilshire REIT	3.07	2.22	3.74	8.60
	Alerian MLP	-1.35	-4.78	-10.75	-6.83

		Latest Mo End (11/30/17)	3 Mos Ago (08/31/17)	Latest Yr End (12/31/16)	12 Mos Ago (11/30/16)
Currency	U.S. Dollar Index Value	93.05	92.67	102.21	101.53
	USD vs. Yen	112.55	110.00	116.90	114.40
	Euro vs. USD	1.19	1.19	1.05	1.06
Cmdtys	Gold (\$ per Troy Ounce)	1274.60	1320.80	1150.90	1173.00
	Crude Oil (\$ per Barrel)	57.40	47.23	53.72	49.44



IMPORTANT DISCLOSURES

The economic forecasts set forth in the presentation may not develop as predicted. 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 any individual security. 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.

Small cap is a term used to classify companies with a relatively small market capitalization. The definition of small cap can vary, but it is generally a company with a market capitalization of between \$300 million and \$2 billion. The prices of small cap stocks are generally more volatile than large cap stocks.

All information is believed to be from reliable sources; however LPL Financial makes no representation as to its completeness or accuracy.

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.

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.

Treasury Inflation-Protected Securities (TIPS) are subject to interest rate risk and opportunity risk. If interest rates rise, the value of your bond on the secondary market will likely fall. In periods of no or low inflation, other investments, including other Treasury bonds, may perform better.

Preferred stock investing involves risk, which may include loss of principal, and are subject to many of the same risks which affect fixed income securities.

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.

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.

Selling short can result in losses should the borrowed security increase in price, rather than decline. The theoretical potential loss is unlimited. Additionally, short sales will incur interest on the borrowed shares while also being subject to margin calls, or early sales in the event that the original owner wishes to sell their position.

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.

Managed futures strategies use systematic quantitative programs to find and invest in positive and negative trends in the futures markets for financials and commodities. Futures and forward trading is speculative, includes a high degree of risk that the anticipated market outcome may not occur, and may not be suitable for all investors.

Definitions

Yield curve is a line that plots the interest rates, at a set point in time, of bonds having equal credit quality, but differing maturity dates. The most frequently reported yield curve compares the 3-month, 2-year, 5-year, and 30-year U.S. Treasury debt. This yield curve is used as a benchmark for other debt in the market, such as mortgage rates or bank lending rates. The curve is also used to predict changes in economic output and growth.

The Citigroup Economic Surprise Index (CESI) measures the variation in the gap between the expectations and the real economic data.

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, Ct o D(lowest). Moody's uses a scale from Aaa (highest) through Aa, A, Baa, Ba, B, Caa, Ca to C (lowest).

The Consumer Sentiment report 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.

Gross Domestic Product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.

The Leading Economic Index is a monthly publication from the Conference Board that attempts to predict future movements in the economy based on a composite of 10 economic indicators whose changes tend to precede changes in the overall economy.

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.





Purchasing Managers Indexes 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.

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.

Beta measures a portfolio's volatility relative to its benchmark. A Beta greater than 1 suggests the portfolio has historically been more volatile than its benchmark. A Beta less than 1 suggests the portfolio has historically been less volatile than its benchmark.

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

The Bloomberg 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 Bloomberg 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 Bloomberg 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 Bloomberg Barclays U.S. Corporate High Yield Energy Index covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included.

The Bloomberg 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 Bloomberg 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 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 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.



MIM

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 form 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 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 Nasdaq Composite Index measures all Nasdaq domestic and non-U.S.-based common stocks listed on the Nasdaq stock market. The index is market-value weighted. This means that each company's security affects the index in proportion to its market value. The market value, the last sale price multiplied by total shares outstanding, is calculated throughout the trading day, and is related to the total value of the index. It is not possible to invest directly in an index.

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/LSTA U.S. Leveraged Loan 100 index is a market value-weighted index designed to measure the performance of the U.S. leveraged loan market. The index consists of 100 loan facilities drawn from a larger benchmark - the S&P/LSTA (Loan Syndications and Trading Association) Leveraged Loan Index (LLI).

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.

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