MARKET INSIGHTS

Guide to the Markets®

U.S. | 2Q 2017 | As of March 31, 2017



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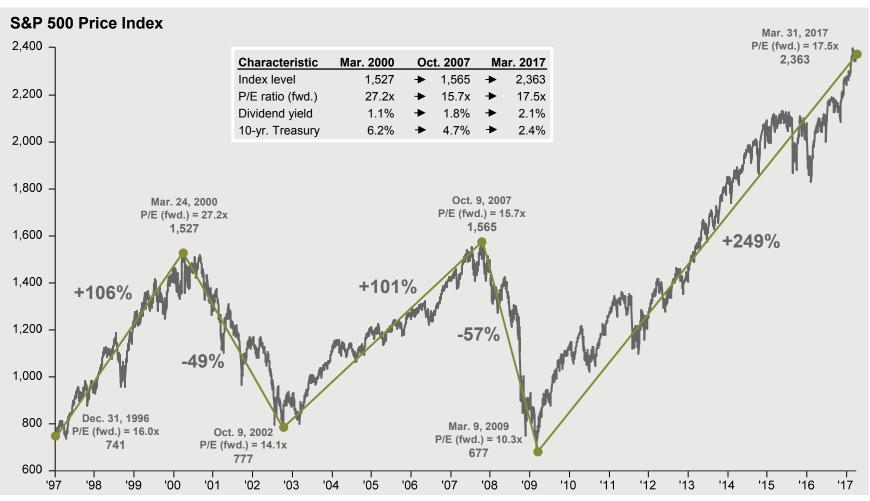
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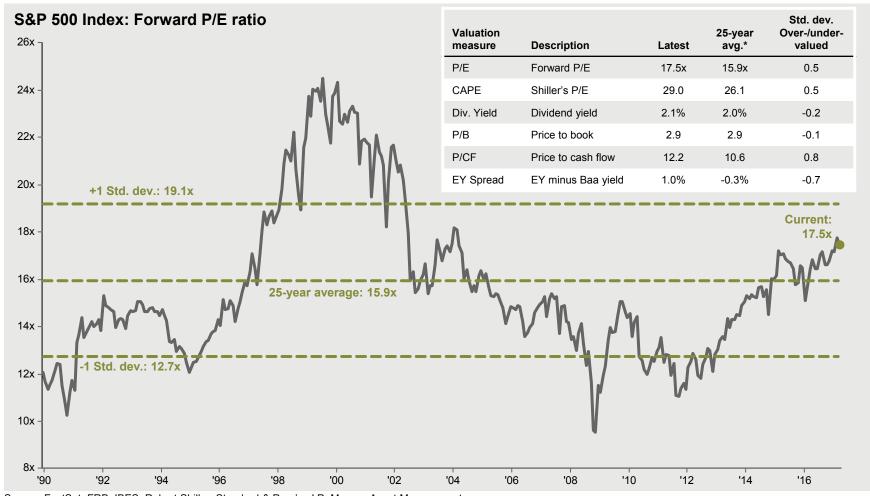
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Source: Compustat, FactSet, IBES, Standard & Poor's, J.P. Morgan Asset Management. Dividend yield is calculated as consensus estimates of dividends for the next 12 months, divided by most recent price, as provided by Compustat. Forward price to earnings ratio is a bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates. Returns are cumulative and based on S&P 500 Index price movement only, and do not include the reinvestment of dividends. Past performance is not indicative of future returns. *Guide to the Markets – U.S.* Data are as of March 31, 2017.





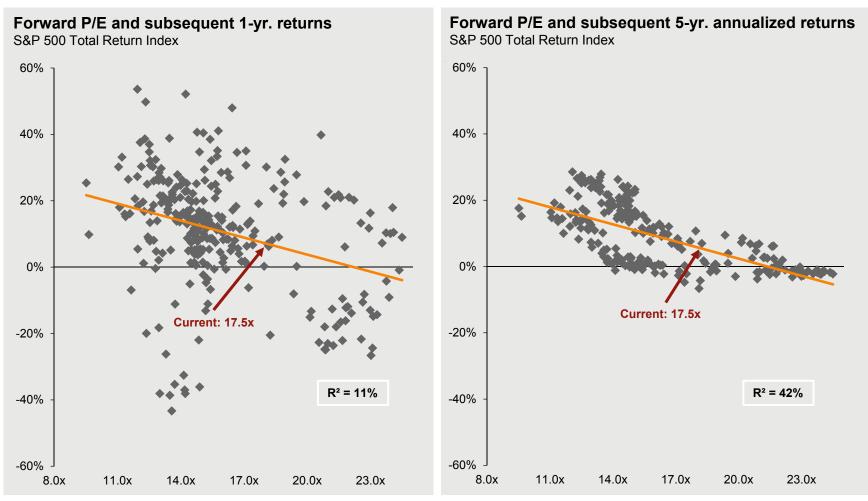
Source: FactSet, FRB, IBES, Robert Shiller, Standard & Poor's, J.P. Morgan Asset Management.

Price to earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months as provided by IBES since December 1989, and FactSet for March 31, 2017. Average P/E and standard deviations are calculated using 25 years of FactSet history. Shiller's P/E uses trailing 10-years of inflation-adjusted earnings as reported by companies. Dividend yield is calculated as the next 12-month consensus dividend divided by most recent price. Price to book ratio is the price divided by book value per share. Price to cash flow is price divided by NTM cash flow. EY minus Baa yield is the forward earnings yield (consensus analyst estimates of EPS over the next 12 months divided by price) minus the Moody's Baa seasoned corporate bond yield. Std. dev. over-/under-valued is calculated using the average and standard deviation over 25 years for each measure.

*P/CF is a 20-year average due to cash flow data availability.

Guide to the Markets – U.S. Data are as of March 31, 2017.





Source: FactSet, Reuters, Standard & Poor's, J.P. Morgan Asset Management.
Returns are 12-month and 60-month annualized total returns, measured monthly, beginning March 31, 1992. R² represents the percent of total variation in total returns that can be explained by forward P/E ratios.

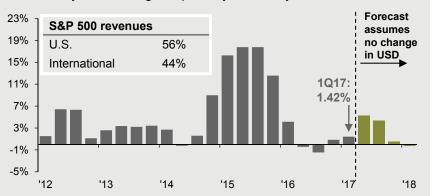
Guide to the Markets – U.S. Data are as of March 31, 2017.



S&P 500 earnings per share Index quarterly operating earnings \$35 S&P consensus analyst estimates 4Q16*: \$27.90 \$31 \$27 \$23 \$19 \$15 \$11 -\$1 '04 '07 '10 '13 '16 '01

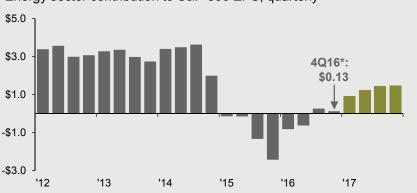
U.S. dollar

Year-over-year % change**, quarterly, USD major currencies index





Energy sector contribution to S&P 500 EPS, quarterly



Source: Compustat, FactSet, Standard & Poor's, J.P. Morgan Asset Management; (Top right) Federal Reserve, S&P 500 individual company 10k filings, S&P Index Alert.

EPS levels are based on operating earnings per share. Earnings estimates are Standard & Poor's consensus analyst expectations. Past performance is not indicative of future returns. Currencies in the Trade Weighted U.S. Dollar Major Currencies Index are: British pound, euro, Swedish krona, Australian dollar, Canadian dollar, Japanese yen and Swiss franc. *4Q16 earnings are calculated using actual earnings for 98.2% of S&P 500 market cap and earnings estimates for the remaining companies. **Year-over-year change is calculated using the quarterly average for each period. USD forecast assumes no change in the U.S. dollar from its March 31, 2017 level.

Guide to the Markets - U.S. Data are as of March 31, 2017.



10	2017			Y 7	ГD		
	Value	Blend	Growth		Value	Blend	Growth
Large	3.3%	6.1%	8.9%	Large	3.3%	6.1%	8.9%
Mid	3.8%	5.1%	6.9%	Mid	3.8%	5.1%	6.9%
Small	-0.1%	2.5%	5.3%	Small	-0.1%	2.5%	5.3%
Si	nce marke	t peak (Oct	ober 2007)	Si	nce marke	t low (Marc	h 2009)
	Value	Blend	Growth		Value	Blend	Growth
Large	65.6%	85.5%	109.6%	Large	313.0%	314.4%	327.4%
Mid	99.7%	98.5%	94.1%	Mid	410.0%	379.0%	348.8%
Small	80.3%	87.2%	92.7%	Small	345.9%	351.4%	354.9%

Current P/E vs. 15-year avg. P/E*

	Va	lue	Ble	end	Gro	wth
ge	16.2	/	17.5		19.5	/
Large		13.1		14.4		16.7
<u>0</u>	17.0		18.4		20.5	
Mid		14.0		15.6		18.2
a 	19.3		24.0		32.4	
Small		16.8		20.1		25.6

Current P/E as % of 15-year avg. P/E*

	Value	Blend	Growth
Large	123.6%	121.4%	117.1%
Mid	121.0%	117.6%	112.5%
Small	114.9%	119.7%	126.8%

Source: FactSet, Russell Investment Group, Standard & Poor's, J.P. Morgan Asset Management.

All calculations are cumulative total return, including dividends reinvested for the stated period. Since Market Peak represents period 10/9/07 – 3/31/17, illustrating market returns since the S&P 500 Index high on 10/9/07. Since Market Low represents period 3/9/09 – 3/31/17, illustrating market returns since the S&P 500 Index low on 3/9/09. Returns are cumulative returns, not annualized. For all time periods, total return is based on Russell style indexes with the exception of the large blend category, which is based on the S&P 500 Index. Past performance is not indicative of future returns. *Timeframe of average valuation decreased from 20 to 15 years because of a discontinued data series. The new data series is bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates.

J.P.Morgan Asset Management

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	Financials	Technology	Health Care	Industrials	Energy	cons. Discr	. Cons. Stad	Telecom	Utilities	RealEstate	Materials	58P 500 Inde	
S&P weight Russell Growth weight Russell Value weight	2.8%	22.1% 32.7% 10.0%	13.9% 15.9% 10.8%	10.1% 10.7% 10.1%	6.6% 0.5% 12.2%	12.3% 20.9% 4.5%	9.3% 9.1% 8.5%	2.4% 1.0% 3.6%	3.2% 0.0% 6.2%	2.9% 2.7% 4.6%	2.8% 3.5% 2.9%	100.0% 100.0% 100.0%	Weight
QTD	2.5	12.6	8.4	4.6	-6.7	8.4	6.4	-4.0	6.4	3.5	5.9	6.1	
YTD	2.5	12.6	8.4	4.6	-6.7	8.4	6.4	-4.0	6.4	3.5	5.9	6.1	(%)
Since market peak (October 2007)	-0.4	142.5	146.5	84.6	9.6	173.2	153.6	50.2	81.2	56.4	51.0	85.5	Return (%)
Since market low (March 2009)	443.9	408.0	297.4	407.4	100.7	532.4	255.6	186.8	217.2	479.8	259.8	314.4	
Beta to S&P 500	1.43	1.09	0.74	1.20	0.98	1.10	0.58	0.61	0.47	1.31	1.28	1.00	ಣ
Correl. to Treas. yields	0.66	0.10	0.14	0.33	0.31	0.24	-0.46	-0.26	-0.68	-0.33	0.37	0.24	q
Forward P/E ratio	13.9x	18.0x	15.8x	18.0x	28.7x	19.5x	20.3x	13.5x	17.8x	17.9x	18.0x	17.5x	
20-yr avg.	12.9x	20.6x	17.7x	16.2x	17.3x	18.2x	17.1x	16.4x	13.9x	15.2x	13.8x	16.0x	P/E
Trailing P/E ratio	15.8x	22.5x	22.5x	21.4x	33.3x	22.5x	21.2x	17.8x	21.7x	28.4x	23.5x	21.1x	₫.
20-yr avg.	15.8x	25.7x	24.1x	20.0x	16.8x	19.2x	21.1x	20.2x	15.8x	35.3x	19.3x	19.6x	
Dividend yield	1.9%	1.5%	1.8%	2.3%	2.8%	1.6%	2.8%	4.7%	3.6%	3.5%	2.1%	2.1%	Div
20-yr avg.	2.3%	1.0%	1.8%	2.1%	2.3%	1.4%	2.6%	4.1%	4.1%	4.4%	2.6%	2.0%	

Source: FactSet, Russell Investment Group, Standard & Poor's, J.P. Morgan Asset Management.

All calculations are cumulative total return, not annualized, including dividends for the stated period. Since market peak represents period 10/9/07 – 3/31/17. Since market low represents period 3/9/09 – 3/31/17. Correlation to Treasury yields are trailing 2-year monthly correlations between S&P 500 sector price returns and 10-year Treasury yield movements. Forward P/E ratio is a bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM), and is provided by FactSet Market Aggregates. Trailing P/E ratios are bottom-up values defined as month-end price divided by the last 12 months of available reported earnings. Historical data can change as new information becomes available. Note that P/E ratios for the S&P 500 may differ from estimates elsewhere in this book due to the use of a bottom-up calculation of constituent earnings (as described) rather than a top-down calculation. This methodology is used to allow proper comparison of sector level data to broad index level data. Dividend yield is calculated as the next 12-month consensus dividend divided by most recent price. Beta calculations are based on 10-years of monthly price returns for the S&P 500 and its sub-indices. Betas are calculated on a monthly frequency over the past 10 years. Past performance is not indicative of future returns. *Guide to the Markets – U.S.* Data are as of March 31, 2017.



Factor performance and sector weights

																	- 2016
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	YTD	Ann.	Vol.
Momen.	Small Cap	Small Cap	Momen.	High Div.	Momen.	Min. Vol.	Cyclical	Small Cap	High Div.	Cyclical	Small Cap	Min. Vol.	Momen.	Small Cap	Momen.	Momen.	Small Cap
- 12 . 1%	47.3%	18.3%	19.3%	21.1%	17.8%	-25.7%	36.9%	26.9%	14.3%	20.1%	38.8%	16.5%	9.3%	21.3%	9.5%	8.9%	20.1%
High Div.	Cyclical	Momen.	Defens.	Small Cap	Defens.	Defens.		Momen.	Min. Vol.	Small Cap	Cyclical	High Div.		High Div.	Cyclical	Small Cap	Cyclical
- 13 . 3 %	37.2%	16.9%	11.1%	18.4%	17.7%	-26.7%		18.2%	12.9%	16.3%	35.0%	14.9%		16.3%	7.6%	8.5%	19.0%
Min. Vol.	Large Cap	Min. Vol.	Min. Vol.	Defens.		High Div.	Small Cap	Cyclical	Defens.	Large Cap	Momen.	Momen.	Min. Vol.	Cyclical		High Div.	Momen.
- 15.3%	28.7%	14.5%	6.6%	15.9%		-27.6%	27.2%	17.9%	10.1%	16.0%	34.8%	14.7%	5.6%	14.0%		8.3%	16.0%
Defens.	Momen.	Defens.	Large Cap	Large Cap	Large Cap		Large Cap	High Div.		Momen.		Large Cap	Cyclical	Large Cap	Large Cap	Min. Vol.	Large Cap
- 18.3%	26.2%	11.9%	4.9%	15.8%	5.5%		26.5%	15.9%		15.1%		13.7%	2.6%	12.0%	6.1%	8.1%	15.9%
	High Div.	High Div.	Small Cap	Cyclical	Min. Vol.	Small Cap	High Div.	Large Cap	Momen.		Large Cap	Cyclical	Large Cap	Min. Vol.	Min. Vol.		High Div.
	24.3%	11.8%	4.6%	15.0%	4.3%	-33.8%	18.4%	15.1%	6.1%		32.4%	13.6%	1.4%	10.7%	6.1%		14.7%
Small Cap		Large Cap	High Div.	Min. Vol.	High Div.	Large Cap	Min. Vol.	Min. Vol.	Large Cap	Min. Vol.	High Div.	Defens.	High Div.	Quality	High Div.	Defens.	Quality
-20.5%		10.9%	3.7%	15.0%	0.0%	-37.0%	18.4%	14.7%	2.1%	11.2%	28.9%	13.0%	0.7%	8.0%	5.6%	7.5%	14.0%
Large Cap	Min. Vol.		Cyclical	Quality	Cyclical	Momen.	Momen.		Cyclical	Defens.	Defens.		Defens.	Defens.	Defens.	Large Cap	Defens.
-22.1%	20.0%		2.5%	12.0%	-0.8%	-40.9%	17.6%		-3.4%	10.7%	28.9%		-0.9%	7.7%	3.8%	6.7%	13.4%
Cyclical	Defens.	Cyclical		Momen.	Small Cap	Cyclical	Defens.	Defens.	S mall Cap	High Div.	Min. Vol.	Small Cap	Small Cap	Momen.	Small Cap	Cyclical	Min. Vol.
-25.2%	17.3%	10.0%		10.7%	- 1.6%	-44.8%	16.5%	12.0%	-4.2%	10.6%	25.3%	4.9%	-4.4%	5.1%	2.5%	6.1%	12.8%



Source: Standard & Poor's, FactSet, J.P. Morgan Asset Management; (Top) MSCI, Russell; (Bottom) MSCI.

The MSCI High Dividend Yield Index only includes securities that offer a higher than average dividend yield relative to the parent index and that pass dividend sustainability and persistence screens. The MSCI Minimum Volatility Index is calculated by optimizing the MSCI USA Index using an estimated security co-variance matrix to produce an index that has the lowest absolute volatility for a given set of constraints. The MSCI Defensive Sectors Index includes: Consumer Staples, Energy, Health Care, Telecommunication Services and Utilities. The MSCI Cyclical Sectors Index contains: Consumer Discretionary, Financials, Information Technology and Materials. Securities in the MSCI Momentum Index are selected based on a momentum value based on 12-month and 6-month price performance. Constituents of the MSCI Quality Index are selected based on three main variables: high return on equity, stable year-over-year earnings growth and low financial leverage.

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0.1

'12

'13

Correlation, dispersion and active management

Realized correlation S&P 500 3-month realized correlation* 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 Mar. 2017: 0.20

'14



'15

'16

Percentage of LCC managers outperforming***, y/y change in S&P 500 100% -50% change (inverted) 90% -40% 80% -30% 70% -20% 60% -10% 50% 0% 40% 10% 30% 20% 20%

% of large cap core managers outperforming*

Active management and market cycles

Sources: Standard & Poor's, Bloomberg, Lipper, FactSet, J.P. Morgan Asset Management.

*Realized correlation is a trailing 3-month measure of the pairwise correlation among the largest 50 stocks in the S&P 500, calculated using the realized volatilities of those stocks and the index. **Return dispersion is based on a three-week moving average of the standard deviation of annual S&P 500 sector returns. ***Percentage of U.S. large cap core equity managers outperforming is based on rolling 12-month periods.

*Guide to the Markets – U.S. Data are as of March 31, 2017.

10%



'16

40%

50%

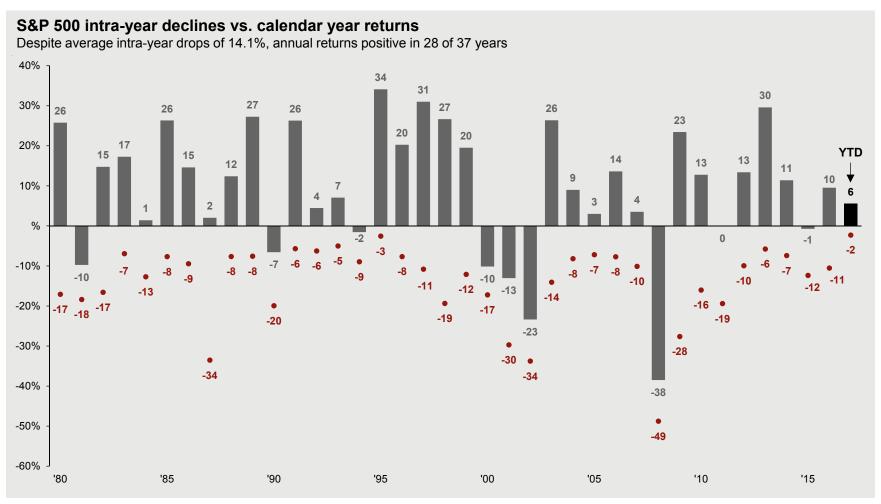
Cyclicals ex-energy vs. defensive valuations* Relative fwd. P/E ratio of cyclicals ex-energy vs. defensives, z-score 4 Cyclicals expensive relative to defensives 3 2 1 Current: 0.15 0 -2 Cyclicals cheap relative to defensives \ -3 '00 '16



Source: FactSet, J.P. Morgan Asset Management; (Left) Standard & Poor's, (Right) MSCI.

*Cyclical sectors include Consumer Discretionary, Information Technology, Industrials, Financials and Materials. REITs are excluded from this analysis. It is more appropriate to value a REIT by looking at its price relative to its funds from operations (FFO), an income measure that excludes depreciation. P/E ratios look at price relative to net income, a measure that includes depreciation, making the comparison of valuations across sectors inappropriate. Defensive sectors include Telecommunications, Health Care, Utilities and Consumer Staples. Sector valuations are equal weighted. **Cyclicals represent the MSCI USA Cyclical Sector index and defensives represent the MSCI USA Defensive Sector index. Guide to the Markets – U.S. Data are as of March 31, 2017.



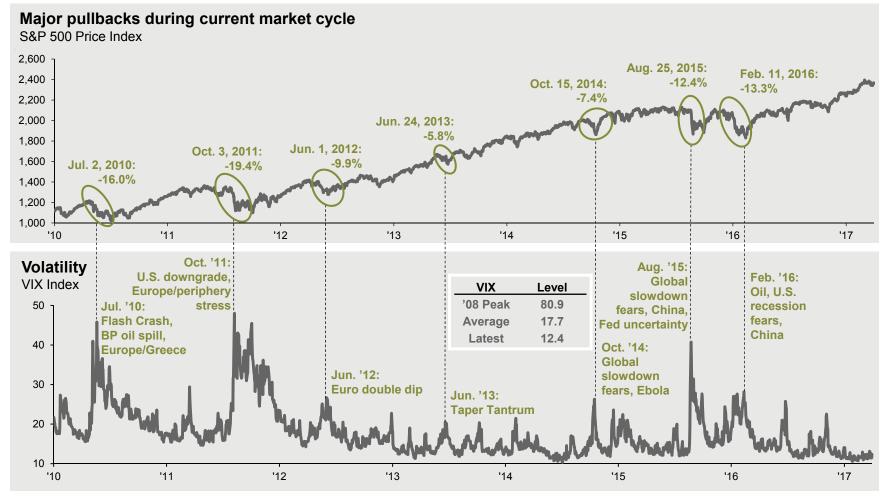


Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.

Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2016, over which time period the average annual return was 8.5%. The 2017 bar represents the year-to-date return and is not included in the average annual return calculation.

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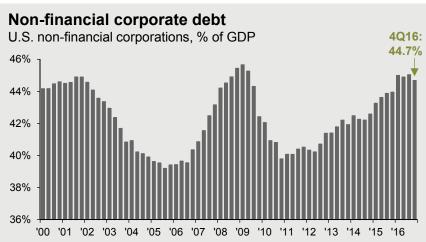


Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management; (Bottom) CBOE. Drawdowns are calculated as the prior peak to the lowest point. *Guide to the Markets – U.S.* Data are as of March 31, 2017.



Corporate cash as a % of current assets S&P 500 companies – cash and cash equivalents, quarterly 32% 30% 28% 26% 24% 22% 20% 18% 16% 100 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16

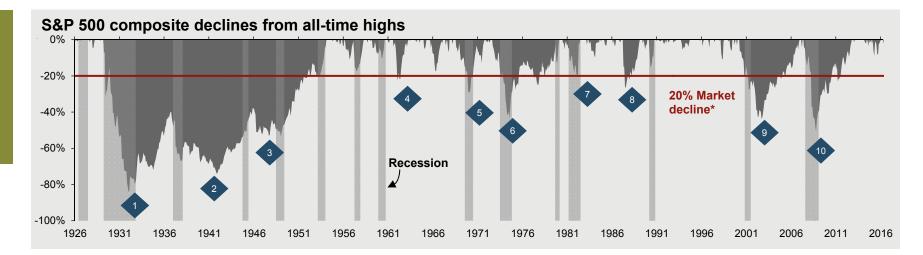






Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management; (Bottom left) BEA, Federal Reserve; (Bottom right) Bloomberg, BEA. M&A activity is the quarterly value of officially announced transactions, and capital expenditures are private non-residential fixed domestic investment. *Guide to the Markets – U.S.* Data are as of March 31, 2017.





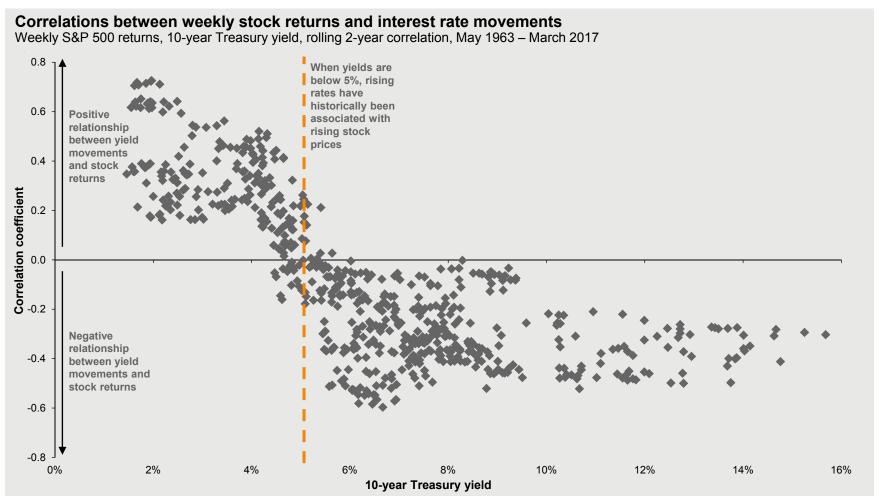
Characteristics of bull and bear markets **Bear markets** Macro environment **Bull markets** Market Bear Duration Commodity Aggressive Extreme Bull Bull Duration **Market Corrections** peak return* (months)* Recession spike Fed valuations begin date return (months) 1 Crash of 1929 - Excessive leverage, irrational exuberance Sep 1929 -86% 33 Jul 1926 152% 38 Mar 1937 -60% 63 Mar 1935 129% 24 2 1937 Fed Tightening - Premature policy tightening 3 Post WWII Crash - Post-war demobilization, recession fears May 1946 -30% 37 Apr 1942 158% 50 7 39% 4 Flash Crash of 1962 - Flash crash, Cuban Missile Crisis Dec 1961 -28% Oct 1960 14 5 Tech Crash of 1970 - Economic overheating, civil unrest Nov 1968 -36% 18 Oct 1962 103% 74 6 Stagflation - OPEC oil embargo Jan 1973 -48% 21 May 1970 74% 32 -27% 62% 33 7 Volcker Tightening - Whip Inflation Now Nov 1980 21 Mar 1978 3 229% 61 8 1987 Crash - Program trading, overheating markets Aua 1987 -34% Aug 1982 9 Tech Bubble - Extreme valuations, .com boom/bust Mar 2000 -49% 31 Oct 1990 417% 115 Oct 2002 10 Global Financial Crisis - Leverage/housing, Lehman collapse Oct 2007 -57% 17 101% 61 Current Cycle Mar 2009 249% -45% 25 156% 55 Averages

Source: FactSet, NBER, Robert Shiller, Standard & Poor's, J.P. Morgan Asset Management.

*A bear market is defined as a 20% or more decline from the previous market high. The bear return is the peak to trough return over the cycle. Periods of "Recession" are defined using NBER business cycle dates. "Commodity spikes" are defined as significant rapid upward moves in oil prices. Periods of "Extreme valuations" are those where S&P 500 last 12 months' P/E levels were approximately two standard deviations above long-run averages, or time periods where equity market valuations appeared expensive given the broader macroeconomic environment. "Aggressive Fed Tightening" is defined as Federal Reserve monetary tightening that was unexpected and/or significant in magnitude.

*Guide to the Markets – U.S. Data are as of March 31, 2017.





Source: FactSet, Standard & Poor's, FRB, J.P. Morgan Asset Management. Returns are based on price index only and do not include dividends. Markers represent monthly 2-year correlations only. *Guide to the Markets – U.S.* Data are as of March 31, 2017.



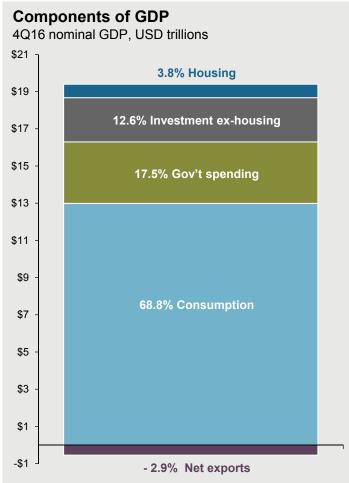
Strength of economic expansions Length of economic expansions and recessions Cumulative real GDP growth since prior peak, percent 125 54% Average length (months): Prior expansion peak Expansions: 47 months 1Q80 Recessions: 15 months 3Q81 44% 93 100 3Q90 months* 1Q01 34% 4Q07 75 4Q73 24% 50 14% 4% 25 -6% 16 24 32 40 2001 Number of quarters 1900 1912 1921 1933 1949 1961 1980

Source: BEA, NBER, J.P. Morgan Asset Management. *Chart assumes current expansion started in July 2009 and continued through March 2017, lasting 93 months so far. Data for length of economic expansions and recessions obtained from the National Bureau of Economic Research (NBER). These data can be found at www.nber.org/cycles/ and reflect information through March 2017.

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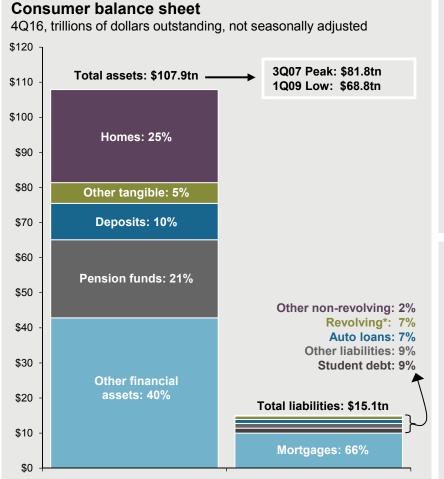


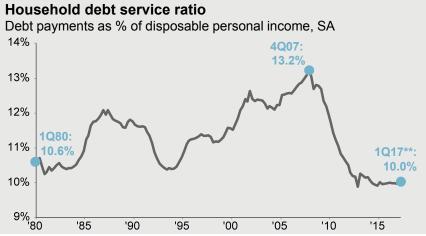
Real GDP Year-over-year % change 10% **Real GDP** 4Q16 YoY % chg: 2.0% 8% QoQ % chg: 2.1% 6% Average: 4% 2% 0% **Expansion** average: -2% 2.1% -4% -6% '70 '75 '80 '85 '00 . '05 '90 '95 '10 '15

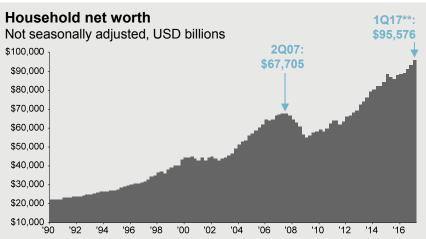


Source: BEA, FactSet, J.P. Morgan Asset Management. Values may not sum to 100% due to rounding. Quarter-over-quarter percent changes are at an annualized rate. Average represents the annualized growth rate for the full period. Expansion average refers to the period starting in the second quarter of 2009. *Guide to the Markets – U.S.* Data are as of March 31, 2017.



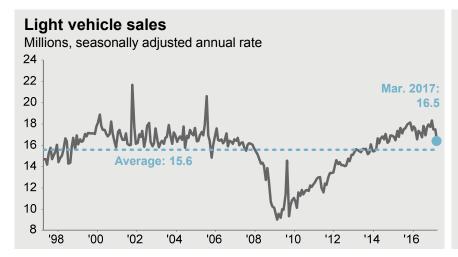


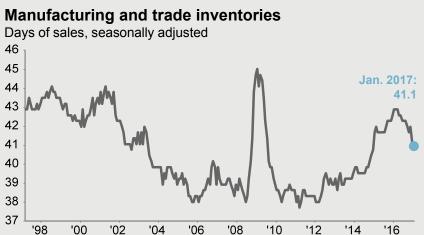




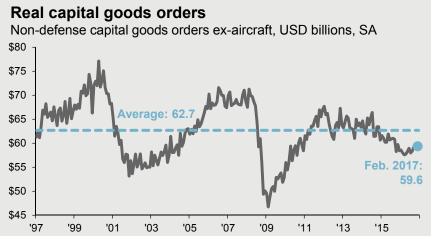
Source: FactSet, FRB, J.P. Morgan Asset Management; (Top and bottom right) BEA. Data include households and nonprofit organizations. SA – seasonally adjusted. *Revolving includes credit cards. Values may not sum to 100% due to rounding. **1Q17 are J.P. Morgan Asset Management estimates. Guide to the Markets – U.S. Data are as of March 31, 2017.







Housing starts Thousands, seasonally adjusted annual rate 2,500 2,000 Feb. 2017: 1,500 1,288 Average: 1,314 1,000 500 '98 '00 '02 '16 '04 '06 '08 '10 '12 '14

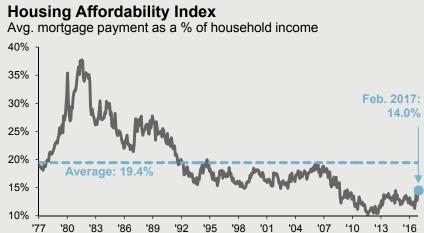


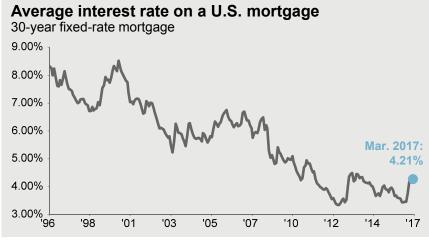
Source: J.P. Morgan Asset Management; (Top left) BEA; (Top and bottom right, bottom left) Census Bureau, FactSet. Capital goods orders deflated using the producer price index for capital goods with a base year of 2009. SA – seasonally adjusted.

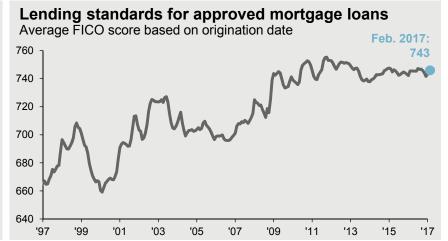
Guide to the Markets – U.S. Data are as of March 31, 2017.











Source: J.P. Morgan Asset Management; (Top left, bottom left and top right) FactSet; (Top left and top right) National Association of Realtors; (Bottom left) Freddie Mac; (Top right) BEA, Census Bureau; (Bottom right) McDash, J.P. Morgan Securitized Product Research.

Monthly mortgage payment assumes the prevailing 30-year fixed-rate mortgage rates and average new home prices excluding a 20% down payment.

Guide to the Markets – U.S. Data are as of March 31, 2017.



Growth in working-age population

'77-'86

Percent increase in civilian non-institutional population ages 16-64 1.8% Census Immigrant Native born forecast 1.6% 1.4% 1.3% 1.4% 1.2% 0.2% 1.0% 0.6% 1.0% 0.8% 0.4% 0.6% 0.6% 1.1% 0.3% 0.3% 0.8% 0.4% 0.6% 0.2% 0.25% 0.3% 0.04% 0.0%

'97-'06

'07-'16

'17-'26

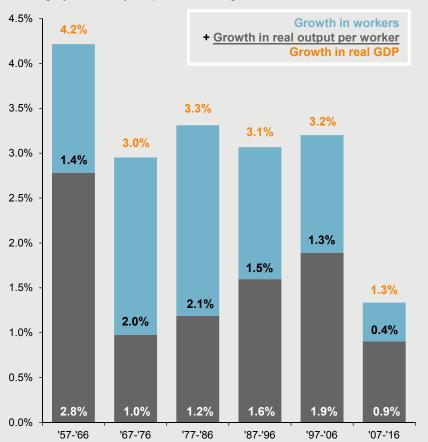
Growth in private non-residential capital stock

'87-'96

Non-residential fixed assets, year-over-year % change 6% 5% 4% 2016: 1.6%* 3% 2% 1% '70 '80 '65 '75 '85 '90 '95 '00 '05

Drivers of GDP growth

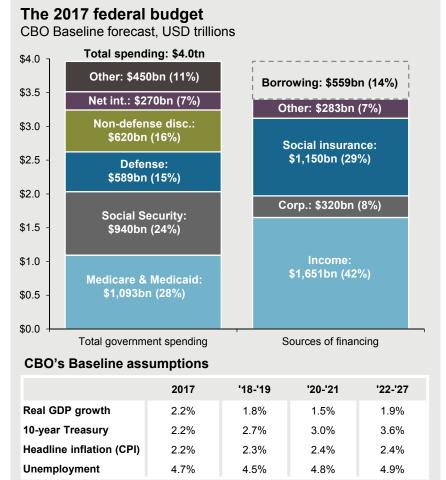
Average year-over-year percent change

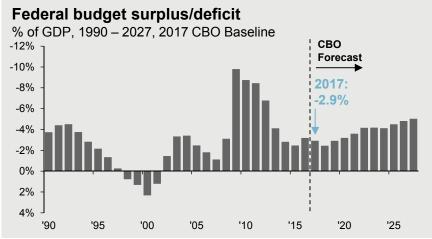


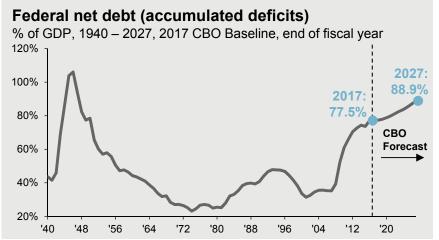
Source: J.P. Morgan Asset Management; (Top left) Census Bureau, DOD, DOJ; (Top left and right) BLS; (Right and bottom left) BEA. GDP drivers are calculated as the average annualized growth between 4Q of the first and last year. Future working age population is calculated as the total estimated number of Americans from the Census Bureau, controlled for military enrollment, growth in institutionalized population and demographic trends. Growth in working age population does not include illegal immigration; DOD Troop Readiness reports used to estimate percent of population enlisted. *J.P. Morgan Asset Management estimate.

Guide to the Markets - U.S. Data are as of March 31, 2017.



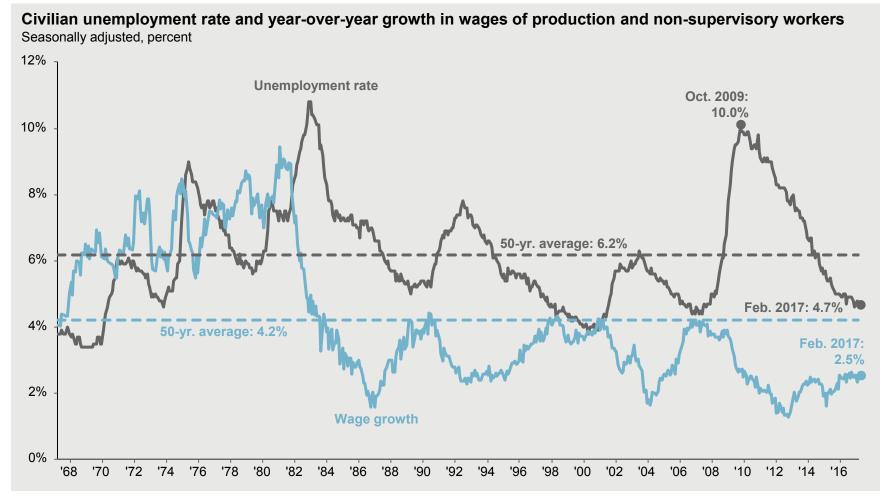






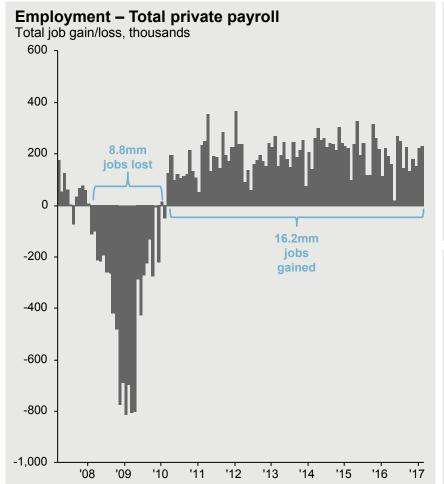
Source: CBO, J.P. Morgan Asset Management; (Top and bottom right) BEA, Treasury Department. 2017 Federal Budget is based on the Congressional Budget Office (CBO) January 2017 Baseline Budget Forecast. Other spending includes, but is not limited to, health insurance subsidies, income security and federal civilian and military retirement. Note: Years shown are fiscal years (Oct. 1 through Sep. 30). Guide to the Markets – U.S. Data are as of March 31, 2017.

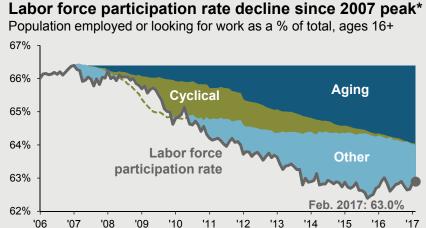


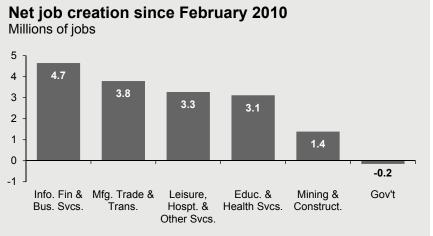


Source: BLS, FactSet, J.P. Morgan Asset Management. *Guide to the Markets – U.S.* Data are as of March 31, 2017.





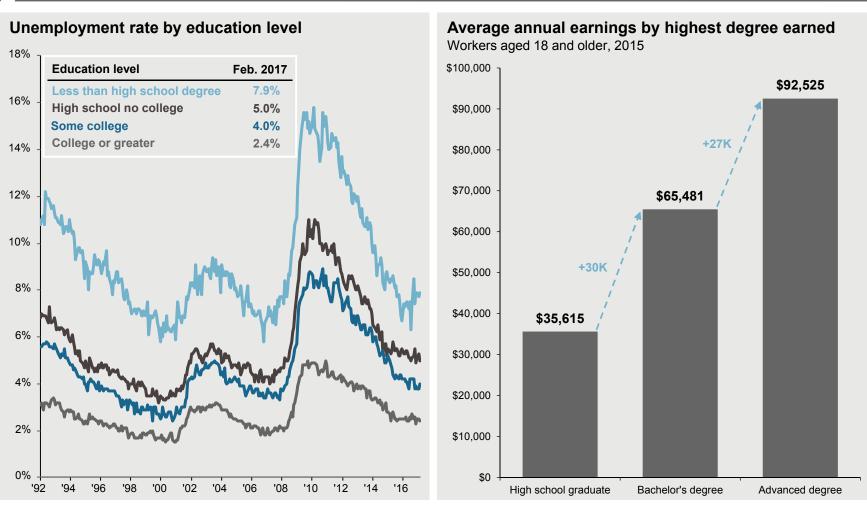




Source: BLS, FactSet, J.P. Morgan Asset Management. (Bottom right) Info. fin. & bus. svcs. = Information, financial activities and professional and business services; Mfg. trade & trans. = Manufacturing, trade, transportation and utilities; Leisure, hospt. & other svcs. = Leisure, hospitality and other services; Educ. & health svcs. = Education & health services; Mining and construct = Natural resources mining & construction; Gov't = Government. *Aging effect on the labor force participation rate is the estimated number of people who are no longer employed or looking for work because they are retired. Cyclical effect is the estimated number of people who lose their jobs and stop looking for work or do not look for work because of the economic conditions. Other represents the drop in labor force participation from the prior expansion peak that cannot be explained by age or cyclical effects. Estimates for reason of decline in labor force participation rate are made by J.P. Morgan Asset Management.

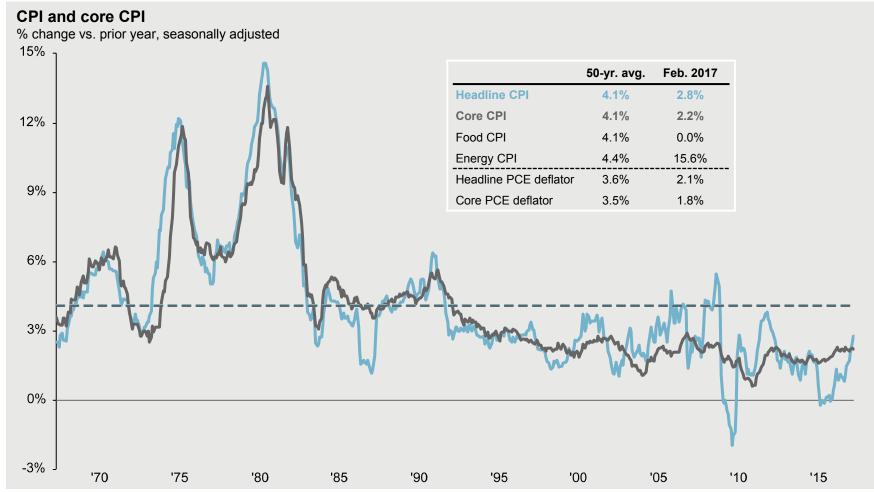
*Guide to the Markets – U.S. Data are as of March 31, 2017.





Source: J.P. Morgan Asset Management; (Left) BLS, FactSet; (Right) Census Bureau. Unemployment rates shown are for civilians aged 25 and older. Earnings by educational attainment comes from the Current Population Survey and is published under historical income tables by person by the Census Bureau. Guide to the Markets – U.S. Data are as of March 31, 2017.





Source: BLS, FactSet, J.P. Morgan Asset Management. CPI used is CPI-U and values shown are % change vs. one year ago and reflect February 2017 CPI data. Core CPI is defined as CPI excluding food and energy prices. The Personal Consumption Expenditure (PCE) deflator employs an evolving chain-weighted basket of consumer expenditures instead of the fixed-weight basket used in CPI calculations. Guide to the Markets – U.S. Data are as of March 31, 2017.



Trade balance and the U.S. dollar Current account balance, % of GDP and the monthly average of major currencies nominal trade-weighted index -7% 115 ■ Current account as % of GDP U.S. dollar index ▶ . 110 -6% 105 -5% 100 Mar. 2017: 94.7 -4% 95 -3% 90 85 -2% 4Q16: -2.4% 80 -1% . 75 0% 70 L 65 1% '12 '96 '98 '00 '02 '04 '06 '08 '10 '14 '16

Source: J.P. Morgan Asset Management; (Left) BEA; (Right) Federal Reserve, FactSet.
Currencies in the Trade Weighted U.S. Dollar Major Currencies Index are: British pound, euro, Swedish kroner, Australian dollar, Canadian dollar, Japanese yen and Swiss franc.

Guide to the Markets – U.S. Data are as of March 31, 2017.



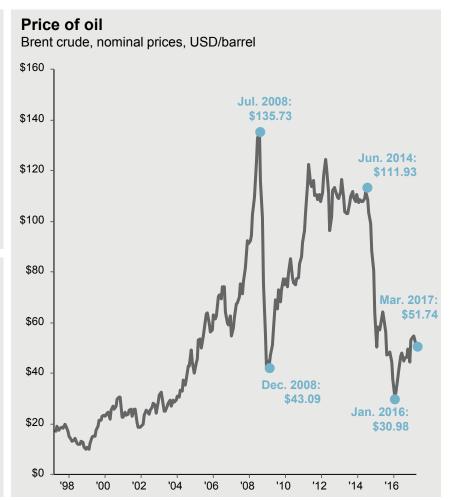
Change in production and consumption of liquid fuels

Production, consumption and inventories, millions of barrels per day

Production	2014	2015	2016	2017*	2018*	Growth since 2014
U.S.	14.1	15.1	14.8	15.4	16.4	16.1%
OPEC	36.6	38.0	39.0	39.5	40.2	9.7%
Global	93.8	96.8	97.2	98.2	99.9	6.5%
Consumption						
U.S.	19.1	19.5	19.6	19.8	20.2	5.8%
China	11.5	12.0	12.4	12.8	13.1	14.0%
Global	93.6	95.1	96.6	98.2	99.7	6.6%
Inventory Change	0.2	1.7	0.5	0.1	0.2	





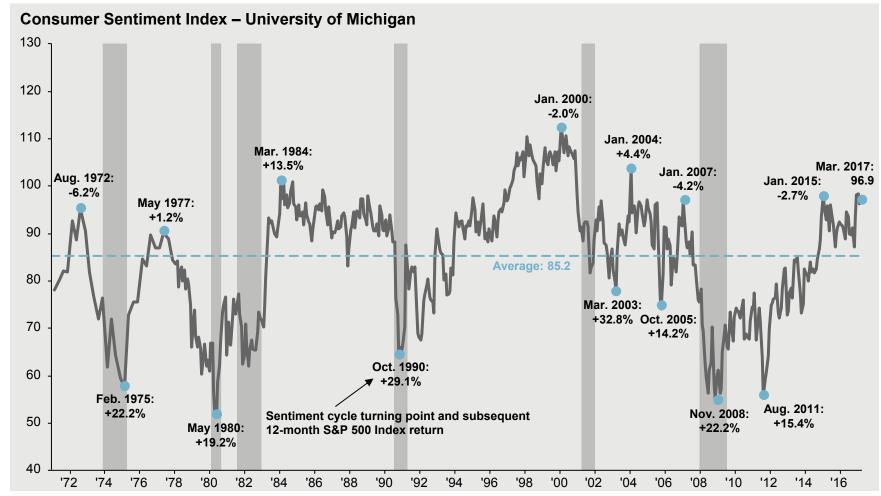


Source: J.P. Morgan Asset Management; (Top and bottom left) EIA; (Right) FactSet; (Bottom left) Baker Hughes.



^{*}Forecasts are from the March 2017 EIA Short-Term Energy Outlook and start in 2017.

^{**}U.S. crude oil inventories include the Strategic Petroleum Reserve (SPR). Active rig count includes both natural gas and oil rigs. Brent crude prices are monthly averages in USD using global spot ICE prices. Guide to the Markets – U.S. Data are as of March 31, 2017.

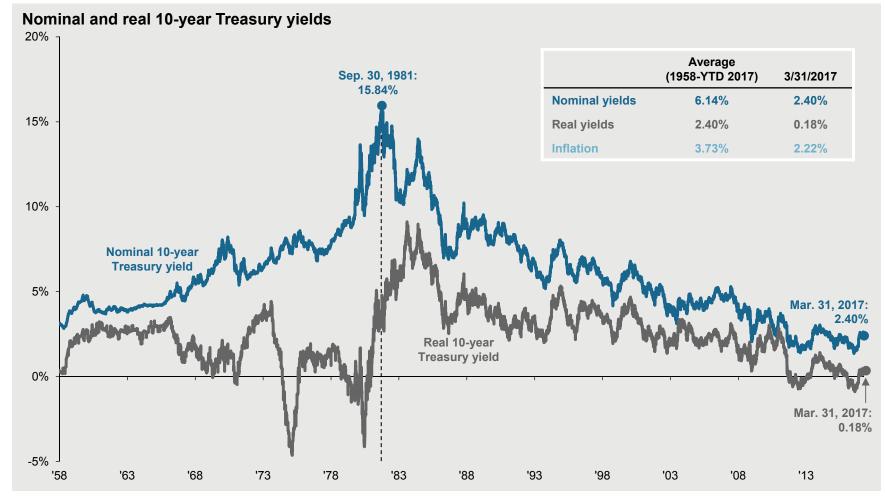


Source: Standard & Poor's, University of Michigan, FactSet, J.P. Morgan Asset Management.

Peak is defined as the highest index value before a series of lower lows, while a trough is defined as the lowest index value before a series of higher highs. Subsequent 12-month S&P 500 returns are price returns only, which excludes dividends.

Guide to the Markets – U.S. Data are as of March 31, 2017.

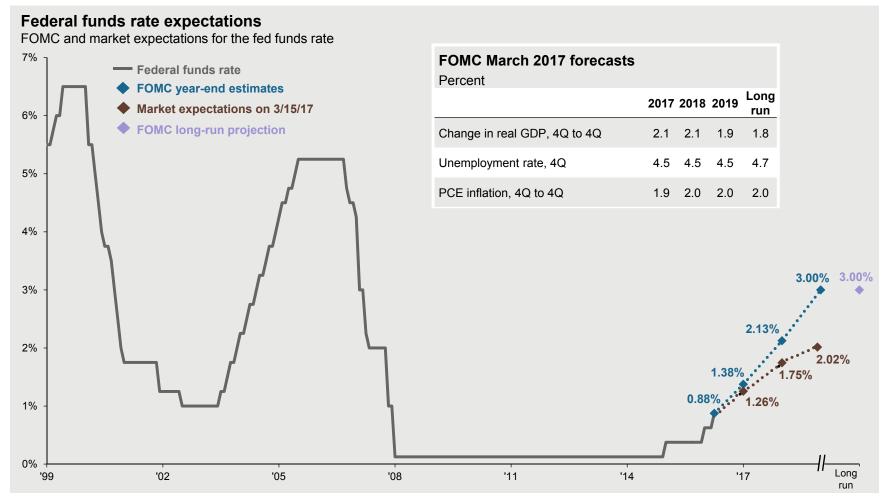




Source: BLS, Federal Reserve, J.P. Morgan Asset Management.
Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core CPI inflation for that month except for March 2017, where real yields are calculated by subtracting out February 2017 year-over-year core inflation.

Guide to the Markets – U.S. Data are as of March 31, 2017.





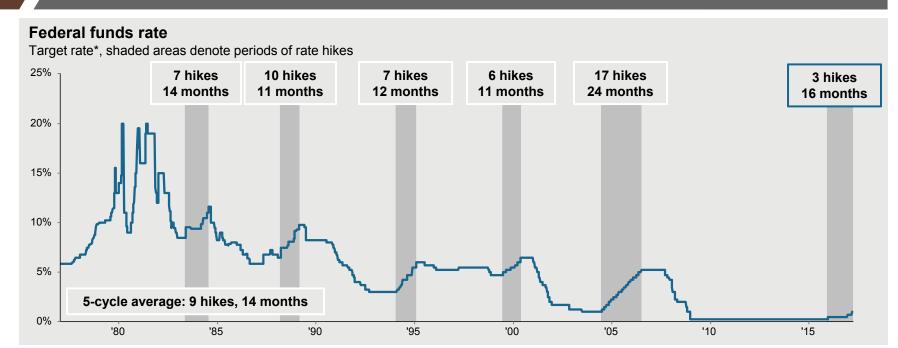
Source: FactSet, Federal Reserve, J.P. Morgan Asset Management.

Market expectations are the federal funds rates priced into the fed futures market as of the date of the March 2017 FOMC meeting.

Guide to the Markets – U.S. Data are as of March 31, 2017.



Historical impact of Fed tightening

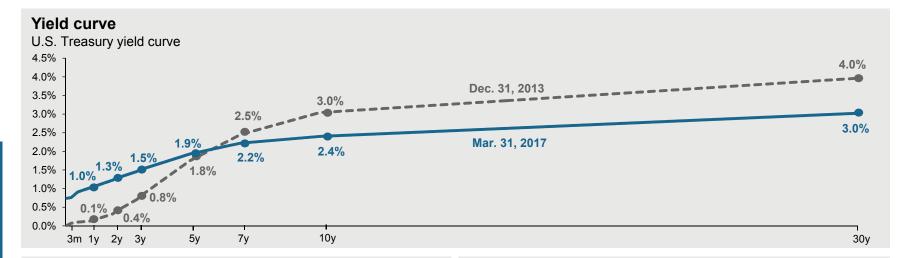


Market reaction during previous rate hiking cycles

	May 1983 – July 1984	March 1988 – February 1989	February 1994 – February 1995	June 1999 – May 2000	June 2004 – June 2006	Average of past five rate hiking cycles	Cycle beginning December 2015
Yield change (bps)							
Federal funds rate	313	325	300	175	425	308	75
2-year Treasury	311	227	305	121	238	240	25
10-year Treasury	274	91	185	50	52	130	10
S&P 500 return	-9.6%	6.8%	-2.1%	8.5%	12.0%	3.1%	14.0%
U.S. dollar	10.4%	1.7%	-4.7%	3.4%	-5.8%	1.0%	-0.3%

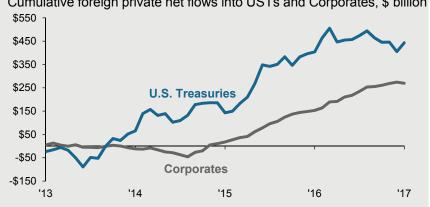
Source: FactSet, Federal Reserve, Standard & Poor's, J.P. Morgan Asset Management. S&P 500 returns are price returns and do not include reinvestment of dividends. Averages do not include the current cycle. *Between 1979 and 1982, the FOMC changed its approach to monetary policy, focusing on the money supply, rather than the federal funds rate. In the fall of 1982, however, the Federal Reserve shifted back to its approach of targeting the "price" rather than the "quantity" of money. Thus, because the federal funds rate was not the FOMC's key policy tool, we exclude increases in the federal funds rate between 1979 to 1982 in our analysis of rate hike cycles. *Guide to the Markets – U.S.* Data are as of March 31, 2017.





Private foreign investor net flows to U.S. fixed income

Cumulative foreign private net flows into USTs and Corporates, \$ billion



Correlation of government bonds

Correlation* between U.S. Treasury and German Bund yields 1.00 10-yr. bonds 0.80 0.60 0.40 0.20 0.00 -0.20 '10 '11 '12 '13 '14 '15 '16 '17

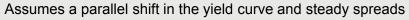
Source: FactSet, J.P. Morgan Asset Management; (Bottom left) U.S. Treasury. *Rolling six-month correlation of weekly change in yield.

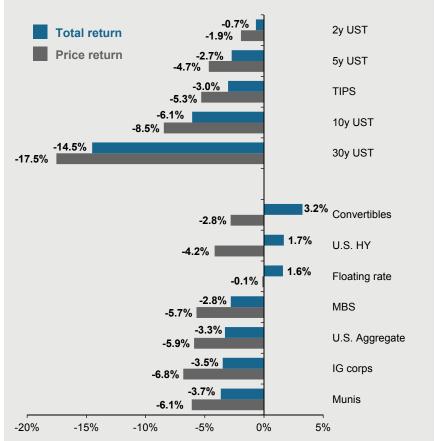
Guide to the Markets – U.S. Data are as of March 31, 2017.



			Yi	eld	Return
U.S. Treasuries	Correlation to 10-year	Avg. Maturity	3/31/2017	12/31/2016	2017 YTD
2-Year	0.63	2 years	1.27%	1.20%	0.26%
5-Year	0.91	5	1.93%	1.93%	0.46%
10-Year	1.00	10	2.40%	2.45%	0.79%
30-Year	0.93	30	3.02%	3.06%	1.30%
TIPS	0.57	10	0.43%	0.50%	1.26%
Sector					
Broad Market	0.86	8.2 years	2.61%	2.61%	0.82%
MBS	0.80	7.3	2.90%	2.85%	0.47%
Municipals	0.47	9.9	2.45%	2.64%	1.78%
Corporates	0.45	10.7	3.33%	3.37%	1.22%
High Yield	-0.25	6.2	5.84%	6.12%	2.70%
Floating Rate	-0.20	2.7	1.74%	1.76%	0.95%
Convertibles	-0.31	-	6.07%	6.18%	5.67%

Impact of a 1% rise in interest rates



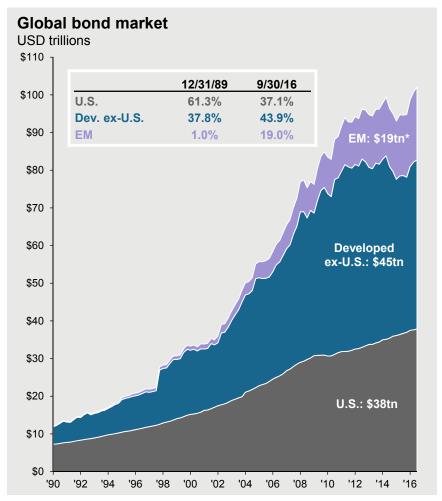


Source: Barclays, U.S. Treasury, FactSet, J.P. Morgan Asset Management. Sectors shown above are provided by Barclays and are represented by – Broad Market: U.S. Aggregate; MBS: U.S. Aggregate Securitized - MBS; Corporate: U.S. Corporates; Municipals: Muni Bond 10-year; High Yield: Corporate High Yield; TIPS: Treasury Inflation Protection Securities (TIPS). Floating Rate: FRN (BBB); Convertibles: U.S. Convertibles Composite. Yield and return information based on bellwethers for Treasury securities. Sector yields reflect yield to worst. Correlations are based on 10-years of monthly returns for all sectors. Change in bond price is calculated using both duration and convexity according to the following formula: New Price = (Price + (Price * -Duration * Change in Interest Rates))+(0.5 * Price * Convexity * (Change in Interest Rates)^2). Chart is for illustrative purposes only. Past performance is not indicative of future results.

Guide to the Markets - U.S. Data are as of March 31, 2017.



			Yi	eld	2017 YTI	D Return
Aggregates	Correl to 10-year	Duration	3/31/2017	12/31/2016	Local	USD
U.S.	0.86	6.0 years	2.61%	2.61%	0.82%	0.82%
Gbl. ex-U.S.	0.40	7.5	1.04%	0.99%	-	2.40%
Japan	0.53	9.0	0.18%	0.16%	-0.44%	4.21%
Germany	0.25	6.2	0.40%	0.32%	-0.31%	1.09%
UK	0.18	10.3	1.43%	1.50%	1.40%	2.61%
Italy	0.10	6.7	1.45%	1.15%	-1.69%	-0.32%
Spain	0.12	6.6	0.95%	0.85%	-0.42%	0.98%
Sector						
Euro Corp.	0.16	5.3 years	0.90%	0.87%	0.27%	1.67%
Euro HY	-0.37	4.1	3.90%	4.13%	1.97%	3.40%
EMD (\$)	0.21	6.6	5.46%	5.79%	-	3.87%
EMD (LCL)	0.10	5.0	6.55%	6.79%	3.23%	6.50%
EM Corp.	-0.21	5.7	4.73%	5.05%	-	2.97%

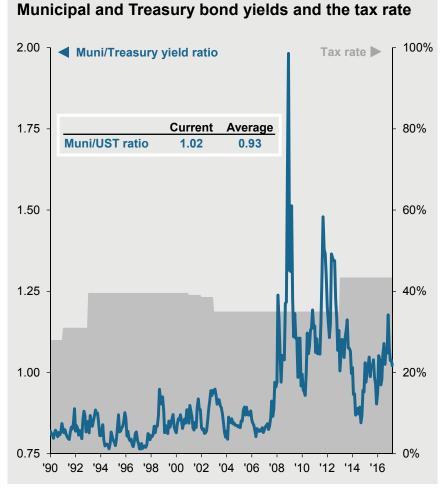


Source: J.P. Morgan Asset Management; (Left) FactSet, Barclays; (Right) BIS.

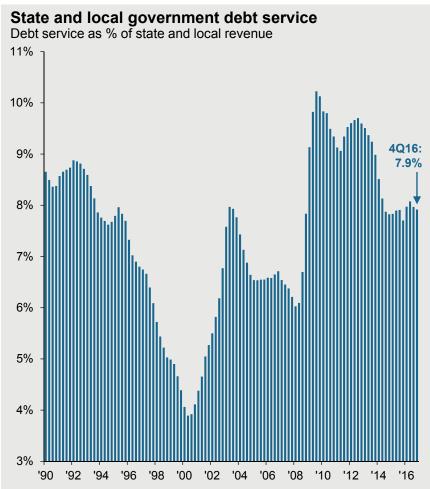
Fixed income sectors shown above are provided by Barclays and are represented by the global aggregate for each country except where noted. EMD sectors are represented by the J.P. Morgan EMBIG Diversified Index (USD), the J.P. Morgan GBI EM Global Diversified Index (LCL) and the J.P. Morgan CEMBI Broad Diversified Index (Corp). European Corporates are represented by the Barclays Euro Aggregate Corporate Index and the Barclays Pan-European High Yield index. Sector yields reflect yield to worst. Duration is modified duration. Correlations are based on 10 years of monthly returns for all sectors. Past performance is not indicative of future results. Global bond market regional breakdown may not sum to 100% due to rounding. *3Q16 Brazil domestic debt is a J.P. Morgan Asset Management estimate based on Brazil Central Bank data.

Guide to the Markets - U.S. Data are as of March 31, 2017.

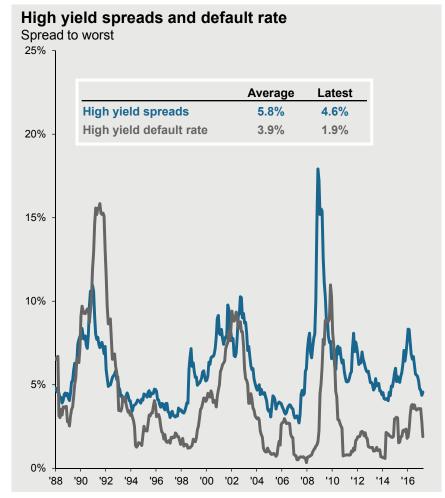


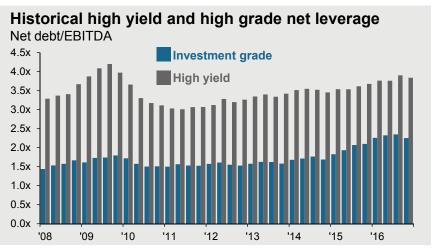


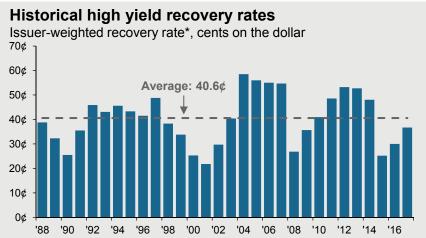
Source: J.P. Morgan Asset Management; (Left) FactSet, Barclays, FRB; (Right) BEA. *Guide to the Markets – U.S.* Data are as of March 31, 2017.











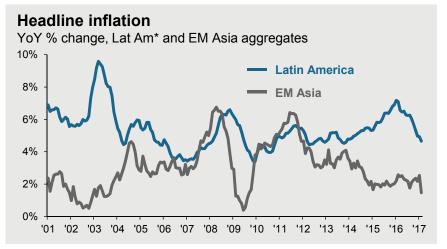
Source: J.P. Morgan Global Economic Research, J.P. Morgan Asset Management.

Default rates are defined as the par value percentage of the total market trading at or below 50% of par value and include any Chapter 11 filing, prepackaged filing or missed interest payments. Spreads indicated are benchmark yield to worst less comparable maturity Treasury yields. Yield to worst is defined as the lowest potential yield that can be received on a bond without the issuer actually defaulting and reflects the possibility of the bond being called at an unfavorable time for the holder. High yield is represented by the J.P. Morgan Domestic HY Index. Investment grade is represented by the J.P. Morgan U.S. Liquid Index. *Recovery rates are issuer-weighted and based on bond price 30 days after default date. The 2009 adjusted recovery rate is based on year-end prices. 2017 recovery rate is for the last 12 months and is not included in the average recovery rate calculated over the period.



Corporate and sovereign EMD spreads USD-denominated debt, percentage points over Treasury 12% **Average** Latest 10% **EM** sovereigns 3.4% 3.1% **EM** corporates 3.9% 2.6% 8% 6% 4% 0% '07 '09 '10 '17 '08 '13 '14 '15 '16

Regional weights in EMD indices USD-denominated corporate and sovereign regional weightings 50% Sovereigns 38.3% 36.7% 40% Corporates 29.7% 26.5% 30% 21.7% 19.5% 20% 15.8% 11.9% 10% 0% Middle East & Asia Europe Latin America Africa



Source: J.P. Morgan Global Economic Research, J.P. Morgan Asset Management. EM sovereigns: J.P. Morgan EMBIG Diversified Index; EM corporates: J.P. Morgan CEMBI Broad Diversified Index. *Lat Am index excludes Argentina, Ecuador and Venezuela. Guide to the Markets – U.S. Data are as of March 31, 2017.



Fixed income sector returns

GTM - u.s. | 41

EMD LCL. Tro 18.1% 13 TIPS M	3.7%	2009 High Yield 58.2% EMD USD	2010 EMD LCL. 15.7%	2011 TIPS	2012 EMD USD	2013	2014	2015	2016	YTD	Cum.	Ann.
18.1% 13 TIPS M	3.7% MBS	58.2%			EMD USD	High Viold						
TIPS M	MBS		15.7%			High Yield	Muni	Muni	High Yield	EMD LCL.	High Yield	High Yield
		EMDIISD		13.6%	17.4%	7.4%	8.7%	3.8%	17.1%	6.5%	105.2%	7.5%
	2 20/.	CIVID 03D	High Yield	Muni	EMD LCL.	MBS	Corp.	MBS	EMD USD	EMD USD	EMD USD	EMD USD
11.6% 8.	0.5 /0	29.8%	15.1%	12.3%	16.8%	-1.4%	7.5%	1.5%	10.2%	3.9%	94.6%	6.9%
ireas.	rclays Agg	EMD LCL.	EMD USD	Treas.	High Yield	Corp.	EMD USD	EMD USD	EMD LCL.	High Yield	Corp.	Corp.
	5.2%	22.0%	12.2%	9.8%	15.8%	-1.5%	7.4%	1.2%	9.9%	2.7%	70.3%	5.5%
Barclays Agg M	Muni	Corp.	Corp.	Corp.	Corp.	Asset	MBS	Treas.	Corp.	Muni	Asset Alloc.	Asset Alloc.
	1.5%	18.7%	9.0%	8.1%	9.8%	-1.9%	6.1%	0.8%	6.1%	1.8%	62.9%	5.0%
	sset Moc.	Asset Alloc.	Asset Alloc.	Asset	Asset	Barclays	Barclays	Barclays	Asset	Asset	Muni	Muni
	июс.).1%	14.7%	7.9%	8.1%	Alloc. 7.4%	Agg -2.0%	Agg 6.0%	Agg 0.5%	4.7%	Alloc. 1.6%	58.4%	4.7%
Asset II	TIPS	TIPS	Barclays Agg	Barclays Agg	TIPS	Muni	Asset Alloc.	Asset Alloc.	TIPS	TIPS	TIPS	TIPS
6.7% -2	2.4%	11.4%	6.5%	7.8%	7.0%	-2.2%	5.5%	-0.3%	4.7%	1.3%	53.3%	4.4%
EMD USD Co	Corp.	Muni	TIPS	EMD USD	Muni	Treas.	Treas.	Corp.	Barclays Agg	Corp.	Barclays Agg	Barclays Agg
6.2% -4	4.9%	9.9%	6.3%	7.3%	5.7%	-2.7%	5.1%	-0.7%	2.6%	1.2%	53.0%	4.3%
Corp. EMD	D LCL.	Barclays Agg	Treas.	MBS	Barclays Agg	EMD USD	TIPS	TIPS	MBS	Barclays Agg	MBS	MBS
4.6% -5	5.2%	5.9%	5.9%	6.2%	4.2%	-5.3%	3.6%	-1.4%	1.7%	0.8%	52.0%	4.3%
Muni EMD	D USD	MBS	MBS	High Yield	MBS	TIPS	High Yield	High Yield	Treas.	Treas.	Treas.	Treas.
4.3% -12	2.0%	5.9%	5.4%	5.0%	2.6%	-8.6%	2.5%	-4.5%	1.0%	0.7%	47.6%	4.0%
High Yield High	h Yield	Treas.	Muni	EMD LCL.	Treas.	EMD LCL.	EMD LCL.	EMD LCL.	Muni	MBS	EMD LCL.	EMD LCL.
1.9% -26	6.2%	-3.6%	4.0%	-1.8%	2.0%	-9.0%	-5.7%	-14.9%	-0.1%	0.5%	45.5%	3.8%

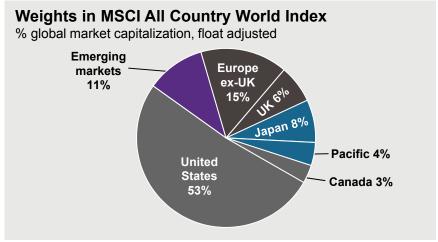
Source: Barclays, FactSet, J.P. Morgan Global Economic Research, J.P. Morgan Asset Management.

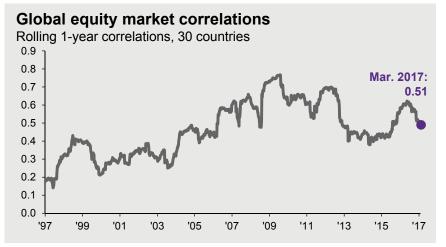
Past performance is not indicative of future returns. Fixed income sectors shown above are provided by Barclays unless otherwise noted and are represented by Broad Market: Barclays U.S. Aggregate Index; MBS: Fixed Rate MBS Index; Corporate: U.S. Corporates; Municipals: Muni Bond 10-Year Index; High Yield: U.S. Corporate High Yield Index; Treasuries: Global U.S. Treasury; TIPS: Global Inflation-Linked - U.S. TIPS; Emerging Debt USD: J.P. Morgan EMBIG Diversified Index; Emerging Debt LCL: J.P. Morgan EM Global Index. The "Asset Allocation" portfolio assumes the following weights: 20% in MBS, 20% in Corporate,15% in Municipals, 5% in Emerging Debt USD, 5% in Emerging Debt LCL, 10% in High Yield, 20% in Treasuries, 5% in TIPS. Asset allocation portfolio assumes annual rebalancing.

Guide to the Markets – U.S. Data are as of March 31, 2017.



2017	YTD	2016				
Local	USD	Local	USD			
5.8	7.0	9.7	8.5			
-	6.1	-	12.0			
4.9	7.4	5.9	1.5			
7.1	8.6	3.2	0.3			
8.0	11.8	8.5	8.0			
7.8	11.5	10.1	11.6			
•						
3.8	5.1	19.2	0.0			
5.9	7.3	9.2	6.0			
7.0	8.5	6.6	3.5			
0.0	4.6	-0.4	2.7			
13.1	12.9	1.2	1.1			
12.1	17.1	1.1	-1.4			
7.7	10.4	37.2	66.7			
-10.6	-4.6	35.1	55.9			
	5.8 - 4.9 7.1 8.0 7.8 3.8 5.9 7.0 0.0 13.1 12.1 7.7	5.8 7.0 - 6.1 4.9 7.4 7.1 8.6 8.0 11.8 7.8 11.5 3.8 5.1 5.9 7.3 7.0 8.5 0.0 4.6 13.1 12.9 12.1 17.1 7.7 10.4	Local USD Local 5.8 7.0 9.7 - 6.1 - 4.9 7.4 5.9 7.1 8.6 3.2 8.0 11.8 8.5 7.8 11.5 10.1 3.8 5.1 19.2 5.9 7.3 9.2 7.0 8.5 6.6 0.0 4.6 -0.4 13.1 12.9 1.2 12.1 17.1 1.1 7.7 10.4 37.2			



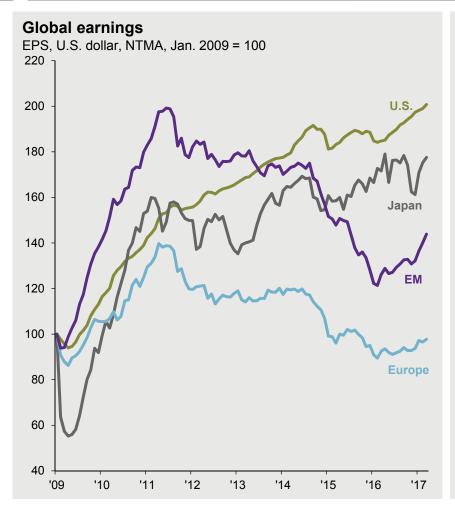


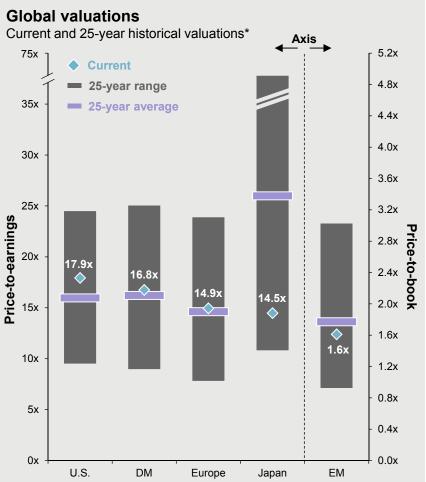
Source: FactSet, MSCI, Standard & Poor's, J.P. Morgan Asset Management.

All return values are MSCI Gross Index (official) data. Chart is for illustrative purposes only. Past performance is not indicative of future results. Please see disclosure page for index definitions. Countries included in global correlations include Argentina, South Africa, Japan, UK, Canada, France, Germany, Italy, Australia, Austria, Brazil, China, Colombia, Denmark, Finland, Hong Kong, India, Malaysia, Mexico, Netherlands, New Zealand, Peru, Philippines, Portugal, Korea, Spain, Taiwan, Thailand, Turkey, United States. *Guide to the Markets – U.S.* Data are as of March 31, 2017.



International equity earnings and valuations





Source: FactSet, MSCI, Standard & Poor's, J.P. Morgan Asset Management.

*Valuations refer to NTMA P/E for Europe, U.S., Japan and Developed Markets and P/B for emerging markets. Valuation and earnings charts use MSCI indices for all regions/countries, except for the U.S., which is the S&P 500. All indices use IBES aggregate earnings estimates, which may differ from earnings estimates used elsewhere in the book.

Guide to the Markets – U.S. Data are as of March 31, 2017.



Global Purcha	Global Purchasing Managers' Index for manufacturing																							
	Apr'15	May'15	Jun'15	Jul'15	Aug'15	Sep'15	Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	Apr'16	May'16	Jun'16	Jul'16	Aug'16	Sep'16	Oct'16	Nov'16	Dec'16	Jan'17	Feb'17	Mar'17
Global	50.8	51.1	50.9	50.8	50.5	50.4	51.0	51.0	50.7	50.9	50.0	50.7	50.2	50.1	50.4	51.0	50.7	51.0	51.9	52.0	52.7	52.7	53.0	53.0
Developed Markets	52.1	52.4	52.1	52.5	52.4	52.1	53.0	52.6	52.0	52.3	50.9	50.9	50.4	50.2	50.9	51.5	51.3	51.6	52.9	53.2	54.0	54.4	54.6	53.9
Emerging Markets	49.3	49.5	49.2	48.8	48.3	48.3	48.9	49.1	49.2	49.2	48.8	50.0	49.5	49.5	49.3	50.1	49.9	50.0	50.7	50.7	51.3	50.8	51.3	51.6
U.S.	54.1	54.0	53.6	53.8	53.0	53.1	54.1	52.8	51.2	52.4	51.3	51.5	50.8	50.7	51.3	52.9	52.0	51.5	53.4	54.1	54.3	55.0	54.2	53.3
Canada	49.0	49.8	51.3	50.8	49.4	48.6	48.0	48.6	47.5	49.3	49.4	51.5	52.2	52.1	51.8	51.9	51.1	50.3	51.1	51.5	51.8	53.5	54.7	55.5
UK	52.3	52.2	51.5	52.3	51.8	51.3	54.9	52.5	51.3	52.3	50.9	51.2	49.7	50.7	52.5	48.2	53.5	55.2	54.6	53.5	56.0	55.4	54.5	54.2
Euro Area	52.0	52.2	52.5	52.4	52.3	52.0	52.3	52.8	53.2	52.3	51.2	51.6	51.7	51.5	52.8	52.0	51.7	52.6	53.5	53.7	54.9	55.2	55.4	56.2
Germany	52.1	51.1	51.9	51.8	53.3	52.3	52.1	52.9	53.2	52.3	50.5	50.7	51.8	52.1	54.5	53.8	53.6	54.3	55.0	54.3	55.6	56.4	56.8	58.3
France	48.0	49.4	50.7	49.6	48.3	50.6	50.6	50.6	51.4	50.0	50.2	49.6	48.0	48.4	48.3	48.6	48.3	49.7	51.8	51.7	53.5	53.6	52.2	53.3
Italy	53.8	54.8	54.1	55.3	53.8	52.7	54.1	54.9	55.6	53.2	52.2	53.5	53.9	52.4	53.5	51.2	49.8	51.0	50.9	52.2	53.2	53.0	55.0	55.7
Spain	54.2	55.8	54.5	53.6	53.2	51.7	51.3	53.1	53.0	55.4	54.1	53.4	53.5	51.8	52.2	51.0	51.0	52.3	53.3	54.5	55.3	55.6	54.8	53.9
Greece	46.5	48.0	46.9	30.2	39.1	43.3	47.3	48.1	50.2	50.0	48.4	49.0	49.7	48.4	50.4	48.7	50.4	49.2	48.6	48.3	49.3	46.6	47.7	46.7
Ireland	55.8	57.1	54.6	56.7	53.6	53.8	53.6	53.3	54.2	54.3	52.9	54.9	52.6	51.5	53.0	50.2	51.7	51.3	52.1	53.7	55.7	55.5	53.8	53.6
Australia	48.0	52.3	44.2	50.4	51.7	52.1	50.2	52.5	51.9	51.5	53.5	58.1	53.4	51.0	51.8	56.4	46.9	49.8	50.9	54.2	55.4	51.2	59.3	57.5
Japan	49.9	50.9	50.1	51.2	51.7	51.0	52.4	52.6	52.6	52.3	50.1	49.1	48.2	47.7	48.1	49.3	49.5	50.4	51.4	51.3	52.4	52.7	53.3	52.4
China	48.9	49.2	49.4	47.8	47.3	47.2	48.3	48.6	48.2	48.4	48.0	49.7	49.4	49.2	48.6	50.6	50.0	50.1	51.2	50.9	51.9	51.0	51.7	51.2
Indonesia	46.7	47.1	47.8	47.3	48.4	47.4	47.8	46.9	47.8	48.9	48.7	50.6	50.9	50.6	51.9	48.4	50.4	50.9	48.7	49.7	49.0	50.4	49.3	50.5
Korea	48.8	47.8	46.1	47.6	47.9	49.2	49.1	49.1	50.7	49.5	48.7	49.5	50.0	50.1	50.5	50.1	48.6	47.6	48.0	48.0	49.4	49.0	49.2	48.4
Taiw an	49.2	49.3	46.3	47.1	46.1	46.9	47.8	49.5	51.7	50.6	49.4	51.1	49.7	48.5	50.5	51.0	51.8	52.2	52.7	54.7	56.2	55.6	54.5	56.2
India	51.3	52.6	51.3	52.7	52.3	51.2	50.7	50.3	49.1	51.1	51.1	52.4	50.5	50.7	51.7	51.8	52.6	52.1	54.4	52.3	49.6	50.4	50.7	52.5
Brazil	46.0	45.9	46.5	47.2	45.8	47.0	44.1	43.8	45.6	47.4	44.5	46.0	42.6	41.6	43.2	46.0	45.7	46.0	46.3	46.2	45.2	44.0	46.9	49.6
Mexico	53.8	53.3	52.0	52.9	52.4	52.1	53.0	53.0	52.4	52.2	53.1	53.2	52.4	53.6	51.1	50.6	50.9	51.9	51.8	51.1	50.2	50.8	50.6	51.5
Russia	48.9	47.6	48.7	48.3	47.9	49.1	50.2	50.1	48.7	49.8	49.3	48.3	48.0	49.6	51.5	49.5	50.8	51.1	52.4	53.6	53.7	54.7	52.5	52.4

Source: Markit, J.P. Morgan Asset Management.

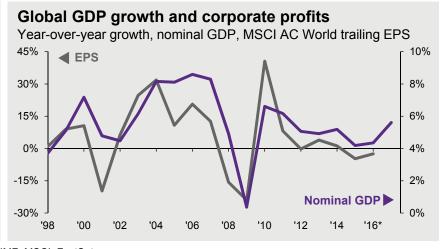
Heatmap colors are based on PMI relative to the 50 level, which indicates acceleration or deceleration of the sector, for the time period shown. Guide to the Markets – U.S. Data are as of March 31, 2017.



Global reflation GTM - u.s. | 45

Components of global growth Nominal GDP growth broken down into real GDP growth and inflation 10% Inflation 8.6% 8.3% Real GDP 8% **Nominal GDP** 6.6% 6.2% 5.6% 6% 5.1% 4.9% 4.9% 4% 2% 0% -2% -4% 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016* 2017*





Source: J.P. Morgan Asset Management; (Left) IMF; (Top right) Bloomberg; (Bottom right) IMF, MSCI, FactSet.

Nominal GDP used is based on purchasing power parity (PPP) valuation of country GDP. *2016 and 2017 are IMF estimates. **Inflation breakevens are calculated by subtracting 10-year inflation-protected securities from 10-year nominal yields. Germany inflation breakeven data begins in June 2009.

Guide to the Markets – U.S. Data are as of March 31, 2017.



-\$400 '09

'10

'11

Central bank balance sheet expansion* USD billions, balance sheet expansion planned for next 12 months \$2,400 \$2,000 \$1,600 \$1,200 \$800 \$400 \$0

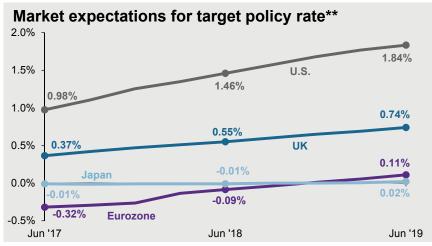
'12

'13

'14

'15

'16



Fiscal drag Reduction in structural deficits, % of potential GDP 5% 2011 - 2016More fiscal drag 4.3% 2017 - 2021*** 4% 3.6% 3% 2.8% 2.6% 1.9% 2% 1.8% 1% 0.5% Less fiscal drag 0% -0.1% -1% U.S. UK

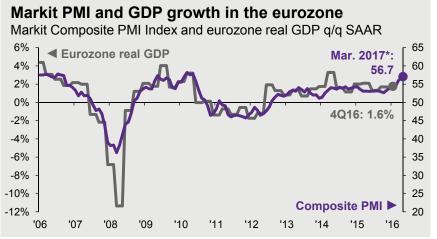
Eurozone

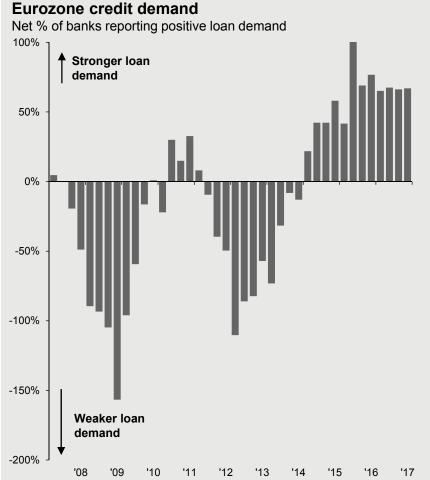
Source: J.P. Morgan Asset Management; (Top left) Bank of England, Bank of Japan, European Central Bank, FactSet, Federal Reserve System, J.P. Morgan Global Economic Research: (Bottom left) Bloomberg: (Right) IMF.

*Includes the Bank of Japan (BoJ), Bank of England (BoE), European Central Bank (ECB) and Federal Reserve. Balance sheet expansion assumes no more quantitative easing (QE) from the Fed, extension of ECB QE to end of 2017, extension of BoE QE to Feb. 2018 and continued BoJ QE. **Target policy rates for Japan are estimated using EuroYen 3m futures contracts less a risk premium of 6bps. ***Eurozone forecasts past 2017 are JPMAM estimates calculated by aggregating individual country data. Government deficits are calculated by the IMF as the general government structural balance. The structural balance excludes the normal impact of the business cycle, providing a clearer measure of the independent impact of changes in government spending and taxation on demand in the economy. Guide to the Markets - U.S. Data are as of March 31, 2017.



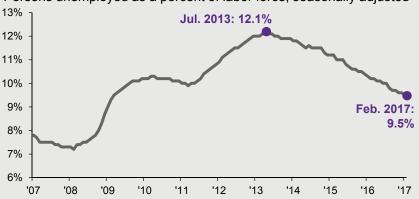
Japan





Eurozone unemployment

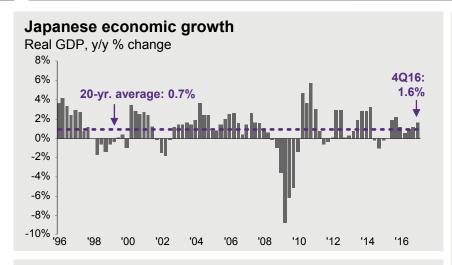
Persons unemployed as a percent of labor force, seasonally adjusted



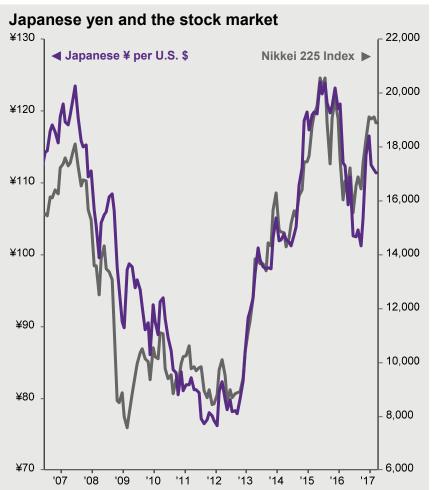
Source: FactSet, J.P. Morgan Asset Management; (Top left) Markit; (Top left and bottom left) Eurostat; (Right) ECB. SAAR – Seasonally adjusted annual rate. *Eurozone composite PMI is a flash estimate. Eurozone shown is the aggregate of the 19 countries that currently use the euro.

*Guide to the Markets – U.S. Data are as of March 31, 2017.





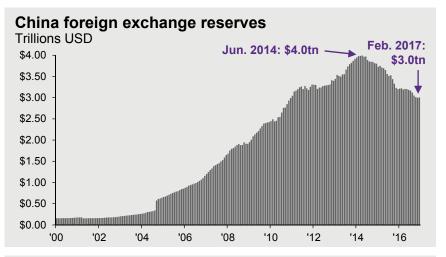


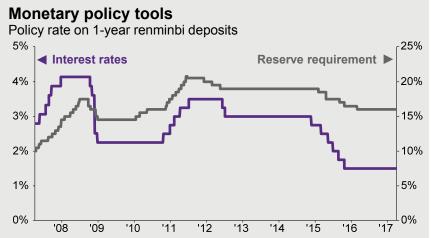


Source: FactSet, J.P. Morgan Asset Management; (Top and bottom left) Japanese Cabinet Office; (Right) Nikkei. Guide to the Markets – U.S. Data are as of March 31, 2017.



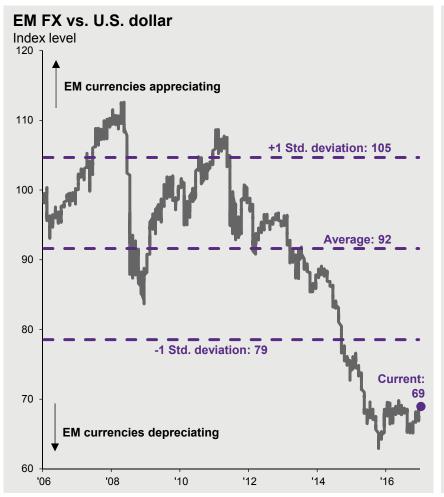
China real GDP contribution Year-over-year % change 16% Investment Consumption 9.4% **Net exports** 10.6% 12% 9.6% 9.7% 8.1% 7.1% 7.9% 7.8% 4.4% 8% 7.3% 7.0% 6.7% 5.1% 3.4% 4.3% 2.8% 3.4% 2.9% 4% 5.9% 5.3% 4.3% 4.8% 4.3% 4.3% 3.6% 4.1% 3.6% 0.3% 0.3% 0.2% 0% -0.5% -0.1% -1.3% -0.1% -0.8% -4.0% -4% 2008 2009 2010 2016 2011 2013

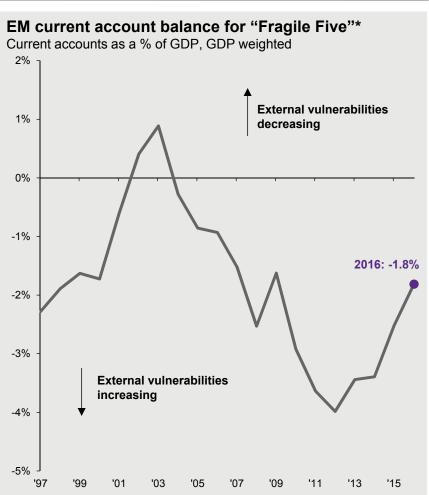




Source: FactSet, J.P. Morgan Asset Management; (Left) CEIC; (Top and bottom right) People's Bank of China. *Guide to the Markets – U.S.* Data are as of March 31, 2017.

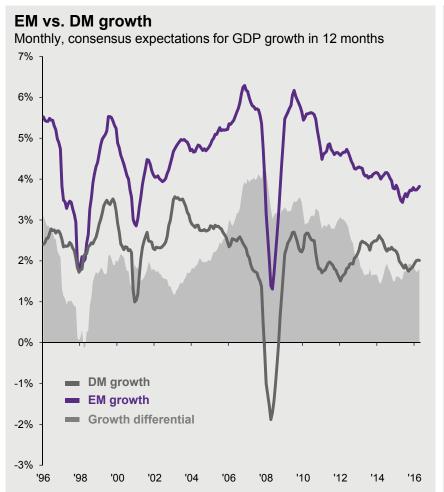






Source: J.P. Morgan Asset Management; (Left) J.P. Morgan Global Economic Research; (Right) IMF. *Fragile Five includes Brazil, India, Indonesia, South Africa and Turkey. 2016 is an IMF forecast. *Guide to the Markets – U.S.* Data are as of March 31, 2017.







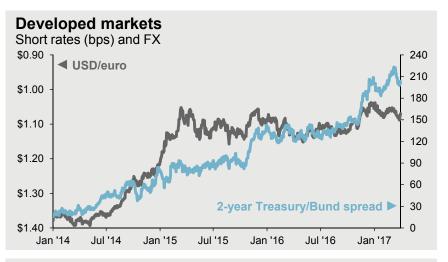
Source: FactSet, MSCI, Consensus Economics, J.P. Morgan Asset Management.

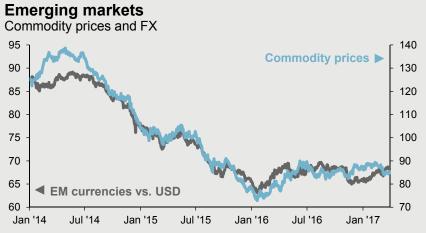
Guide to the Markets – U.S. Data are as of March 31, 2017.



[&]quot;Growth differential" is consensus estimates for EM growth in the next 12 months minus consensus estimates for DM growth in the next 12 months, provided by Consensus Economics.

Real effective exchange rates* FX adjusted for relative inflation changes vs. 10-year average Cheap relative to average Expensive relative to average Russia Korea U.S. China India Brazil Indonesia Australia Mexico **Graph Key** UK Current Canada ■ 10-year range Japan Eurozone Turkey 0.60 0.80 1.60 1 80 1.00 1.20 1 40





Source: J.P. Morgan Asset Management; (Left and bottom right) J.P. Morgan Global Economic Research; (Top right) FactSet, Tullett Prebon; (Bottom right) Bloomberg.

*Real effective exchange rates (REERs) compare the value of a currency to a weighted basket of several foreign currencies. They are deflated using a producer price index, except for Indonesia, which uses a consumer price index. EM currencies is the J.P. Morgan Emerging Market Currencies Index. Commodity prices is the Bloomberg Commodity Price Index.

*Guide to the Markets – U.S. Data are as of March 31, 2017.



Ann. Volatility

16%

20%

24%

3%

12%

4%

8%

8%

20%

25%

7%

11%

_	U.S. Large Cap	EAFE	EME	Bonds	Corp. HY	Munis	Currcy.	EMD	Cmdty.	REITs	Hedge funds	Private equity
U.S. Large Cap	1.00	0.89	0.79	-0.29	0.75	-0.12	-0.46	0.60	0.53	0.77	0.82	0.83
EAFE		1.00	0.90	-0.14	0.79	0.00	-0.64	0.71	0.60	0.66	0.86	0.82
ЕМЕ			1.00	-0.04	0.85	0.09	-0.68	0.82	0.67	0.55	0.86	0.80
Bonds				1.00	-0.06	0.81	-0.21	0.27	-0.11	0.02	-0.21	-0.29
Corp. HY					1.00	0.12	-0.50	0.88	0.66	0.67	0.80	0.69
Munis						1.00	-0.19	0.46	-0.08	0.09	-0.02	-0.16
Currencies							1.00	-0.60	-0.62	-0.38	-0.47	-0.59
EMD								1.00	0.58	0.60	0.67	0.59
Commodities									1.00	0.40	0.71	0.69
REITs										1.00	0.52	0.59
Hedge funds											1.00	0.87
Private equity												1.00

Source: Barclays Inc., Bloomberg, Cambridge Associates, Credit Suisse/Tremont, FactSet, Federal Reserve, MSCI, NCREIF, Standard & Poor's, J.P. Morgan Asset Management.

Indexes used – Large Cap: S&P 500 Index; Currencies: Federal Reserve Trade Weighted Dollar; EAFE: MSCI EAFE; EME: MSCI Emerging Markets; Bonds: Barclays Aggregate; Corp HY: Barclays Corporate High Yield; EMD: Barclays Emerging Market; Cmdty.: Bloomberg Commodity Index; Real Estate: NAREIT ODCE Index; Hedge Funds: CS/Tremont Hedge Fund Index; Private equity: Cambridge Associates Global Buyout & Growth Index. Private equity data are reported on a one quarter lag. All correlation coefficients and annualized volatility calculated based on quarterly total return data for period 3/31/07 to 3/31/17. This chart is for illustrative purposes only. Guide to the Markets – U.S. Data are as of March 31, 2017.

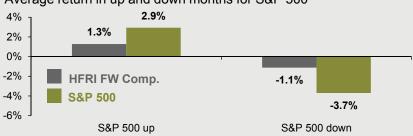


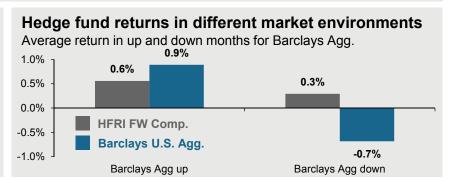
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	YTD	15-yrs.	'02-'16 Vol.
Global Bond	Large Cap	Event Driven	Equity L/S	Large Cap	Macro	Global Bond	Large Cap	Large Cap	Global Bond	Large Cap	Large Cap	Large Cap	Market Neutral	Large Cap	Large Cap	Large Cap	Large Cap
16.5%	28.7%		10.0%	15.8%	11.4%	4.8%	26.5%	15.1%	5.6%	16.0%	32.4%	13.7%	4.5%	12.0%	5.9%	6.9%	14.8%
Macro		Large Cap	HFRIFW Comp.		Equity L/S	Macro	Relative Value	Relative Value	Large Cap	Relative Value	Equity L/S	Macro	Large Cap		Equity L/S	Event Driven	Equity L/S
5.5%		10.9%	9.1%		11.4%	4.7%	23.0%	12.5%	2.1%	9.7%	14.5%	5.8%	1.4%		3.1%	6.4%	10.0%
Relative Value	Macro	HFRIFW Comp.		HFRI FW Comp.	HFRI FW Comp.	Market Neutral	Equity L/S		Relative Value			Relative Value	Macro	Relative Value		Relative Value	Event Driven
5.3%	21.5%	9.3%		13.3%	11.0%	-3.0%	22.3%		0.8%	6.5%		5.3%	0.4%	7.7%		6.0%	8.5%
Market Neutral	HFRI FW Comp.	Global Bond	Market Neutral	Equity L/S	Relative Value	Relative Value		Equity L/S		Equity L/S	HFRI FW Comp.	HFRI FW Comp.	Relative Value	HFRI FW Comp.	HFRIFW Comp.	HFRI FW Comp.	HFRI FW Comp.
0.9%	17 . 1%	9.3%	6.1%	12.8%	10.0%	- 17.3%	20.3%	8.9%	-0.5%	4.7%	9.6%	4.3%	0.2%	5.5%	2.2%	5.4%	7.5%
HFRI FW Comp.	Equity L/S	Equity L/S	Macro	Relative Value	Global Bond	HFRIFW Comp.	HFRIFW Comp.	HFRIFW Comp.	Macro	HFRIFW Comp.	Relative Value	Equity L/S	Equity L/S	Equity L/S	Relative Value	Macro	Relative Value
0.4%	16.9%	7.9%	6.1%	12.2%	9.5%	- 18.7%	18.6%	8.5%	-0.7%	4.4%	7.5%	3.6%	-0.2%	5.5%	2.1%	5.0%	6.3%
Equity L/S	Global Bond	Macro	Relative Value	Macro			Global Bond	Global Bond	Market Neutral	Global Bond	Market Neutral	Market Neutral	HFRIFW Comp.	Market Neutral	Global Bond	Global Bond	Global Bond
- 1.7%	12.5%	7.5%	5.3%	8.2%		-20.8%	6.9%	5.5%	- 1.5%	4.3%	6.4%	3.2%	-0.2%	2.2%	1.6%	4.9%	6.1%
	Relative Value	Relative Value	Large Cap	Market Neutral	Market Neutral	Equity L/S	Macro	Macro	HFRIFW Comp.	Market Neutral	Macro			Global Bond	Macro	Equity L/S	Macro
	9.1%	6.1%	4.9%	7.0%	5.7%	-26.4%	6.9%	3.2%	-2.0%	3.1%	0.1%			2.1%	0.4%	4.9%	5.2%
Large Cap	Market Neutral	Market Neutral	Global Bond	Global Bond	Large Cap	Large Cap	Market Neutral	Market Neutral	Equity L/S	Macro	Global Bond	Global Bond	Global Bond	Macro	Market Neutral	Market Neutral	Market Neutral
- 22.1%	3.3%	3.4%	-4.5%	6.6%	5.5%	-37.0%	- 1.7%	2.5%	-4.3%	- 1.3%	-2.6%	0.6%	-3.2%	1.2%	0.4%	2.7%	2.7%

Hedge fund returns in different market environments

Average return in up and down months for S&P 500

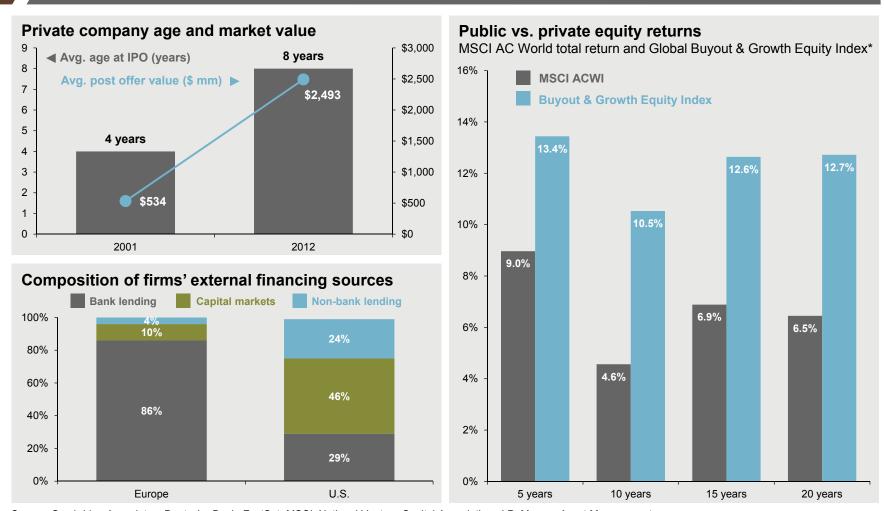
Hedge funds





Source: Barclays, FactSet, HFRI, Standard & Poor's, J.P. Morgan Asset Management. Returns in different market environments are based on monthly returns over the past 15 years through February 28, 2017, due to data availability. *Guide to the Markets – U.S.* Data are as of March 31, 2017.

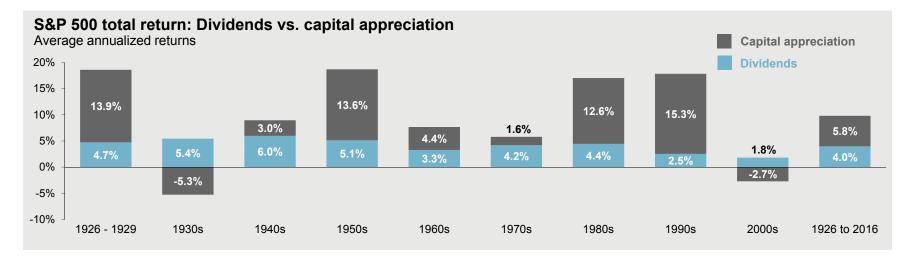


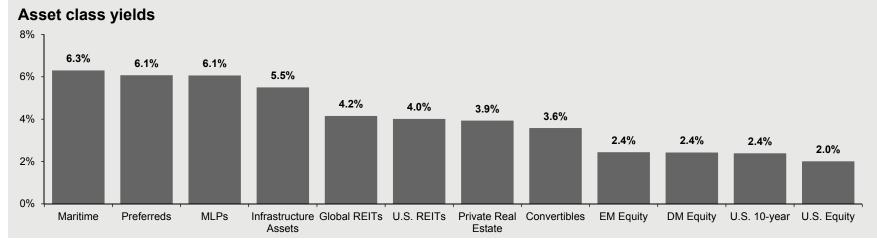


Source: Cambridge Associates, Deutsche Bank, FactSet, MSCI, National Venture Capital Association, J.P. Morgan Asset Management. Age at IPO is defined as time elapsed from first funding round until IPO date. *Data as of 3Q16. Guide to the Markets – U.S. Data are as of March 31, 2017.



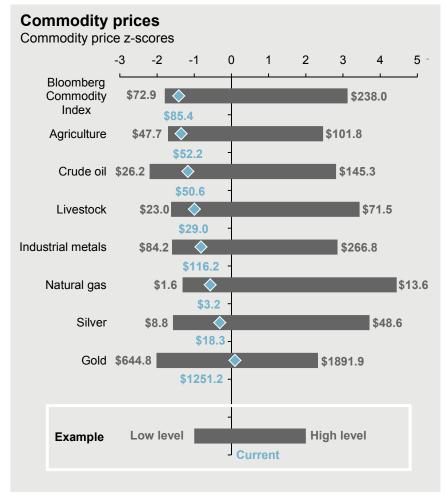
Yield alternatives: Domestic and global

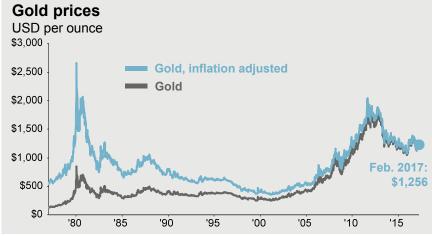


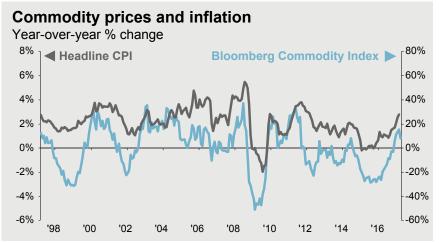


Source: FactSet, J.P. Morgan Asset Management; (Top) Ibbotson, Standard & Poor's; (Bottom) Alerian, BAML, Barclays, Clarkson, Drewry Maritime Consultants, Federal Reserve, FTSE, MSCI, NCREIF, Standard & Poor's. Dividend vs. capital appreciation returns are through 12/31/16. Yields are as of 3/31/17, except maritime and infrastructure assets (12/31/16); Infrastructure assets yield is internal estimate. Maritime: Unlevered yields for maritime assets are calculated as the difference between charter rates (rental income) and operating expenses as a percentage of current asset value. Yields for each of the sub-vessel types above are calculated and the respective weightings are applied to calculate sub-sector specific yields, and then weighted to arrive at the current indicative yield for the World Maritime Fleet; MLPs: Alerian MLP; Preferreds: BAML Hybrid Preferred Securities; Private Real Estate: NCREIF ODCE; Global/U.S. REITs: FTSE NAREIT Global/USA REITs; Infrastructure Assets: MSCI Global Infrastructure Asset Index; Convertibles: Barclays U.S. Convertibles Composite; EM Equity: MSCI Emerging Markets; DM Equity: MSCI The World Index; U.S. Equity: MSCI USA. *Guide to the Markets – U.S.* Data are as of March 31, 2017.









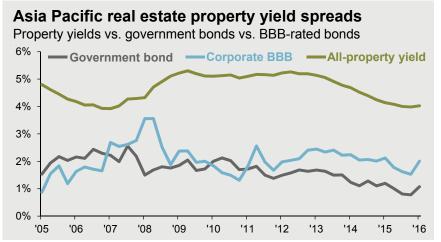
Source: FactSet, J.P. Morgan Asset Management; (Left) Bloomberg, CME; (Top right) BLS, CME; (Bottom right) Bloomberg, BLS. Commodity prices are represented by the appropriate Bloomberg Commodity sub-index. Crude oil shown is Brent crude. Other commodity prices are represented by futures contracts. Z-scores are calculated using daily prices over the past 10 years.

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U.S. real estate net operating income growth Year-over-year NPI-ODCE Index NOI growth 25% 20% 15% 10% 4Q16: 5% 0% -5% -10% '99 '01 '03 '05 '07 '13 '15

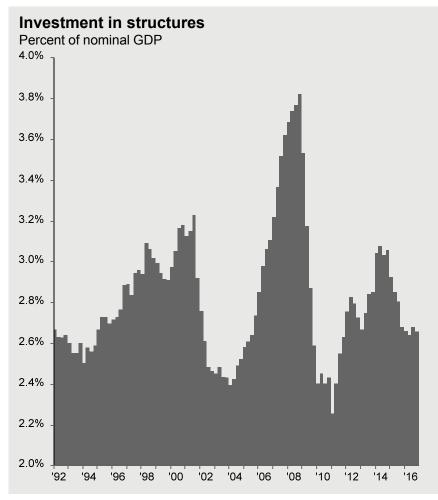


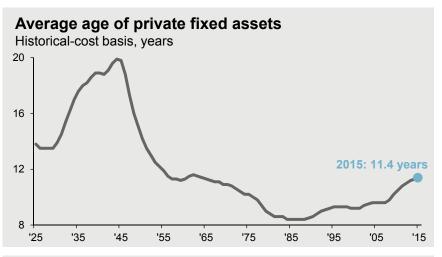


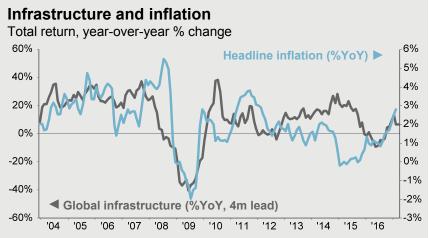
Source: J.P. Morgan Asset Management; (Left) U.S. real estate: NPI-ODCE NOI Growth; (Top right) Europe real estate: CBRE EU-15 prime index; (Bottom right) Asia Pacific real estate: Barclays. All property yields (market value weighted blend of Sydney CBD and Melbourne CBD average equivalent prime yield (NLA) and Tokyo CBD 5-Kus market yield (GFA), in JPY), government bonds and BBB-rated bonds for Asia Pacific are yield to worst

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Source: J.P. Morgan Asset Management; (Left and top right) BEA; (Left and bottom right) FactSet; (Bottom right) BLS, Standard & Poor's. *Guide to the Markets – U.S.* Data are as of March 31, 2017.



Asset class returns

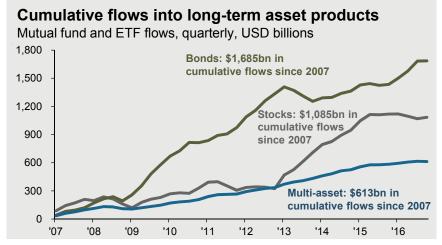
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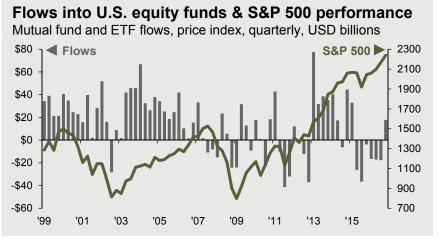
																2002	2016
2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	YTD	Ann.	Vol.
Comdty.	EM	REITs	EM	REITs	EM	Fixed	EM	REITs	REITs	REITs	Small	REITs	REITs	Small	EM	REITs	EM
25.9%	Equity 56.3%	31.6%	Equity 34.5%	35.1%	Equity 39.8%	Income 5.2%	Equity 79.0%	27.9%	8.3%	19.7%	Cap 38.8%	28.0%	2.8%	Cap 21.3%	Equity 11.5%	10.8%	Equity 23.8%
			34.5 //		39.0 //	5.2 /0											23.0 /6
Fixed Income	Small Cap	EM Equity	Comdty.	EM Equity	Comdty.	Cash	High Yield	Small Cap	Fixed Income	High Yield	Large Cap	Large Cap	Large Cap	High Yield	DM Equity	EM Equity	REITs
10.3%	47.3%	26.0%	21.4%	32.6%	16.2%	1.8%	59.4%	26.9%	7.8%	19.6%	32.4%	13.7%	1.4%	14.3%	7.4%	9.8%	22.6%
High	DM	DM	DM	DM	DM	Asset	DM	EM	High	EM	DM	Fixed	Fixed	Large	Large	High	Small
Yield	Equity	Equity	Equity	Equity	Equity	Alloc.	Equity	Equity	Yield	Equity	Equity	Income	Income	Cap	Сар	Y ie Id	Сар
4.1%	39.2%	20.7%	14.0%	26.9%	11.6%	-25.4%	32.5%	19.2%	3.1%	18.6%	23.3%	6.0%	0.5%	12.0%	6.1%	9.2%	20.1%
REITs	REITs	Small	REITs	Small	Asset	High	REITs	Comdty.	Large	DM	Asset	Asset	Cash	Comdty.	Asset	Small	DM
3.8%	37.1%	Cap 18.3%	12.2%	Cap 18.4%	A Toc. /7.1%	Yield - 26.9%	28.0%	16.8%	Cap 2.1%	Equity 17.9%	Alloc. 14.9%	5.2%	0.0%	11.8%	Alloc. 3.8%	Cap 8.5%	Equity 19.2%
3.0 /									2.1/0								19.2 /0
Cash	High Yield	High Yield	Asset	Large Cap	Fixed Income	Small Cap	Small Cap	Large Cap	Cash	Small Cap	High Yield	Small Cap	DM Equity	EM Equity	High Yield	Asset Alloc.	Comdty.
1.7%	32.4%	13.2%	8.1%	15.8%	7.0%	-33.8%	27.2%	15.1%	0.1%	16.3%	7.3%	4.9%	0.4%	11.6%	3.2%	6.9%	19.0%
Asset	Large	Asset	Large	Asset	Large		Large	High	As <u>s</u> et	Large /			Asset			Large	Large
Alloc.	Сар	Ambc.	Сар	A oc.	Сар	Comdty.	Cap	Yield	Allos.	Cap /	REITs	Cash	Alloc.	REITs	REITs	Cap	Сар
-5.9%	28.7%	12.8%	4.9%	15.3%	5.5%	-35.6%	26.5%	14.8%	-0.7%	16.0%	2.9%	0.0%	-2.0%	8.6%	2.5%	6.7%	15.9%
EM	Asset	Large	Small	High	Cash	Large	Asset	Asset	Small	Asset	Cash	High	High	Asset	Small	DM	High
Equity	Alloc.	Сар	Сар	Yield		Cap	Alloc.	Alloc.	Cap	Alloc.		Yield	Yield	Alloc.	Сар	Equity	Yield
-6.0%	26.3%	10.9%	4.6%	13.7%	4.8%	-37.0%	25.0%	13.3%	-4.2%	12.2%	0.0%	0.0%	-2.7%	8.3%	2.5%	5.8%	11.7%
DM Equity	Comdty.	Comdty.	High Yield	Cash	High Yield	REITs	Comdty.	DM Equity	DM Equity	Fixed Income	Fixe d Income	EM Equity	Small Cap	Fixed Income	Fixed Income	Fixed Income	Asset Alloc.
- 15.7 %	23.9%	9.1%	3.6%	4.8%	3.2%	-37.7%	18.9%	8.2%	- 11.7%	4.2%	-2.0%	- 1.8 %	-4.4%	2.6%	0.8%	4.6%	11.0%
Small	Fixed	Fixed		Fixed	Small	DM	Fixed	Fixed			EM	DM	EM	DM			Fixed
Cap	Income	Income	Cash	Income	Cap	Equity	Income	Income	Comdty.	Cash	Equity	Equity	Equity	Equity	Cash	Cash	Income
-20.5%	4.1%	4.3%	3.0%	4.3%	- 1.6%	- 43.1%	5.9%	6.5%	- 13.3%	0.1%	-2.3%	-4.5%	- 14 . 6 %	1.5%	0.1%	1.3%	3.5%
Large	Cash	Cash	Fixe d	Comdty.	REITs	EM	Cash	Cash	EM	Comdty.	Comdty.	Comdty.	Comdty.	Cash	Comdty.	Comdty.	Cash
Сар			Income			Equity			Equity	•	•	•	•		•		
- 22.1%	1.0%	1.2%	2.4%	2.1%	- 15.7%	-53.2%	0.1%	0.1%	- 18.2%	- 1.1%	-9.5%	- 17 . 0 %	-24.7%	0.3%	-2.3%	1.2%	0.8%

Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management. Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Barclays Global HY Index, Fixed Income: Barclays Aggregate, REITs: NAREIT Equity REIT Index. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Barclays Aggregate, 5% in the Barclays 1-3m Treasury, 5% in the Barclays Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period of 12/31/01 – 12/31/16. Please see disclosure page at end for index definitions. All data represents total return for stated period. Past performance is not indicative of future returns.



		Registered product flows																	
USD billions	AUM	YTD	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
U.S. equity	7,069	33	(29)	(33)	97	184	(39)	(40)	14	11	(10)	16	69	103	164	135	48	86	123
World equity	2,713	33	4	205	141	201	56	18	85	58	(39)	194	173	138	92	42	12	(10)	43
Taxable bond	3,153	67	222	51	77	(24)	308	170	221	312	60	108	49	43	25	48	111	62	(10)
Tax-free bond	652	6	30	21	32	(56)	53	(10)	14	73	13	13	17	7	(8)	(3)	13	9	(9)
Multi-asset	2,220	15	28	59	92	98	69	59	60	38	12	98	78	81	85	55	24	19	(20)
Liquidity	2,574	(47)	153	41	26	31	9	(57)	(361)	(266)	667	541	172	47	(59)	(90)	6	278	67





Source: Strategic Insight Simfund, J.P. Morgan Asset Management; All data includes flows through February 2017 and captures all registered product flows (open-end mutual funds and ETFs). Simfund data are subject to periodic revisions. World equity flows are inclusive of emerging market, global equity and regional equity flows. Multi-asset flows include asset allocation, balanced fund, flexible portfolio and mixed income flows. *Guide to the Markets – U.S.* Data are as of March 31, 2017.



Probability of reaching ages 80 and 90 Persons aged 65, by gender, and combined couple 100% Men 90% Women Couple - at least one lives to specified age 80% 73% 63% 60% 48% 40% 33% 22% 20% 0% 80 years 90 years

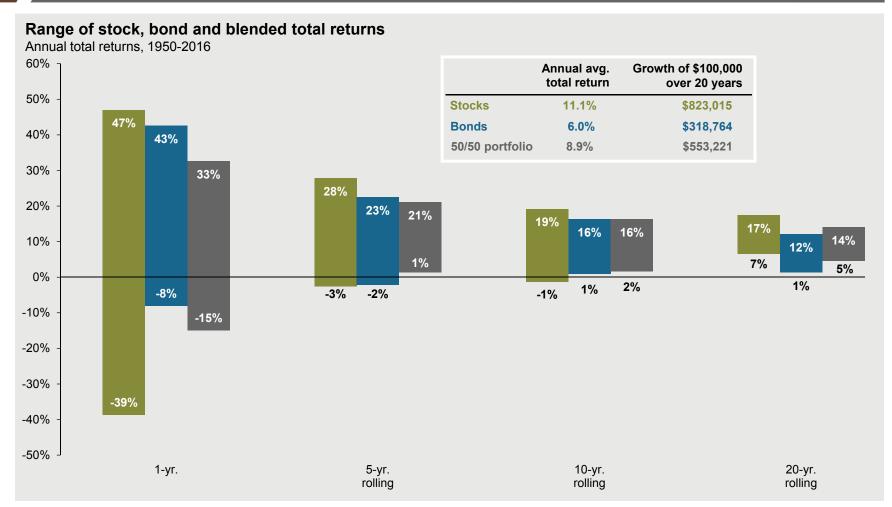
Mandatory and voluntary savings by country Contribution to pre-retirement income replacement goal of 80% 100% Mandatory savings & government pensions Voluntary savings 90% Gap 80% 70% 60% 33% 29% 50% 91% 13% 82% 40% 30% 70% 30% 55% 45% 20% 38% 37% 35% 35% 22% 10% 0% France Germany Spain Italy Japan 놀 Netherlands Australia Canada U.S.

Source: J.P. Morgan Asset Management; (Left) SSA 2013 Life Tables; (Right) OECD Pensions at a Glance 2015.

Mandatory savings & government pensions is the total public pension or forced savings in defined contribution plans; Voluntary savings is defined contribution savings by employers and employees; Gap is the savings shortfall assuming a desired pre-retirement income replacement rate of 80%. Pre-retirement income replacement is calculated for the average earning worker who is assumed to have worked a full career, defined as entering the labor market at age 20 and working until the normal pension age within each country.

Guide to the Markets – U.S. Data are as of March 31, 2017.

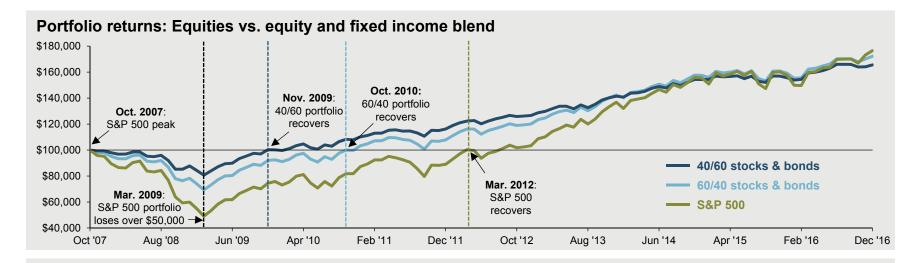


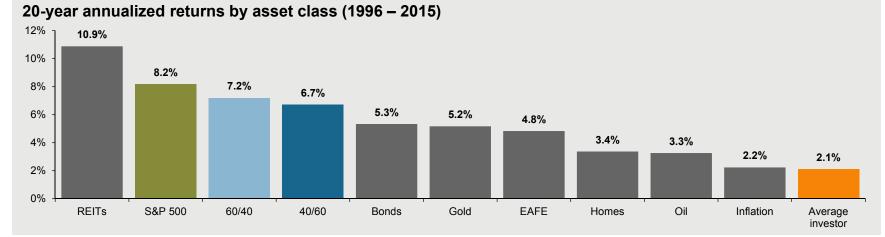


Source: Barclays, FactSet, Federal Reserve, Robert Shiller, Strategas/Ibbotson, J.P. Morgan Asset Management.
Returns shown are based on calendar year returns from 1950 to 2016. Stocks represent the S&P 500 Shiller Composite and Bonds represent Strategas/Ibbotson for periods from 1950 to 2010 and Barclays Aggregate thereafter. Growth of \$100,000 is based on annual average total returns from 1950 to 2016.

Guide to the Markets – U.S. Data are as of March 31, 2017.



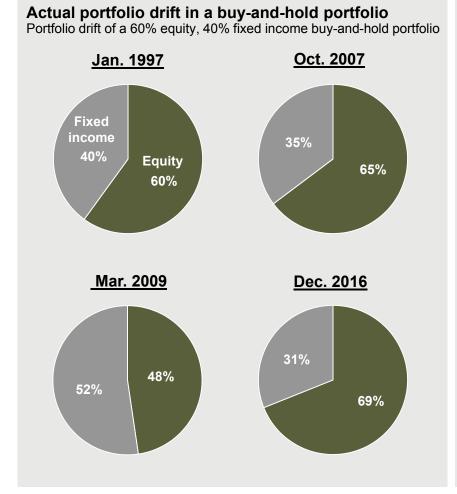


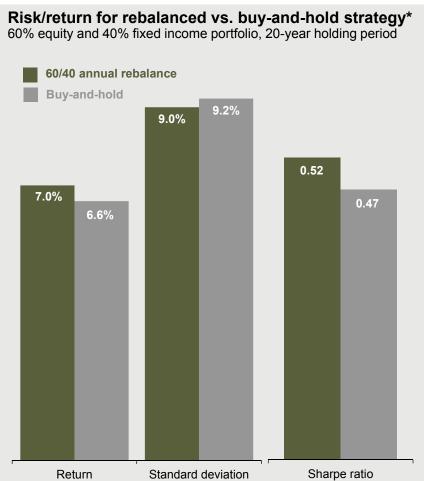


Source: J.P. Morgan Asset Management; (Top) Barclays, FactSet, Standard & Poor's; (Bottom) Dalbar Inc. Indexes used are as follows: REITS: NAREIT Equity REIT Index, EAFE: MSCI EAFE, Oil: WTI Index, Bonds: Barclays U.S. Aggregate Index, Homes: median sale price of existing single-family homes, Gold: USD/troy oz, Inflation: CPI. 60/40: A balanced portfolio with 60% invested in S&P 500 Index and 40% invested in high quality U.S. fixed income, represented by the Barclays U.S. Aggregate Index. The portfolio is rebalanced annually. Average asset allocation investor return is based on an analysis by Dalbar Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Returns are annualized (and total return where applicable) and represent the 20-year period ending 12/31/15 to match Dalbar's most recent analysis.

Guide to the Markets - U.S. Data are as of March 31, 2017.





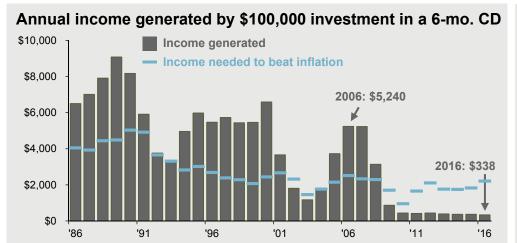


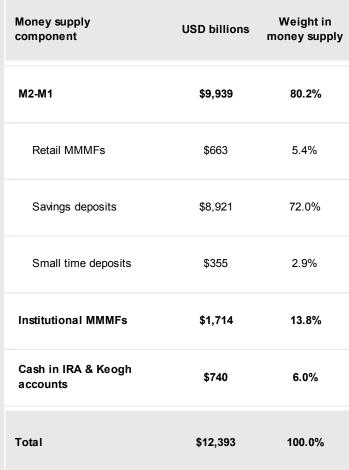
Source: Standard & Poor's, Barclays, FactSet, J.P. Morgan Asset Management.

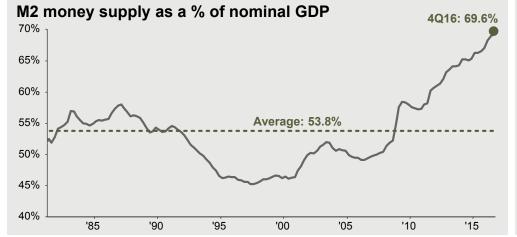
Guide to the Markets – U.S. Data are as of March 31, 2017.



^{*}Annual rebalance and buy-and-hold strategies are composed of S&P 500 and Barclays U.S. Aggregate total return indexes on a monthly basis. Annualized risk and return statistics are calculated from 1/31/1996 – 12/31/2016 using monthly data. The risk-free rate is represented by the Barclays 1-3 month Treasury Bellwether index.

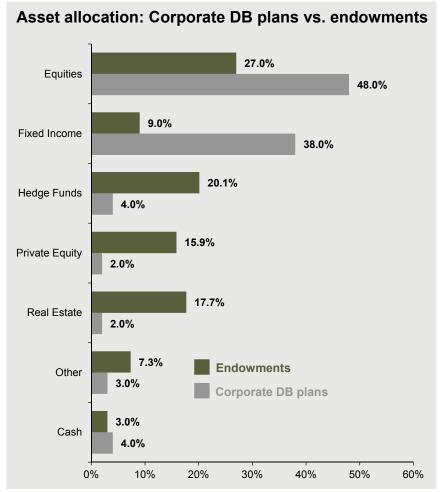




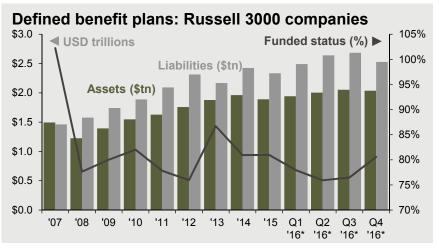


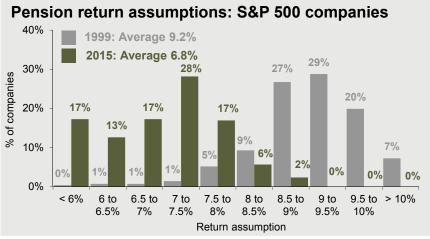
Source: FactSet, J.P. Morgan Asset Management; (Top left) Bankrate.com; (Bottom left and right) BEA, Federal Reserve, St. Louis Fed. All cash measures obtained from the Federal Reserve are latest available seasonally adjusted month averages. All numbers are in billions of U.S. dollars. Small-denomination time deposits are those issued in amounts of less than \$100,000. All IRA and Keogh account balances at commercial banks and thrift institutions are subtracted from small time deposits. Annual income is for illustrative purposes and is calculated based on the 6-month CD yield on average during each year and \$100,000 invested. IRA and Keogh account balances at money market mutual funds are subtracted from retail money funds. Past performance is not indicative of comparable future results. *Guide to the Markets – U.S.* Data are as of March 31, 2017.





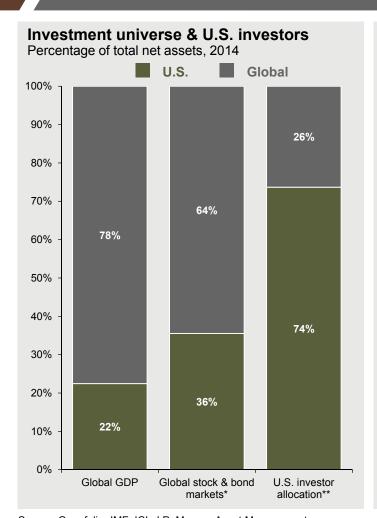
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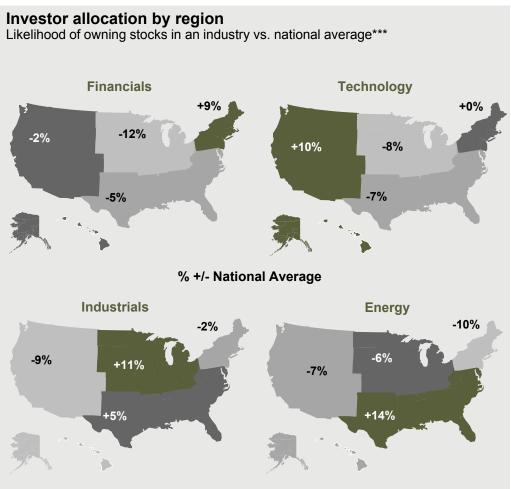




Source: J.P. Morgan Asset Management; (Left) NACUBO (National Association of College and University Business Officers), Towers Watson; (Top right) S&P Capital IQ – Russell 3000 corporate plans; (Bottom right) Compustat/FactSet, S&P 500 corporate 10-Ks. Asset allocation as of 2012. Endowments represents dollar-weighted average data of 842 colleges and universities. Pension return assumptions based on all available and reported data from S&P 500 Index companies. Pension assets, liabilities and funded status based on Russell 3000 companies reporting pension data. Return assumption bands are inclusive of upper range. *2016 estimates are based on market moves only and do not include contributions, benefit payments and service costs. All information is shown for illustrative purposes only.







Source: Openfolio, IMF, ICI, J.P. Morgan Asset Management.

*Global stock and bond markets data are as of 2013. **U.S. investor allocation is the total value of investments in global or domestic equity mutual funds and ETFs. ***Investor allocation by region is based on data collected by Openfolio. Average sector allocations at the national level are determined by looking at the sector allocations of over 20,000 brokerage accounts, and taking a simple average. Portfolio allocations are then evaluated on a regional basis, and the regional averages are compared to the national average to highlight any investor biases. Further details can be found on openfolio.com.





J.P. Morgan Asset Management - Index definitions

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All indexes are unmanaged and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

Equities:

The **Dow Jones Industrial Average** is a price-weighted average of 30 actively traded blue-chip U.S. stocks.

The MSCI ACWI (All Country World Index) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets.

The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada.

The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets.

The MSCI Europe Index is a free float-adjusted market capitalization index that is designed to measure developed market equity performance in Europe.

The **MSCI Pacific Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the Pacific region.

The Russell 1000 Index® measures the performance of the 1,000 largest companies in the Russell 3000.

The Russell 1000 Growth Index® measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

The **Russell 1000 Value Index**® measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

The **Russell 2000 Index**® measures the performance of the 2,000 smallest companies in the Russell 3000 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 3000 Index**® measures the performance of the 3,000 largest U.S. companies based on total market capitalization.

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

The **Russell Midcap Growth Index** ® measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth index.

The **Russell Midcap Value Index** ® measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values. The stocks are also members of the Russell 1000 Value index.

The **S&P 500 Index** is widely regarded as the best single gauge of the U.S. equities market. The index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. The **S&P 500 Index** focuses on the large-cap segment of the market; however, since it includes a significant portion of the total value of the market, it also represents the market.

Fixed income:

The **Barclays 1-3 Month U.S. Treasury Bill Index** includes all publicly issued zero-coupon US Treasury Bills that have a remaining maturity of less than 3 months and more than 1 month, are rated investment grade, and have \$250 million or more of outstanding face value. In addition, the securities must be denominated in U.S. dollars and must be fixed rate and non convertible.

The **Barclays Global High Yield Index** is a multi-currency flagship measure of the global high yield debt market. The index represents the union of the US High Yield, the Pan-European High Yield, and Emerging Markets (EM) Hard Currency High Yield Indices. The high yield and emerging markets sub-components are mutually exclusive. Until January 1, 2011, the index also included CMBS high yield securities.

The **Barclays Municipal Index**: consists of a broad selection of investment- grade general obligation and revenue bonds of maturities ranging from one year to 30 years. It is an unmanaged index representative of the tax-exempt bond market.

The Barclays US Dollar Floating Rate Note (FRN) Index provides a measure of the U.S. dollar denominated floating rate note market.

The **Barclays US Corporate Investment Grade Index** is an unmanaged index consisting of publicly issued US Corporate and specified foreign debentures and secured notes that are rated investment grade (Baa3/BBB or higher) by at least two ratings agencies, have at least one year to final maturity and have at least \$250 million par amount outstanding. To qualify, bonds must be SEC-registered.

The **Barclays US High Yield 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.

The **Barclays US Mortgage Backed Securities Index** is an unmanaged index that measures the performance of investment grade fixed-rate mortgage backed pass-through securities of GNMA, FNMA and FHLMC.

The Barclays US TIPS Index consists of Inflation-Protection securities issued by the U.S. Treasury.

The J.P. Morgan Emerging Market Bond Global Index (EMBI) includes U.S. dollar denominated Brady bonds, Eurobonds, traded loans and local market debt instruments issued by sovereign and quasi-sovereign entities

The **J.P. Morgan Domestic High Yield Index** is designed to mirror the investable universe of the U.S. dollar domestic high yield corporate debt market.

The J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBI Broad Diversified) is an expansion of the J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI). The CEMBI is a market capitalization weighted index consisting of U.S. dollar denominated emerging market corporate bonds.

The J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI Global Diversified) tracks total returns for U.S. dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady bonds, loans, Eurobonds. The index limits the exposure of some of the larger countries.

The **J.P. Morgan GBI EM Global Diversified** tracks the performance of local currency debt issued by emerging market governments, whose debt is accessible by most of the international investor base.

The **U.S.** Treasury Index is a component of the U.S. Government index.



J.P. Morgan Asset Management - Index definitions & disclosures

GTM - u.s. | 70

Other asset classes:

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

The **Bloomberg Commodity Index** and related sub-indices are composed of futures contracts on physical commodities and represents twenty two separate commodities traded on U.S. exchanges, with the exception of aluminum, nickel, and zinc

The **Cambridge Associates U.S. Global Buyout and Growth Index**® is based on data compiled from 1,768 global (U.S. & ex – U.S.) buyout and growth equity funds, including fully liquidated partnerships, formed between 1986 and 2013.

The CS/Tremont Hedge Fund Index is compiled by Credit Suisse Tremont Index, LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The Index uses the Credit Suisse/Tremont database, which tracks over 4500 funds, and consists only of funds with a minimum of US\$50 million under management, a 12-month track record, and audited financial statements. It is calculated and rebalanced on a monthly basis, and shown net of all performance fees and expenses. It is the exclusive property of Credit Suisse Tremont Index, LLC.

The HFRI Monthly Indices (HFRI) are equally weighted performance indexes, utilized by numerous hedge fund managers as a benchmark for their own hedge funds. The HFRI are broken down into 4 main strategies, each with multiple sub strategies. All single-manager HFRI Index constituents are included in the HFRI Fund Weighted Composite, which accounts for over 2200 funds listed on the internal HFR Database.

The NAREIT EQUITY REIT Index is designed to provide the most comprehensive assessment of overall industry performance, and includes all tax-qualified real estate investment trusts (REITs) that are listed on the NYSE, the American Stock Exchange or the NASDAQ National Market List.

The **NFI-ODCE**, short for NCREIF Fund Index - Open End Diversified Core Equity, is an index of investment returns reporting on both a historical and current basis the results of 33 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s. The NFI-ODCE Index is capitalization-weighted and is reported gross of fees. Measurement is time-weighted.

Definitions:

Investing in **alternative assets** involves higher risks than traditional investments and is suitable only for sophisticated investors. Alternative investments involve greater risks than traditional investments and should not be deemed a complete investment program. They are not tax efficient and an investor should consult with his/her tax advisor prior to investing. Alternative investments have higher fees than traditional investments and they may also be highly leveraged and engage in speculative investment techniques, which can magnify the potential for investment loss or gain. The value of the investment may fall as well as rise and investors may get back less than they invested.

Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise.

Investments in **commodities** may have greater volatility than investments in traditional securities, particularly if the instruments involve leverage. The value of commodity-linked derivative instruments may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. Use of leveraged commodity-linked derivatives creates an opportunity for increased return but, at the same time, creates the possibility for greater loss.

Derivatives may be riskier than other types of investments because they may be more sensitive to changes in economic or market conditions than other types of investments and could result in losses that significantly exceed the original investment. The use of derivatives may not be successful, resulting in investment losses, and the cost of such strategies may reduce investment returns.

Distressed Restructuring 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.

Investments in **emerging markets** can be more volatile. The normal risks of investing in foreign countries are heightened when investing in emerging markets. In addition, the small size of securities markets and the low trading volume may lead to a lack of liquidity, which leads to increased volatility. Also, emerging markets may not provide adequate legal protection for private or foreign investment or private property.

The price of **equity** securities may rise, or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries, or the securities market as a whole, such as changes in economic or political conditions. Equity securities are subject to "stock market risk" meaning that stock prices in general may decline over short or extended periods of time.

Equity market neutral 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. Equity Market Neutral Strategies typically maintain characteristic net equity market exposure no greater than 10% long or short.

Global macro strategies 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.

International investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Some overseas markets may not be as politically and economically stable as the United States and other nations.

There is no guarantee that the use of **long and short positions** will succeed in limiting an investor's exposure to domestic stock market movements, capitalization, sector swings or other risk factors. Using long and short selling strategies may have higher portfolio turnover rates. Short selling involves certain risks, including additional costs associated with covering short positions and a possibility of unlimited loss on certain short sale positions.

Merger arbitrage strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction.

Mid-capitalization investing typically carries more risk than investing in well-established "blue-chip" companies. Historically, mid-cap companies' stock has experienced a greater degree of market volatility than the average stock.

Price to forward earnings is a measure of the price-to-earnings ratio (P/E) using forecasted earnings. **Price to book value** compares a stock's market value to its book value. **Price to cash flow** is a measure of the market's expectations of a firm's future financial health. **Price to dividends** is the ratio of the price of a share on a stock exchange to the dividends per share paid in the previous year, used as a measure of a company's potential as an investment.

Real estate investments may be subject to a higher degree of market risk because of concentration in a specific industry, sector or geographical sector. Real estate investments may be subject to risks including, but not limited to, declines in the value of real estate, risks related to general and economic conditions, changes in the value of the underlying property owned by the trust and defaults by borrower.

Relative Value Strategies maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities.

Small-capitalization investing typically carries more risk than investing in well-established "blue-chip" companies since smaller companies generally have a higher risk of failure. Historically, smaller companies' stock has experienced a greater degree of market volatility than the average stock.



The Market Insights program provides comprehensive data and commentary on global markets without reference to products. Designed as a tool to help clients understand the markets and support investment decision-making, the program explores the implications of current economic data and changing market conditions.

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Unless otherwise stated, all data are as of March 31, 2017 or most recently available.

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