## MARKET INSIGHTS

# 10 | 2014

As of December 31, 2013

# Guide to the Markets®





# MARKET INSIGHTS

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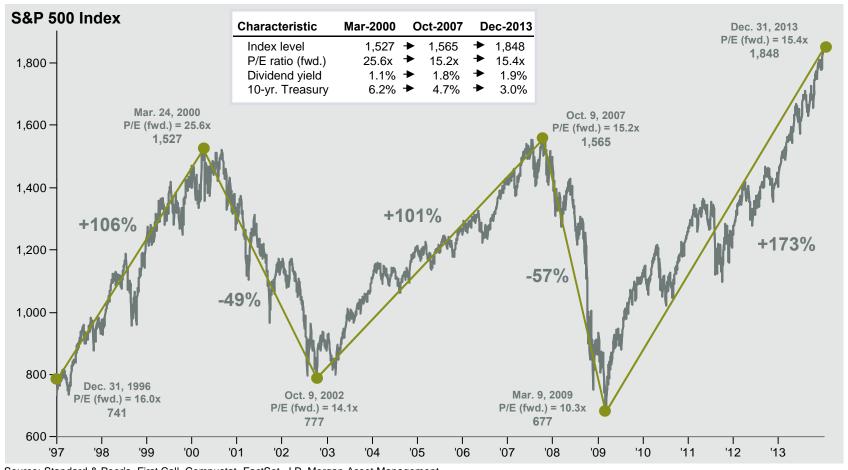
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#### S&P 500 Index at Inflection Points



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

Dividend yield is calculated as the annualized dividend rate divided by 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.

Asset Management

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### Returns and Valuations by Style

40	2013			20	)13		
	Value	Blend	Growth		Value	Blend	Growth
Large	10.0%	10.5%	10.4%	Large	32.5%	32.4%	33.5%
Mid	8.6%	8.4%	8.2%	Mid	33.5%	34.8%	35.7%
Small	9.3%	8.7%	8.2%	Small	34.5%	38.8%	43.3%
Si	nce Market	t Peak (Oct	ober 2007)	Si	nce Market	Low (Marc	ch 2009)
	Value	Blend	Growth		Value	Blend	Growth
Large	25.3%	35.5%	50.4%	Large	212.4%	202.8%	206.8%
Mid	46.8%	50.2%	51.5%	Mid	274.8%	262.4%	250.3%
Small	42.1%	50.2%	57.8%	Small	251.4%	262.2%	272.4%

Currer	Current P/E vs. 20-year avg. P/E										
	Value	Blend	Growth								
Large	14.1	15.4	17.9								
Mid	15.5	17.5	19.5								
Small	16.8	19.2	22.0								
Curren	nt P/E as %	of 20-year	avg. P/E								

E.g.: Large Cap Blend stocks are 4.9% cheaper than their historical average.

	Value	Blend	Growth
Large	101.6%	95.1% <	85.7%
Mid	110.5%	106.8%	89.4%
Small	117.3%	112.2%	102.9%

**Asset Management** 

Source: Russell Investment Group, Standard & Poor's, FactSet, 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 – 12/31/13, illustrating market returns since the S&P 500 Index high on 10/9/07. Since Market Low represents period 3/9/09 – 12/31/13, 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 reflected by the S&P 500 Index.

Past performance is not indicative of future returns. Guide to the Markets – U.S.

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#### Returns and Valuations by Sector

	Financials	<b>Technology</b>	HealthCare	Industrials	Energy	cons. Discr	Cors. Staple	<b>Telecom</b>	Utilities	Materials	58P 500 Index	
	Fine	<b>√</b> ec.	Hea	Indi	Eng	COL	COL	Leis	Util.	Mar	c <sub>o</sub>	
S&P Weight	16.2%	18.6%	13.0%	10.9%	10.3%	12.5%	9.8%	2.3%	2.9%	3.5%	100.0%	ght
Russell Growth Weight Russell Value Weight	5.4%	27.1%	12.2%	12.4%	4.4%	19.9%	11.9%	2.0%	0.2%	4.5%	100.0%	Weight
•	29.0%	8.9%	12.9%	10.5%	15.0%	6.6%	5.9%	2.5%	5.7%	2.9%	100.0%	
4Q13	10.3	13.3	10.1	13.5	8.4	10.8	8.7	5.5	2.8	10.7	10.5	
2013	35.6	28.4	41.5	40.7	25.1	43.1	26.1	11.5	13.2	25.6	32.4	(%)
Since Market Peak (October 2007)	-30.2	48.7	74.5	38.8	26.8	96.7	83.0	18.9	19.4	24.8	35.5	Return (%)
Since Market Low (March 2009)	280.8	211.6	181.3	281.4	132.2	355.4	156.7	127.1	108.9	197.4	202.8	<u></u>
Beta to S&P 500	1.44	1.12	0.70	1.20	1.00	1.11	0.56	0.65	0.50	1.28	1.00	ದ
Correl to Treas. Yields	0.42	0.30	0.15	0.30	0.32	0.21	-0.15	-0.45	-0.34	0.16	0.26	Q
Forward P/E Ratio	12.9x	15.5x	16.8x	16.8x	13.1x	18.5x	17.2x	13.7x	15.0x	16.4x	15.4x	
15-yr avg.	12.6x	22.7x	17.5x	16.7x	14.1x	18.3x	17.5x	17.0x	13.6x	16.0x	16.2x	P/E
Trailing P/E Ratio	15.6x	18.2x	22.3x	20.7x	14.6x	21.9x	19.1x	36.1x	19.2x	20.6x	18.7x	<u> </u>
20-yr avg.	16.0x	26.2x	24.4x	20.4x	17.7x	19.1x	21.1x	20.3x	14.6x	19.0x	19.4x	
Dividend Yield	1.7%	1.7%	1.7%	2.0%	2.2%	1.4%	2.7%	4.7%	4.0%	2.2%	1.9%	Div
20-yr avg.	2.1%	0.6%	1.4%	1.7%	1.7%	0.9%	2.1%	4.1%	4.4%	2.1%	1.7%	٥

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

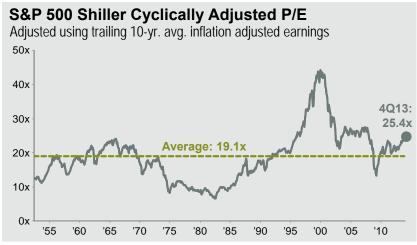
All calculations are cumulative total return, not annualized, including dividends for the stated period. Since Market Peak represents period 10/9/07 – 12/31/13. Since Market Low represents period 3/9/09 – 12/31/13. Correlation to Treasury Yields are trailing 2-year monthly correlations between S&P 500 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 yields are bottom-up values defined as the annualized value of the most recent cash dividend as a percent of month-end price. Beta calculations are based on 10 years of monthly price returns for the S&P 500 and its sub-indices. Correlations to Treasury yields reflect the 10-year Treasury. Past performance is not indicative of future returns.

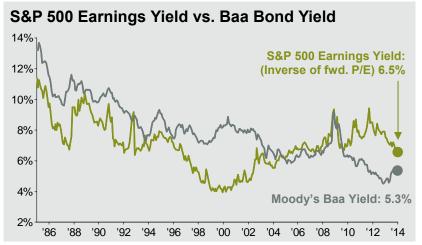
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#### Stock Valuation Measures: S&P 500 Index

S&P 500 Inc	dex: Valuation Measures		Historical Averages					
Valuation		Latest*	1-year	3-year	5-year	10-year	15-year	
Measure	Description	Latest	ago	avg.	avg.	avg.	avg.	
P/E	Price to Earnings	15.4x	12.6x	13.0x	13.1x	13.9x	16.2x	
P/B	Price to Book	2.7	2.1	2.2	2.2	2.5	2.9	
P/CF	Price to Cash Flow	10.6	8.7	8.9	8.6	9.5	10.8	
P/S	Price to Sales	1.6	1.2	1.3	1.2	1.3	1.5	
PEG	Price/Earnings to Growth	1.5	1.3	1.2	2.1	1.7	1.6	
Div. Yield	Dividend Yield	2.1%	2.4%	2.2%	2.2%	2.1%	1.9%	





Asset Management

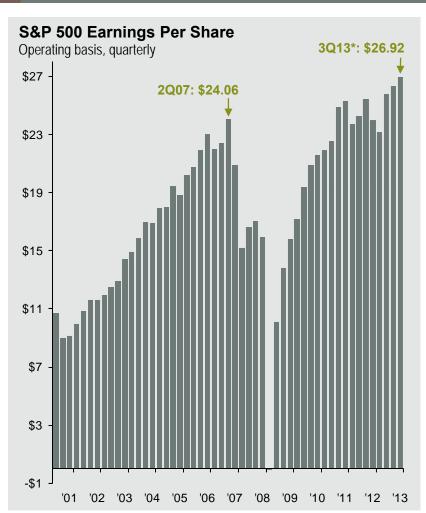
Source: (Top) Standard & Poor's, FactSet, Robert Shiller Data, J.P. Morgan Asset Management.

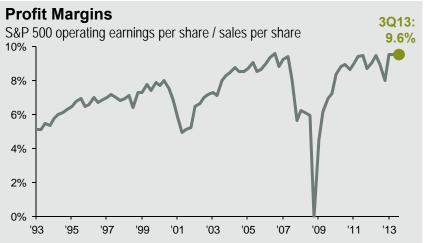
Price to Earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months. Price to Book is price divided by book value per share. Data post-1992 include intangibles and are provided by Standard & Poor's. Price to Cash Flow is price divided by consensus analyst estimates of cash flow per share for the next 12 months. Price to Sales is calculated as price divided by consensus analyst estimates of sales per share for the next 12 months. PEG Ratio is calculated as NTM P/E divided by NTM earnings growth. Dividend Yield is calculated as consensus analyst estimates of dividends for the next 12 months divided by price. All consensus analyst estimates are provided by FactSet. (Bottom left) Cyclically adjusted P/E uses as reported earnings throughout. \*Latest reflects data as of 12/31/2013.

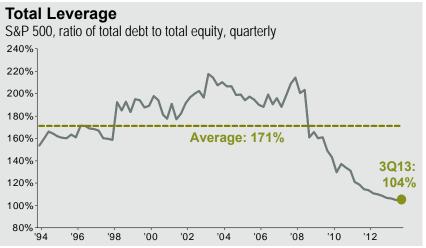
(Bottom right) Standard & Poor's, IBES, Moody's, FactSet, J.P. Morgan Asset Management.

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#### Corporate Profits and Leverage







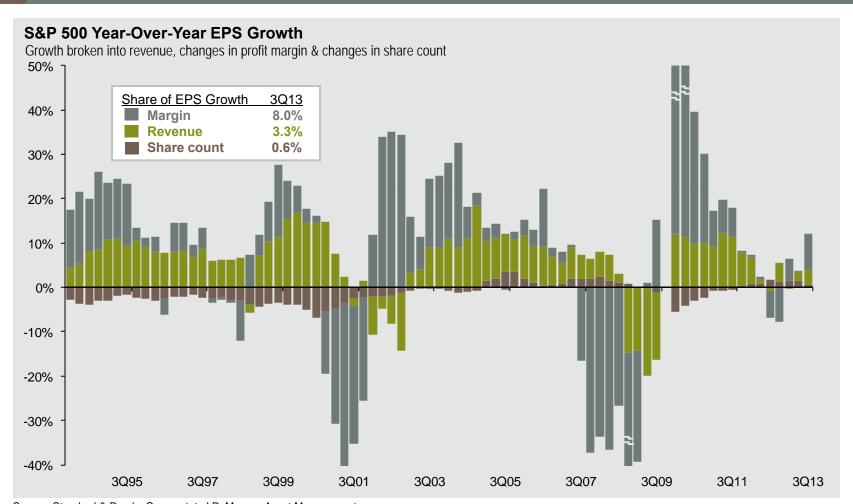
Source: Standard & Poor's, Compustat, J.P. Morgan Asset Management.

EPS levels are based on operating earnings per share. \*Most recently available data is 2Q13 as 3Q13 are Standard & Poor's preliminary estimates. Past performance is not indicative of future returns.

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### Sources of Earnings per Share Growth

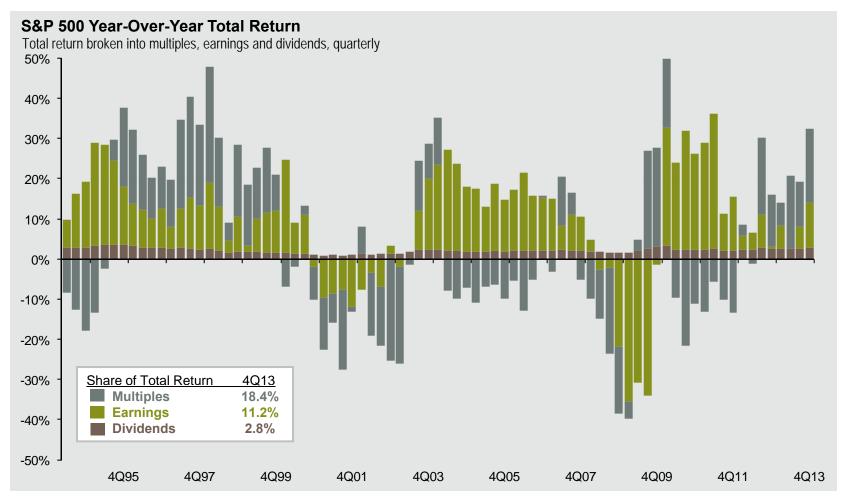


Source: Standard & Poor's, Compustat, J.P. Morgan Asset Management.

EPS levels are based on operating earnings per share. Most recently available data is 2Q13 as 3Q13 are Standard & Poor's preliminary estimates. Past performance is not indicative of future returns. 4Q2008, 1Q2010 and 2Q2010 reflect -101%, 92% and 51% growth in operating earnings, and are adjusted on the chart.

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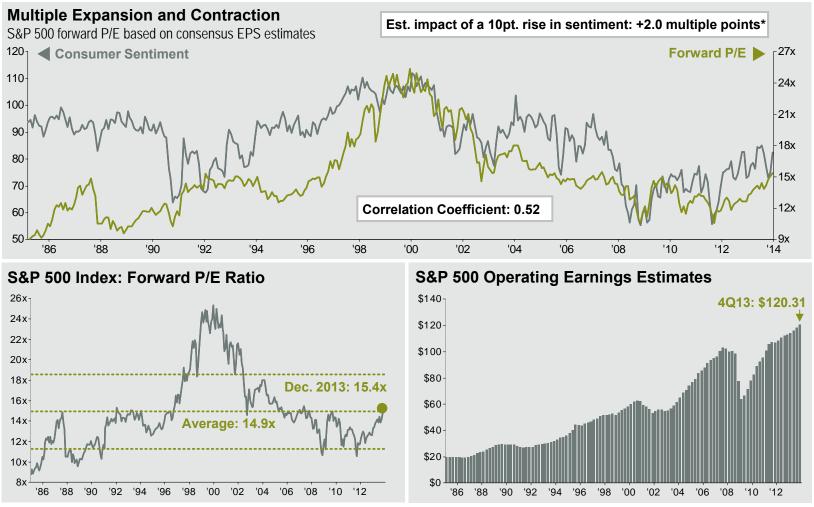




Source: Standard & Poor's, J.P. Morgan Asset Management. Guide to the Markets – U.S.  $\,$ 



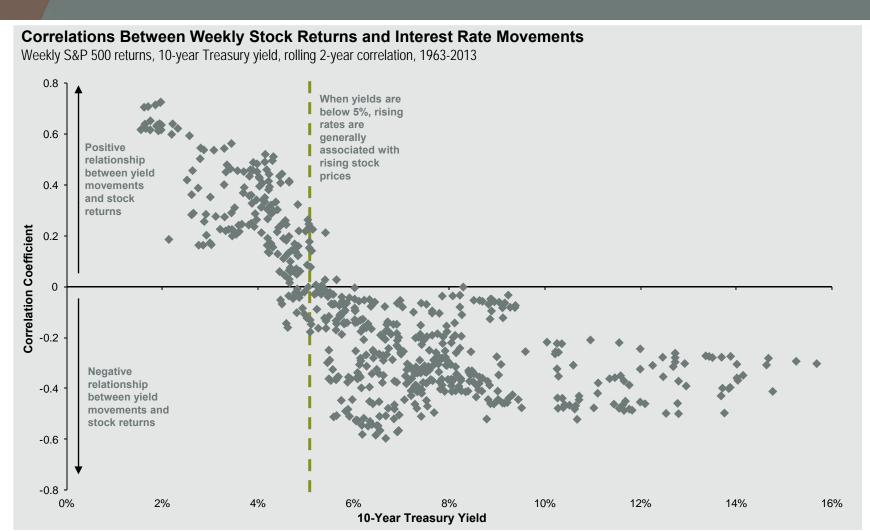
## Confidence, Earnings and Multiples



Source: (Top) Standard & Poor's, FactSet, J.P. Morgan Asset Management. (Bottom) Standard & Poor's, IBES, J.P. Morgan Asset Management. Price to Earnings is price divided by consensus analyst estimates of earnings per share for the next twelve months. \*Estimated impact based on coefficients from regression analysis. Guide to the Markets – U.S. Data are as of 12/31/13.



#### Interest Rates and Equities

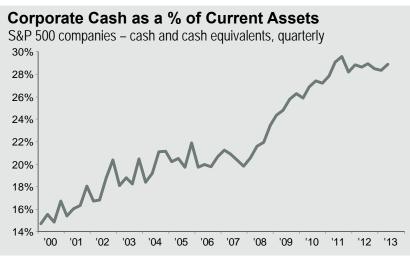


Source: Standard & Poor's, US Treasury, FactSet, J.P. Morgan Asset Management.

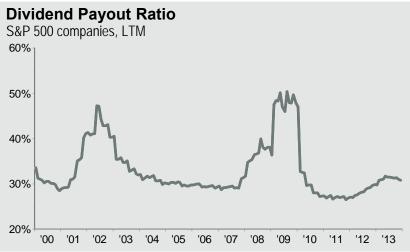
Returns are based on price index only and do not include dividends.

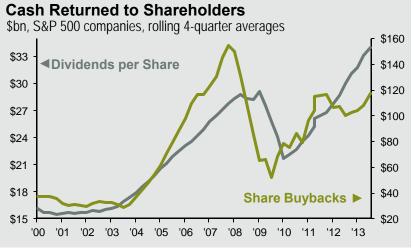
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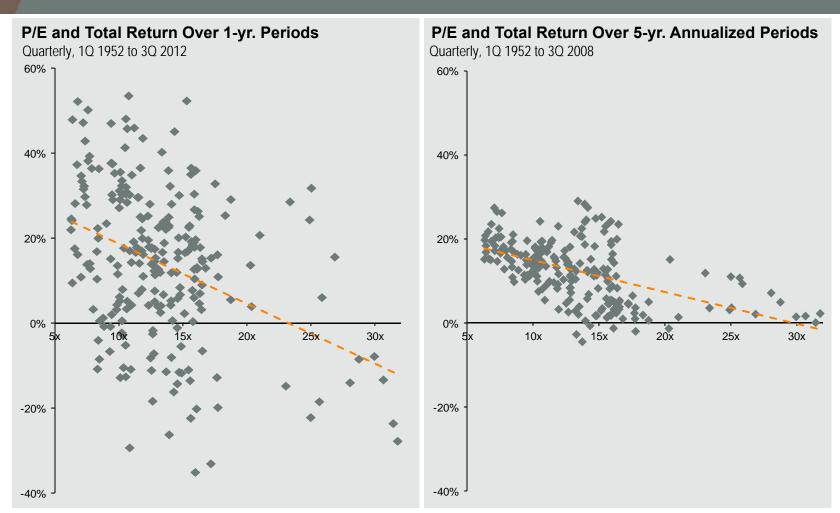






Source: Standard & Poor's, FRB, Bloomberg, FactSet, J.P. Morgan Securities, J.P. Morgan Asset Management. (Top left) Standard & Poor's, FactSet, J.P. Morgan Asset Management. (Top right) M&A activity is the quarterly value of deals completed and capital expenditures are for nonfarm nonfinancial corporate business. (Bottom left) Standard & Poor's, FactSet, J.P. Morgan Asset Management. (Bottom right) Standard & Poor's, Compustat, FactSet, J.P. Morgan Asset Management. Guide to the Markets – U.S. Data are as of 12/31/13.



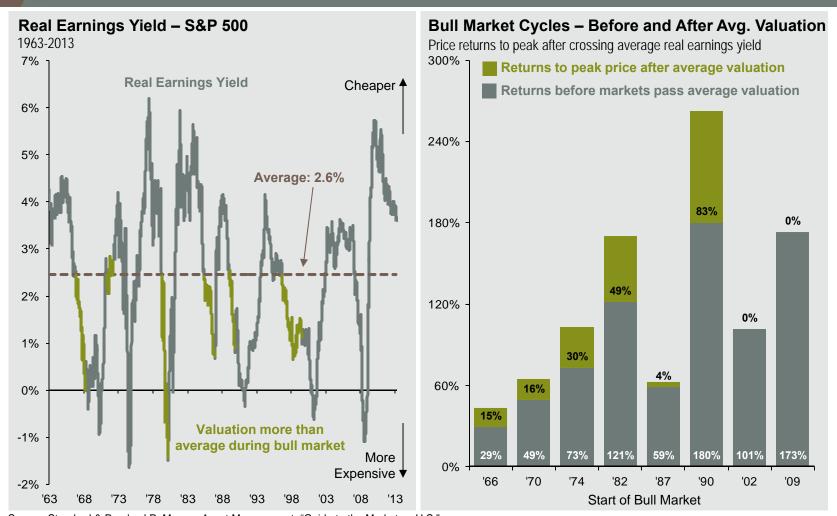


Source: BEA, FRB, J.P. Morgan Asset Management. Prices are based on the market value of all U.S. corporations and include quarterly dividends. Valuation based on long-term P/E ratio.

Note: Orange line denote results of linear regression with R-squared of 0.13 for 1-yr. returns (left) and 0.27 for 5-yr. returns (right). Guide to the Markets – U.S.



#### Real Earnings Yield and Bull Market Cycles

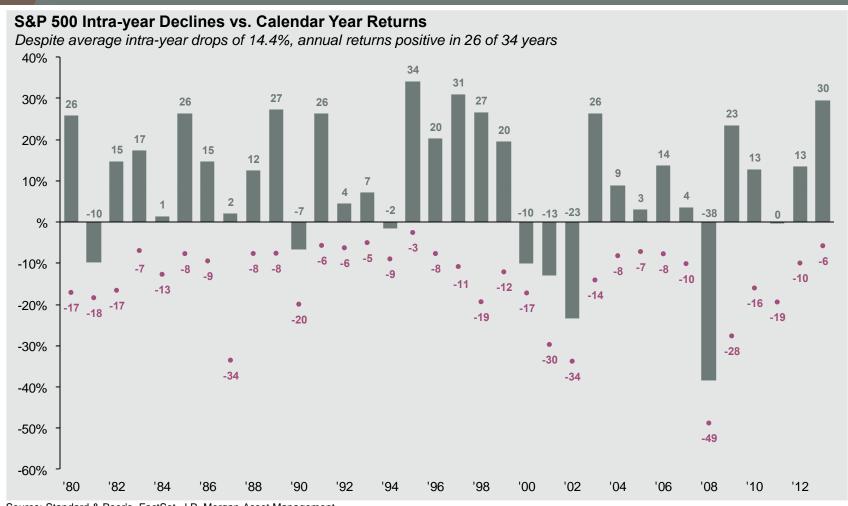


Asset Management

Source: Standard & Poor's, J.P. Morgan Asset Management. "Guide to the Markets – U.S."

Valuations are based on real earnings yield for the S&P 500 which is defined as (trailing four quarters of reported earnings/price) - year over year core CPI inflation. Period after average valuation defined by 15-day moving average passing below average real earnings yield.

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

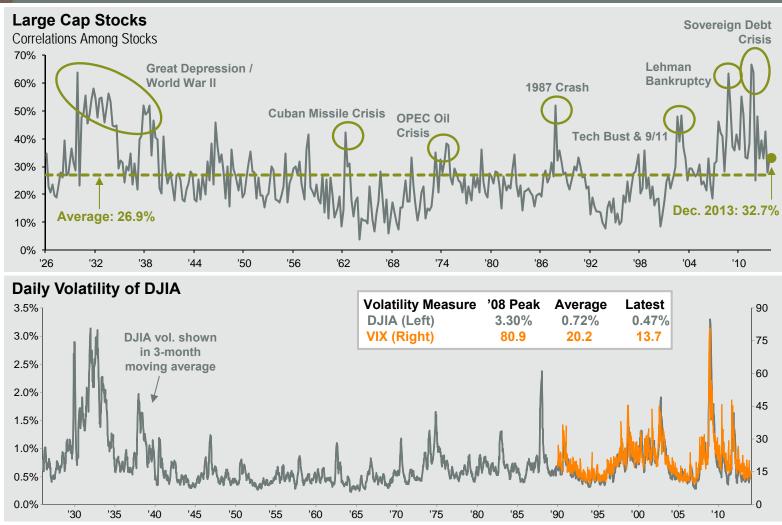
Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2013.

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Data are as of 12/31/13.

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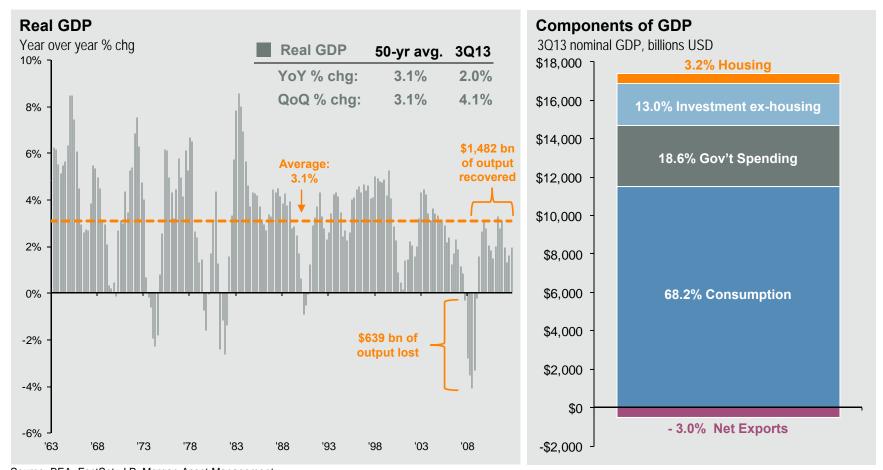
## **Equity Correlations and Volatility**



Source: (Top) Empirical Research Partners LLC, Standard & Poor's, J.P. Morgan Asset Management. Capitalization weighted correlation of top 750 stocks by market capitalization, daily returns, 1926 – Dec. 31, 2013. (Bottom) CBOE, Dow Jones, J.P. Morgan Asset Management. DJIA volatility are represented as three-month moving averages of the daily absolute percentage change in the Dow Jones Industrial Average. Charts shown for illustrative purposes only. Guide to the Markets – U.S. Data are as of 12/31/13.



## Economic Growth and the Composition of GDP



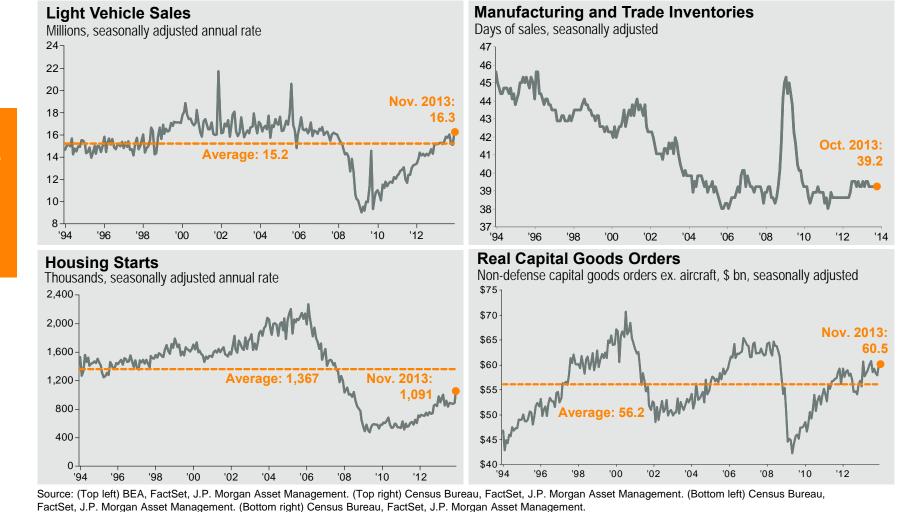
Source: BEA, FactSet, J.P. Morgan Asset Management.

Values may not sum to 100% due to rounding. Quarter over quarter percent changes are at an annualized rate.

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#### Cyclical Sectors

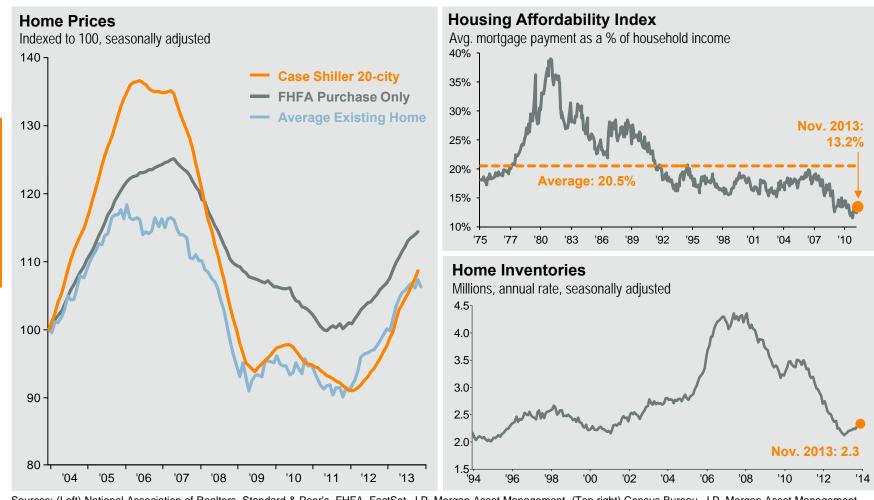


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Guide to the Markets – U.S. Data are as of 12/31/13.

Capital goods orders deflated using the producer price index for capital goods with a base year of 2004.

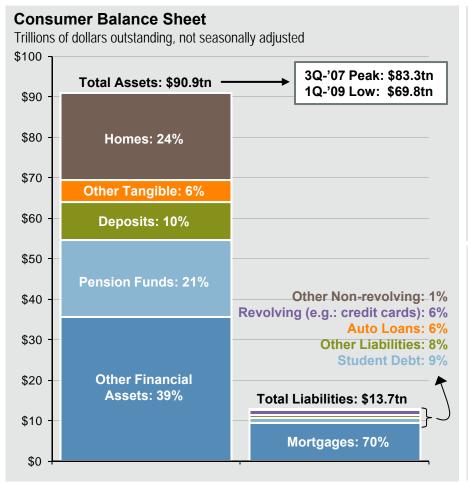
## The Aftermath of the Housing Bubble

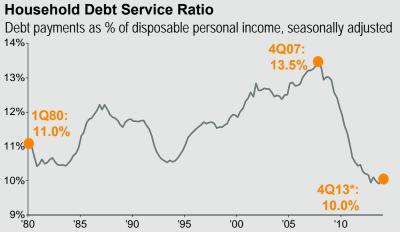


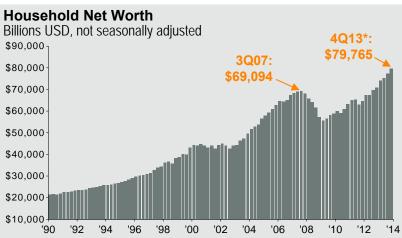
Sources: (Left) National Association of Realtors, Standard & Poor's, FHFA, FactSet, J.P. Morgan Asset Management. (Top right) Census Bureau, J.P. Morgan Asset Management. Monthly mortgage payment assumes the prevailing 30-year fixed-rate mortgage rates and average new home prices excluding a 20% downpayment. (Bottom right) Census Bureau, National Association of Realtors, J.P. Morgan Asset Management. Guide to the Markets – U.S.

**Asset Management** 

### Consumer Finances



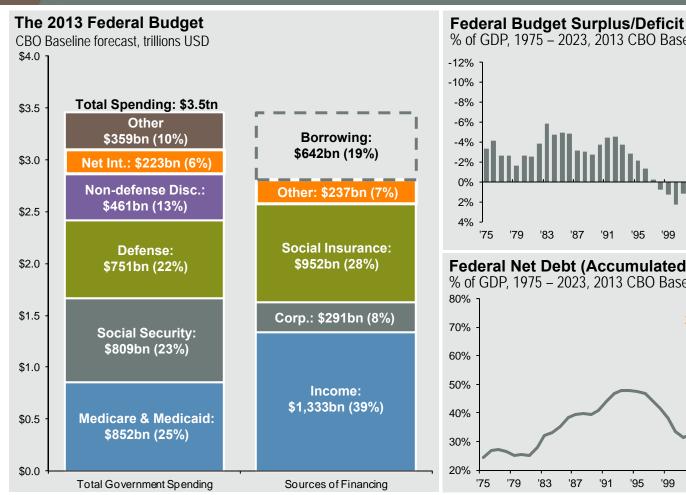


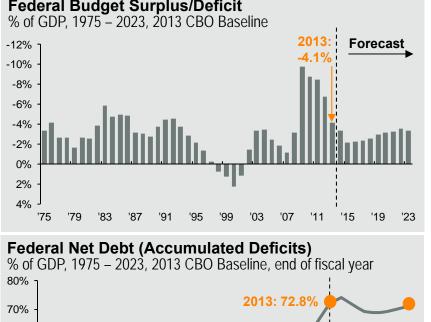


Source: (Left) FRB, J.P. Morgan Asset Management. Data includes households and nonprofit organizations. (Right) BEA, FRB, J.P. Morgan Asset Management. \*4Q13 household debt service ratio and household net worth are J.P. Morgan Asset Management estimates. Values may not sum to 100% due to rounding.

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2023: 71.4% **Forecast** '99 '03 '07 '11 '15 '19 '23

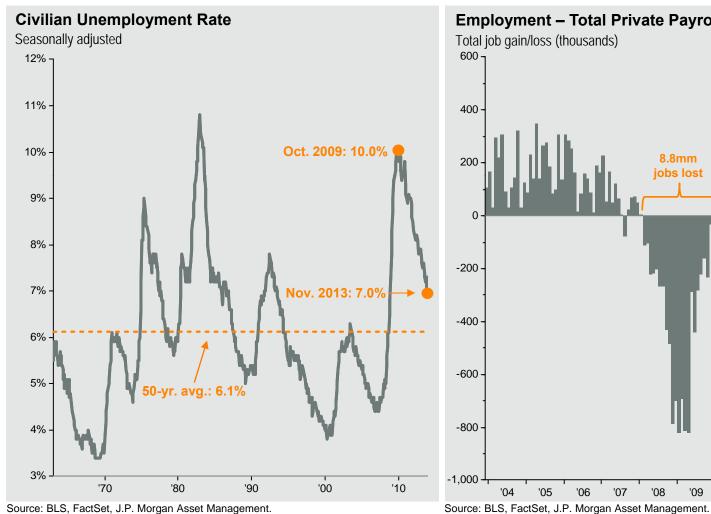
Source: U.S. Treasury, BEA, OMB, CBO, J.P. Morgan Asset Management.

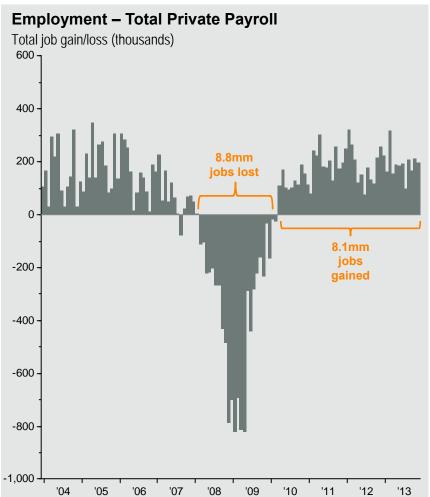
2013 Federal Budget is based on the CBO's May 2013 Baseline Scenario. Other spending includes, but is not limited to, health insurance subsidies, income security, and federal civilian and military retirement.

Note: Years shown are fiscal years (Oct. 1 through Sep. 30). 2013 numbers in right hand charts are J.P. Morgan Asset Management estimates.

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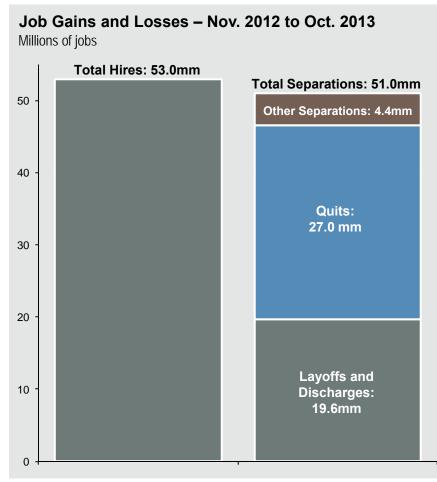


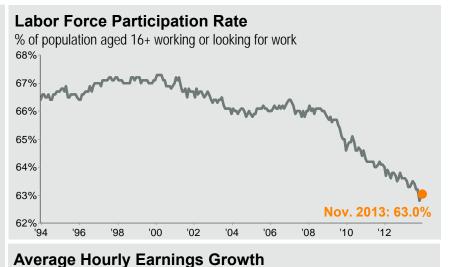
Source: BLS, FactSet, J.P. Morgan Asset Management.

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Economy

#### Alternative Measures of Labor Utilization





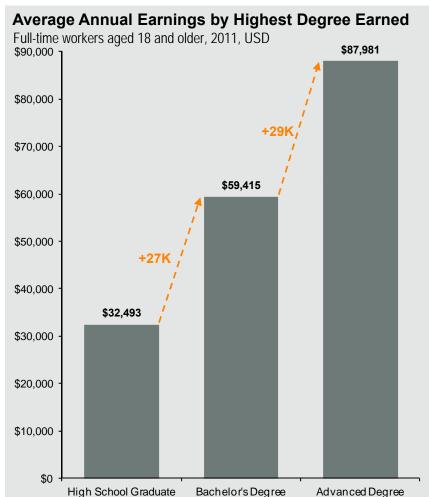


Source: BLS, FactSet, J.P. Morgan Asset Management.

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## Employment and Income by Educational Attainment





Source: Census Bureau, J.P. Morgan Asset Management.

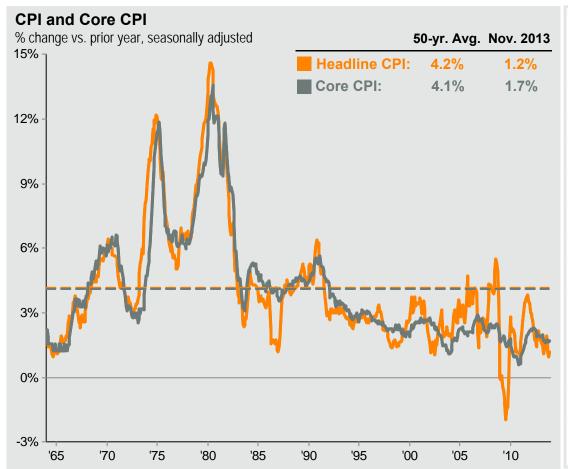
Unemployment rates shown are for civilians aged 25 and older.

Data are as of 12/31/13.

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#### Consumer Price Index



CPI Components	Weight in CPI	12-month Change
Food & Bev.	15.3%	1.2%
Housing	41.0%	2.1%
Apparel	3.6%	-0.1%
Transportation	16.8%	-0.9%
Medical Care	7.2%	2.2%
Recreation	6.0%	0.5%
Educ. & Comm.	6.8%	1.6%
Other	3.4%	1.6%
Headline CPI	100.0%	1.2%
Less:		
Energy	9.6%	-2.5%
Food	14.3%	1.2%
Core CPI	76.1%	1.7%

Source: BLS, FactSet, J.P. Morgan Asset Management.

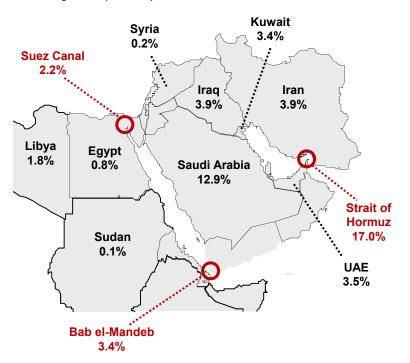
CPI used is CPI-U and values shown are % change vs. 1 year ago and reflect November 2013 CPI data. CPI component weights are as of December 2012 and 12-month change reflects non-seasonally adjusted data through November 2013. Core CPI is defined as CPI excluding food and energy prices.

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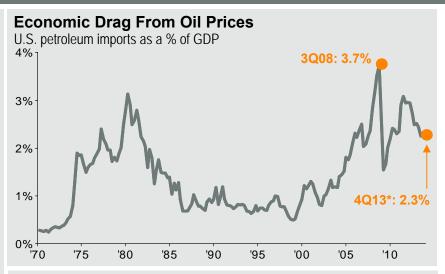


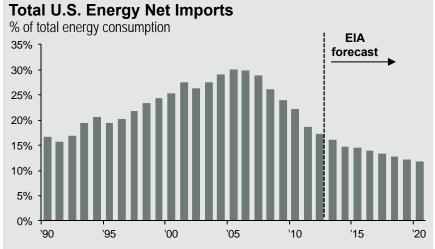
#### Middle East Energy Production & Chokepoints

Percent of global liquid fuel production, 2012\*



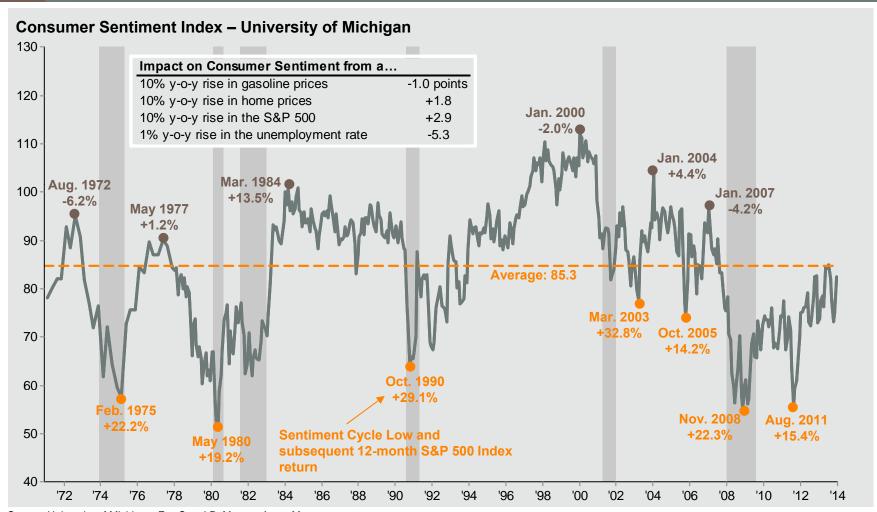
Major Produ	cers			Major Consumers				
Percent of global	total, 2	012		Percent of global total, 2012				
Saudi Arabia	13%	China	5%	United States	21%	India	4%	
United States	12%	Canada	4%	China	11%	Saudi Arabia	3%	
Russia	12%	Iran	4%	Japan	5%	Brazil	3%	





Source: (Left) EIA, J.P. Morgan Asset Management. (Top right) BEA, FactSet, J.P. Morgan Asset Management. (Bottom right) EIA, J.P. Morgan Asset Management. Forecasts are from EIA Annual Energy Outlook and start in 2013. \*4Q13 drag on growth is a J.P. Morgan Asset Management estimate. \*Production numbers as of 2012, while chokepoints are 2011 data. Guide to the Markets – U.S.. Data as of 12/31/2013.





Source: 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. Impact on consumer sentiment is based on a multivariate monthly regression between 1/31/2000 – 10/31/2013. Guide to the Markets – U.S.



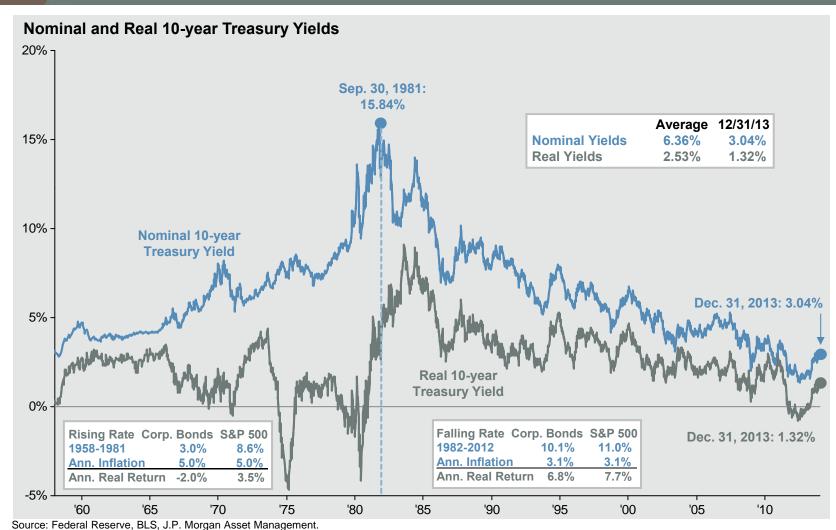
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	4Q13	10-yrs. Cum.	'04 - '13 Ann.
EMD	EMD	High Yield	TIPS	Treas.	High Yield	High Yield	TIPS	EMD	High Yield	High Yield	High Yield	High Yield
11.9%	12.3%	11.8%	11.6%	13.7%	58.2%	15.1%	13.6%	17.9%	7.4%	3.6%	128.6%	8.6%
High Yield	Asset Anoc.	EMD	Treas.	MBS	EMD	EMD	Muni	High Yield	MBS	EMD	EMD	EMD
11.1%	3.5%	10.0%	9.0%	8.3%	34.2%	12.8%	12.3%	15.8%	-1.4%	1.2%	126.9%	8.5%
TIPS	TIPS	MBS	Barclays Agg	Barclays Agg	Corp.	Corp.	Treas.	Corp.	Corp.	Corp.	Asset Alloc.	Asset Alloc.
8.5%	2.8%	5.2%	7.0%	5.2%	18.7%	9.0%	9.8%	9.8%	-1.5%	1.1%	72.3%	5.6%
Asset Affoc.	Treas.	Asset Angc.	MBS	Muni	Asset	Asset	Asset	Asset Alloc.	Asset Alloc.	Asset Alloc.	Corp.	Corp.
6.2%	2.8%	5.1%	6.9%	1.5%	15.3%	7.8%	9.1%	7.7%	-2.0%	0.3%	68.1%	5.3%
Corp.	Muni	Muni	Asset	Asset	TIPS	Barclays Agg	Corp.	TIPS	Barclays Agg	Muni	TIPS	TIPS
5.4%	2.7%	4.7%	6.4%	-0.8%	11.4%	6.5%	8.1%	7.0%	-2.0%	-0.1%	60.6%	4.8%
MBS	High Yield	Barclays Agg	EMD	TIPS	Muni	TIPS	Barclays Agg	Muni	Muni	Barclays Agg	Muni	Muni
4.7%	2.7%	4.3%	5.2%	-2.4%	9.9%	6.3%	7.8%	5.7%	-2.2%	-0.1%	57.5%	4.6%
Barclays Agg	MBS	Corp.	Corp.	Corp.	Barclays Agg	Treas.	EMD	Barclays Agg	Treas.	MBS	MBS	MBS
4.3%	2.6%	4.3%	4.6%	-4.9%	5.9%	5.9%	7.0%	4.2%	-2.7%	-0.4%	57.0%	4.6%
Muni	Barclays Agg	Treas.	Muni	EMD	MBS	MBS	MBS	MBS	EMD	Treas.	Barclays Agg	Barclays Agg
4.1%	2.4%	3.1%	4.3%	-14.7%	5.9%	5.4%	6.2%	2.6%	-4.1%	-0.8%	56.0%	4.5%
Treas.	Corp.	TIPS	High Yield	High Yield	Treas.	Muni	High Yield	Treas.	TIPS	TIPS	Treas.	Treas.
3.5%	1.7%	0.4%	1.9%	-26.2%	-3.6%	4.0%	5.0%	2.0%	-8.6%	-2.0%	51.3%	4.2%

Source: Barclays Capital, FactSet, J.P. Morgan Asset Management.

Past performance is not indicative of future returns. Fixed income sectors shown above are provided by Barclays Capital and are represented by: Barclays Capital U.S. Aggregate Index; MBS: Fixed Rate MBS Index; Corporate: U.S. Corporates; Municipals: Muni Bond 10-Year Index; Emerging Debt: Emerging Markets USD Index; High Yield: Corporate High Yield Index; Treasuries: Barclays Capital U.S. Treasury; TIPS: Barclays Capital TIPS. The "Asset Allocation" portfolio assumes the following weights:

10% in MBS, 20% in Corporate, 15% in Municipals, 10% in Emerging Debt, 10% in High Yield, 25% in Treasuries, 10% in TIPS.

Asset allocation portfolio assumes annual rebalancing. Guide to the Markets – U.S.

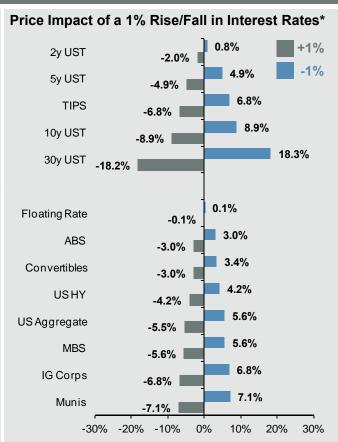


Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core inflation for that month except for December 2013, where real yields are calculated by subtracting out November 2013 year-over-year core inflation. All returns above reflect annualized total returns, which include reinvestment of dividends. Corporate bond returns are based on a composite index of investment grade bond performance. Guide to the Markets – U.S.

J.P.Morgan
Asset Management

#### Fixed Income Yields and Returns

				Yield		Ret	urn
US Treasuries	# of issues	Correlation to 10-year	Avg. Maturity	12/31/2013	12/31/2012	4Q13	2013
2-Year	77	0.67	2 years	0.38%	0.25%	0.08%	0.30%
5-Year	60	0.91	5	1.75%	0.72%	-0.91%	-2.47%
10-Year	20	1.00	10	3.04%	1.78%	-2.44%	-7.81%
30-Year	18	0.92	30	3.96%	2.95%	-3.56%	-15.03%
TIPS	34	0.60	10	0.80%	-0.67%	-2.00%	-8.61%
Sector							
Broad Market	8,701	0.86	7.6 years	2.48%	1.74%	-0.14%	-2.02%
MBS	784	0.82	7.8	3.26%	2.22%	-0.42%	-1.41%
Municipals	9,149	0.48	9.9	3.03%	2.01%	-0.10%	-2.17%
Corporates	4,843	0.48	10.1	3.26%	2.71%	1.11%	-1.53%
High Yield	2,147	-0.23	6.6	5.64%	6.13%	3.58%	7.44%
Floating Rate	42	-0.21	2.7	1.07%	1.84%	0.58%	2.42%
Convertibles	526	-0.29		1.18%	0.97%	5.43%	23.90%
ABS	1,289	-0.03	3.4	2.05%	1.58%	0.49%	0.14%

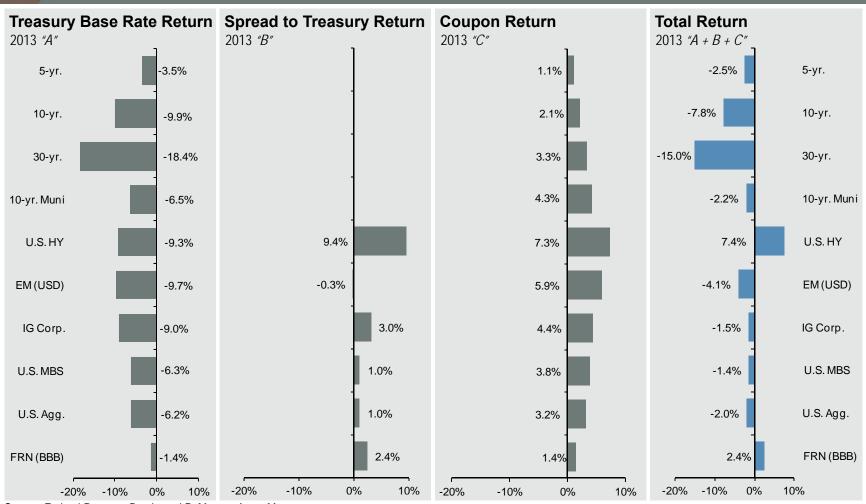


Asset Management

Source: U.S. Treasury, Barclays Capital, FactSet, J.P. Morgan Asset Management.

Fixed income sectors shown above are provided by Barclays Capital and are represented by – Broad Market: Barclays U.S. Aggregate; MBS: Fixed Rate MBS Index; Corporate: U.S. Corporates; Municipals: Muni Bond Index; High Yield: Corporate High Yield Index; TIPS: Treasury Inflation Protection Securities (TIPS). Floating Rate: Barclays FRN (BBB); Convertibles: Barclays U.S. Convertibles Composite; ABS: Barclays ABS + CMBS. Treasury securities data for # of issues based on U.S. Treasury benchmarks from Barclays Capital. Yield and return information based on bellwethers for Treasury securities. Sector yields reflect yield to worst, while Treasury yields are yield to maturity. Correlations are based on 10-years of monthly returns for all sectors except Floating Rate which is based on monthly returns from May 2004, due to data availability. 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).

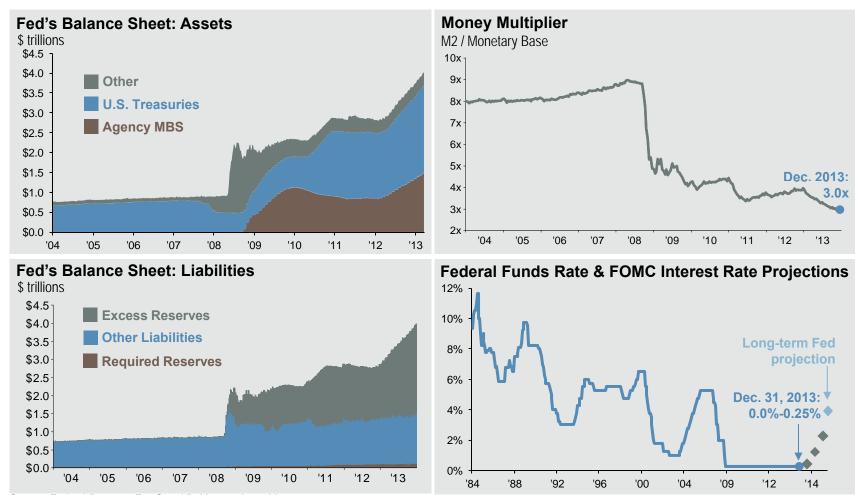
\*Calculation assumes 2-year Treasury interest rate falls 0.38% to 0.00%, as interest rates can only fall to 0.00%. Chart is for illustrative purposes only. Past performance is not indicative of future results. Guide to the Markets – U.S.



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

All returns reflect year to date returns. Treasury base, spread, and coupon returns based on Barclays and J.P. Morgan Asset Management estimates. The sum of charts A and B equate to price return for each sector.

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

Monetary base is defined as the total amount of a currency that is either circulated in the hands of the public or in the commercial bank deposits held in the central bank's reserves. Money multiplier defined as M2 divided by the monetary base. Long-term Fed projection is the average of expectations of FOMC members. Other liabilities of the Federal Reserve primarily consist of currency outstanding.



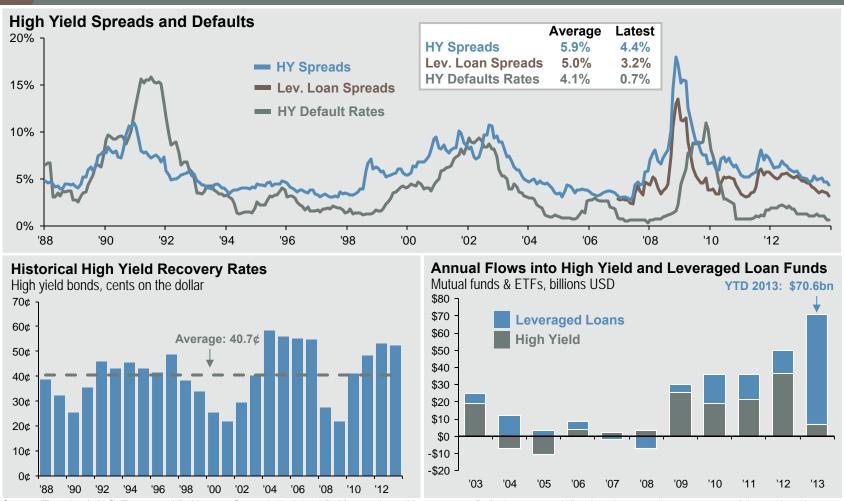




Source: (Top left) McDash, J.P. Morgan Securitized Product Research, J.P. Morgan Asset Management. (Top right) Federal Reserve, FactSet, J.P. Morgan Asset Management. (Bottom right) FDIC, J.P. Morgan Asset Management. (Bottom right) FDIC, J.P. Morgan Asset Management. All data reflect most recently available releases.

**Asset Management** 

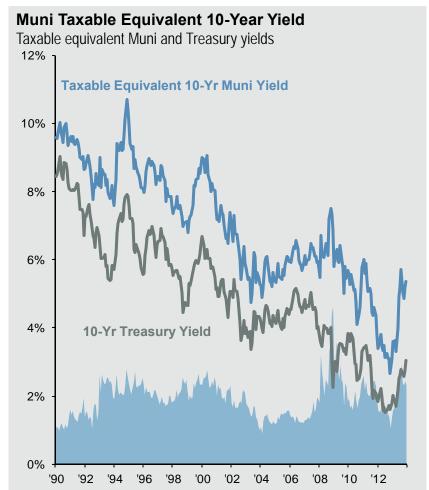
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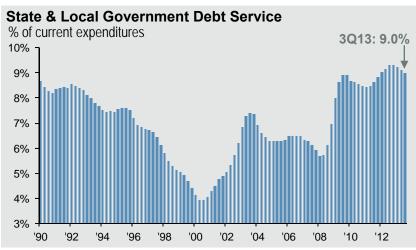


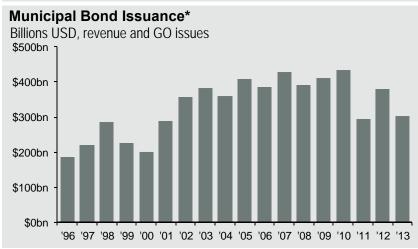
Source (Top chart): U.S. Treasury, J.P. Morgan, Strategic Insight, J.P. Morgan Asset Management. Default rates are defined as the par value percentage of the total market trading at or below 50% of par value and include any Chapter 11 filing, prepackaged filing or missed interest payments. (Bottom left): J.P Morgan, Fitch, J.P. Morgan Asset Management. (Bottom right): Strategic Insight, J.P. Morgan Asset Management. Spreads indicated are benchmark yield to worst less comparable maturity Treasury yields. 2013 recovery rate is a weighted average number as of December 2013. 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.

Flows include ETFs and are as of November 2013. Past performance is not indicative of comparable future results. Guide to the Markets – U.S.

Asset Management







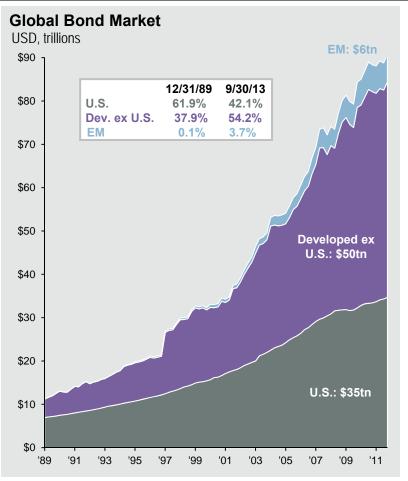
Source (Left chart): Barclays Capital, U.S. Treasury, FactSet, J.P. Morgan Asset Management. (Top right) BEA, J.P. Morgan Asset Management. (Bottom right) SIFMA, J.P. Morgan Asset Management.

Taxable equivalent yields are calculated for the highest federal marginal tax bracket. 2013 tax rate includes the net investment income tax of 3.8%. \*Excludes maturities of 13 months or less and private placements. Interest payments include interest accrued on defined benefit liabilities. 2013 issuance data is as of November 2013. Guide to the Markets – U.S.



#### Global Fixed Income

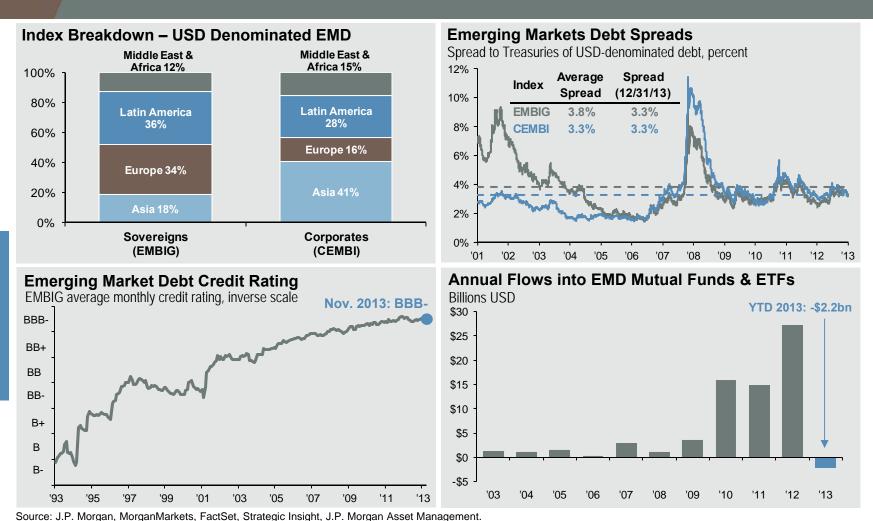
				Yield		Ret	urn
Aggregates	# of issues	Correl to 10-year	Duration	Current	Spread	4Q13	2013
U.S.	8,701	0.86	5.6 Yrs	2.48%	45bps	-0.14%	-2.02%
Glbl ex. U.S.	9,755	0.40	6.5	1.92%	53	-0.59%	-3.03%
Japan	1,434	0.53	7.8	0.63%	3	-6.35%	-15.87%
Germany	892	0.27	5.5	1.34%	23	1.28%	2.59%
U.K.	981	0.17	8.3	2.71%	39	1.17%	-0.58%
Australia	395	0.14	4.8	4.8 3.17% 49 -2.22%		-2.22%	-7.99%
France	822	0.25	6.1	1.76%	53	2.20%	4.60%
Italy	254	0.09	6.0	2.99%	172	5.32%	11.56%
Spain	303	0.12	5.0	2.74%	2.74% 173		15.52%
Sector							
EMD (\$)	1,214	0.23	5.7	5.25%	313	1.17%	-4.12%
EMD (LCL)	465	0.05	4.8	5.69%	78	-0.31%	-4.32%
Euro Corp.	1,388	0.19	4.3	2.07%	2.07% 115 0.96		2.37%
Euro HY.	616	-0.36	3.8	5.08%	328	4.00%	9.90%
EM Corp.	434	0.23	6.3	5.60%	251	1.50%	-2.39%



Asset Management

Source: Barclays Capital, BIS, FactSet, J.P. Morgan Securities, J.P. Morgan Asset Management. Fixed income sectors shown above are provided by Barclays Capital and are represented by the global aggregate for each country. EMD sectors are represented by Barclays Emerging Markets USD Aggregate Index, Barclays Emerging Market Local Currency Government Index, and JPM CEMBI. European Corporates represent the Barclays Euro Aggregate Credit – Corporate Index and the Barclays Pan-European High Yield index. Sector yields reflect yield to worst. Spread is the option adjusted spread to benchmark yields for each respective sector. Duration represents modified duration. Correlations are based on 10-years of monthly returns for the U.S.

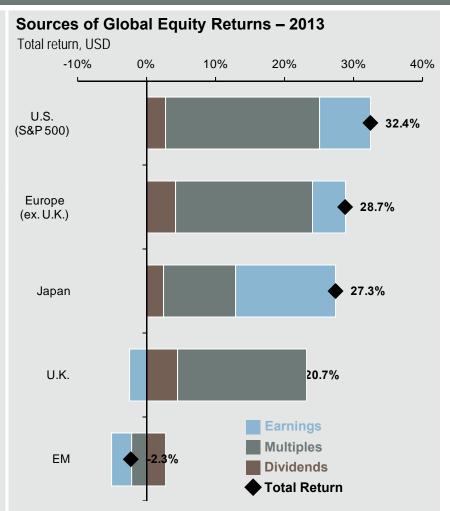
Aggregate, Japan Aggregate, EMD USD, European Corporates and European High Yield. Correlations for the Barclays Global Aggregate ex U.S. are calculated from December 2006, EMD (LCL) is calculated from August 2008. All other sector correlations are calculated from March 2007. Past performance is not indicative of future results. Current data are as of 12/31/2013 unless otherwise noted. Guide to the Markets – U.S.



Spreads measure the credit risk premium over comparable maturity U.S. Treasury bonds. The J.P. Morgan EMBI Global (EMBIG) Index is a USD-denominated external debt index tracking bonds issued by sovereigns and quasi-sovereigns in developing nations. The J.P. Morgan Corporate Emerging Bond Index (CEMBI) is a USD-denominated external debt index tracking bonds issued by corporations in developing nations. Flow data is as of November 2013. Past performance is not indicative of comparable future results. Index breakdown may not equate to 100% due to rounding. Guide to the Markets – U.S.



	4Q1	3	201	3
Country / Region	Local	USD	Local	USD
Regions / Broad Index	xes			
U.S. (S&P 500)	-	10.5	-	32.4
EAFE	6.4	5.7	27.5	23.3
Europe ex-U.K.	6.5	8.2	24.2	28.7
Pacific ex-Japan	3.2	0.3	16.5	5.6
Emerging Markets	3.0	1.9	3.8	-2.3
MSCI: Selected Coun	tries			
United Kingdom	5.0	7.4	18.5	20.7
France	4.3	6.2	22.1	27.7
Germany	11.3	13.3	26.7	32.4
Japan	9.6	2.3	54.8	27.3
China	3.8	3.8	4.0	4.0
India	9.0	10.3	8.6	-3.8
Brazil	0.2	-5.5	-3.0	-15.8
Russia	1.5	0.4	7.5	1.4

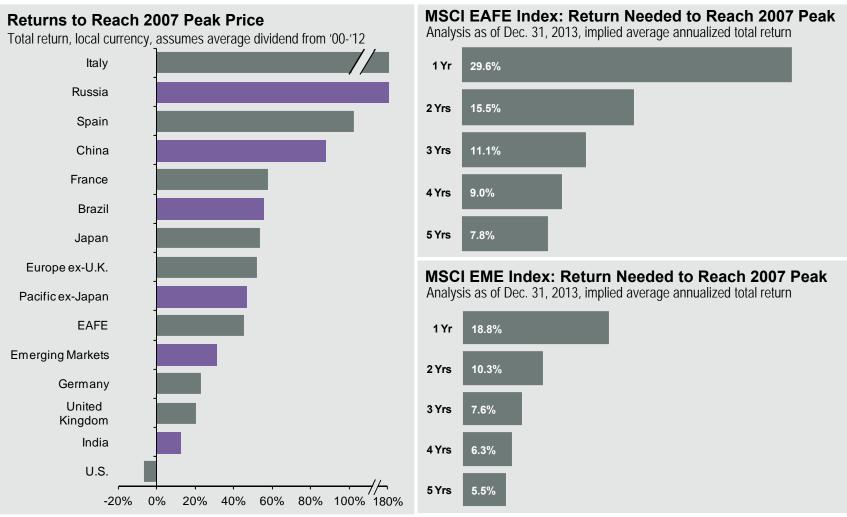


Source: Standard & Poor's, MSCI, FactSet, J.P. Morgan Asset Management.

All return values are MSCI Gross Index (official) data. Multiples and earnings in sources of return calculation based on consensus expectations. Chart is for illustrative purposes only. Past performance is not indicative of future results. Please see disclosure page for index definitions. Guide to the Markets – U.S.



## Global Equity Markets: Returns to Prior Peaks

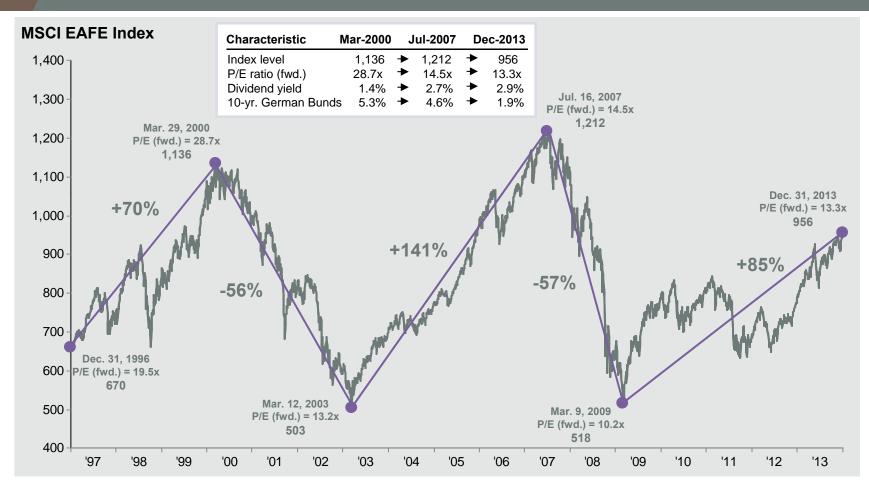


Source: Standard & Poor's, MSCI, IMF, FactSet, J.P. Morgan Asset Management.

All return values are MSCI Gross Index (official) data. Data assume dividend yields as of 12/31/13 (MSCI EAFE: 2.9% and MSCI EM: 2.5%). Chart is for illustrative purposes only. Past performance is not indicative of future results. Please see disclosure page for index definitions. Guide to the Markets – U.S.

Data as of 12/31/13.



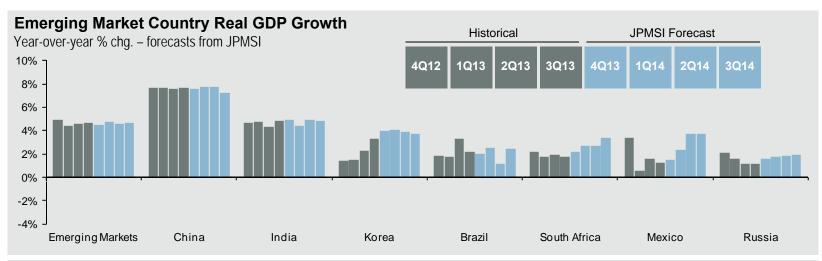


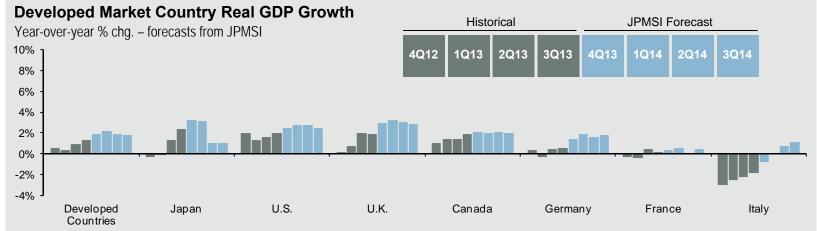
Source: MSCI, FactSet, J.P. Morgan Asset Management.

Index levels are in local currency. Dividend yield is calculated as the annualized dividend rate divided by price, as provided by MSCI. Forward Price to Earnings Ratio is a bottom-up calculation based on the most recent MSCI EAFE 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 MSCI EAFE Index price movement only, and do not include the reinvestment of dividends. Past performance is not indicative of future returns.

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

Forecast and aggregate data come from J.P. Morgan Global Economic Research. Historical growth data collected from FactSet Economics.

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#### Global Purchasing Managers' Index for Manufacturing Aug'12 Oct'12 Oct'13 Apr'12 Sep'12 Jan'13 Apr'13 Sep'13 Jan'12 Jul'12 50.6 Global 48.8 48.7 48.9 50.0 51.5 50.9 50.8 51.6 54.0 55.8 U.S. 52.8 Canada 50.6 51.8 52.4 53.3 54.7 54.8 53.0 53.0 52.4 51.4 50.4 50.4 50.5 51.7 49.3 50.1 53.2 52.4 52.0 52.1 54.2 55.6 55.3 53.5 U.K. 48.8 45.5 49.1 48.2 48.0 48.4 50.7 50.9 48.2 49.3 50.6 52.1 53.0 54.7 57.3 56.7 56.5 58.1 50.8 51.1 52.0 50.2 46.8 Euro Area 45.1 46.1 45.4 46.2 46.1 47.9 47.9 46.8 46.7 48.3 48.8 50.3 51.4 51.1 51.3 51.6 52.7 Germany 44.7 47.4 46.0 46.8 46.0 49.8 50.3 49.0 48.1 49.4 48.6 50.7 51.8 51.1 51.7 52.7 54.3 France 42.7 43.7 44.5 44.6 42.9 Italy Spain Greece 41.8 41.4 41.7 43.0 42.1 45.0 Ireland 48.3 49.7 51.5 50.1 51.2 53.1 53.9 50.9 51.8 52.1 52.4 51.4 50.3 51.5 48.6 48.0 49.7 50.3 51.0 Australia 51.6 51.3 49.5 43.9 42.4 47.2 40.3 45.3 43.0 42.8 44.3 44.3 40.2 45.6 44.4 36.7 43.8 49.6 42.0 Japan 50.7 50.5 51.1 50.7 50.7 49.9 47.9 47.7 48.0 46.9 46.5 45.0 47.7 48.5 50.4 51.1 51.5 52.3 50.7 52.2 52.5 54.2 55.1 55.2 China 48.3 49.3 48.4 47.9 49.5 50.5 51.5 52.3 50.4 51.6 50.4 49.2 48.2 47.7 Indonesia 50.5 51.9 51.5 50.7 49.7 50.5 51.3 51.7 Korea 48.2 50.1 49.9 50.9 52.0 52.6 Taiw an India Brazil Mexico 55.1 54.4 55.5 55.6 57.1 55.0 53.4 52.2 51.7

50.8 50.7 50.8 52.9 53.2 51.0 52.0 51.0 52.4 52.9 52.2 50.0 52.0 52.0 50.8 50.6 50.4 51.7 49.2 49.4 49.4 51.8 49.4 48.8

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

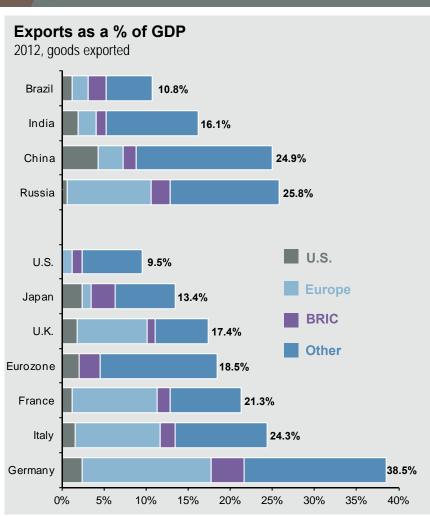
Heatmap colors are based on PMI relative to the 50 level, which indicates acceleration or deceleration of the sector, for the time period shown.

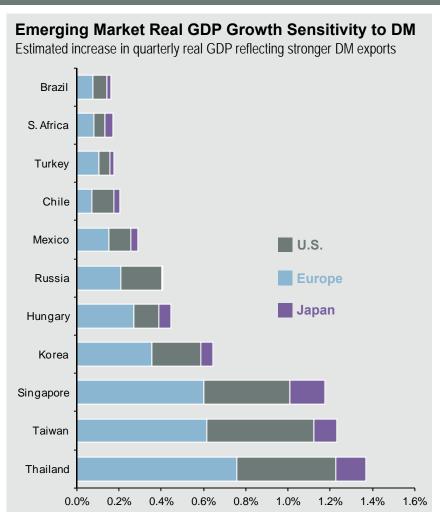
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Data are as of 12/31/13.

Russia



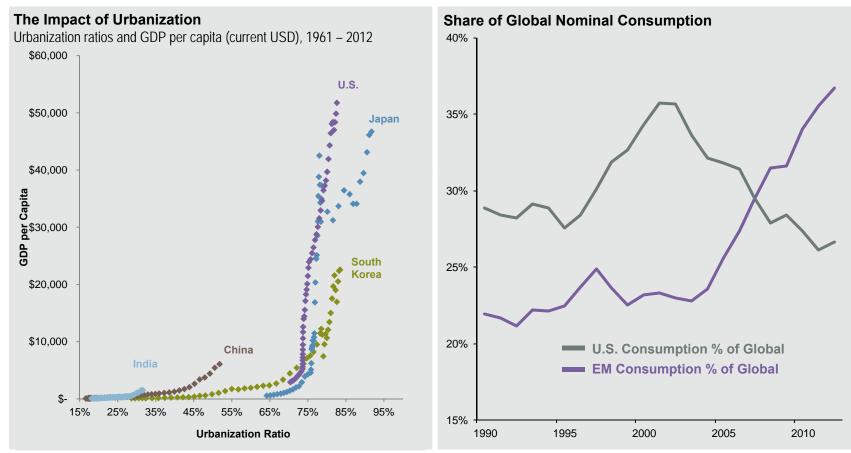




Source: IMF, MacData, J.P. Morgan Securities, J.P. Morgan Asset Management.

Values may not sum to 100% due to rounding. (Right chart) Assumes a 1% increase in GDP growth from Japan, Europe, and the U.S., and estimates a reaction function through a multistage regression measuring emerging market economies sensitivity to export volumes. Developed market imports are used as a proxy for developed demand and estimated from a 1% pick up in domestic GDP. Increases in industrial production are estimated while controlling for emerging market domestic demand in order to limit feedback loops and isolate the impulse from developed market demand only. The sample period tested ranges between 1993 and 2013 reflecting quarterly data. Guide to the Markets – U.S. Data are as of 12/31/13.





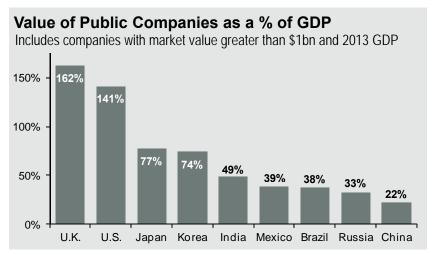
Source: FactSet, United Nations, J.P. Morgan Global Economics Research, J.P. Morgan Asset Management.

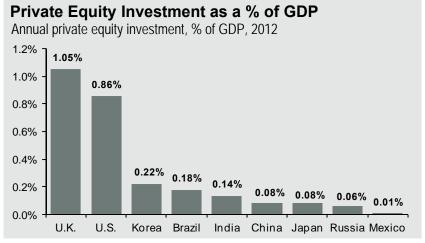
Share of global consumption data are as of 2012.

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Economic and Demographic Snapshot									
	GDP USD GDP Per (Bns) Capita								
Developed									
U.S.	\$16,724	\$52,839	317 mm						
Canada	1,825	51,871	35						
U.K.	2,490	39,049	64						
Germany	3,593	43,952	82						
France	2,739	42,991	64						
Japan	5,007	39,321	127						
Italy	2,068	33,909	61						
Emerging									
Korea	1,198	23,838	50						
India	1,758	1,414	1,243						
Brazil	2,190	10,958	200						
Mexico	1,327	11,224	118						
Russia	2,118	14,973	141						
China	8,939	6,569	1,361						



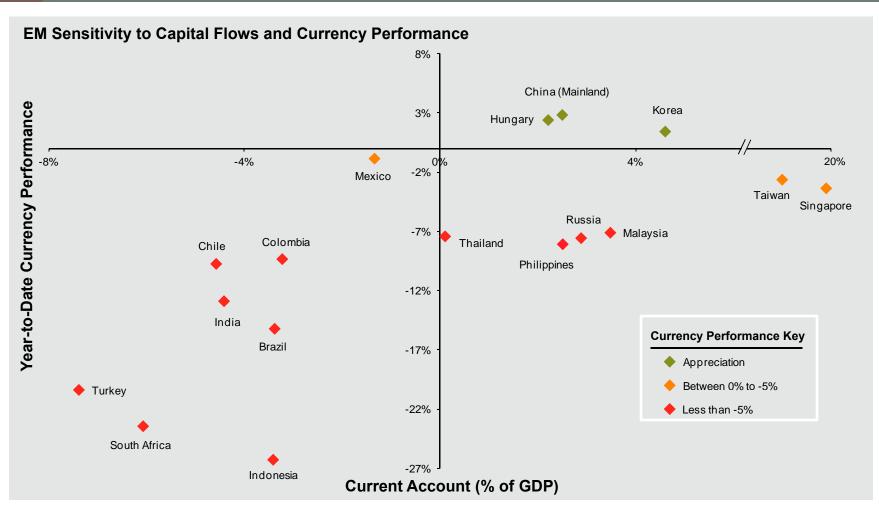


Source: IMF, J.P. Morgan Global Economics Research, FactSet, EMPEA (Emerging Markets Private Equity Association), J.P. Morgan Asset Management.

Number of listed companies excludes secondary listings, non-equity securities, and companies with market capitalization of less than \$1 billion.

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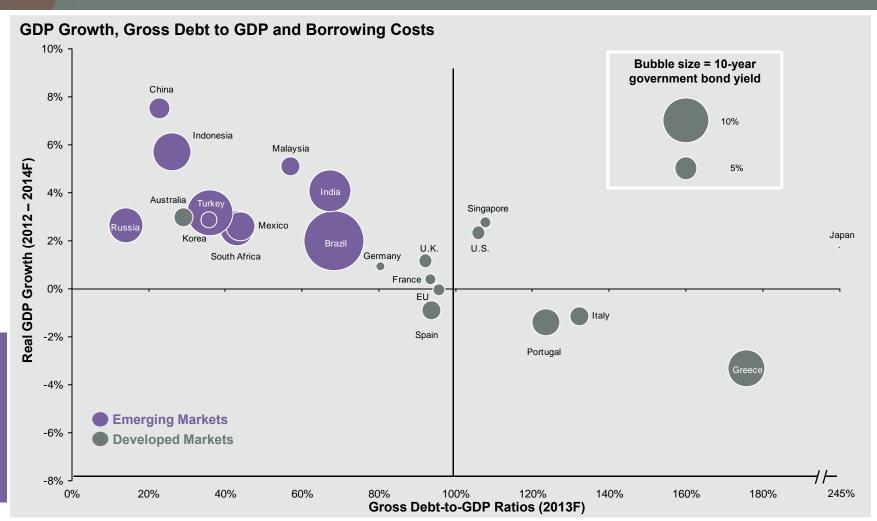




Source: IMF - World Economic Outlook, FactSet, J.P. Morgan Asset Management.

Current accounts as a percentage of GDP are IMF estimates for 2013. Guide to the Markets - U.S. Data reflect most recently available as of 12/31/13.

J.P.Morgan
Asset Management

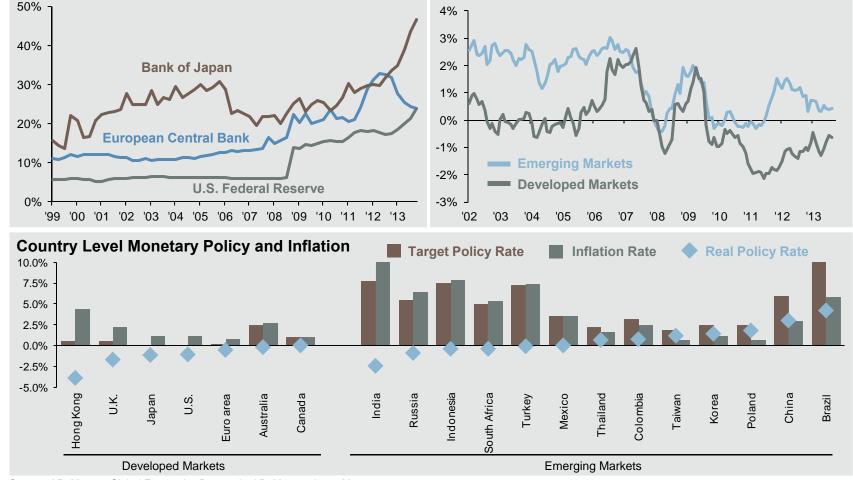


Source: IMF, FactSet, Bloomberg, J.P. Morgan Economics, Barclays, J.P. Morgan Asset Management. Growth and debt data are based on the October 2013 World Economic Outlook.

Borrowing costs based on local currency debt. EU overall borrowing cost based on Barclays Capital Euro-Aggregate 7-10 year treasury. South Africa's borrowing cost is based on 7-year government bond yield due to data availability. Guide to the Markets – U.S.



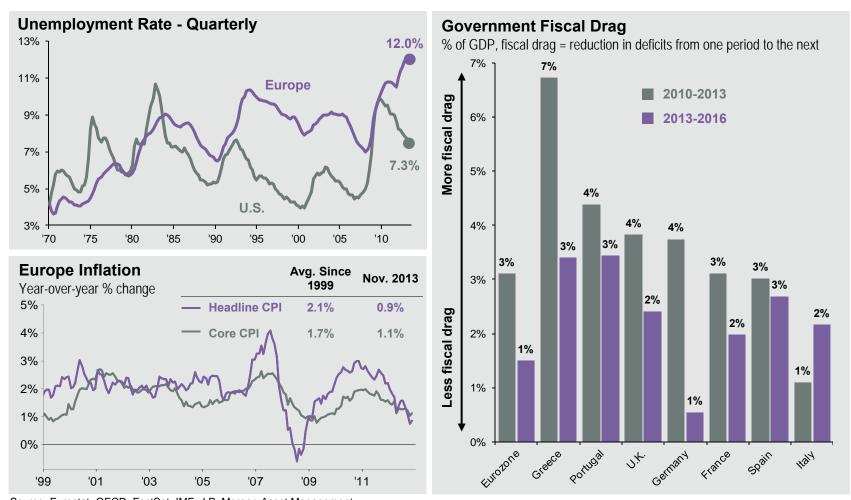
Central Bank Assets - Percent of Nominal GDP



**Real Policy Rates – Monthly** 

Source: J.P. Morgan Global Economics Research, J.P. Morgan Asset Management. (Top charts) Emerging and Developed Economy GDP growth and real policy rates represent GDP weighted aggregates estimated by J.P. Morgan Global Economics Research. (Bottom chart) Target policy rates are the short-term target interest rates set by central banks. Inflation rates shown represent year-over-year quarterly rates for 4Q13. Real policy rates are short-term target interest rates set by central banks minus year-over-year inflation. Guide to the Markets – U.S.

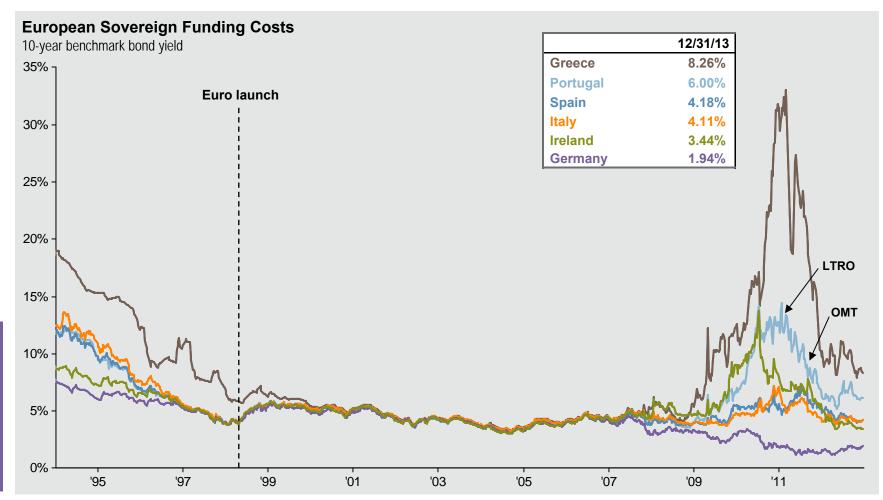




Source: Eurostat, OECD, FactSet, IMF, J.P. Morgan Asset Management.

Government deficits calculated by the IMF as general government net lending/borrowing (revenue minus total expenditure). Data are based on the October 2013 World Economic Outlook. Unemployment rates are OECD estimates as of September 2013. Guide to the Markets – U.S.



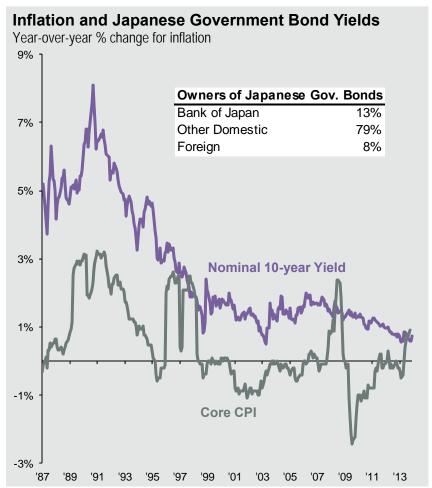


Source: Tullett Prebon, FactSet, J.P. Morgan Asset Management.

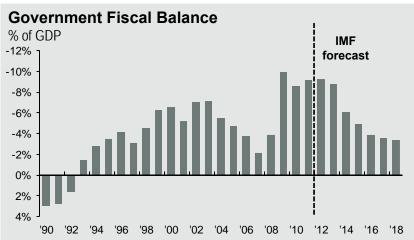
Note: The ECB announced the second round of Long Term Refinancing Operations (LTRO) in February 2012. The Outright Monetary Transaction (OMT) program was announced in September 2012.

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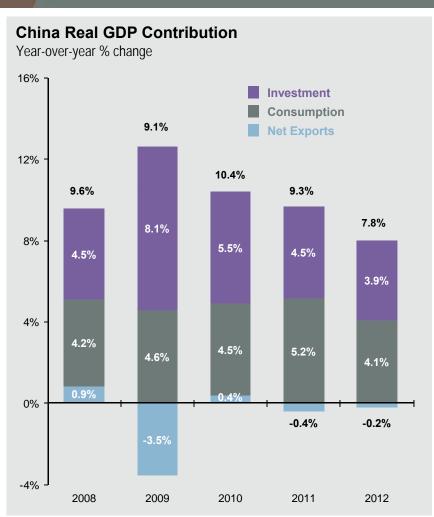


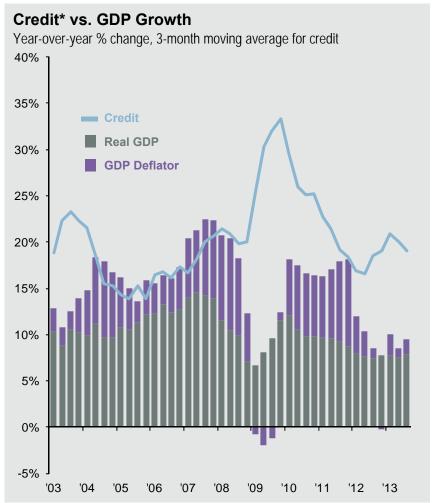


Source: (Left) Bank of Japan, OECD, IMF, FactSet, J.P. Morgan Asset Management. (Right) FactSet, J.P. Morgan Asset Management.

Core CPI is defined as CPI excluding fresh food. Other Domestic includes banks (34%), insurance and pensions (23%), public pensions (7%), households (3%), and others (11%). Values may not sum to 100% due to rounding. Government bond data is calculated from the Bank of Japan's June 2013 flow of funds. Guide to the Markets – U.S.



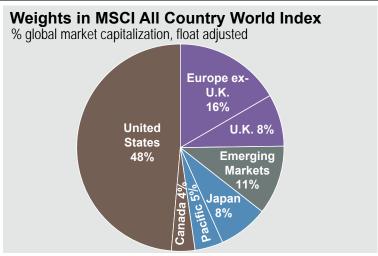


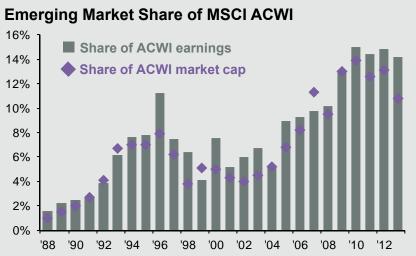


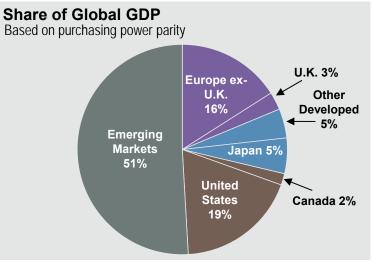
Source: National Bureau of Statistics of China, The People's Bank of China, EM Advisors Group, FactSet, CEIC, J.P. Morgan Asset Management. Values may not sum to 100% due to rounding. \*As defined by Total Social Financing: RMB bank loans (61%), bankers acceptance bills (-9%), trust loans (8%), entrusted loans (17%), corporate bond financing (18%), foreign currency loans (3%), and non-financial equity financing (2%). TSF data uses an assumption of outstanding credit in Dec. 2001. Guide to the Markets – U.S. Data are as of 12/31/13.







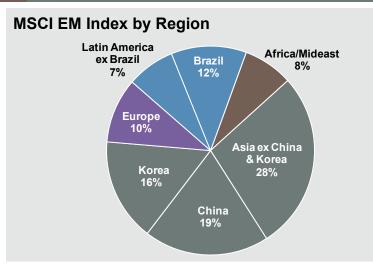


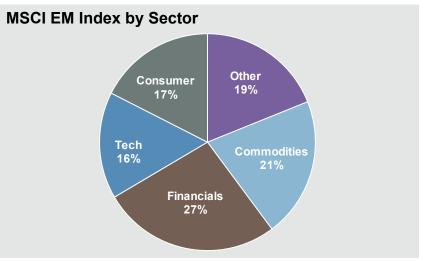


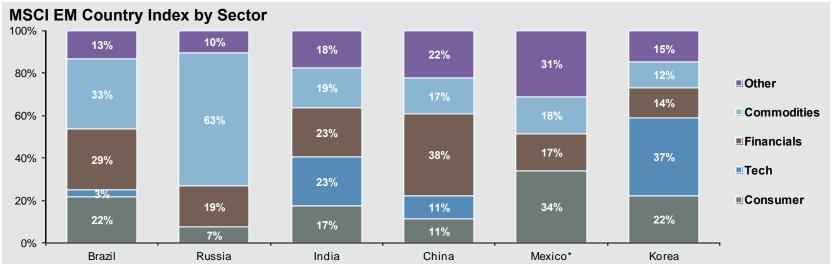
Source: MSCI, IMF, FactSet, J.P. Morgan Asset Management.

Share of global market capitalization is based on float adjusted MSCI data. Share of global GDP based on purchasing power parity (PPP) as calculated by the IMF for 2013. Definition of emerging markets is based on MSCI and IMF data sources. Percentages may not sum to 100% due to rounding. Guide to the Markets – U.S. Data as of 12/31/13.





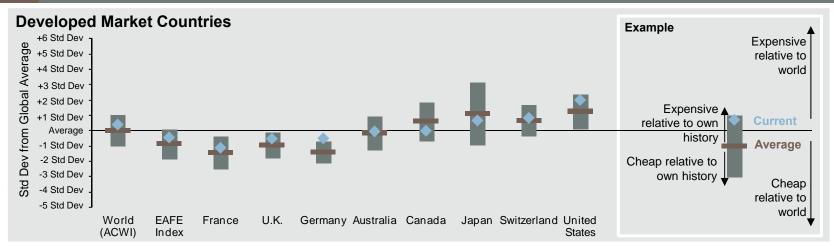




Source: MSCI, FactSet, J.P. Morgan Asset Management. "Other" is comprised of Healthcare, Industrials, Telecom, and Utilities sectors. 
\*Mexican Telecom sector accounts for 19% of the country's market capitalization. Values may not sum to 100% due to rounding.



## Global Equity Valuations - Developed Markets



	Current Composite		Cur	rent		10-year avg.					
	Index	Fwd. P/E	P/B	P/CF	Div. Yld.	Fwd. P/E	P/B	P/CF	Div. Yld.		
World (ACWI)	0.39	13.8	2.0	8.6	2.5%	13.1	2.0	7.4	2.5%		
EAFE Index	-0.45	13.3	1.7	7.9	3.1%	12.6	1.7	6.6	3.1%		
France	-1.13	12.5	1.5	6.8	3.4%	11.3	1.6	5.8	3.3%		
U.K.	-0.53	12.3	1.9	8.5	3.6%	11.5	1.5	5.5	3.0%		
Germany	-0.51	12.5	1.7	7.2	2.7%	11.2	2.0	7.6	3.7%		
Australia	-0.05	13.7	2.0	10.4	4.5%	13.4	2.2	9.4	4.3%		
Canada	-0.02	14.2	1.9	8.0	2.9%	13.7	2.1	8.6	2.2%		
Japan	0.66	14.1	1.4	7.8	1.7%	16.5	1.4	6.4	1.5%		
Switzerland	0.82	14.6	2.5	9.7	3.0%	13.3	2.4	9.6	2.6%		
United States	1.99	15.4	2.7	10.1	1.9%	14.0	2.5	8.6	1.9%		

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

Note: Each valuation index shows an equally weighted composite of four metrics: price to forward earnings (Fwd. P/E), price to current book (P/B), price to last 12 months' cash flow (P/CF) and price to last 12 months' dividends. Results are then normalized using means and average variability over the last 10 years. The grey bars represent valuation index variability relative to that of the MSCI All Country World Index (ACWI). See disclosures page at the end for metric definitions.

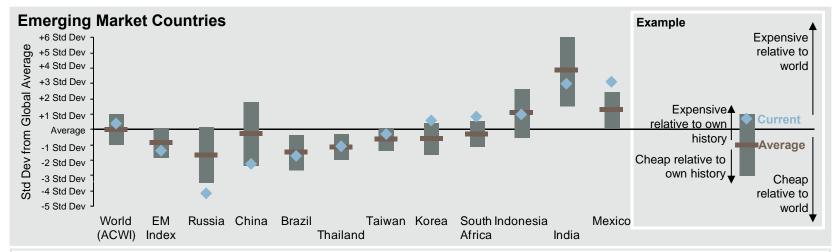
Guide to the Markets - U.S.

Data are as of 12/31/13.



International

## Global Equity Valuations - Emerging Markets



	Current		Curi	rent		10-year avg.					
	Composite Index	Fwd. P/E	P/B	P/CF	Div. Yld.	Fwd. P/E	P/B	P/CF	Div. Yld.		
World (ACWI)	0.39	13.8	2.0	8.6	2.5%	13.1	2.0	7.4	2.5%		
EM Index	-1.38	10.2	1.5	6.0	2.7%	11.1	1.9	6.2	2.7%		
Russia	-4.16	4.8	0.7	3.0	4.2%	7.9	1.4	4.9	2.1%		
China	-2.24	9.0	1.5	4.6	3.3%	12.0	2.1	7.2	2.6%		
Brazil	-1.72	10.0	1.4	6.8	3.6%	9.9	1.9	5.5	3.2%		
Thailand	-1.10	11.3	1.9	6.6	3.5%	10.7	2.0	6.7	3.6%		
Taiw an	-0.30	14.2	1.8	7.1	3.0%	14.0	1.9	6.8	3.6%		
Korea	0.59	8.6	1.1	5.1	1.0%	9.4	1.5	4.8	1.6%		
South Africa	0.84	13.5	2.5	11.1	3.1%	11.2	2.4	8.5	3.2%		
Indonesia	0.98	12.4	3.0	10.3	2.8%	12.2	3.4	9.7	2.8%		
India	2.98	14.1	2.7	12.5	1.5%	15.3	3.2	12.7	1.3%		
Mexico	3.10	17.8	2.8	9.5	1.5%	14.1	2.8	7.4	1.8%		

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

Note: Each valuation index shows an equally weighted composite of four metrics: price to forward earnings (Fwd. P/E), price to current book (P/B), price to last 12 months' cash flow (P/CF) and price to last 12 months' dividends. Results are then normalized using means and average variability over the last 10 years. The grey bars represent valuation index variability relative to that of the MSCI All Country World Index (ACWI). See disclosures page at the end for metric definitions. Guide to the Markets – U.S. Data are as of 12/31/13.



											10-yrs.	'04 - '13
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	4Q13	Cum.	Ann.
REITs	MSCI EME	REITs	MSCI EME	Barclays Agg	MSCI EME	REITs	REITs	REITs	Russell 2000	S&P 500	MSCI EME	MSCI EME
31.6%	34.5%	35.1%	39.8%	5.2%	79.0%	27.9%	8.3%	19.7%	38.8%	10.5%	197.7%	11.5%
MSCI	DJUBS	MSCI	DJUBS	Cash	MSCI	Russell	Barclays	MSCI	S&P	Russell	Russell	Russell
EME 26.0%	Cmdty 21.4%	EME 32.6%	Cmdty 16.2%	1.8%	EAFE 32.5%	2000 26.9%	Agg 7.8%	EME 18.6%	500 32.4%	2000 8.7%	2000 138.3%	2000 9.1%
MSCI	MSCI	MSCI	MSCI	Market		MSCI	Market	MSCI	MSCI	MSCI	130.3/0	9.1/0
EAFE	EAFE	EAFE	EAFE	Neutral	REITs	EME	Neutral	EAFE	EAFE	EAFE	REITs	REITs
20.7%	14.0%	26.9%	11.6%	1.1%	28.0%	19.2%	4.5%	17.9%	23.3%	5.7%	128.5%	8.6%
Russell	REITs	Russell	Market	Asset	Russell	DJUBS	S&P	Russell	Asset	Asset	S&P	S&P
2000		2000	Neutral	AHOC.	2000	Cmdty	500	2000	Alloc.	Alloc.	500	500
18.3%	12.2%	18.4%	9.3%	-24.0%	27.2%	16.8%	2.1%	16.3%	14.9%	4.6%	104.3%	7.4%
Asset Alloc.	Asset	S&P 500	Asset Alloc.	Russell \	S&P 500	S&P 500	Cash	S&P 500	Market Neutral	Market Neutral	MSCI EAFE	MSCI EAFE
12.5%	8.3%	15.8%	7.4%	-33.8%	26.5%	15.1%	0.1%	16.0%	7.9%	3.8%	104.1%	7.4%
S&P	Market	Asset	Barclays	DJUBS	Asset	Asset	Asset	Asset		MSCI	Asset	Asset
500	Neutral	Alloc.	Agg	Cmdty	Alloc.	Allec.	Allec.	Alloc.	REITs	EME	Alloc.	Alloc.
10.9%	6.1%	15.2%	7.0%	-35.6%	22.2%	12.5%	-0.6%	11.3%	2.9%	1.9%	100.1%	7.2%
DJ UBS	S&P	Market	S&P	S&P	DJ UBS	MSCI	Russell	Barclays	Cash	Cash	Market	Market
Cmdty	500	Neutral	500	500	Cmdty	EAFE	2000	Agg	0.0%		Neutral	Neutral
9.1%	4.9%	11.2%	5.5%	-37.0%	18.9%	8.2%	-4.2% MSCI	4.2%		0.0%	62.7%	5.0%
Market Neutral	Russell 2000	Cash	Cash	REITs	Barclays Agg	Barclays Agg	EAFE	Market Neutral	Barclays Agg	Barclays Agg	Barclays Agg	Barclays Agg
6.5%	4.6%	4.8%	4.8%	-37.7%	5.9%	6.5%	- 11.7 %	0.9%	-2.0%	- 0 . 1%	56.0%	4.5%
Barclays	Cash	Barclays	Russell	MSCI	Market	Cash	DJ UBS	Cash	MSCI	REITs	Cash	Cash
Agg		Agg	2000	EAFE	Neutral		Cmdty		EME			
4.3%	3.0%	4.3%	- 1.6%	-43.1%	4.1%	0.1%	- 13.3%	0.1%	-2.3%	-0.2%	17.1%	1.6%
Cash	Barclays Agg	DJ UBS Cmdty	REITs	MSCI EME	Cash	Market Neutral	MSCI EME	DJ UBS Cmdty	DJ UBS Cmdty	DJ UBS Cmdty	DJ UBS Cmdty	DJ UBS Cmdty
1.2%	2.4%	2.1%	- 15.7%	- 53.2%	0.1%	-0.8%	- 18.2%	- 1.1%	-9.5%	- 1.1%	9.0%	0.9%

Source: Russell, MSCI, Dow Jones, Standard & Poor's, Credit Suisse, Barclays Capital, NAREIT, FactSet, J.P. Morgan Asset Management. 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 EMI, 25% in the Barclays Capital Aggregate, 5% in the Barclays 1-3m Treasury, 5% in the CS/Tremont Equity Market Neutral Index, 5% in the DJ UBS Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. All data represents total return for stated period. Past performance is not indicative of future returns. Data are as of 12/31/13, except for the CS/Tremont Equity Market Neutral Index, which reflects data through 11/30/13. "10-yrs" returns represent period of 1/1/04 – 12/31/13 showing both cumulative (Cum.) and annualized (Ann.) over the period. Please see disclosure page at end for index definitions. \*Market Neutral returns include estimates found in disclosures.

Guide to the Markets – U.S. Data are as of 12/31/13.



## Correlations and Volatility

_	U.S. Large Cap	EAFE	ЕМЕ	Bonds	Corp. HY	Munis	Currcy.	EMD	Cmdty.	REITs	Hedge Funds	Eq Market Neutral*	Ann. Volatility
U.S. Large Cap	1.00	0.89	0.77	-0.26	0.76	-0.11	-0.48	0.58	0.30	0.77	0.81	0.61	16%
EAFE		1.00	0.90	-0.16	0.77	-0.03	-0.57	0.66	0.20	0.70	0.88	0.54	20%
EME			1.00	-0.03	0.81	0.10	-0.62	0.79	0.09	0.62	0.90	0.54	25%
Bonds				1.00	-0.02	0.84	0.02	0.35	-0.17	0.03	-0.21	-0.33	4%
Corp. HY					1.00	0.19	-0.55	0.85	0.11	0.71	0.77	0.63	12%
Munis						1.00	-0.02	0.54	-0.26	0.09	-0.04	-0.12	4%
Currencies							1.00	-0.48	-0.39	-0.47	-0.65	-0.67	6%
EMD								1.00	0.05	0.65	0.65	0.49	9%
Commodities									1.00	0.49	0.18	0.47	21%
REITs										1.00	0.57	0.61	26%
Hedge Funds											1.00	0.64	8%
Eq Market Neutral*												1.00	14%

Source: Standard & Poor's, FRB, Barclays Capital Inc., MSCI Inc., Credit Suisse/Tremont, NCREIF, DJ UBS, 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 Capital Aggregate; Corp HY: Barclays Capital Corporate High Yield; EMD: Barclays Capital Emerging Market; Cmdty.: DJ UBS Commodity Index; Real Estate: NAREIT Equity REIT Index; Hedge Funds: CS/Tremont Multi-Strategy Index; Equity Market Neutral: CS/Tremont Equity Market Neutral Index. \*Market Neutral returns include estimates found in disclosures.

All correlation coefficients and annualized volatility calculated based on quarterly total return data for period 12/31/03 to 12/31/13.

This chart is for illustrative purposes only. Guide to the Markets – U.S.



Please see disclosure pages for index definitions. Guide to the Markets – U.S. Data are as of 12/31/13.

											10-yrs	'04 - '13
											Ann.	Ann.
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	4Q13	Return	Volatility
Real	Private	Real	Private	Glb.	MLPs	MLPs	MLPs	Real	MLPs	Global	Private	Real
Estate	Equity	Estate	Equity	Macro				Estate		Equity	Equity	Estate
35.0%	28.3%	35.6%	19.7%	4.7%	76.4%	35.9%	13.9%	18.0%	27.6%	7.9%	15.1%	25.4%
Private Equity	Global Equity	Private Equity	MLPs	Eq. Mkt. Ntrl.	Global Equity	Real Estate	Private Equity	Global Equity	Global Equity	MLPs	MLPs	MLPs
25.9%	17.4%	28.7%	12.7%	-3.0%	30.0%	26.7%	10.5%	16.5%	26.2%	5.3%	15.0%	18.2%
Distrsd.	Real	MLPs	Glb.	Mrgr.	Real	Private	Real	Private	Distrsd.	Distrsd.	Real	Global
Distisu.	Estate	WILFS	Macro	Arb.	Estate	Equity	Estate	Equity			Estate	Equity
18.1%	13.7%	26.1%	11.4%	-6.7%	27.6%	21.0%	9.4%	13.8%	15.0%	4.5%	8.5%	16.0%
MLPs	Distrsd.	Global Equity	HF Agg.	Rel. Val.	Rel. Val.	Rel. Val.	Mrgr. Arb.	Rel. Val.	HF Agg.	HF Agg.	Distrsd.	Private Equity
16.7%	10.4%	17.0%	11.0%	- 17.3%	23.0%	12.5%	2.3%	9.7%	9.8%	4.3%	7.7%	10.4%
Global Equity	HF Agg.	Distrsd.	Rel. Val.	HF Agg.	Distrsd.	Distrsd.	Rel. Val.	Distrsd.	Rel. Val.	Eq. Mkt. Ntrl.	Global Equity	Distrsd.
12.0%	9.1%	15.3%	10.0%	- 18.7%	20.2%	12.2%	0.8%	8.5%	7.4%	2.7%	7.3%	9.6%
HF Agg.	MLPs	Mrgr. Arb.	Mrgr. Arb.	Distrsd.	HF Agg.	Global Equity	Distrsd.	MLPs	Eq. Mkt. Ntrl.	Rel. Val.	Rel. Val.	HF Agg.
9.3%	6.3%	14.6%	8.9%	-22.3%	18.6%	11.1%	0.0%	4.8%	6.4%	2.6%	6.5%	7.9%
Glb. Macro	Eq. Mkt. Ntrl.	HF Agg.	Global Equity	Private Equity	Private Equity	HF Agg.	GIb. Macro	HF Agg.	Mrgr. Arb.	Mrgr. Arb.	HF Agg.	Rel. Val.
7.5%	6.1%	13.3%	7.7%	- 22.4%	13.4%	8.5%	-0.7%	4.4%	5.4%	1.8%	5.8%	6.7%
Rel. Val.	Glb.	Rel. Val.	Distrsd.	MLPs	Mrgr.	Mrgr.	Eq. Mkt.	Eq. Mkt.	Glb.	Glb.	Mrgr.	Glb.
	Macro				Arb.	Arb.	Ntrl.	Ntrl.	Macro	Macro	Arb.	Macro
6.1%	6.1%	12.2%	6.8%	-36.9%	11.9%	4.6%	- 1.5%	3.1%	0.6%	1.6%	5.1%	4.9%
Mrgr.	Mrgr.	Glb.	Eq. Mkt.	Real	Glb.	Glb.	HF Agg.	Mrgr.	Real	Real	Glb.	Eq. Mkt.
Arb. 3.7%	Arb. 5.5%	Macro 8.2%	Ntrl. 5.7%	Estate - 37.3%	Macro 6.9%	Macro 3.2%	-2.0%	Arb. 1.8%	Estate - 0.5%	Estate - 1.3%	Macro 4.6%	Ntrl. 3.7%
Eq. Mkt.		Eq. Mkt.	Real	Global	Eq. Mkt.	Eq. Mkt.	Global	Glb.	Private	Private	Eq. Mkt.	Mrgr.
Ntrl.	Rel. Val.	Ntrl.	Estate	Equity	Ntrl.	Ntrl.	Equity	Macro	Equity	Equity	Ntrl.	Arb.
3.4%	5.3%	7.0%	- 16.3%	-39.2%	- 1.7%	2.5%	-6.0%	- 1.3%	-	-	2.7%	3.6%

Source: Standard & Poor's, Alerian, HFRI, MSCI, Cambridge Associates, NAREIT, FactSet, J.P. Morgan Asset Management.

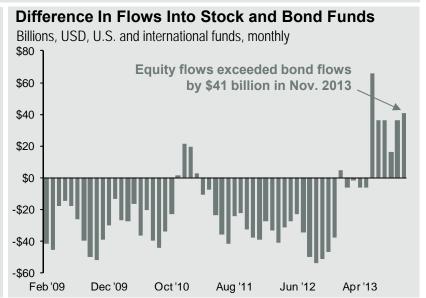
Hedge fund indices include distressed and restructuring (Distrsd.), relative value (Rel. Val.), global macro (Glb. Macro), merger arbitrage (Mrger. Arb.), equity market neutral (Eq. Mkt. Ntrl.), and the aggregate (HF Agg.). 4Q13 and 2013 private equity data is unavailable and provided by Cambridge Associates.

Real estate returns reflect the NAREIT Real Estate 50 Index and global equity returns reflect the MSCI AC World Index. Annualized volatility and returns are calculated from quarterly data between 1/1/04 and 12/31/13, except for private equity which represents 1/1/03 – 12/31/12.

**Asset Management** 

							Fun	d Flows	s								
Billions, USD	AUM	YTD 2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Domestic Equity	5,592	28	(156)	(132)	(81)	(29)	(149)	(65)	(0)	18	101	120	(26)	55	261	176	149
World Equity	1,993	131	3	4	58	28	(80)	139	149	106	71	24	(3)	(22)	53	11	8
Taxable Bond	2,824	(10)	254	137	224	310	21	98	45	27	5	40	125	76	(36)	8	59
Tax-exempt Bond	510	(48)	50	(12)	11	69	8	11	15	5	(15)	(7)	17	11	(14)	(12)	15
Hybrid	1,222	73	46	29	29	12	(25)	41	18	37	48	38	8	9	(36)	(14)	10
Money Market	2,674	(29)	(0)	(124)	(525)	(539)	637	654	245	62	(157)	(263)	(46)	375	159	194	235

#### **Cumulative Flows Into Stock & Bond Funds** Billions, USD, includes both mutual funds and ETFs \$1,600 Nov '13: \$1.346 billion into bond funds \$1,400 and fixed income ETFs since '07 \$1,200 \$1,000 \$800 Nov. '13: \$498 billion into stock funds and \$600 equity ETFs since '07 i **Bonds** \$400 \$200 **Stocks** \$0 '08 '09 '10 '11 '12 '13 '07

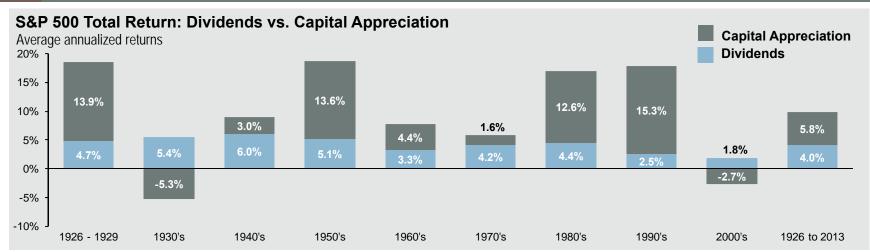


Source: Investment Company Institute, J.P. Morgan Asset Management.

Data include flows through November 2013 and exclude ETFs except for the bottom left chart. ICI data are subject to periodic revisions. World equity flows are inclusive of emerging market, global equity and regional equity flows. Hybrid flows include asset allocation, balanced fund, flexible portfolio and mixed income flows.

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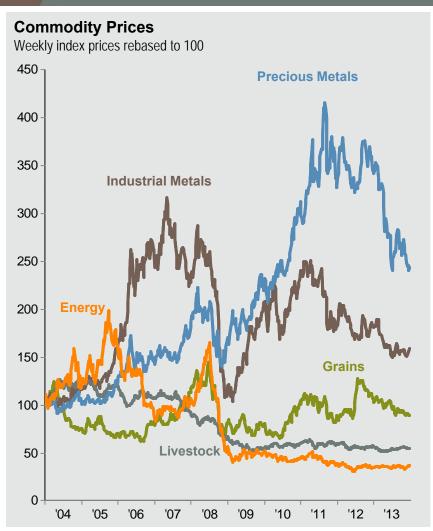


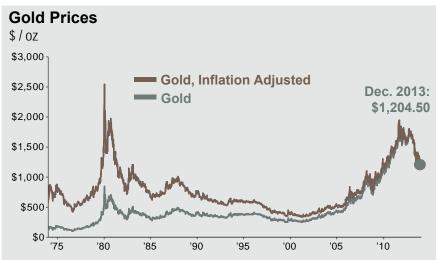


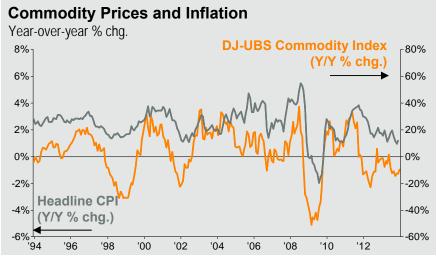


Source: (Top chart) Standard & Poor's, Ibbotson, J.P. Morgan Asset Management. (Bottom left) FactSet, NAREIT, J.P. Morgan Asset Management. Dividend vs. capital appreciation returns are through 12/31/12. Yields shown are that of the appropriate FTSE NAREIT REIT index, which excludes property development companies. (Bottom right) FactSet, MSCI, J.P. Morgan Asset Management. Yields shown are that of the appropriate MSCI index. Guide to the Markets – U.S.



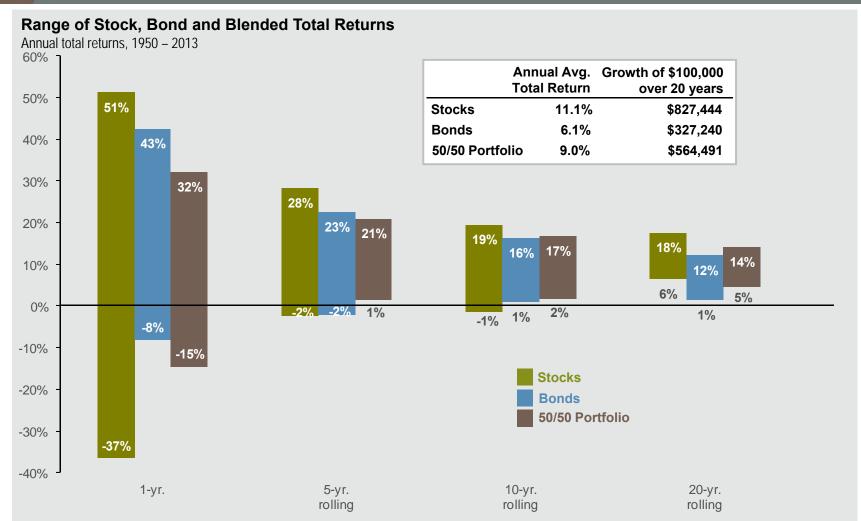






Source: Dow Jones/UBS, EcoWin, BLS, U.S. Department of Energy, FactSet, J.P. Morgan Asset Management. CPI adjusted gold values are calculated using monthly averages of gold spot prices divided by the CPI value for that month. CPI is rebased to 100 at the end of the chart. Returns based on nominal prices. Commodity prices represented by the appropriate DJ/UBS Commodity sub-index. Guide to the Markets – U.S.

J.P.Morgan Asset Management



Sources: Barclays Capital, FactSet, Robert Shiller, Strategas/Ibbotson, Federal Reserve, J.P. Morgan Asset Management.

Returns shown are based on calendar year returns from 1950 to 2013. Growth of \$100,000 is based on annual average total returns from 1950-2013. Guide to the Markets – U.S.



■S&P 500

MSCI EAFE

**More Diversified Portfolio** Equity Mkt. Neutral Commodities 8% REIT 26% S&P 500 Russell 2000 22% 13% MSCI EAFE MSCI EM Barclays Agg.

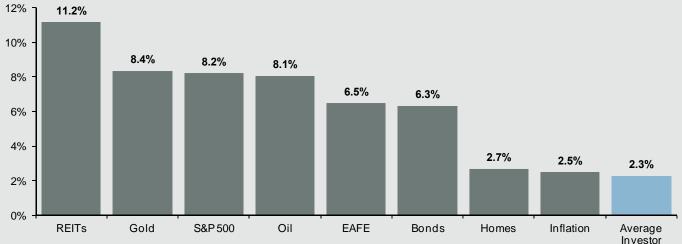
Return: 7.72% Standard Deviation: 9.87%

20-year Annualized Returns by Asset Class (1993 – 2012)

Maximizing the Power of Diversification (1994 – 2012)

**Traditional Portfolio** 

55%



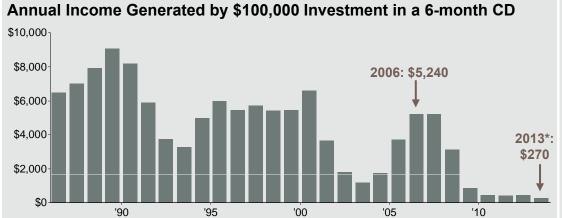
(Top) Indexes and weights of the traditional portfolio are as follows: U.S. Stocks: 55% S&P 500; U.S. Bonds: 30% Barclays Capital Aggregate: International Stocks: 15% MSCI EAFE. Portfolio with 25% in alternatives is as follows: U.S. Stocks: 22.2% S&P 500, 8.8% Russell 2000; International Stocks: 4.4% MSCI EM, 13.2% MSCI EAFE; U.S. Bonds: 26.5% Barclays Capital Aggregate; Alternatives: 8.3% CS/Tremont Equity Market Neutral: 8.3%, DJ/UBS Commodities: 8.3% NAREIT Equity REIT Index. Return and standard deviation calculated using Morningstar Direct. Charts are shown for illustrative purposes only. Past performance is not indicative of future returns. Diversification does not guarantee investment returns and does not eliminate risk of loss. Data are as of 12/31/13. Guide to the Markets - U.S. J.P. Morgan Asset Management. (Bottom) Indexes used are as follows: REITS: NAREIT Equity REIT Index, EAFE: MSCI EAFE, Oil: WTI Index, Bonds: Barclays Capital U.S.

Aggregate Index, Homes: median sale price of existing single-family homes, Gold: USD/troy oz, Inflation: CPI. 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 12/31/12 to match Dalbar's most recent analysis.

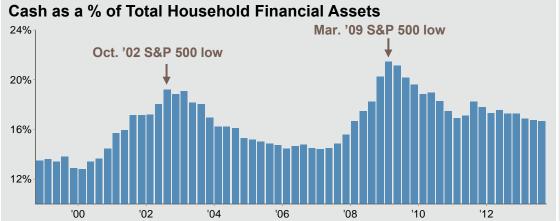


65

#### Cash Accounts



Money Supply Component	\$ Billions	Weight in Money Supply
M2-M1	8,323	77.1%
Retail MMMFs	645	6.0%
Savings deposits	7,138	66.1%
Small time deposits	540	5.0%
Institutional MMMFs	1,794	16.6%
Cash in IRA & Keogh accounts	677	6.3%
Total	10,793	100.0%



Source: Federal Reserve, St. Louis Fed, Bankrate.com, J.P. Morgan Asset Management.

All cash measures obtained from the Federal Reserve are seasonally adjusted monthly numbers. 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. \*2013 average income is through June 2013. IRA and Keogh account balances at money market mutual funds are subtracted from retail money funds.

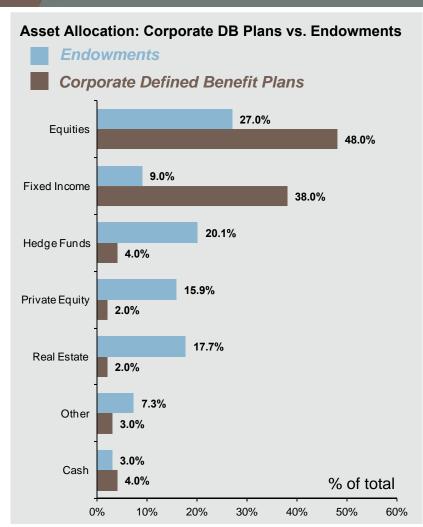
Past performance is not indicative of comparable future results.

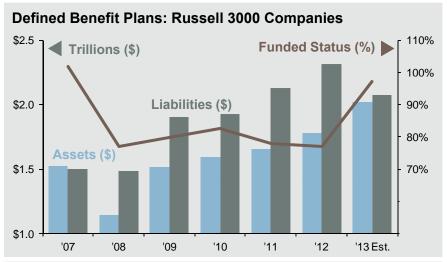
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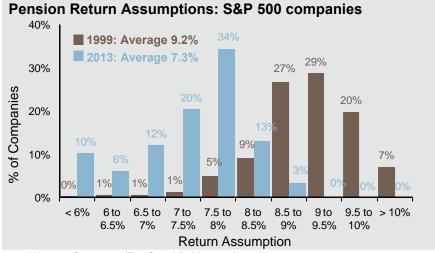
Data are as of 12/31/13.



**Asset Class** 







Source: NACUBO (National Association of College and University Business Officers), Towers Watson, Compustat/FactSet, J.P. Morgan Asset Management. Asset allocation as of 2012. Funded status for 2013 estimated using 2013 market returns. 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. All information is shown for illustrative purposes only. Guide to the Markets – U.S. Data are as of 12/31/13.



### J.P. Morgan Asset Management - Index Definitions

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

The **S&P 500 Index** is widely regarded as the best single gauge of the U.S. equities market. This world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 Index focuses on the large-cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

The S&P 400 Mid Cap Index is representative of 400 stocks in the mid-range sector of the domestic stock market, representing all major industries.

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

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 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 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 Top 200 Index** ® measures the performance of the largest cap segment of the U.S. equity universe. It includes approximately 200 of the largest securities based on a combination of their market cap and current index membership and represents approximately 68% of the U.S. market.

The MSCI® EAFE (Europe, Australia, Far East) Net Index is recognized as the pre-eminent benchmark in the United States to measure international equity performance. It comprises 21 MSCI country indexes, representing the developed markets outside of North America.

The MSCI Emerging Markets Index<sup>SM</sup> is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. As of June 2007, the MSCI Emerging Markets Index consisted of the following 25 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

The MSCI ACWI (All Country World Index) Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. As of June 2009 the MSCI ACWI consisted of 45 country indices comprising 23 developed and 22 emerging market country indices.

The MSCI Small Cap Indices<sup>SM</sup> target 40% of the eligible Small Cap universe within each industry group, within each country. MSCI defines the Small Cap universe as all listed securities that have a market capitalization in the range of USD200-1,500 million.

The MSCI Value and Growth Indices<sup>SM</sup> cover the full range of developed, emerging and All Country MSCI Equity indexes. As of the close of May 30, 2003, MSCI implemented an enhanced methodology for the MSCI Global Value and Growth Indices, adopting a two dimensional framework for style segmentation in which value and growth securities are categorized using different attributes - three for value and five for growth including forward-looking variables. The objective of the index design is to divide constituents of an underlying MSCI Standard Country Index into a value index and a growth index, each targeting 50% of the free float adjusted market capitalization of the underlying country index. Country Value/Growth indices are then aggregated into regional Value/Growth indices. Prior to May 30, 2003, the indices used Price/Book Value (P/BV) ratios to divide the standard MSCI country indices into value and growth indices. All securities were classified as either "value" securities (low P/BV securities) or "growth" securities (high P/BV securities), relative to each MSCI country index.

The following MSCI Total Return Indices<sup>SM</sup> are calculated with gross dividends:

This series approximates the maximum possible dividend reinvestment. The amount reinvested is the dividend distributed to individuals resident in the country of the company, but does not include tax credits.

The MSCI Europe Index<sup>SM</sup> is a free float-adjusted market capitalization index that is designed to measure developed market equity performance in Europe. As of June 2007, the MSCI Europe Index consisted of the following 16 developed market country indices: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The MSCI Pacific Index<sup>SM</sup> is a free float-adjusted market capitalization index that is designed to measure equity market performance in the Pacific region. As of June 2007, the MSCI Pacific Index consisted of the following 5 Developed Market countries: Australia, Hong Kong, Japan, New Zealand, and Singapore.

Credit Suisse/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 NCREIF Property Index is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment.

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 **Dow Jones Industrial Average** measures the stock performance of 30 leading blue-chip U.S. companies.

The **Dow Jones-UBS Commodity Index** is 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.



### J.P. Morgan Asset Management - Index Definitions

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

The S&P GSCI Index is a composite index of commodity sector returns representing an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. The returns are calculated on a fully collateralized basis with full reinvestment. Individual components qualify for inclusion in the index on the basis of liquidity and are weighted by their respective world production quantities.

The Barclays Capital U.S. Aggregate Index represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

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

West Texas Intermediate (WTI) is the underlying commodity for the New York Mercantile Exchange's oil futures contracts.

The Barclays Capital High Yield Index covers the universe of fixed rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, and 144-As are also included.

The Barclays Capital 1-3 Month U.S. Treasury Bill Index includes all publicly issued zero-coupon U.S. 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 Capital General Obligation Bond Index is a component of the Barclays Capital Municipal Bond Index. To be included in the index, bonds must be general obligation bonds rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. The bonds must be fixed rate, have a dated-date after December 31, 1990, and must be at least one year from their maturity date. Remarketed issues, taxable municipal bonds, bonds with floating rates, and derivatives, are excluded from the benchmark.

The Barclays Capital Revenue Bond Index is a component of the Barclays Capital Municipal Bond Index. To be included in the index, bonds must be revenue bonds rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. The bonds must be fixed rate, have a dated-date after December 31, 1990, and must be at least one year from their maturity date. Remarketed issues, taxable municipal bonds, bonds with floating rates, and derivatives, are excluded from the benchmark.

The Barclays High Yield Municipal Index includes bonds rated Ba1 or lower or non-rated bonds using the middle rating of Moody's, S&P and Fitch.

The Barclays Capital Taxable Municipal Bond Index is a rules-based, market-value weighted index engineered for the long-term taxable bond market. To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies if all three rate the bond: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. The bonds must be fixed rate and must be at least one year from their maturity date. Remarketed issues (unless converted to fixed rate), bonds with floating rates, and derivatives, are excluded from the benchmark.

Municipal Bond Index: To be included in the index, bonds must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. If only two of the three agencies rate the security, the lower rating is used to determine index eligibility. If only one of the three agencies rates a security, the rating must be investment-grade. They must have an outstanding par value of at least \$7 million and be issued as part of a transaction of at least \$75 million. The bonds must be fixed rate, have a dated-date after December 31, 1990, and must be at least one year from their maturity date. Remarketed issues, taxable municipal bonds, bonds with floating rates, and derivatives are excluded from the benchmark.

The Barclays Capital Emerging Markets Index includes USD-denominated debt from emerging markets in the following regions: Americas, Europe, Middle East, Africa, and Asia. As with other fixed income benchmarks provided by Barclays Capital, the index is rules-based, which allows for an unbiased view of the marketplace and easy replicability.

The Barclays Capital MBS Index covers the mortgage-backed pass-through securities of Ginnie Mae, Fannie Mae, and Freddie Mac. Aggregate components must have a weighted average maturity of at least one year, must have \$250 million par amount outstanding, and must be fixed rate mortgages.

The Barclays Capital Corporate Bond Index is the Corporate component of the U.S. Credit index.

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

The J.P. Morgan EMBI Global Index 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 CS/Tremont Equity Market Neutral Index takes both long and short positions in stocks with the aim of minimizing exposure to the systematic risk of the market (i.e., a beta of zero).

The CS/Tremont Multi-Strategy Index consists of funds that allocate capital based on perceived opportunities among several hedge fund strategies. Strategies adopted in a multi-strategy fund may include, but are not limited to, convertible bond arbitrage, equity long/short, statistical arbitrage and merger arbitrage.

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

\*Market Neutral returns for November 2008 are estimates by J.P. Morgan Funds Market Strategy, and are based on a December 8, 2008 published estimate for November returns by CS/Tremont in which the Market Neutral returns were estimated to be +0.85% (with 69% of all CS/Tremont constituents having reported return data). Presumed to be excluded from the November return are three funds, which were later marked to \$0 by CS/Tremont in connection with the Bernard Madoff scandal. J.P. Morgan Funds believes this distortion is not an accurate representation of returns in the category. CS/Tremont later published a finalized November return of -40.56% for the month, reflecting this mark-down. CS/Tremont assumes no responsibility for these estimates.



### J.P. Morgan Asset Management - Definitions, Risks & Disclosures

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

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.

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.

**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.

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.

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. Also, some overseas markets may not be as politically and economically stable as the United States and other nations.

Investments in emerging markets can be more volatile. As mentioned above, 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.

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.

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.

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.

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.

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. Investing 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.

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 substrategies. 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.

**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.

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.

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.

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.

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

The Cambridge Associates LLC U.S. Private Equity Index® is an end-to-end calculation based on data compiled from 1,052 U.S. private equity funds (buyout, growth equity, private equity energy and mezzanine funds), including fully liquidated partnerships, formed between 1986 and 2013.

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.



### J.P. Morgan Asset Management - Risks & Disclosures

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.

The views contained herein are not to be taken as an advice or recommendation to buy or sell any investment in any jurisdiction, nor it is commitment from J.P. Morgan Asset Management or any of its subsidiaries (collectively identified as "JPMAM") to participate in any of the transactions mentioned herein. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without previous notice. All information presented herein is considered to be accurate at the time of writing, but no warranty of accuracy is given and no liability in respect to any error or omission is accepted. This material should not be relied upon by you in evaluating the merits of investing in any securities or products mentioned herein. In addition, the Investor should make an independent assessment of the legal, regulatory, tax, credit and accounting and determine, together with their own professional advisers, if any of the investments mentioned herein are suitable to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. It should be noted that the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yield may not be a reliable guide to future performance. Exchange rate variations may cause the value of investments to increase or decrease. Investments in smaller companies may involve a higher degree of risk as they are usually more sensitive to market movements. Investments in emerging markets may be more volatile and therefore the risk to your capital could be greater. Further, the economic and political situations in emerging markets may be more volatile than in established economies and these may adversely influence the value of investments made. The information presented herein

The value of investments and the income from them may fall as well as rise and investors may not get back the full or any of the amount invested. Recipient of this communication should make their own investigation or evaluation or seek independent advice prior to making any investment. It shall be the recipient's sole responsibility to verify his / her eligibility and to comply with all requirements under applicable legal and regulatory regimes in receiving this communication and in making any investment. All cases studies shown for illustrative purposes only and should not be relied upon as advice or interpreted as a recommendation. Results shown are not meant to be representative of actual investment results.

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#### Brazilian recipients:



Prepared by: Joseph S. Tanious, Andrés Garcia-Amaya, Anastasia V. Amoroso, James C. Liu, Brandon D. Odenath, Gabriela D. Santos, Anthony M. Wile and David P. Kelly.

#### JP-LITTLEBOOK

Unless otherwise stated, all data are as of December 31, 2013 or most recently available.

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