



PHOTO: VALLARIE ENRIQUEZ/GETTY IMAGES

## The 10 Potential Surprises of 2016

*Update in the Back Stretch*

May 2016

## Definition, Disclaimer & Qualifier

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**Definition:** A Surprise is a Variant Perception (an idea that is materially different from Consensus) that I believe has a better than 50% chance of occurring in the current year.

**Disclaimer:** I have intentionally not read any of the other lists of 2016 Surprises (most importantly Byron's), so any similarity between the Surprises in this presentation and any of those predictions is coincidental or evidence (if they match the Blackstone list) that there was some channeling actually going on...

**Qualifier:** There is much wisdom about the folly of prediction (some on next page) and it would probably have been wise to decline the request to produce this list... That said, the process of thinking about Variant Perceptions and Scenarios is valuable to our investment process and it was actually kind of fun to spend some extra time thinking outside the box (or even better, thinking like there was no box...).

## Words of Wisdom

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**“Making predictions is hard, especially about the future...”**

**Yogi Berra**

**“The financial markets generally are unpredictable. So that one has to have different scenarios... The idea that you can actually predict what's going to happen contradicts my way of looking at the market.”**

**George Soros**

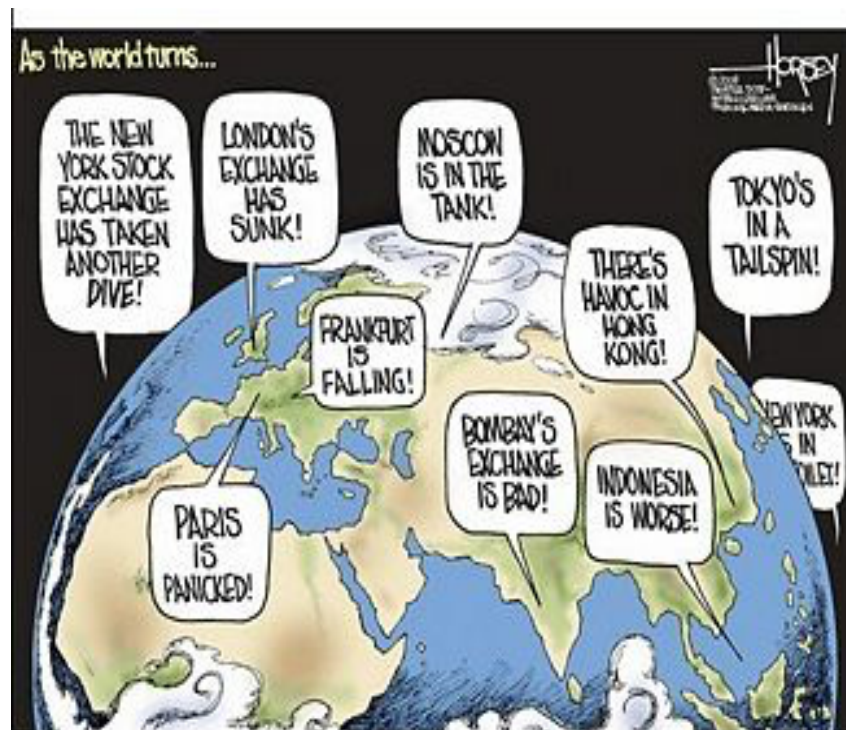
**“Those who have knowledge, don't predict. Those who predict, don't have knowledge.”**

**Lao Tzu**

## Surprise #1

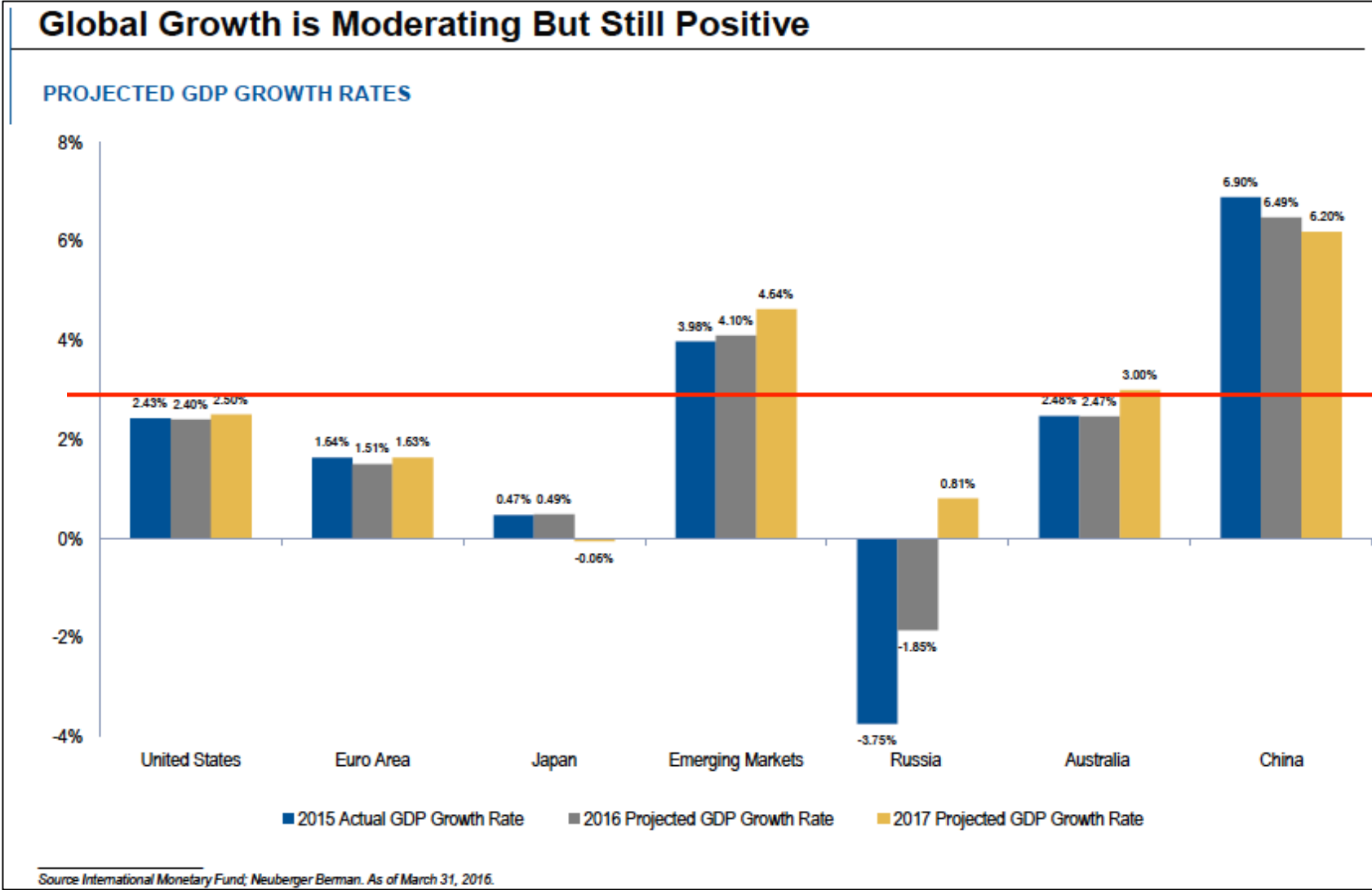
## There Goes The Boom...

Despite massive Central Bank stimulus programs around the world, economic growth continues to surprise to the downside as the rising costs of aging populations weighs on the Developed Markets. One (or more) of the U.S., Europe and Japan slip into Recession and global interest rates continue to plumb new lows.



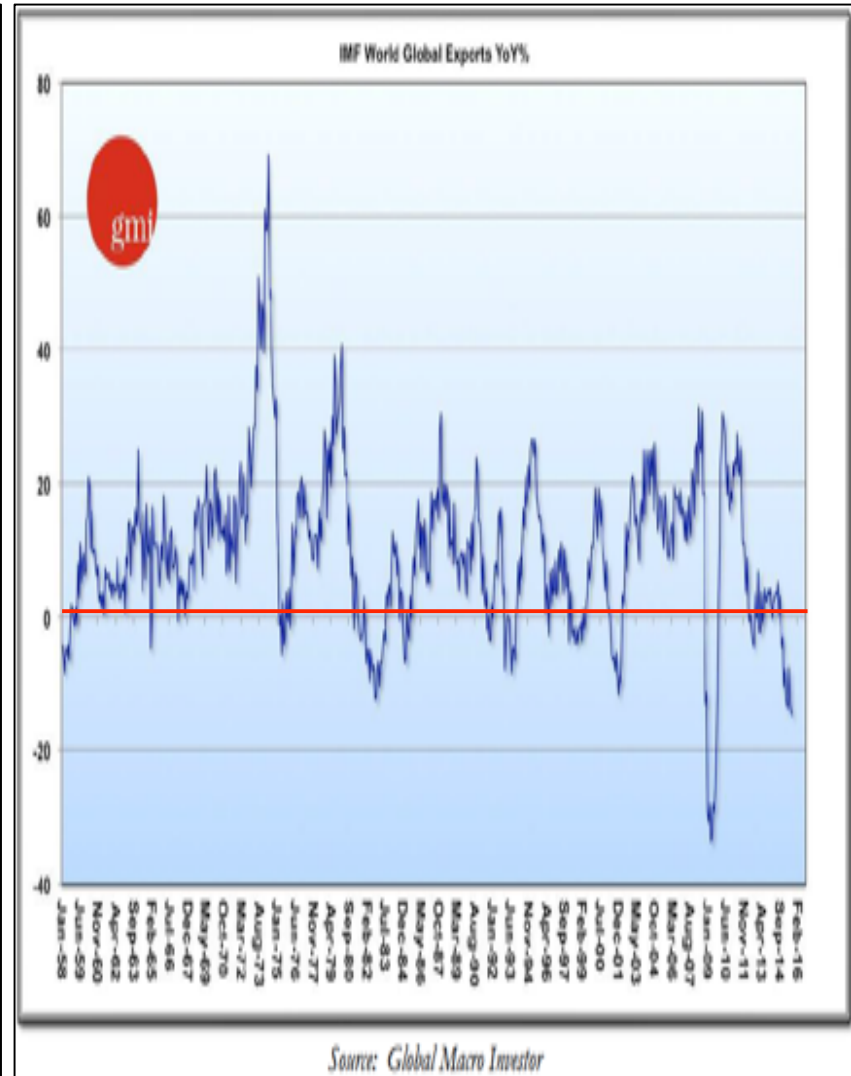
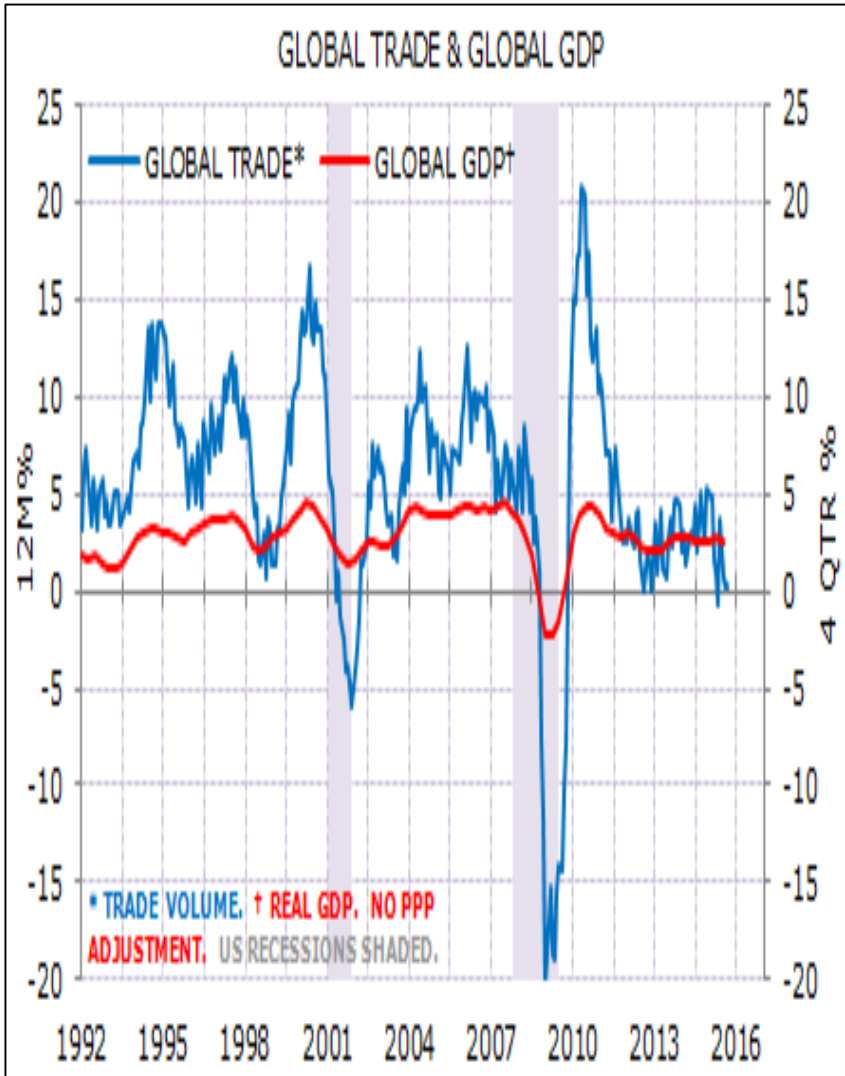
Source(s): Conservapedia.com

# Dev Mkt GDP Growth in Secular Decline Due to Killer D's



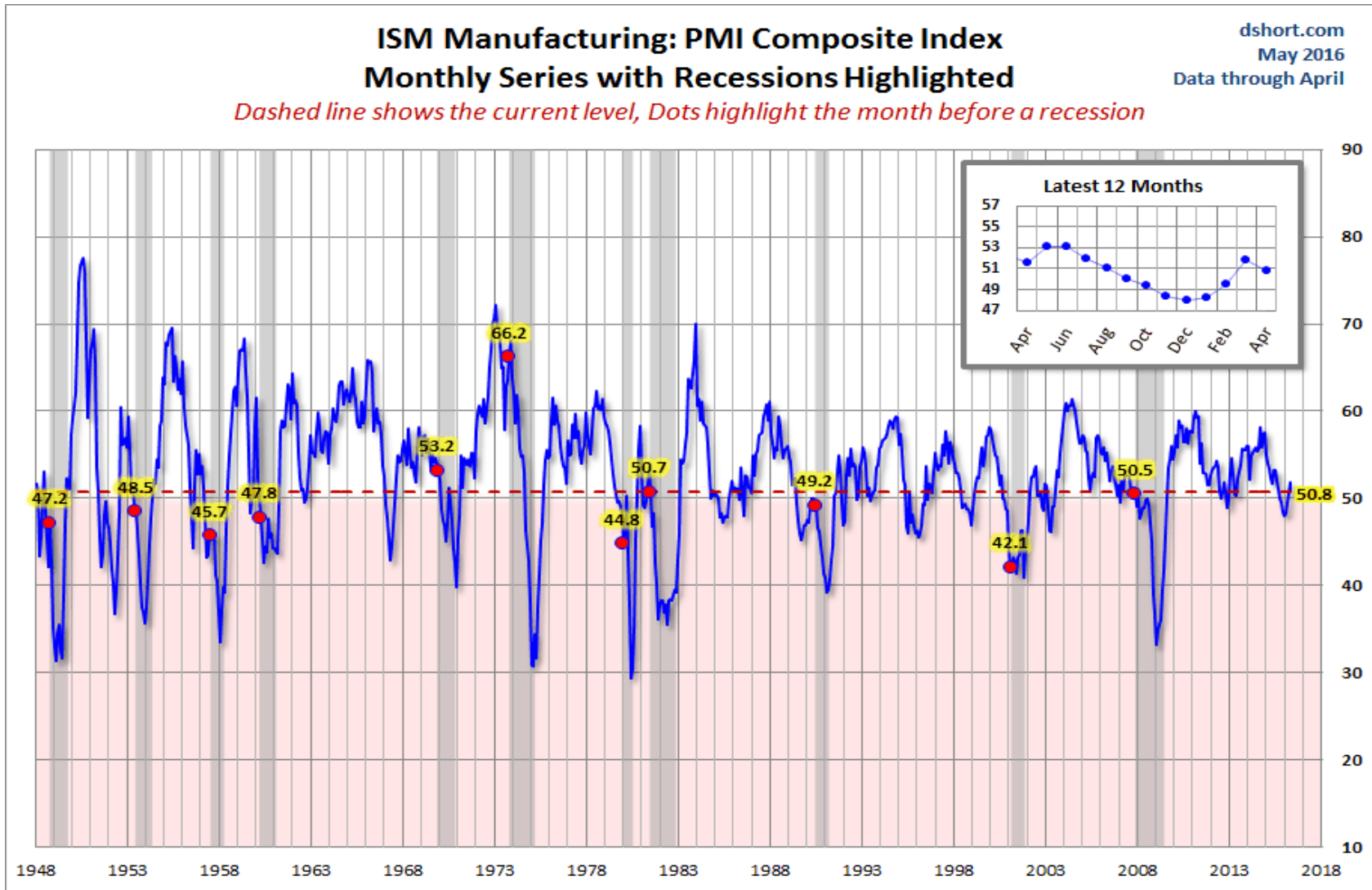
Source(s): Neuberger Berman

# Global Trade & Global Exports Flat => Global Recession?



Source(s): EurekaReport.com, Global Macro Investor

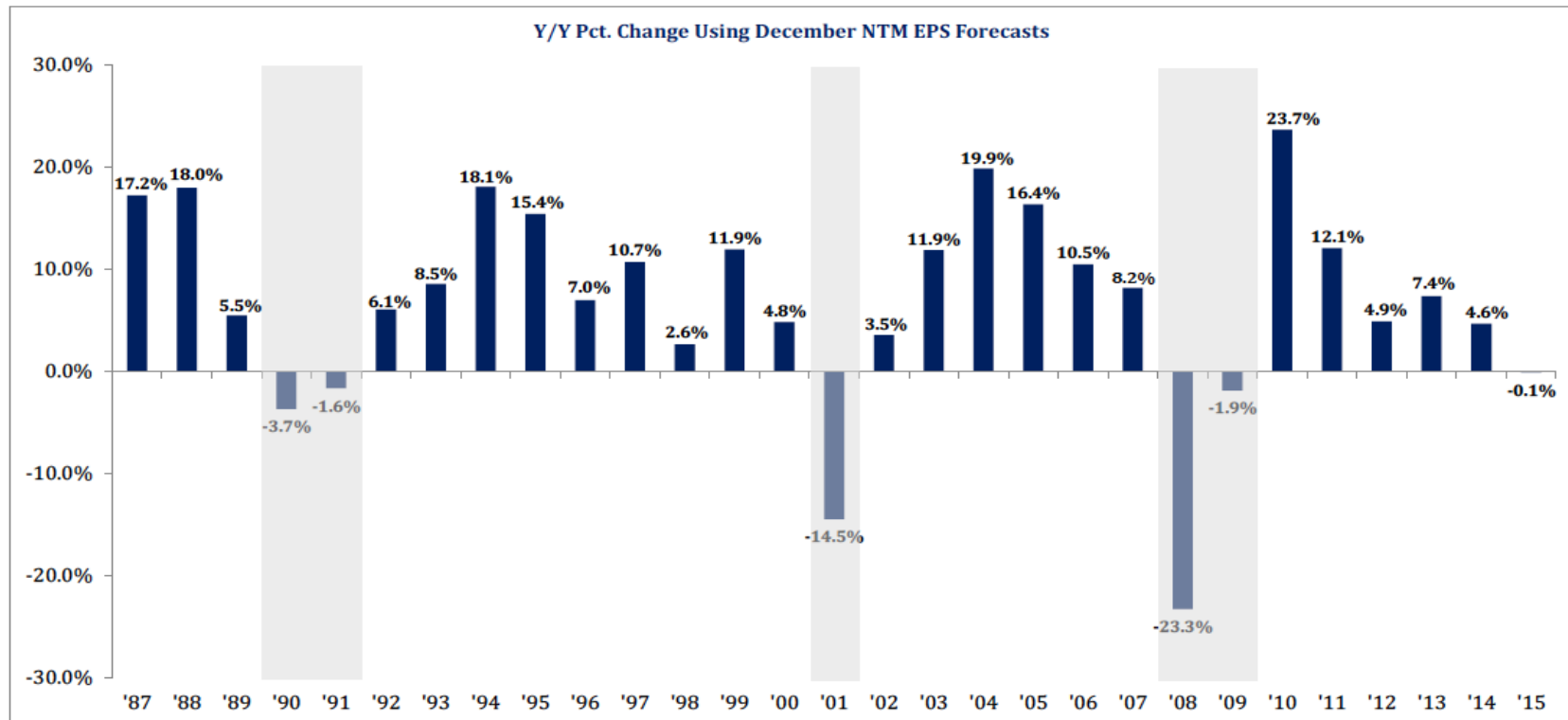
# US Manufacturing Bordering on Contraction; Recession?



Source(s): AdvisorPerspectives.com

# Negative NTM S&P 500 Forward EPS Signals Recession

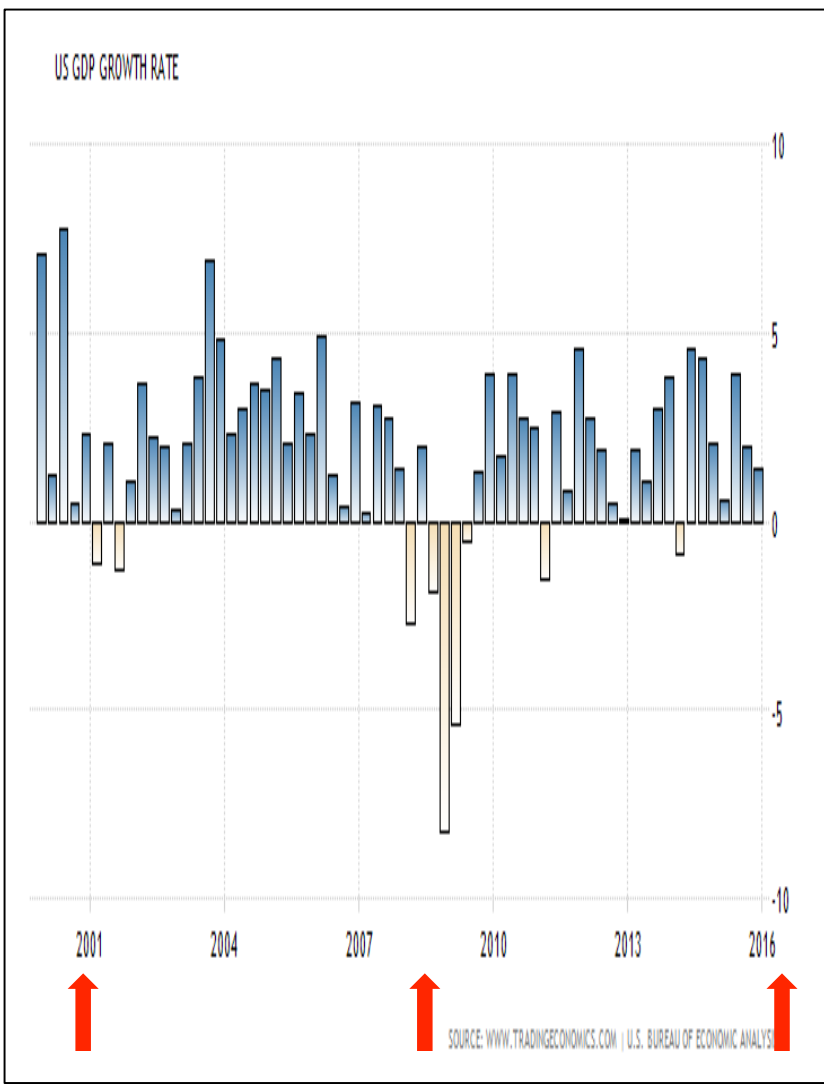
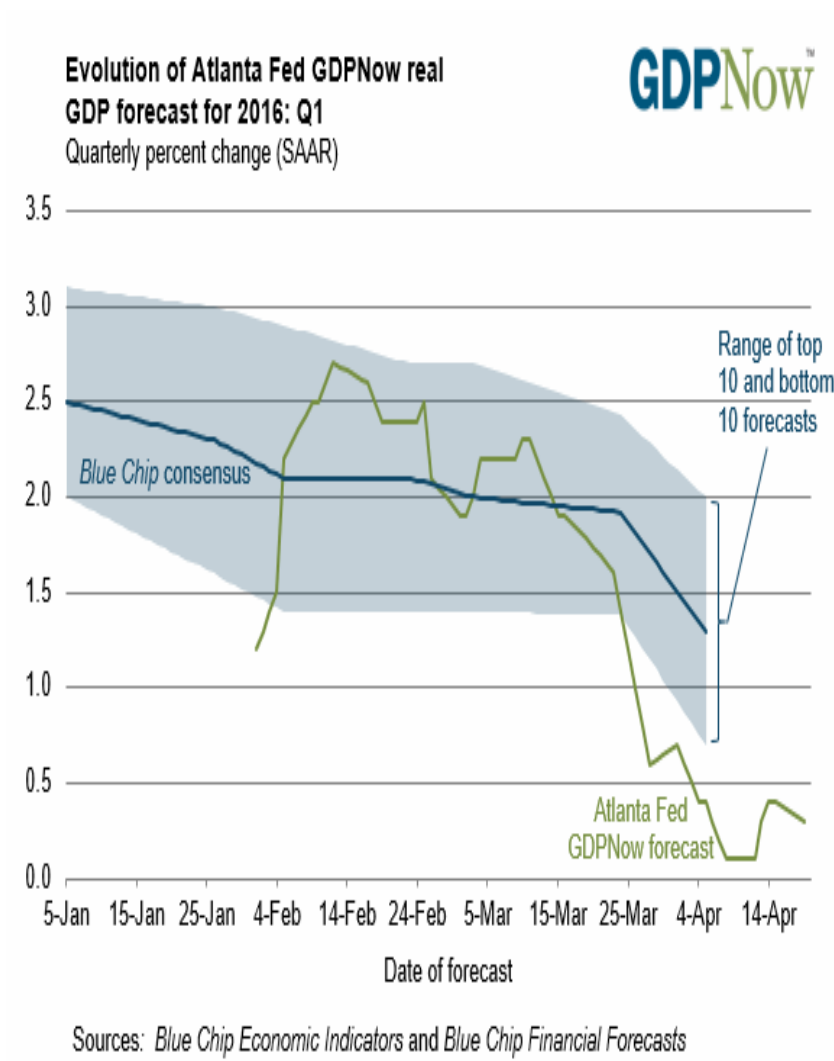
Looking at the year over year percentage change in the consensus next twelve-month earnings estimate as of the end of December suggests that in years when the change is negative, a recession occurs. As of the end of 2015, that percentage change is -0.1%. If you looked at this at the beginning of 1991, you did not believe that the economy was in recession either however when all was said and done it was determined that we were. Is this the situation that we are in today? Only time will tell.



Source(s): Strategas

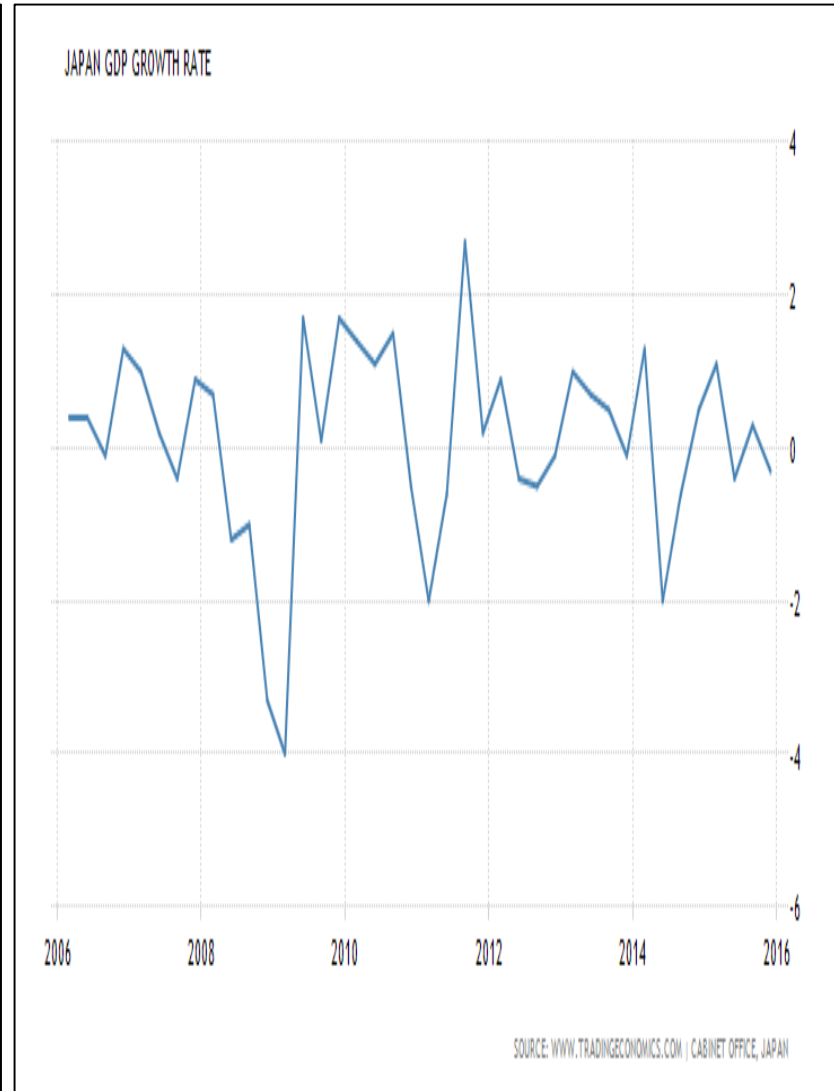
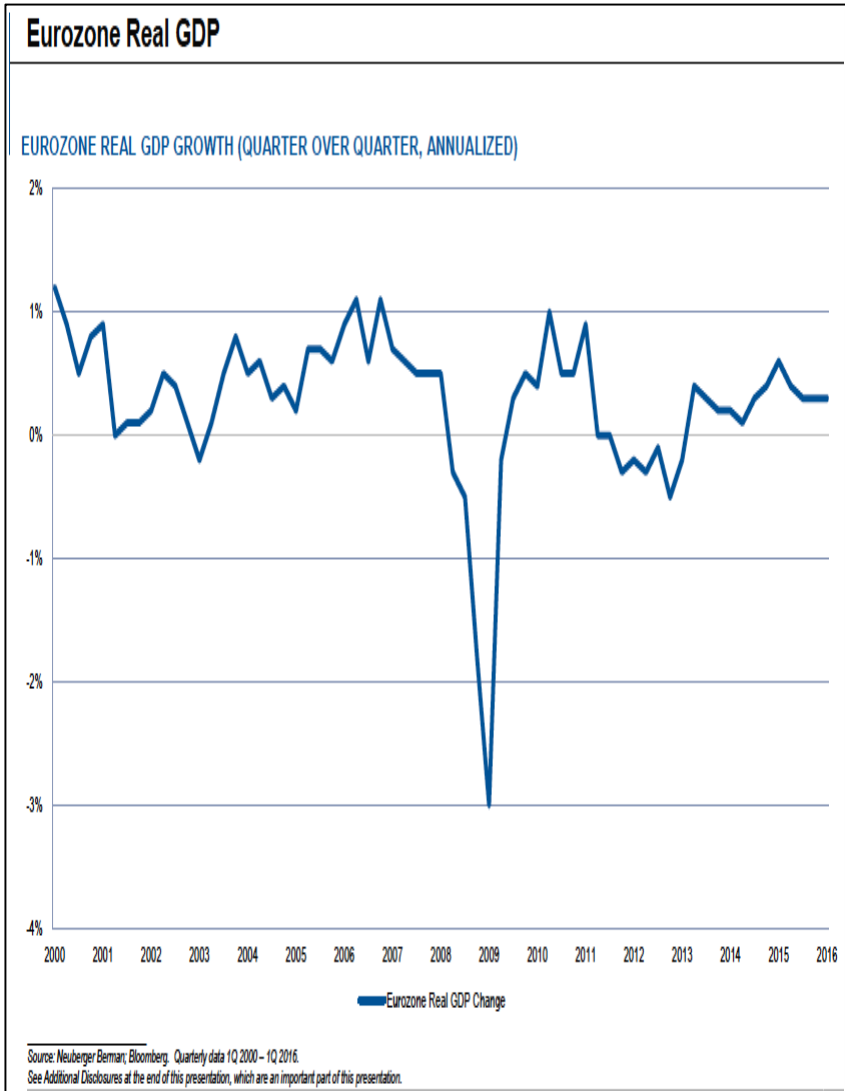


# Q1 '16 GDP Quite Disappointing, Business Cycle Lives



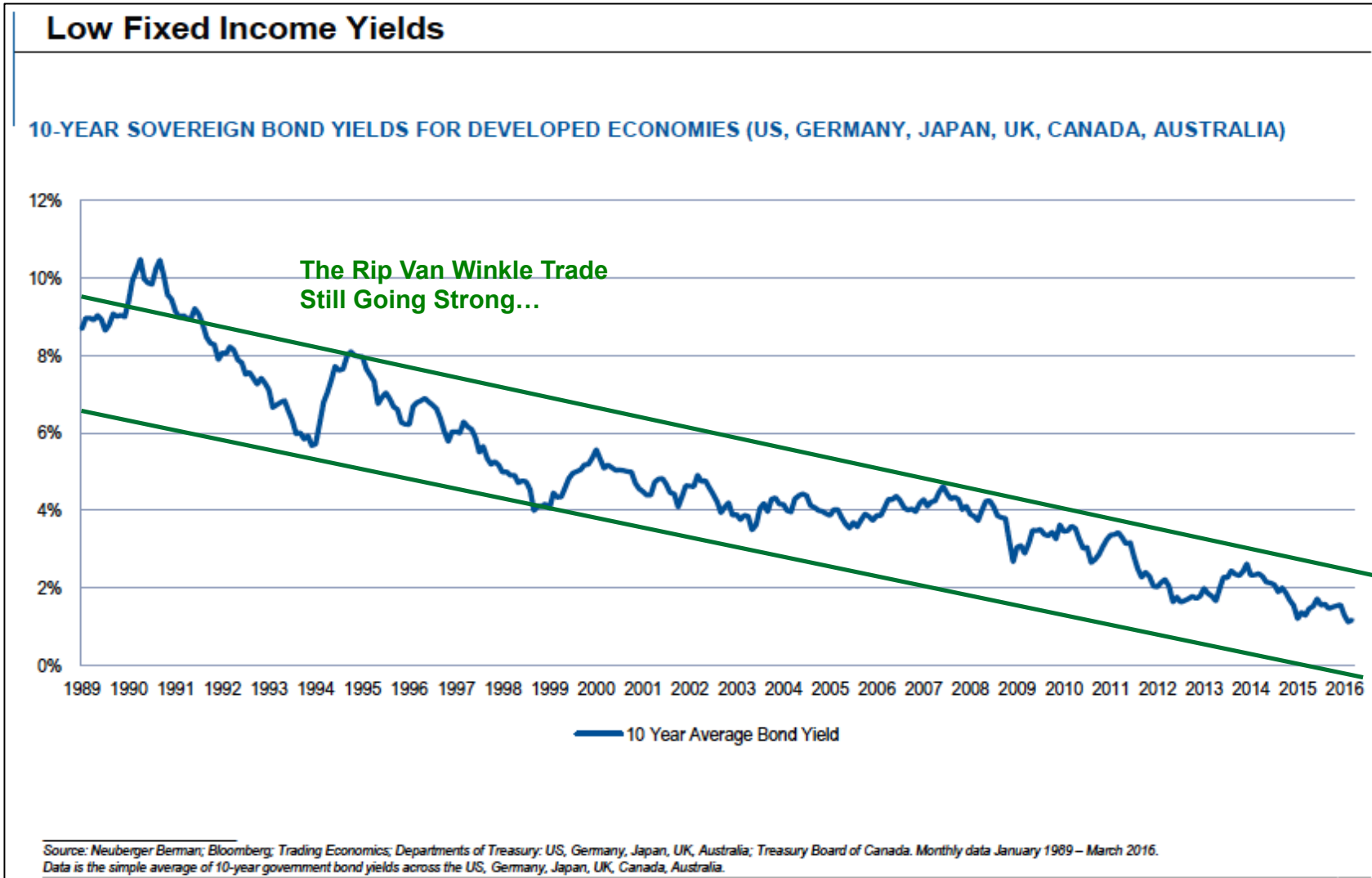
Source(s): AtlantaFED, TradingEconomics.com

# Europe/Japan Economies Right on Edge of a Recession



Source(s): Neuberger Berman, TradingEconomics.com

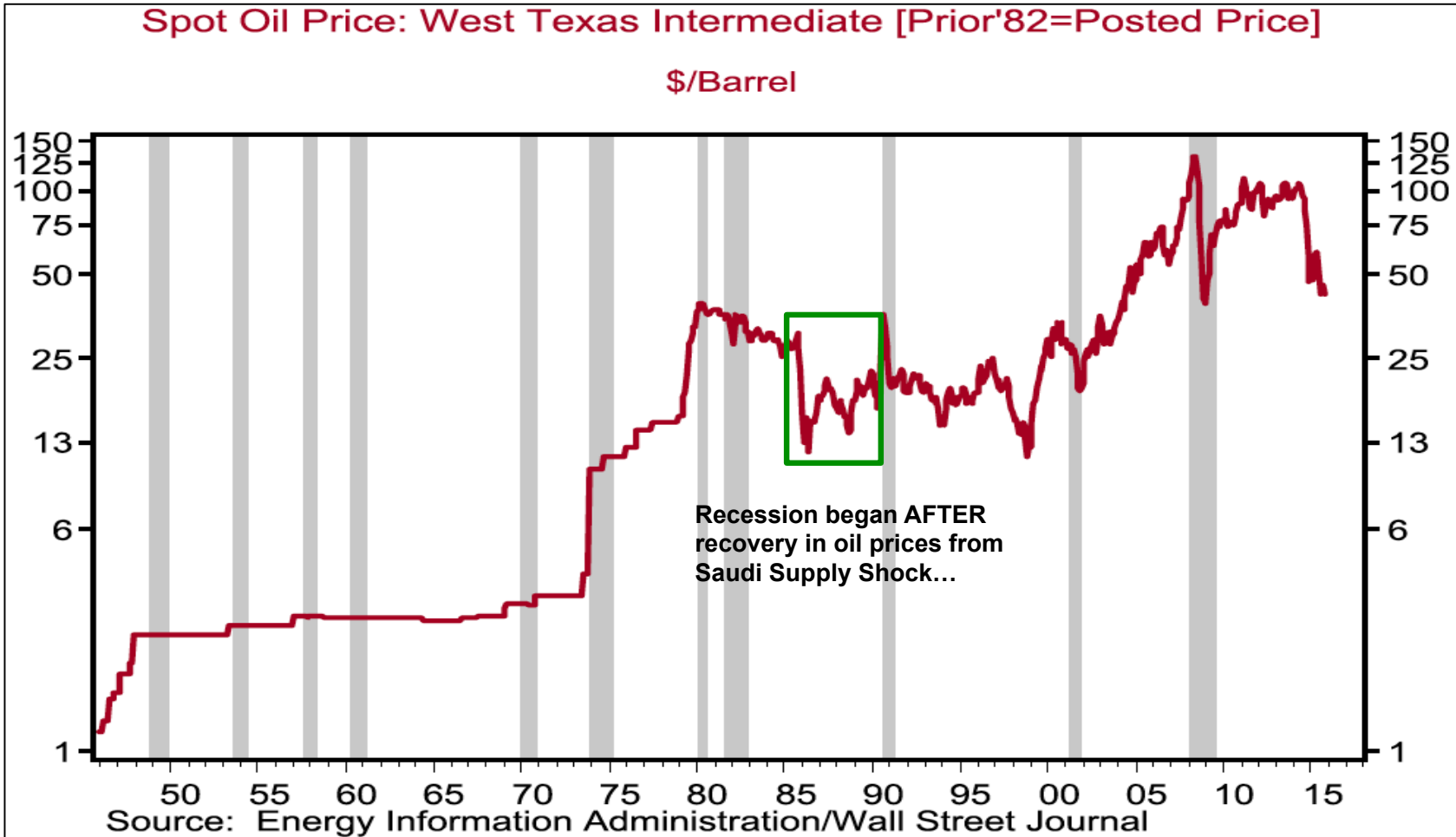
# Long Bonds Saying Deflation Larger Risk Than Inflation



Source(s): Neuberger Berman

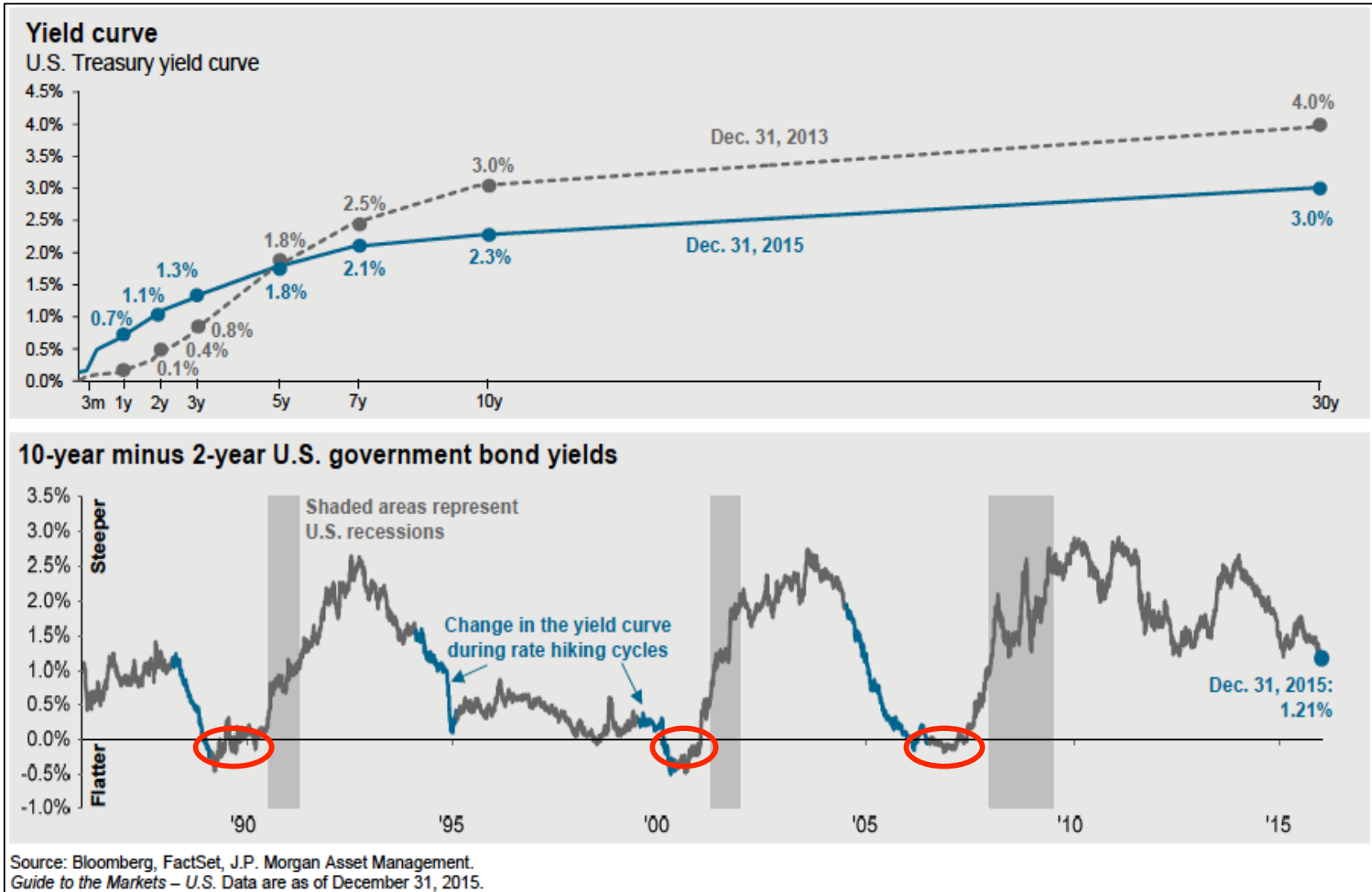
# Spoiler #1 to Recession Surprise is Oil Prices Being Low

**FALLING OIL PRICES DON'T LEAD TO A U.S. RECESSION  
(IT'S RIISING OIL PRICES THAT DO THIS).**



Source(s): TIS Group

# Spoiler #2 to Recession Surprise is Lack of Inverted YC



Source(s): NeubergerBerman

## Surprise #2

## Two Wrongs Won't Make It Right

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After trying to flex their muscles by raising rates in December, the Fed realizes the (policy) error of their ways, acknowledges that they missed the window to raise rates in 2013 and puts further increases to the Fed Funds rate on hold for 2016. In a total about face, discussions of QE IV begin in the 2H of the year as economic growth continues to disappoint.



Source(s): Cleveland.com

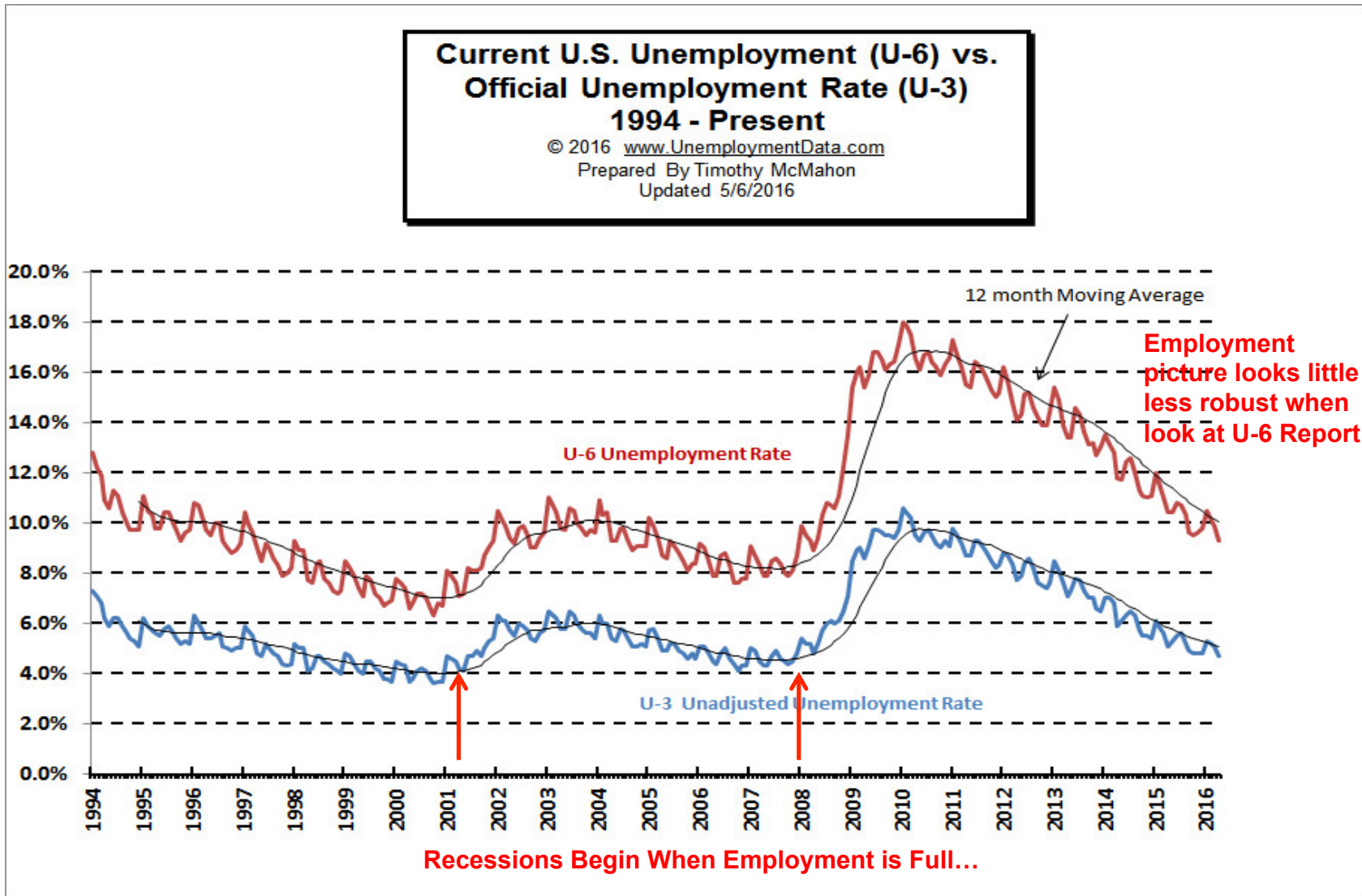
# QEen Janet or Lucy: Will the Real Ms. Yellen Stand Up



“The committee anticipates that it will be appropriate to raise the target range for the federal funds rate when it has seen *further improvement in the labor market* and is *reasonably confident that inflation will move back to its two percent objective* over the medium term.” **Fed Open Market Committee**

Source(s): Grrraphics.wordpress.com, Wikipedia

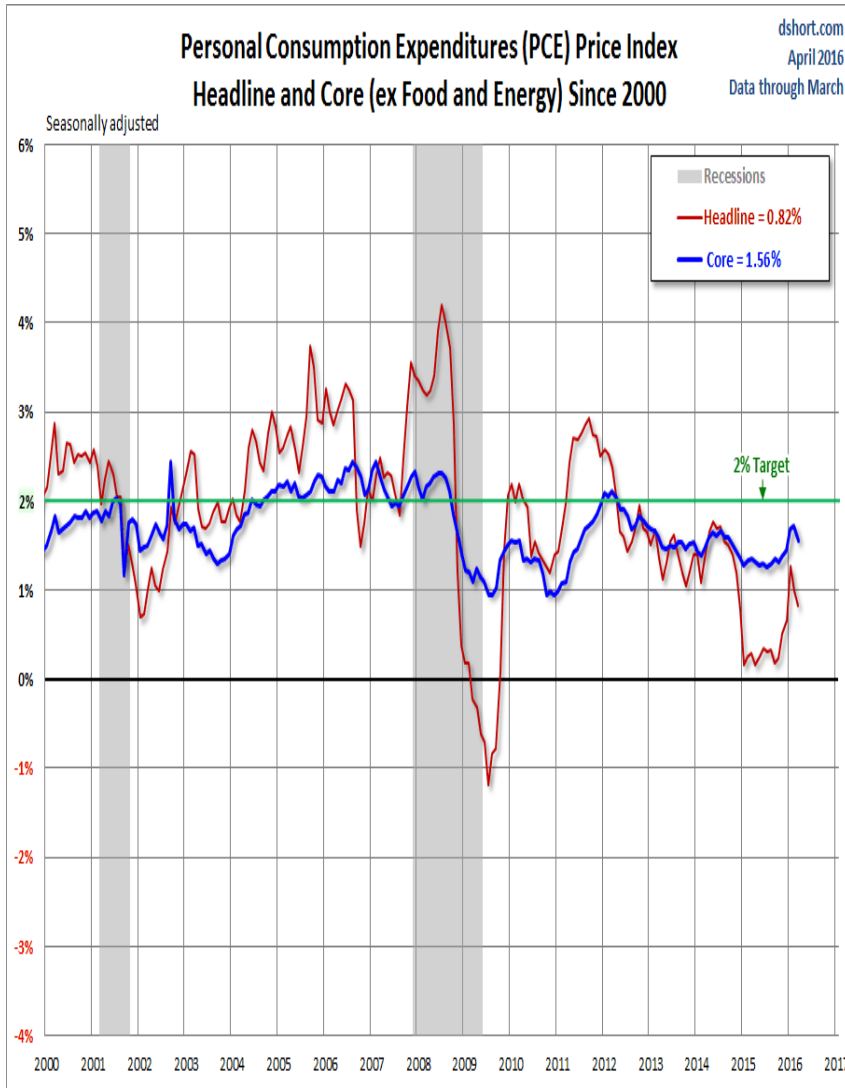
# Fed Objective #1 Employment: Mission Accomplished?



Source(s): UnemploymentData.com



# Fed Objective #2 Inflation: Not Looking Good, Way Short



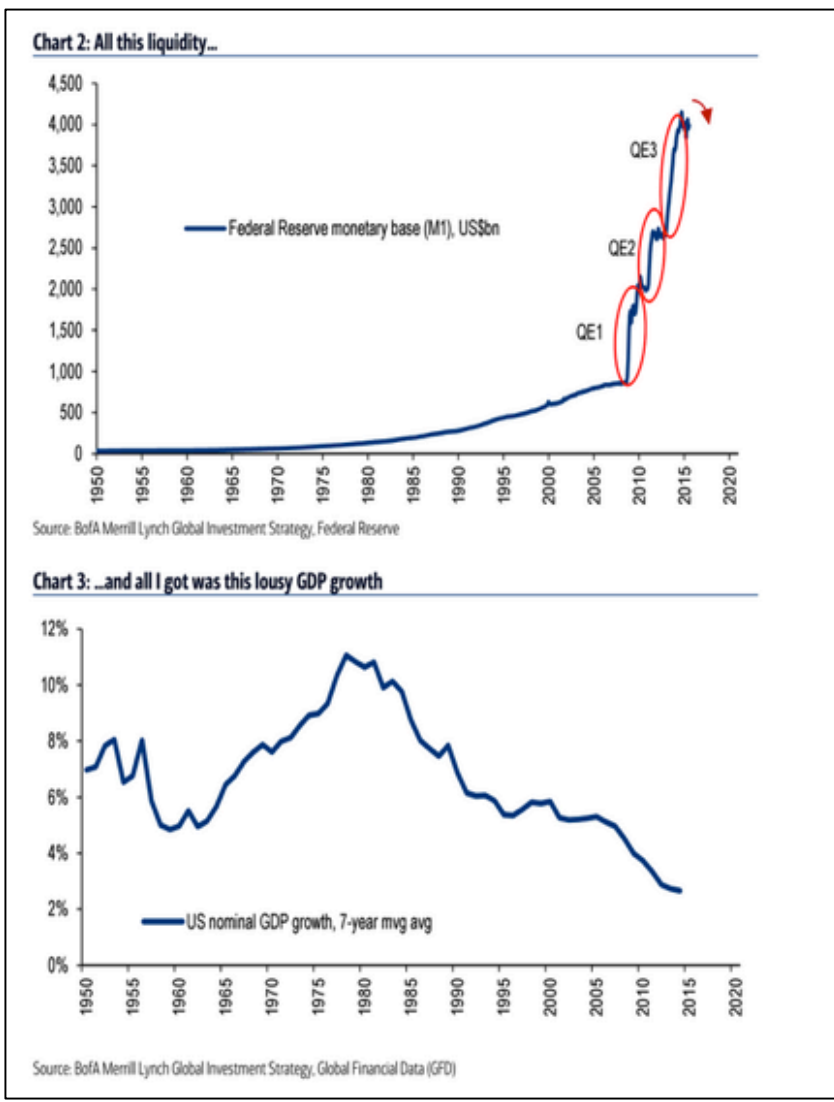
Source(s): AdvisorPerspectives.com

# Inflation Expectations Still Below Previous QE Triggers



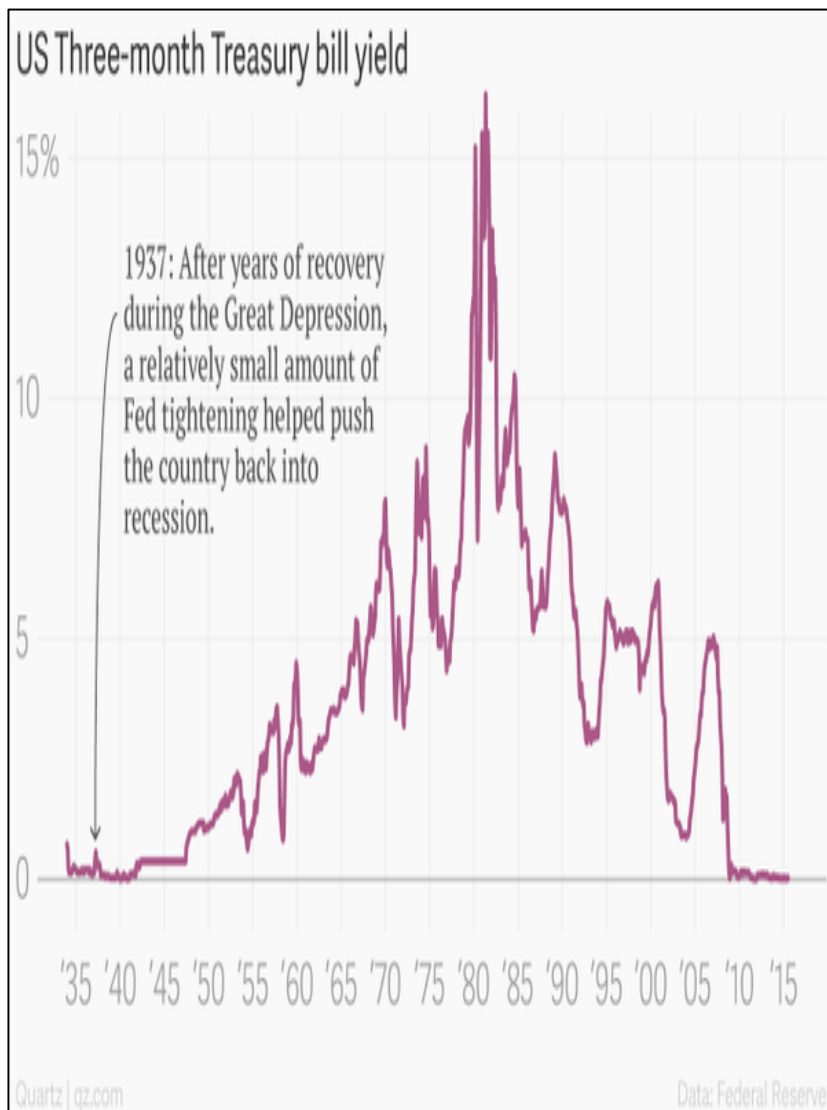
Source(s): [research.StLouisFed.org](http://research.StLouisFed.org)

# Huge QE Stimulus No Impact on GDP, Big Impact on S&P



Source(s): BofAML, Raymond James

# Tried to Leave ZIRP in '37, Bad Outcome: Lost Control?



Source(s): Quartz.com, TIS Group



The Fed's unwillingness to move away from ZIRP seems to us to be an acknowledgement that the speculation they created is now somewhat out of their control. While the gap in the following chart has steadily risen, the quality of the credit in the blue line has steadily degraded.

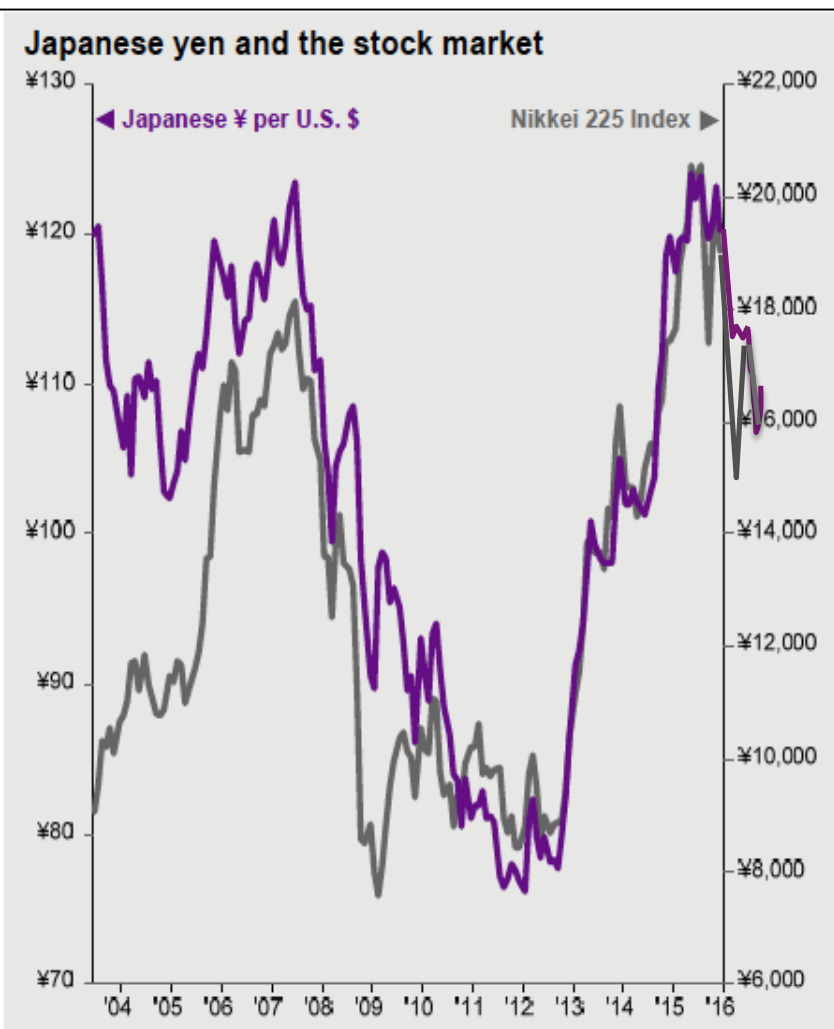
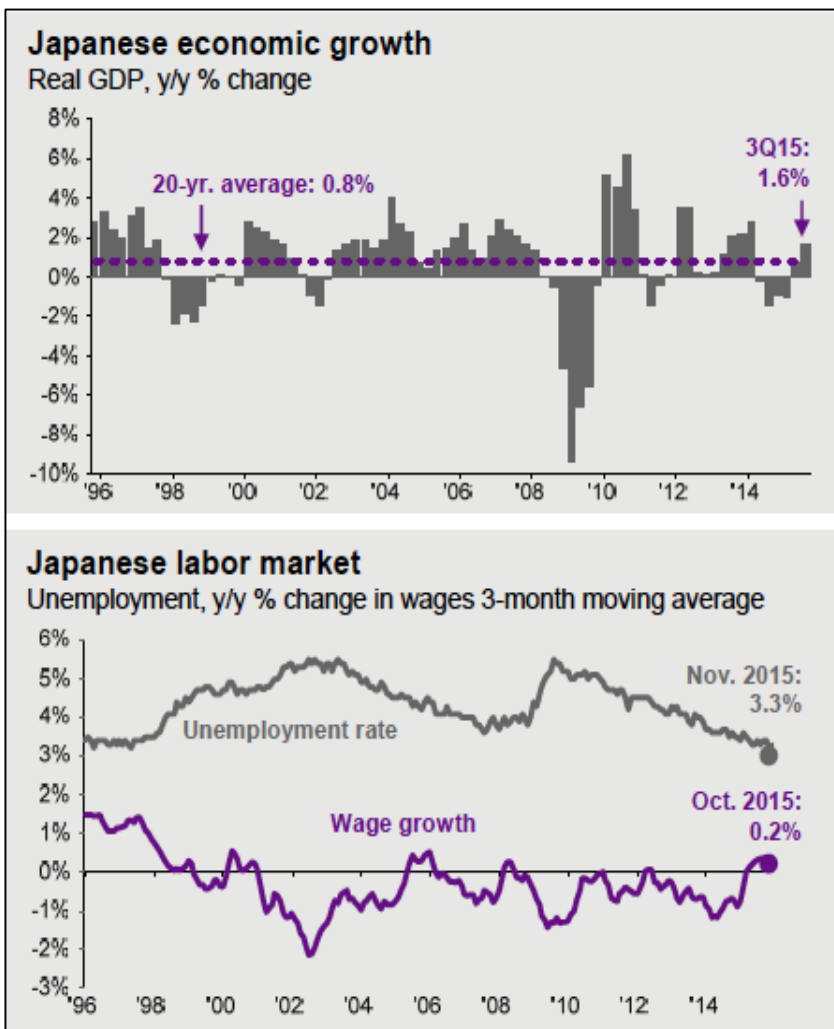
## Surprise #3 Save Us Kuroda-san, You're Our Only Hope

**BOJ Governor Kuroda surprises everyone at the end of the Japan Fiscal Year and pulls out another bazooka to weaken the Yen and stimulate the economy and markets. The Yen falls dramatically, with USDJPY hitting 135. Corporate profits surge to new record highs and Japanese equities rally hard, finishing the year at 21,000.**



Source(s): JapanTimes

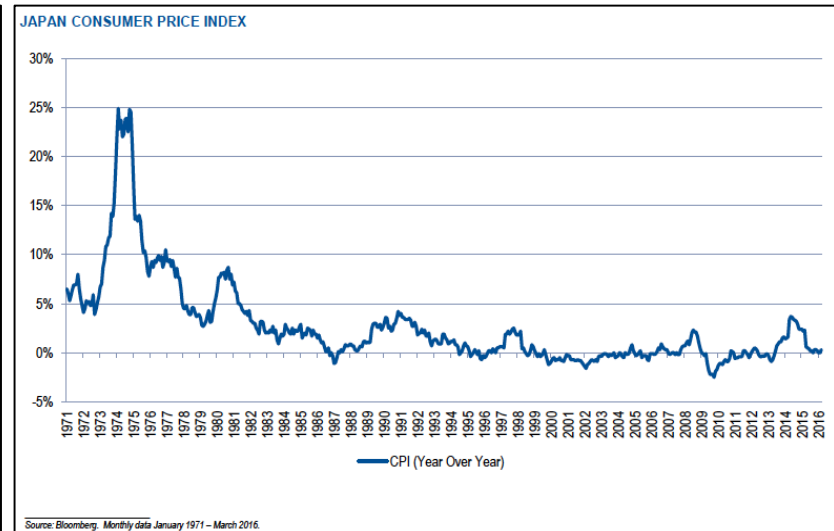
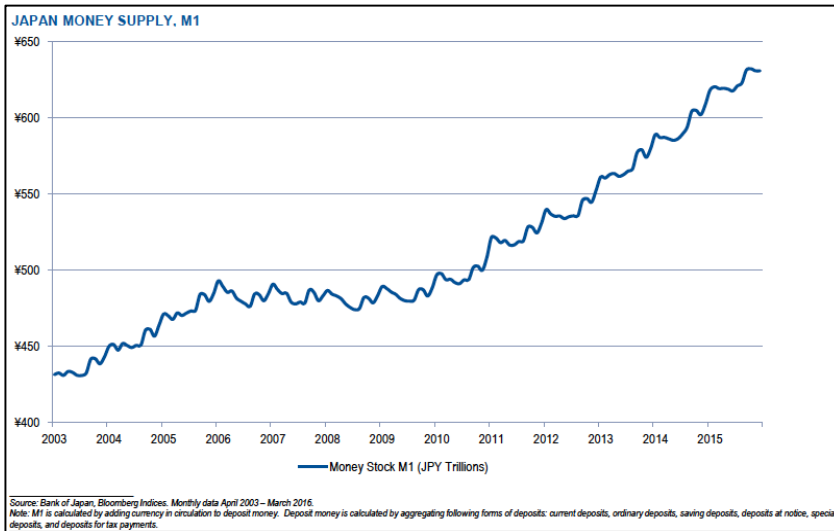
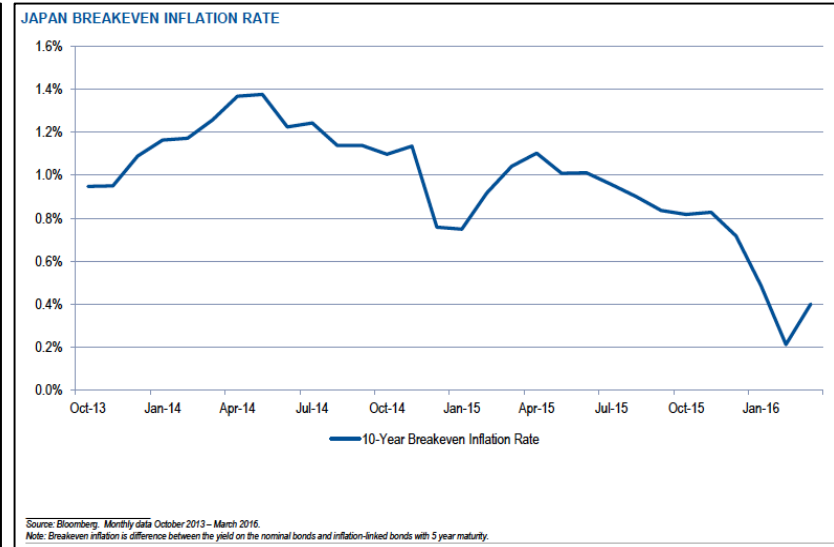
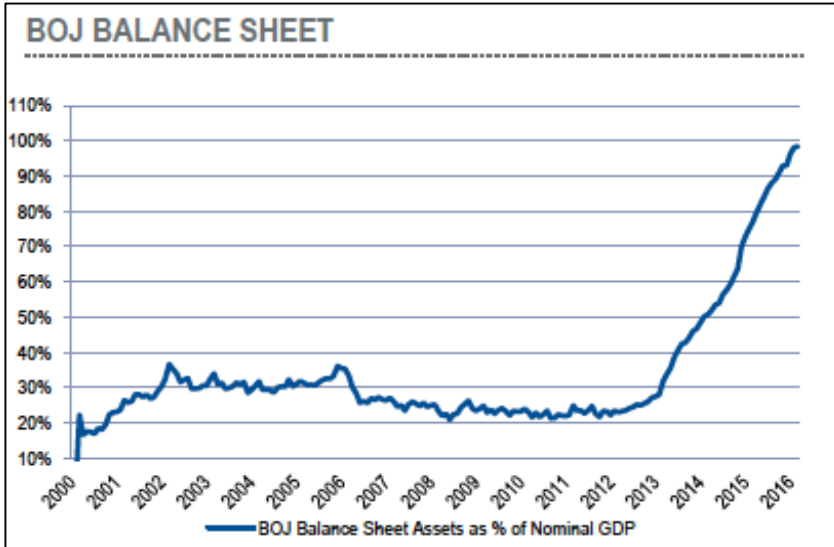
# Abenomics? Yen Rising?, GDP, Wages & Stocks Falling?



Source: FactSet, J.P. Morgan Asset Management; (Top and bottom left) Japanese Cabinet Office; (Right) Nikkei.  
Guide to the Markets – U.S. Data are as of December 31, 2015.

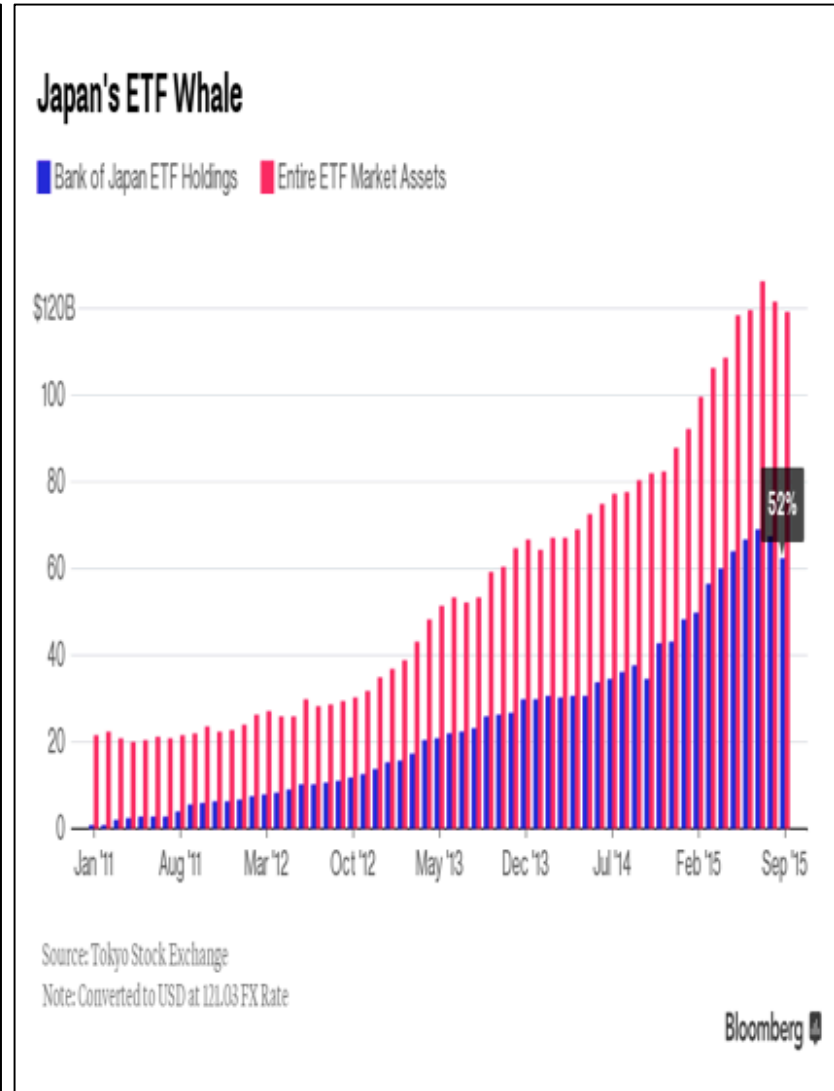
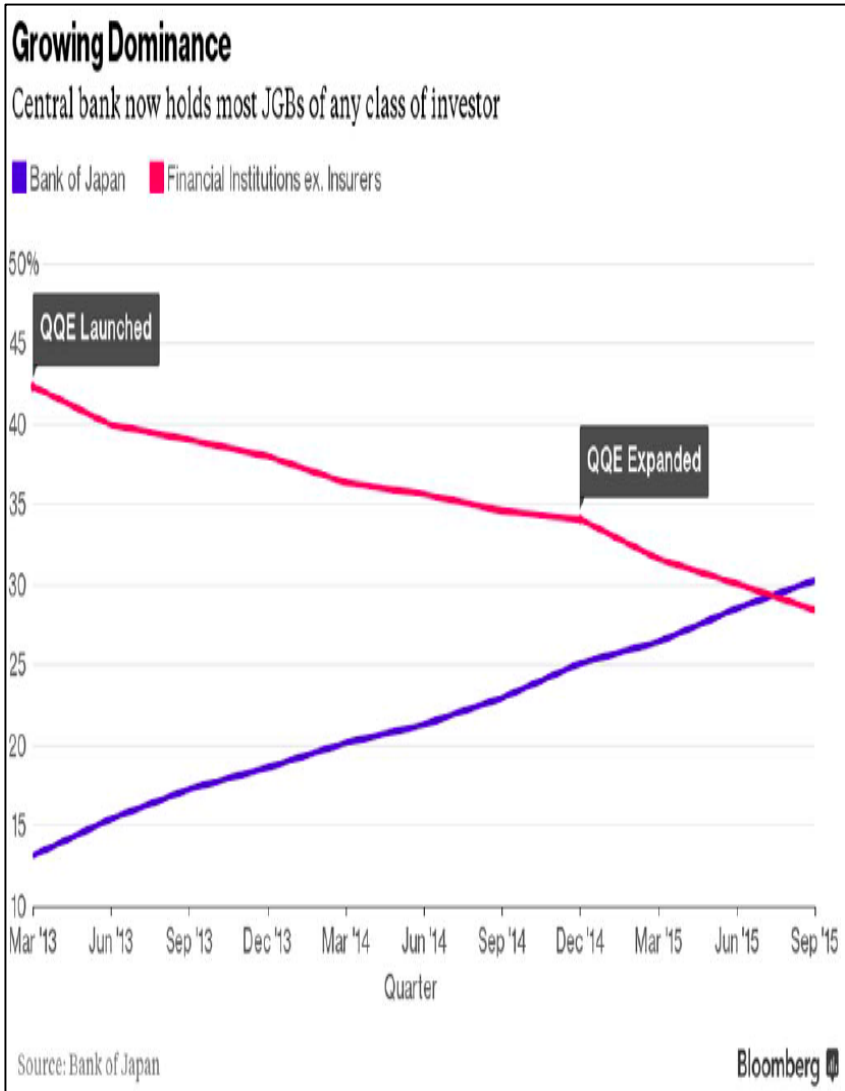
Source(s): JPMorgan

# BOJ Commitment to QQE Was Cornerstone of Abenomics



Source(s): Neuberger Berman

# Risk to Abenomics Plan; BOJ Owns Big % JGBs & ETFs



Source(s): Bloomberg

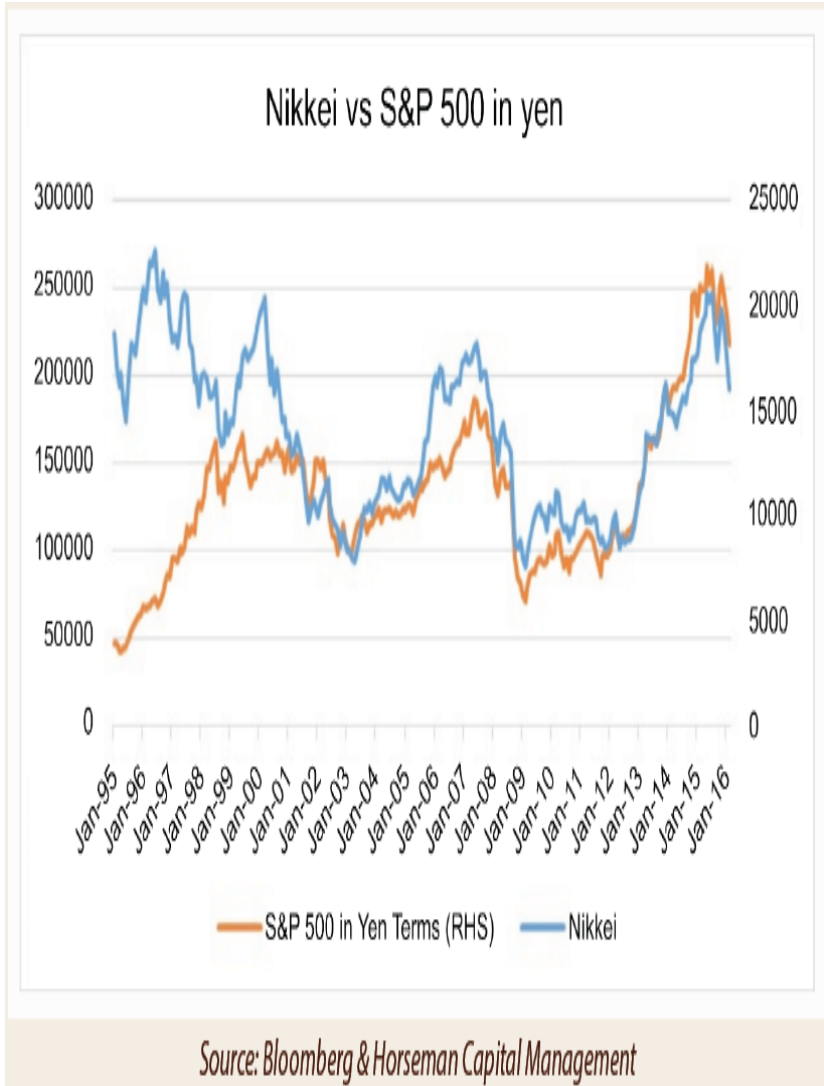


# Kuroda-san Shocks World w/ NIRP on 1/29, Yen Soars...



Source(s): StockCharts.com

# Potential Problem is Nikkei Tends to Lead S&P 500 Down



Source(s): 13d Research

## Surprise #4

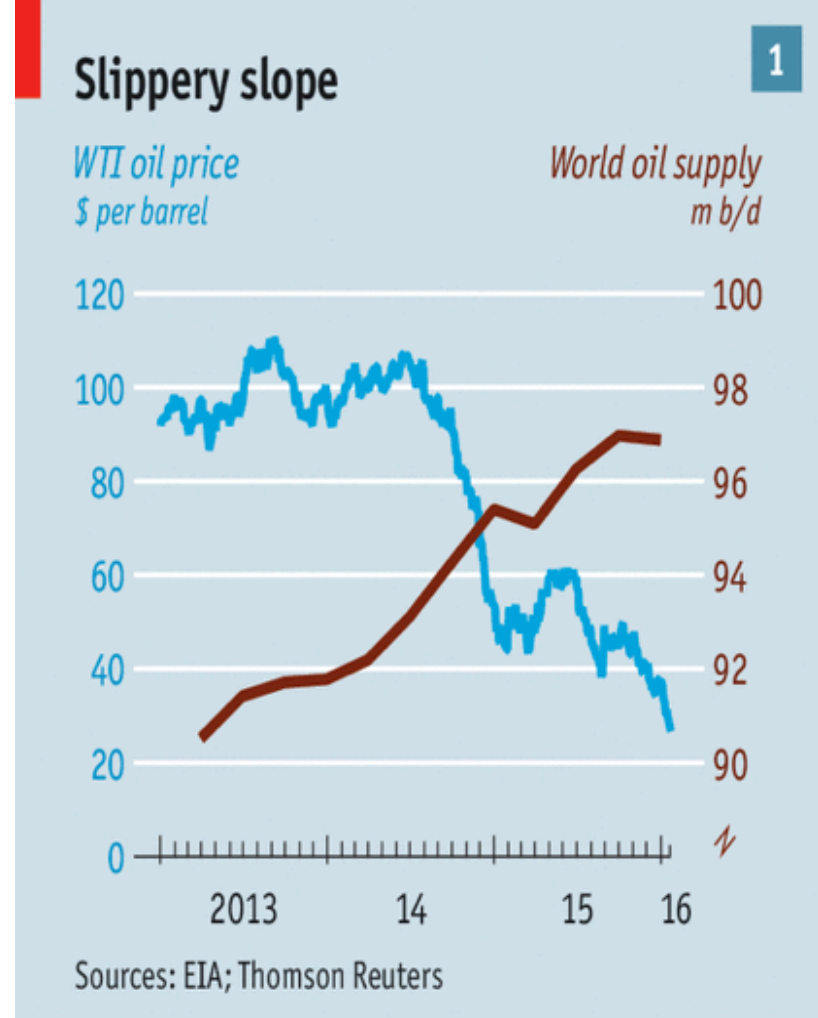
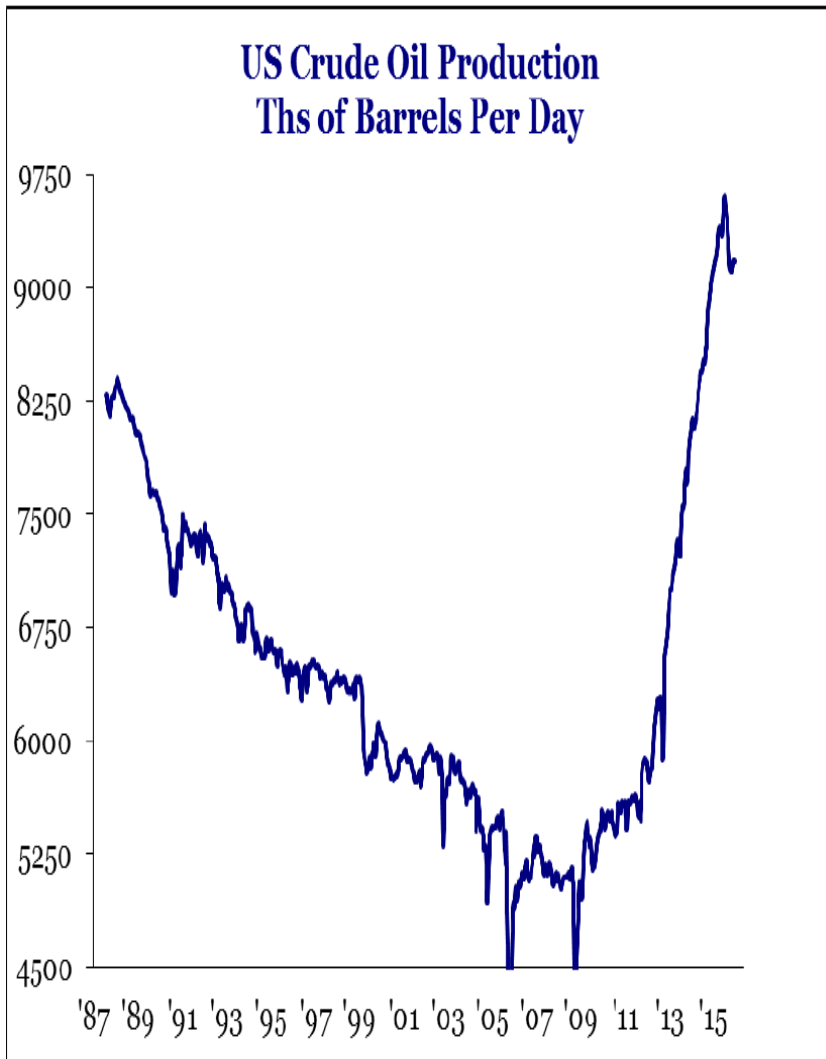
## Saudi Is Not Fracking Around

Realizing the end of the Hydrocarbon Era is approaching more rapidly than anticipated, Saudi abdicates their role as swing producer within OPEC and recommits to maximizing their production and grabbing market share. The resumption of Iran oil trading and short-term storage concerns push the market into steep Contango in Q1 and oil hits a multi-decade low in the 20's, but in the 2H of the year the impact of cap-ex cuts and production declines push prices back toward \$50.



Source(s): Economist.com

# QE Fueled U.S. Production Explosion, Prices Collapsed

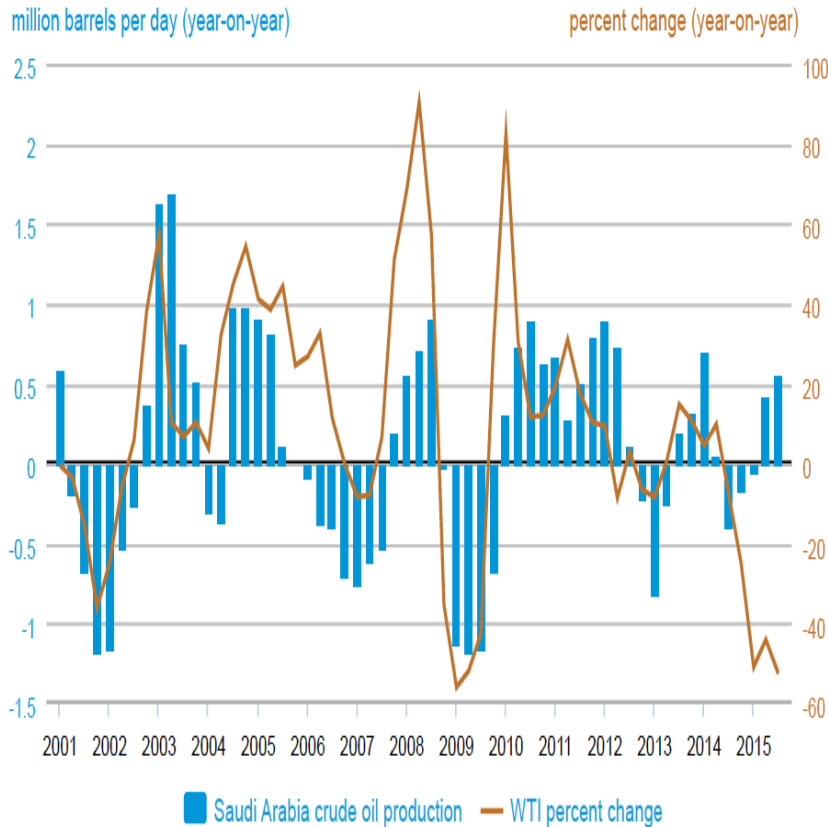


Economist.com

Source(s): Strategas, Economist.com

# Saudi Abdicated Swing Role on Thanksgiving Day in 2014

Changes in Saudi Arabia crude oil production can affect oil prices



Sources: U.S. Energy Information Administration, Thomson Reuters

## Oil's Ups and Downs

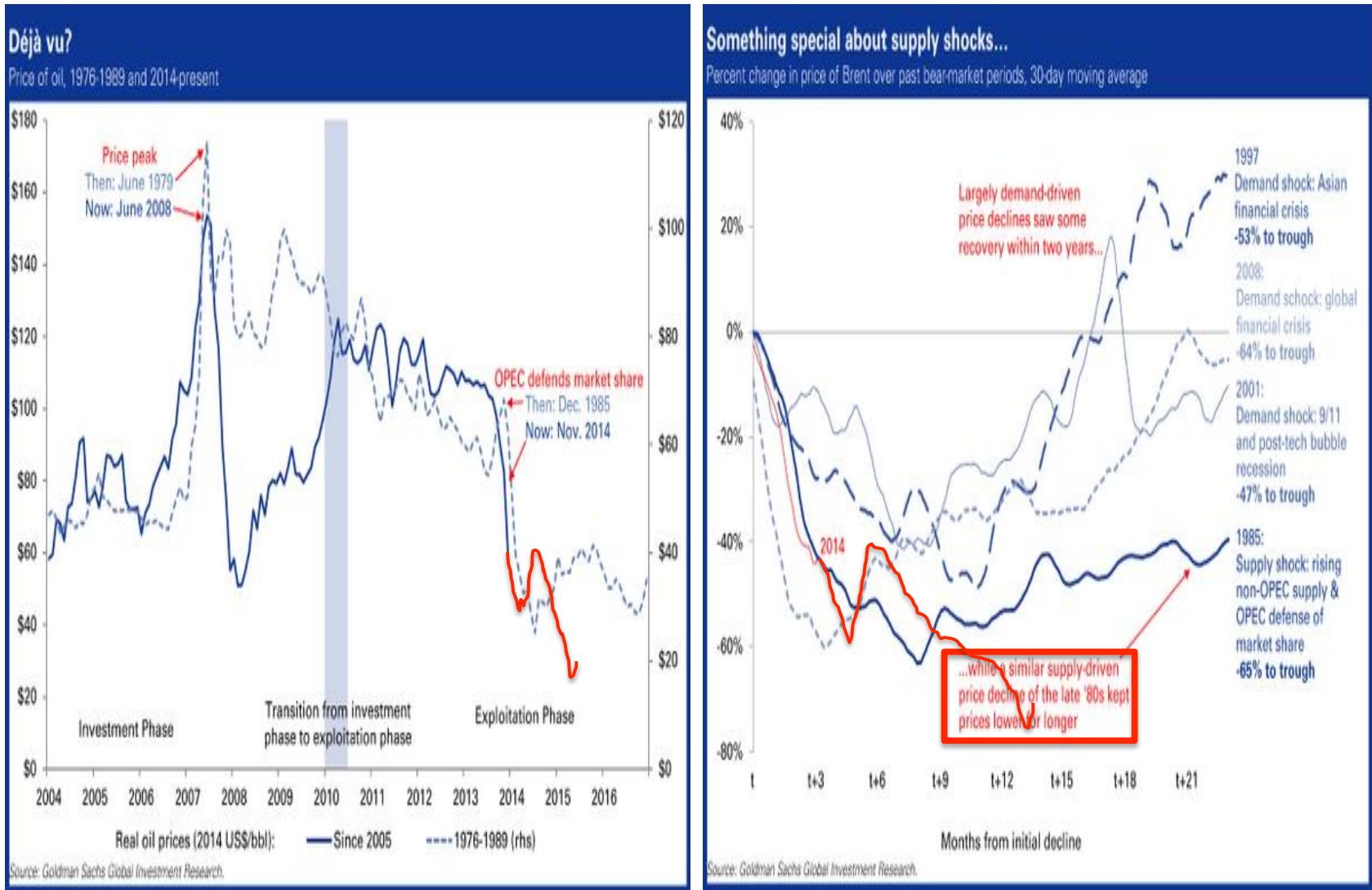
Benchmark price per barrel of U.S. crude at the end of each month



\*Final figure for 2015 is end of October

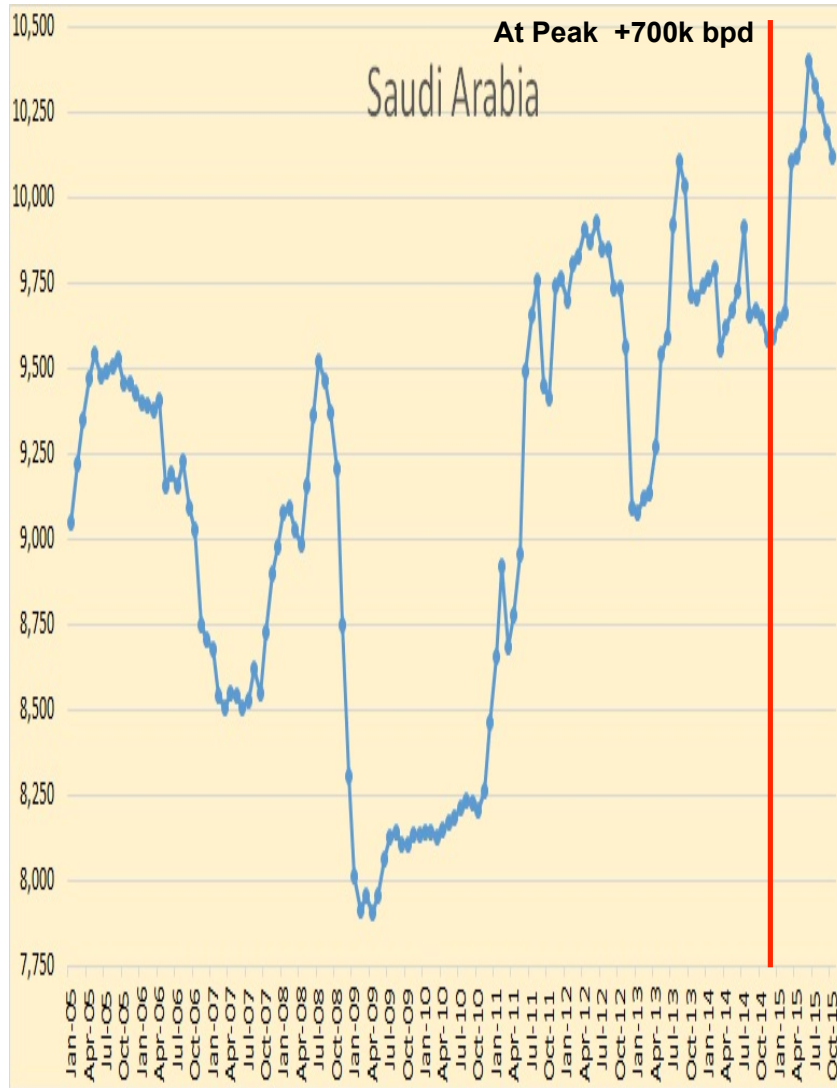
Source(s): IHS Energy, Bloombergview.com

# Supply Shocks Are Very Different From Demand Shocks



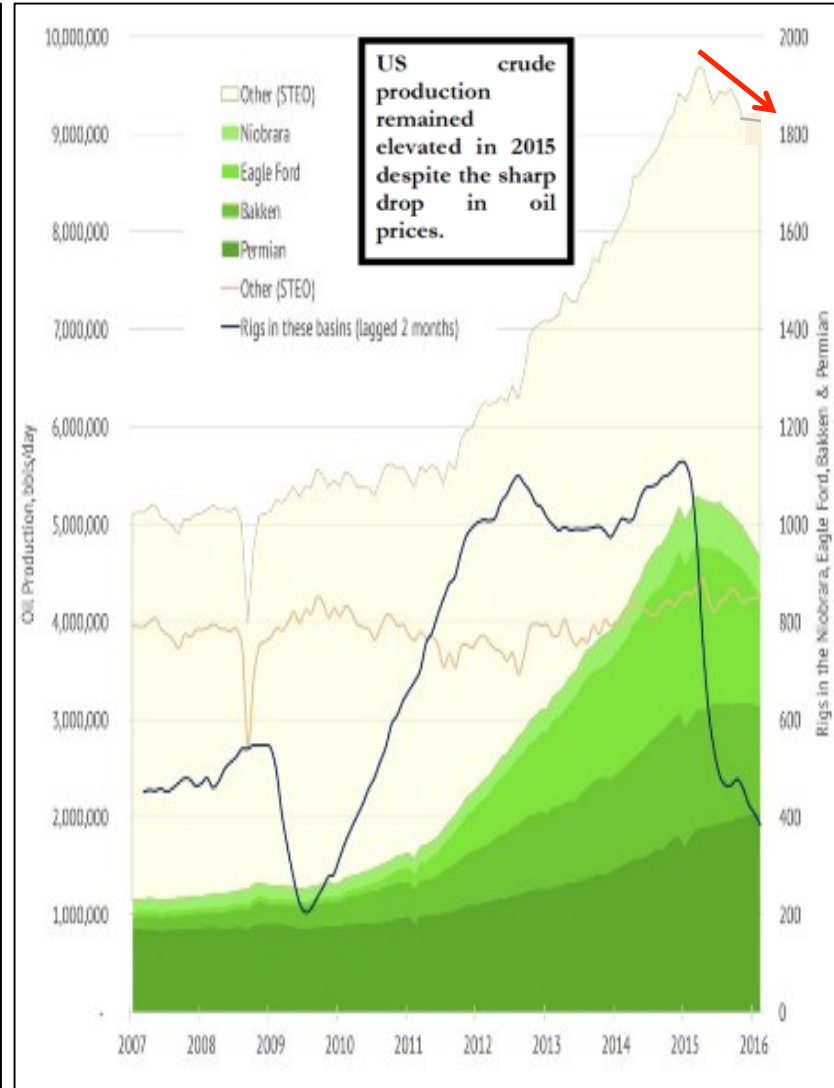
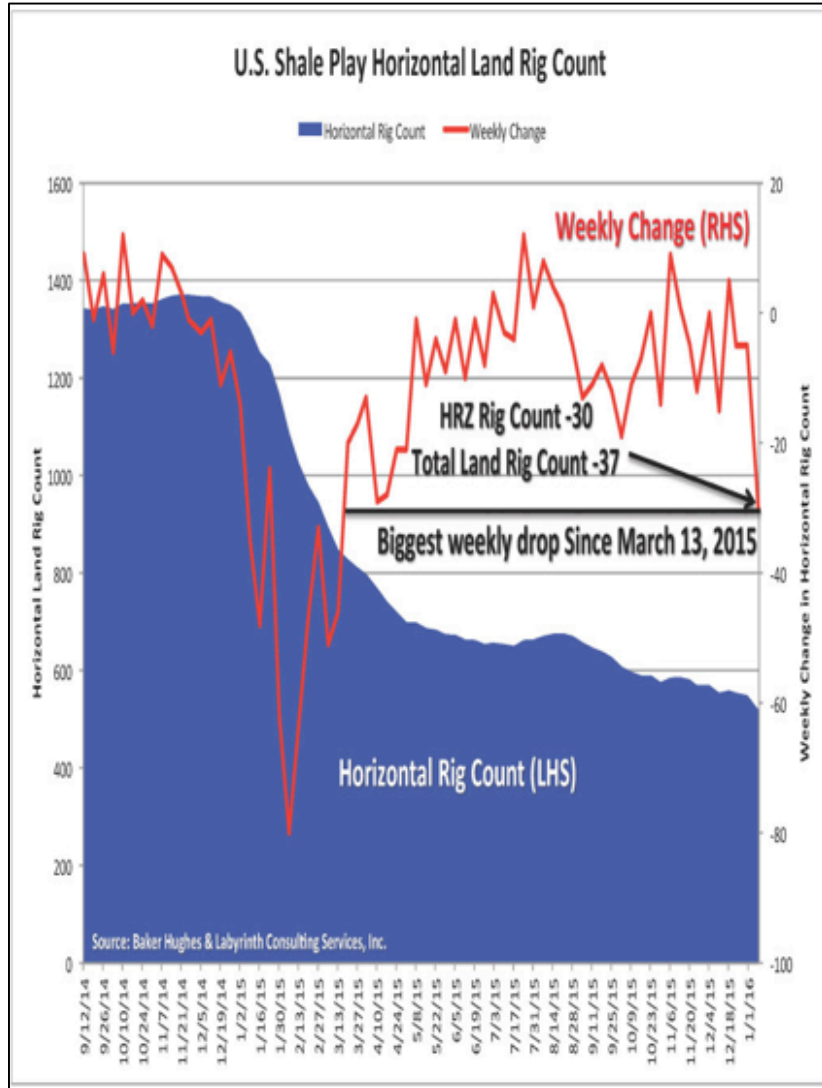
Source(s): ShaneObata, GS Research

# All The Talk About Saudi Production Overshadows Iraq



Source(s): OPEC

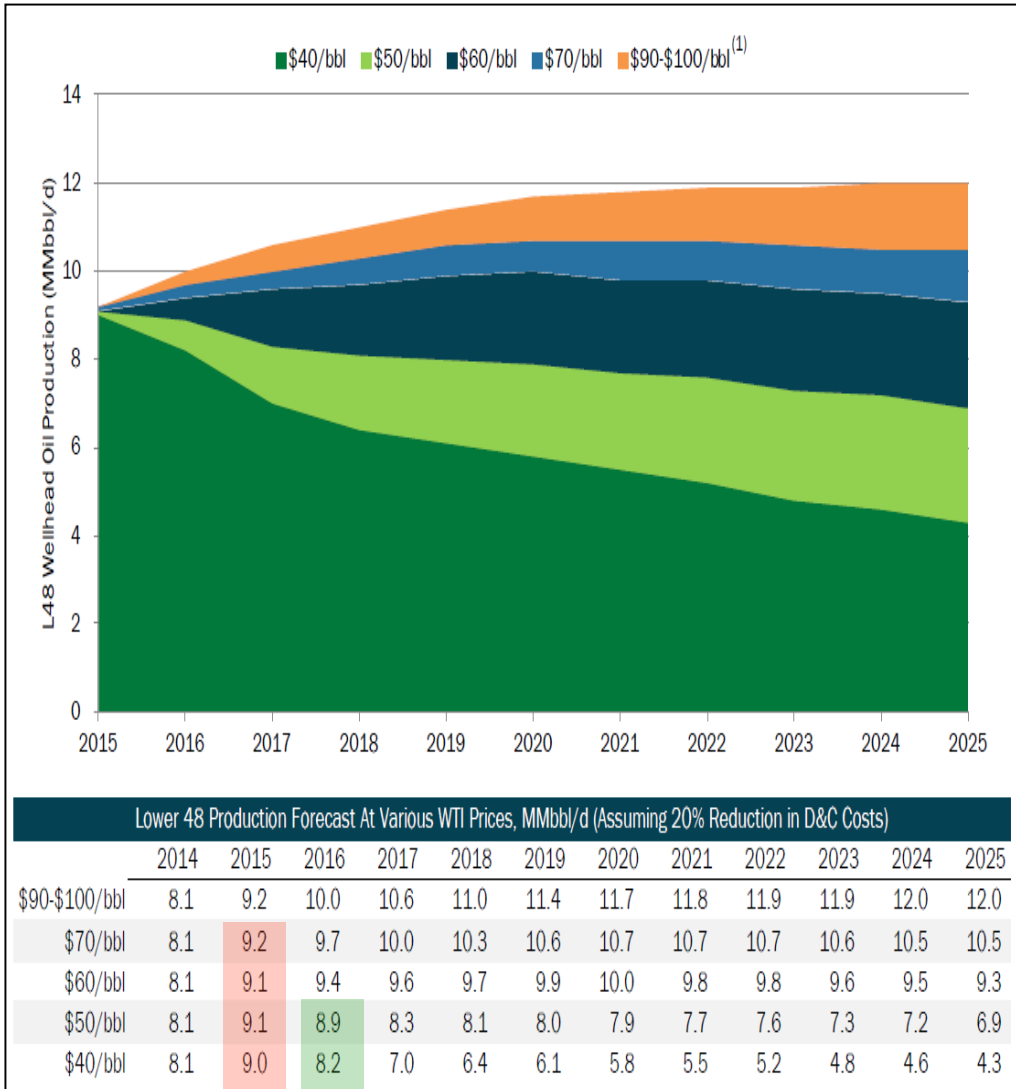
# U.S. Rig Count Has Collapsed, Production Finally Rolled



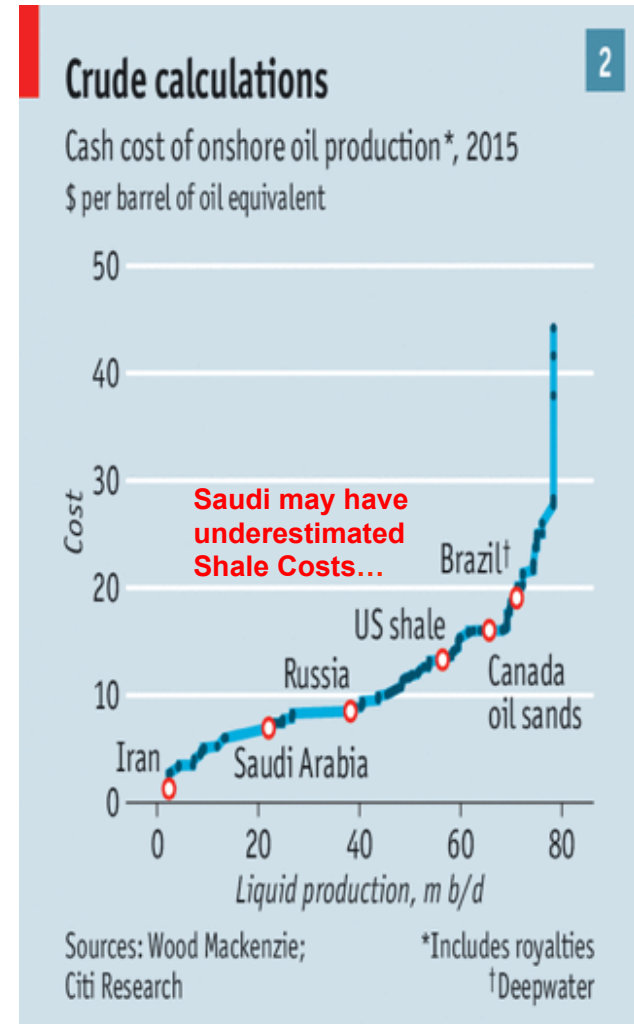
Source(s): Baker Hughes, OilPrice.com



# Hedges Roll Off, Production Will Drop w/o Higher Prices

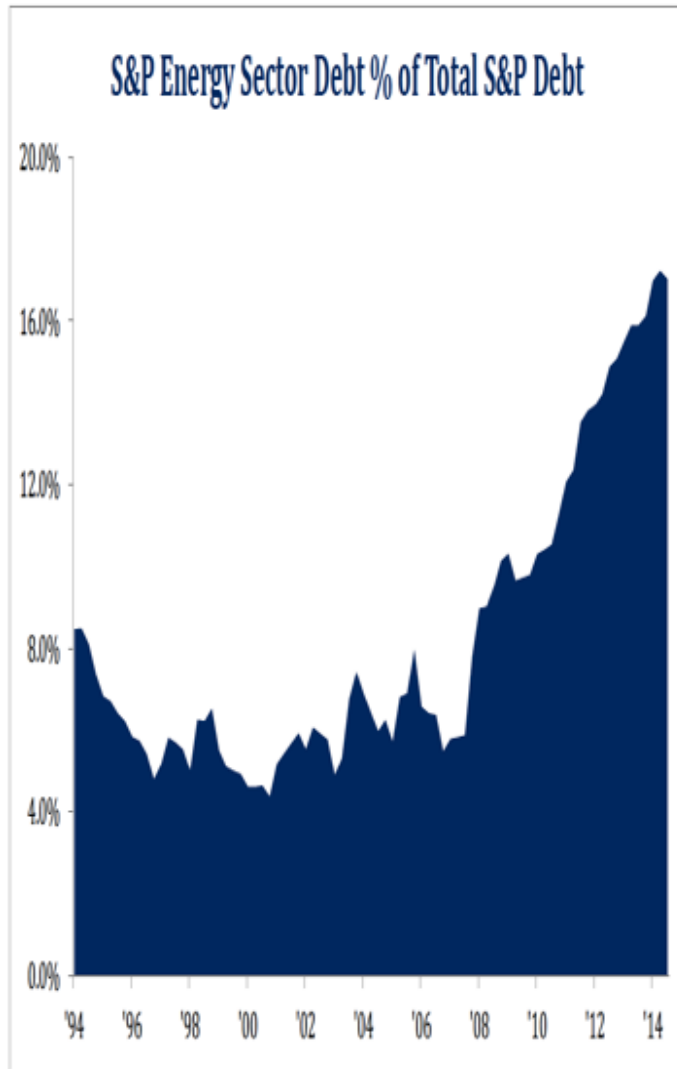


Source(s): ITG, Economist.com.

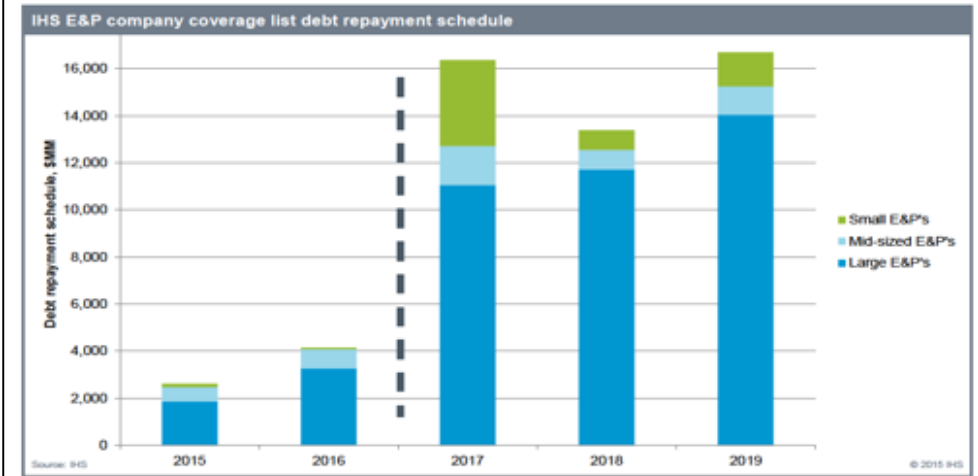


Economist.com

# Debt Fueled Oil Boom Could Turn Into a Bust... in 2017?

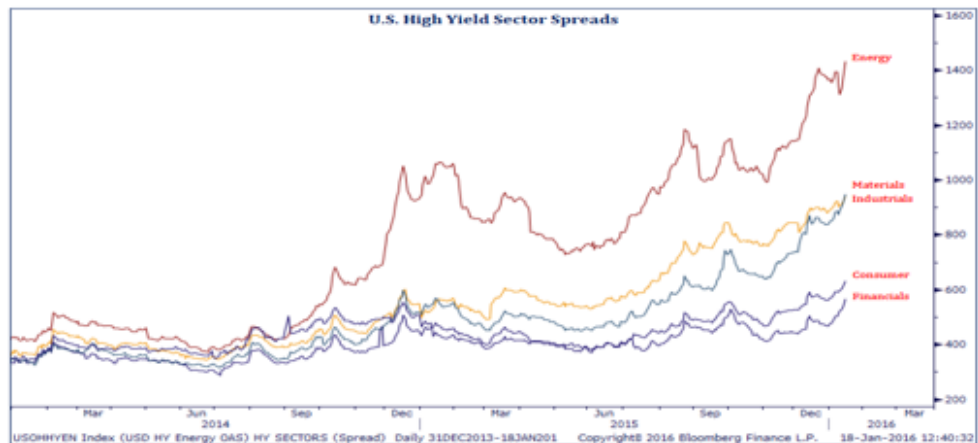


## Great Wall of Debt



Heavy debt repayment burden in 2017 & beyond If prices don't turnaround

## SECTOR SPREADS WIDER ACROSS THE BOARD

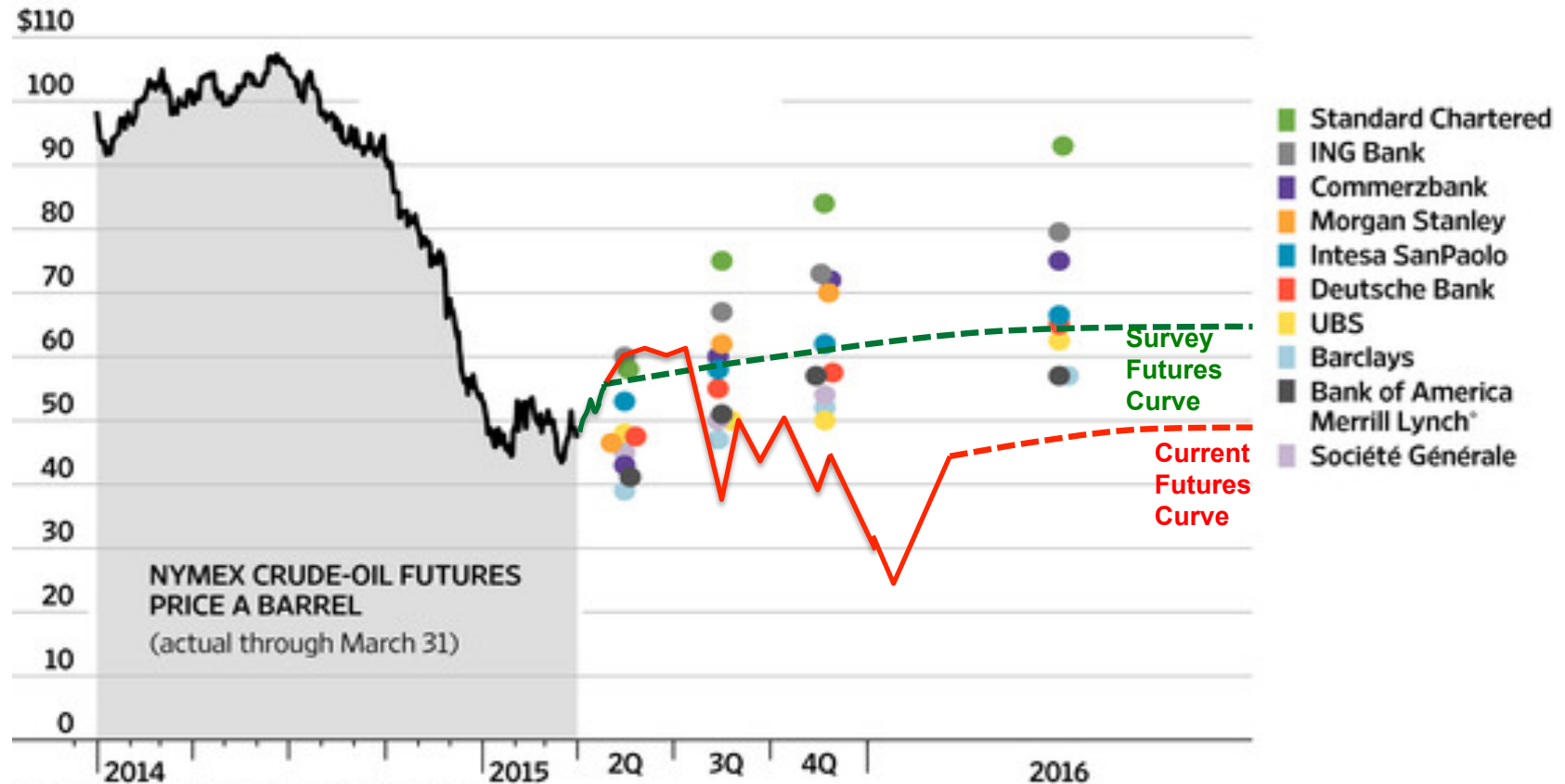


Source(s): Strategas, HIS Energy

# Most Banks Saw 2Q15 Drop & Gradual Recovery: Oops

## Looking Ahead at Oil Prices

Where investment banks see the price of Nymex-traded crude-oil futures; as of March 2015

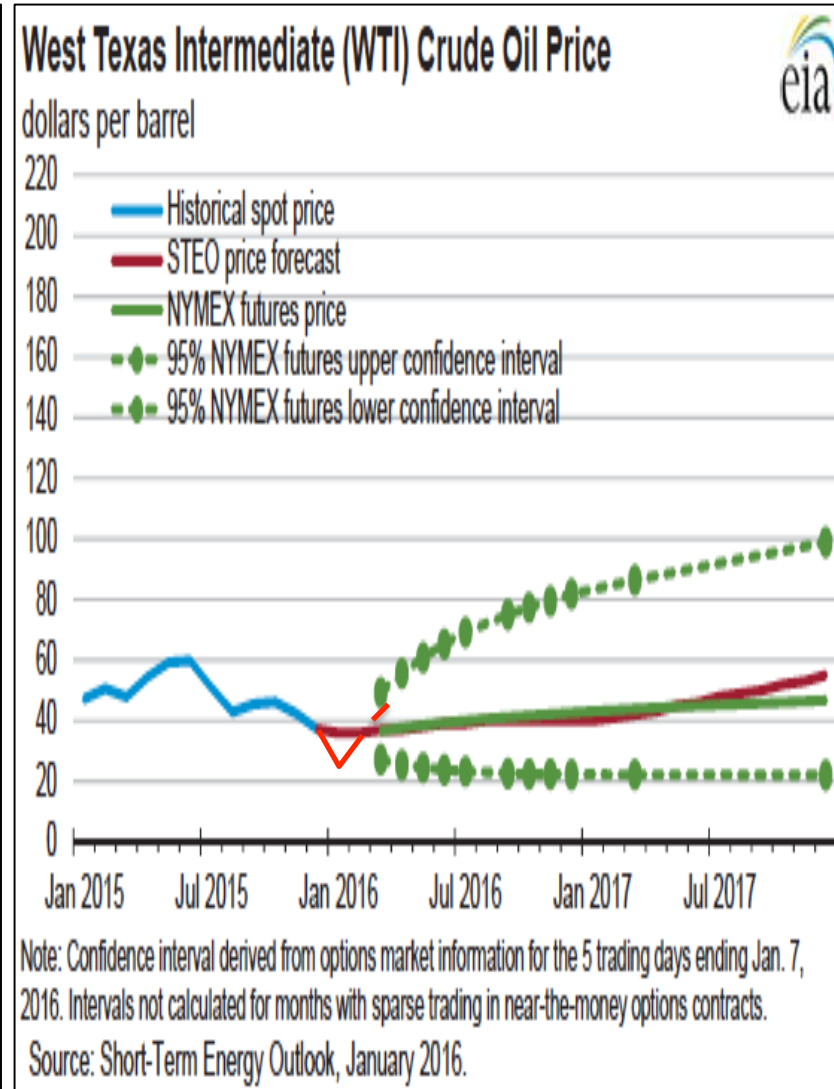
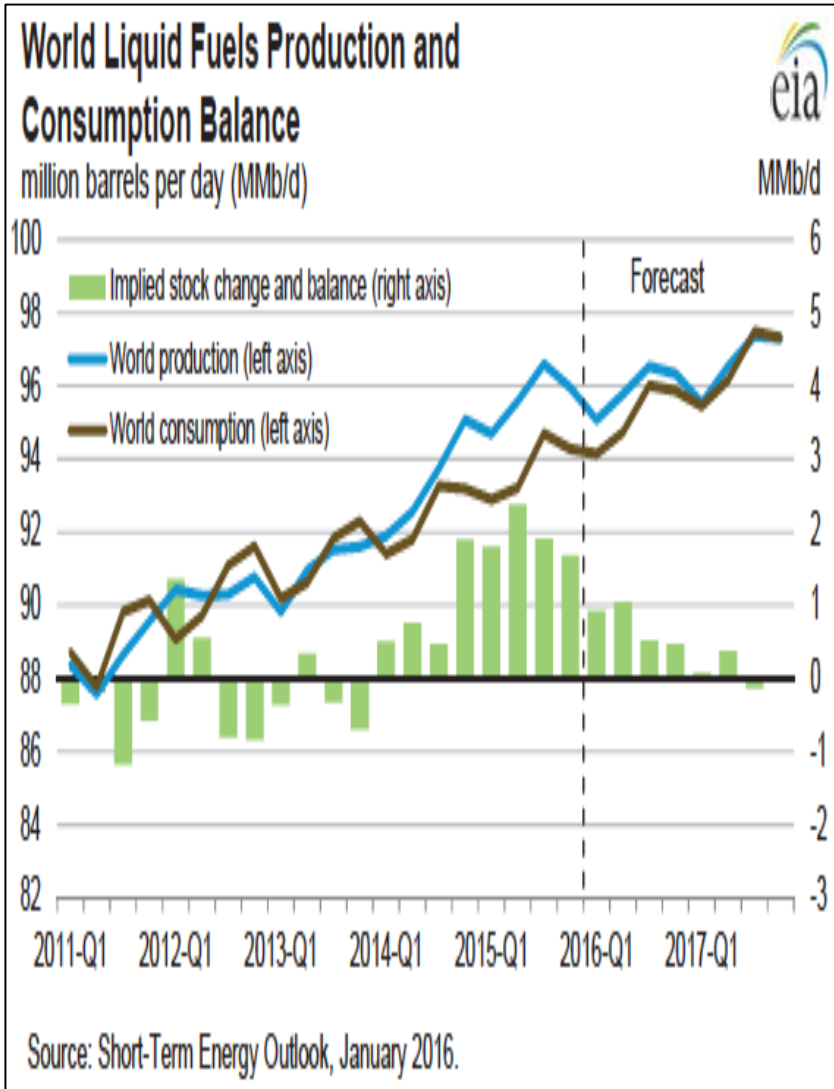


\*Quarterly forecasts are for the end of each period.  
Source: WSJ Market Data Group (crude prices); the companies

THE WALL STREET JOURNAL.

Source(s): ClimateerInvesting.com

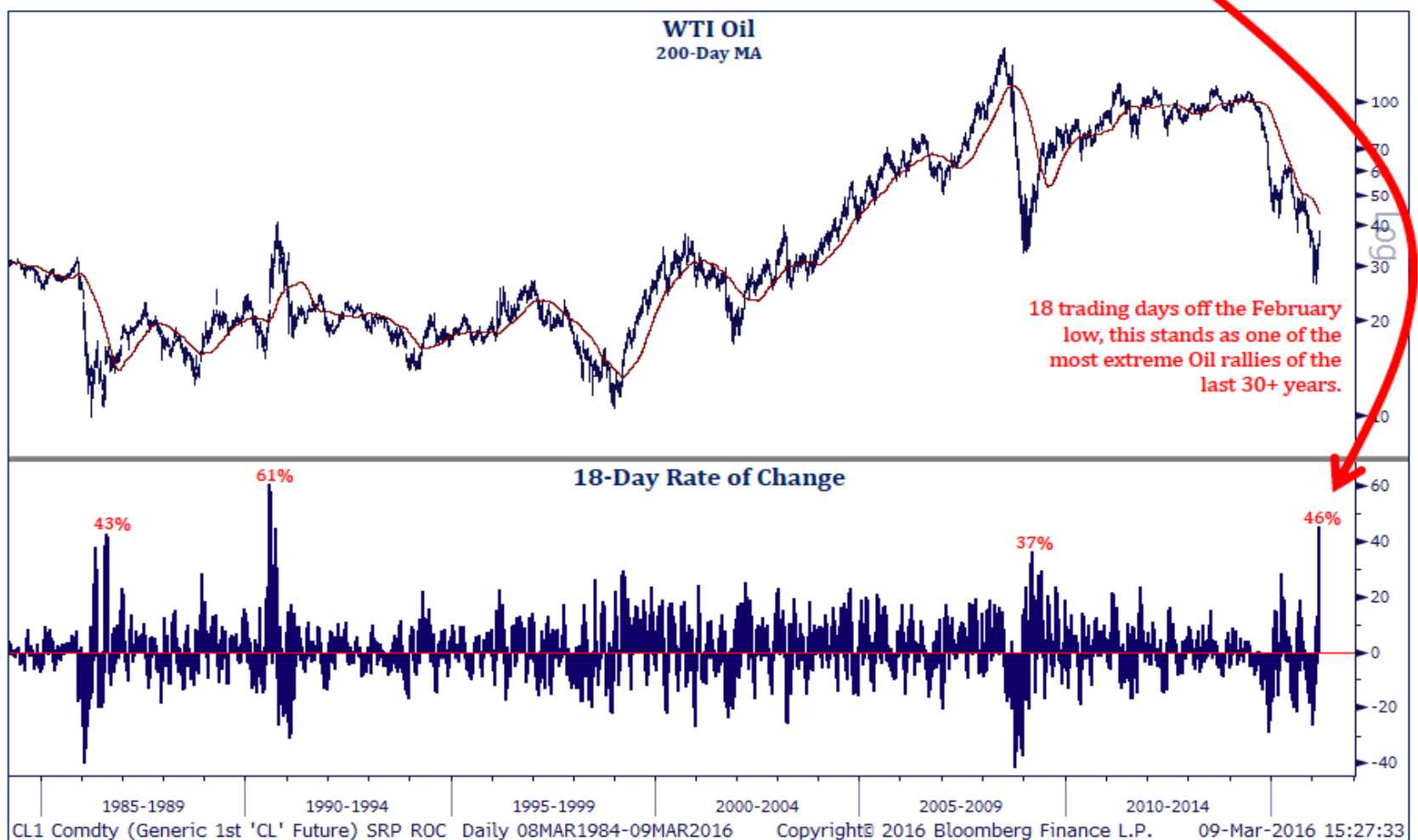
# EIA Forecasts Supply Shrinkage & No Price Response?



Source(s): EIA

# Oil Rally From OPEC Production Rumor Extremely Sharp

ONE OF THE SHARPEST OIL RALLIES IN HISTORY



Source(s): Strategas

# Surge in Chinese Futures Trading = Commodity Spike

Chart 1: Commodity futures' trading value, monthly



ITI16 - Iron Ore 62% Fe, CFR China (TSI) Swap Futures - Daily Line Chart



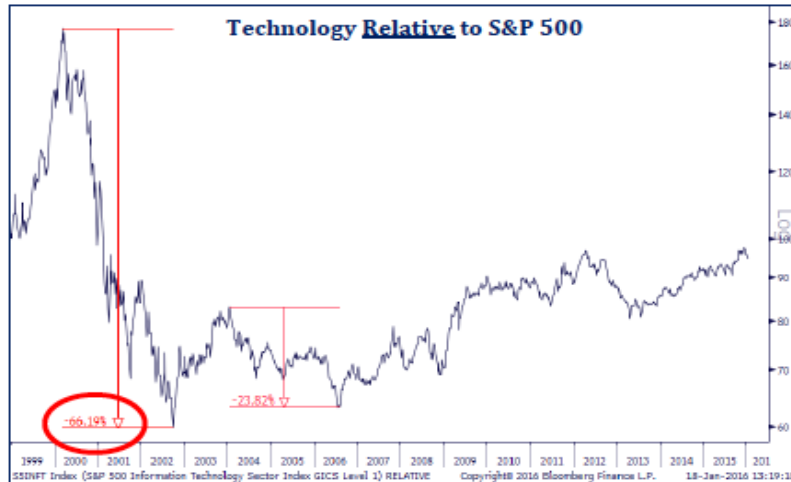
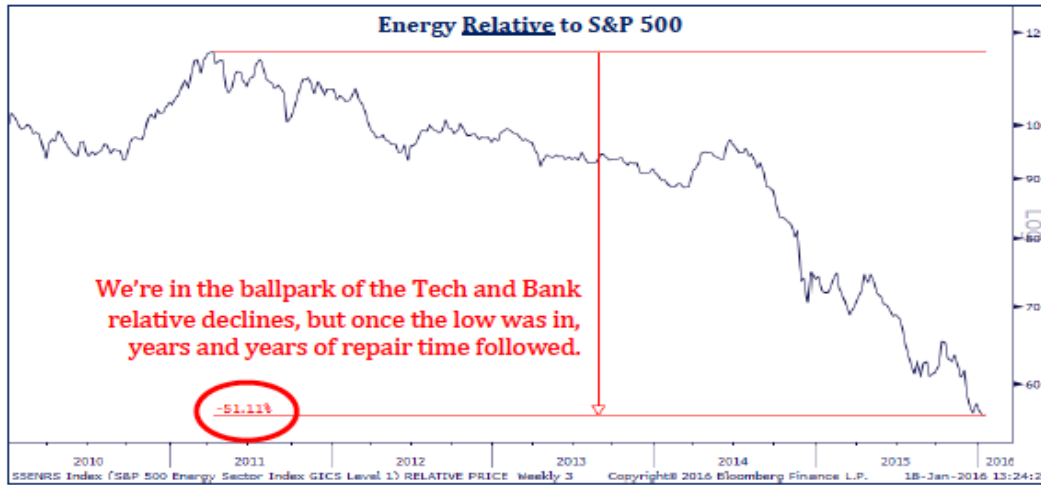
CLM16 - Crude Oil WTI - Daily Line Chart



Source(s): Goldman Sachs Research, Barcharts.com

# Recovery in Overleveraged Sectors Takes a Long Time

## HISTORY SAYS REPAIR TIME WILL TAKE YEARS FOR ENERGY

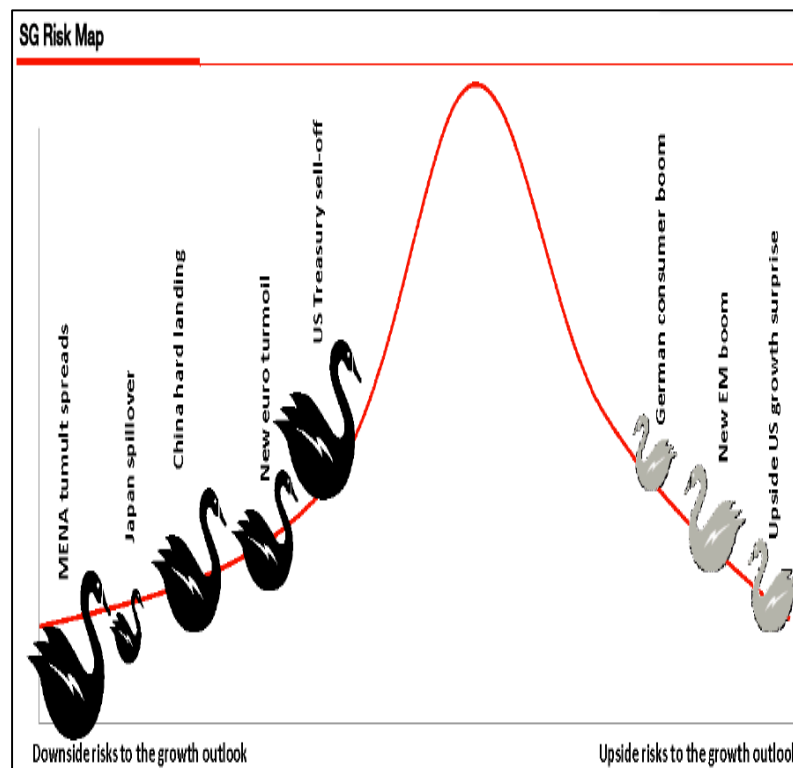


Source(s): Strategas

## Surprise #5

## The Black Swan Alights in Europe

**The relentless bear market in commodities since 2011 comes to a head with a messy bankruptcy of one (or more) commodity trading companies (Glencore, Trafigura, Vitol, Nobel Group, Mercuria). The resulting unwind of complex derivatives positions causes huge losses within the European banks, pushing one, or more, of them to the brink of insolvency.**



Source(s): SocGen

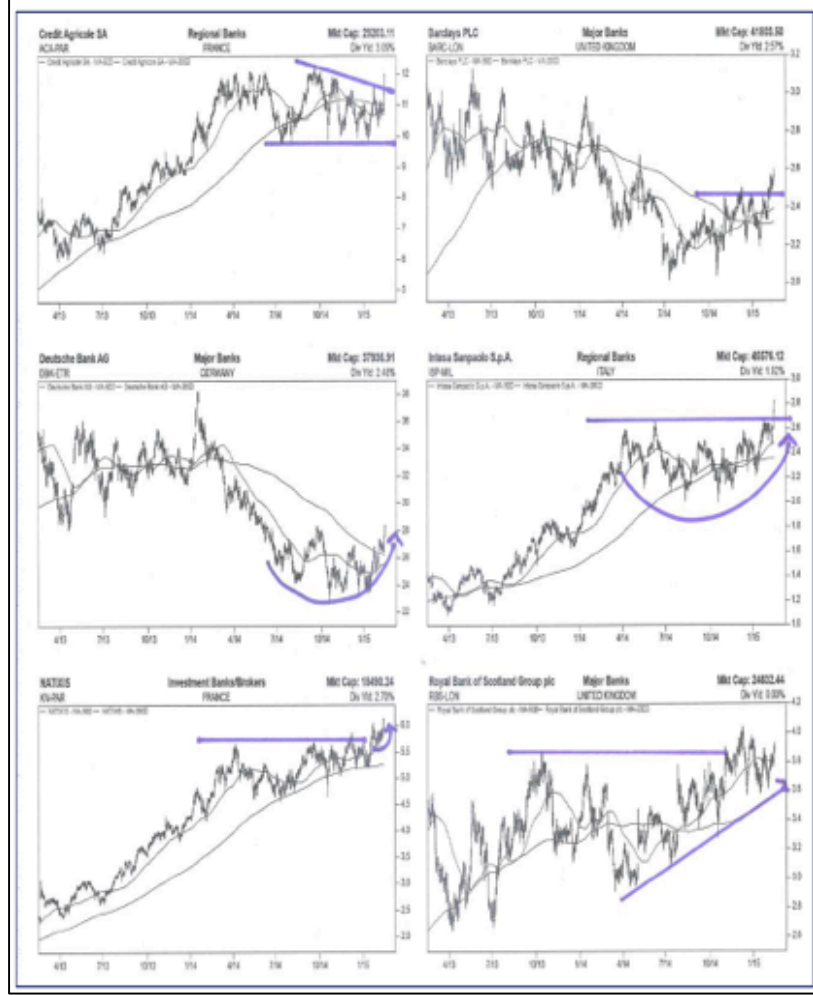


# Despite Grexit Fears, No Euro Bank Credit Stress in 2015

## DESPITE GREEK ANXIETY, EURO BANK CREDIT REMAINS IN CHECK

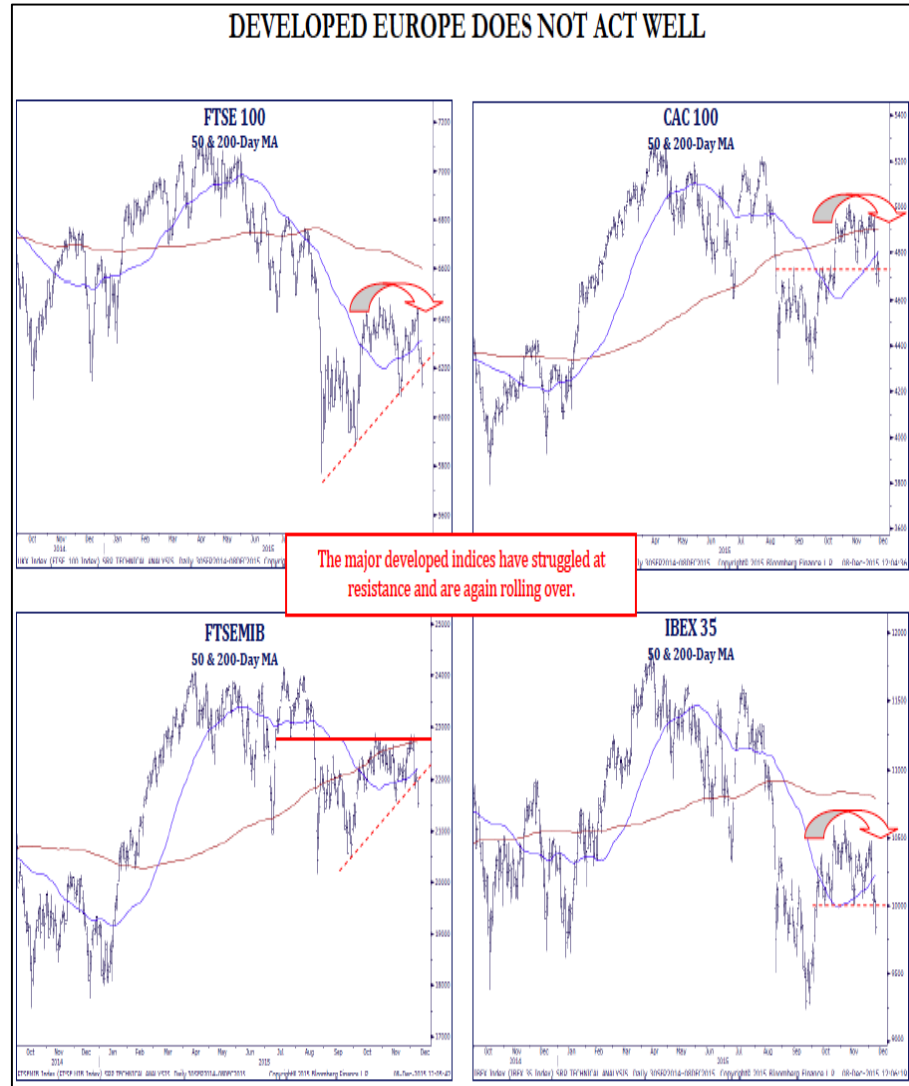


## EURO BANKS IMPROVING



Source(s): Strategas

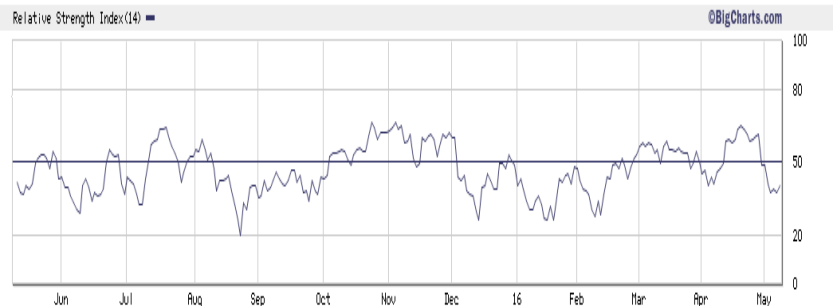
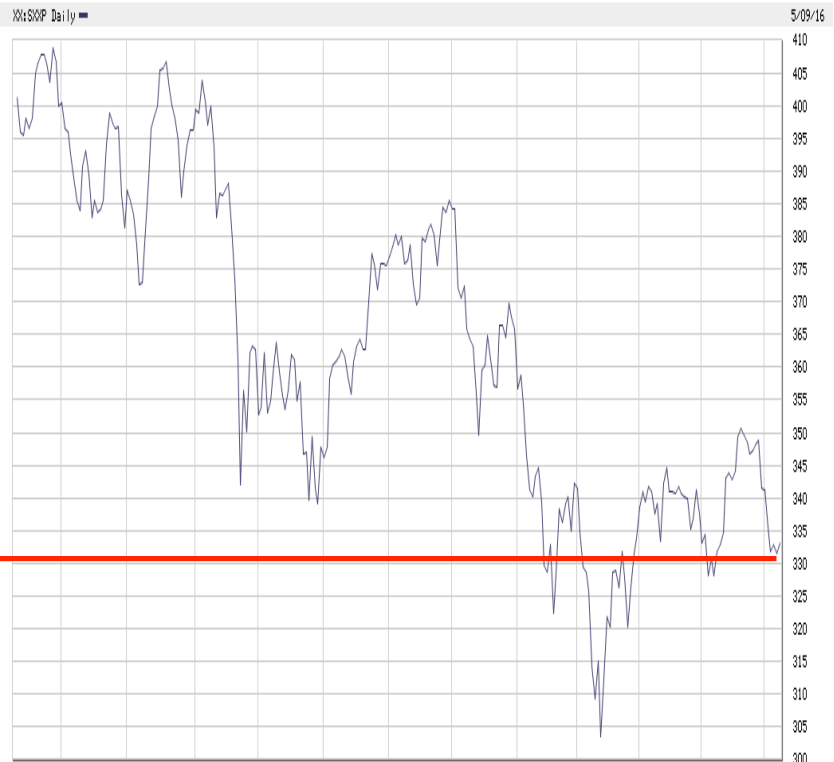
# ECB Stimulus; But No Inflation; Markets Fear Deflation?



Source(s): TIS Group, Strategas

# European Equities Breaking Down in '16, at Critical Point

IMPORTANT JUNCTURE ON LONG-TERM CHART



Source(s): Strategas, Bigcharts.com

# European Banks Suddenly Making Significant Lows

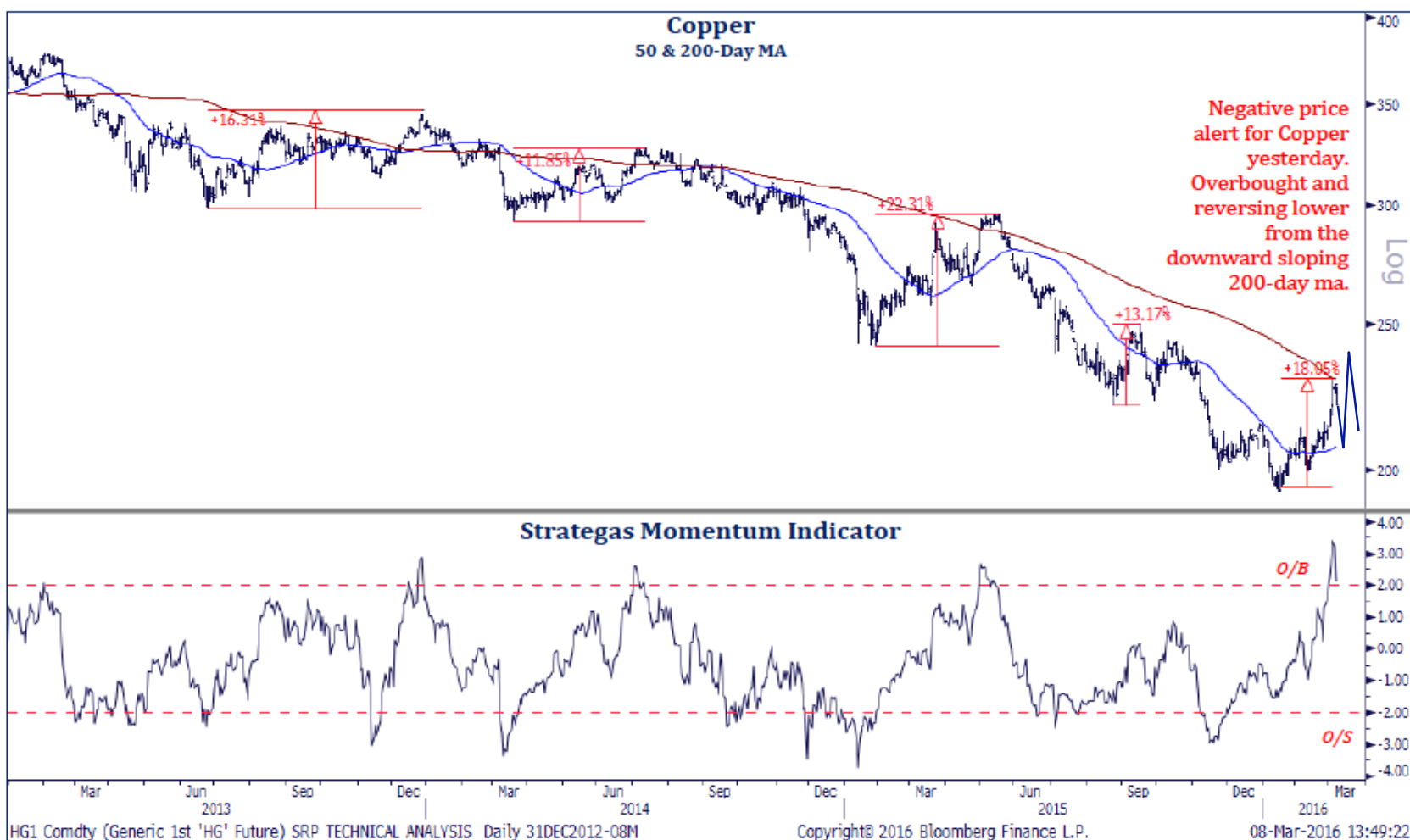
EUROPEAN BANKS ALSO AT 30-MONTH LOW



Source(s): Strategas, Bigcharts.com

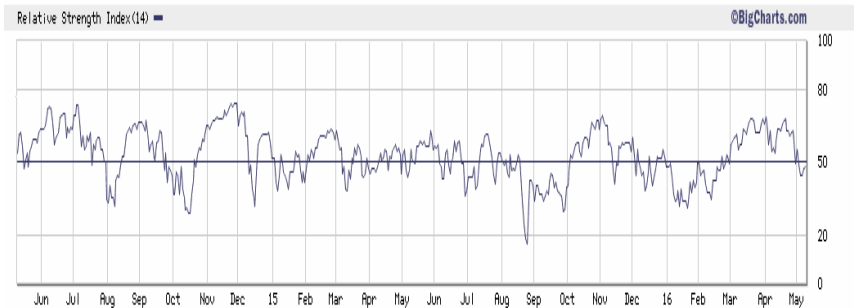
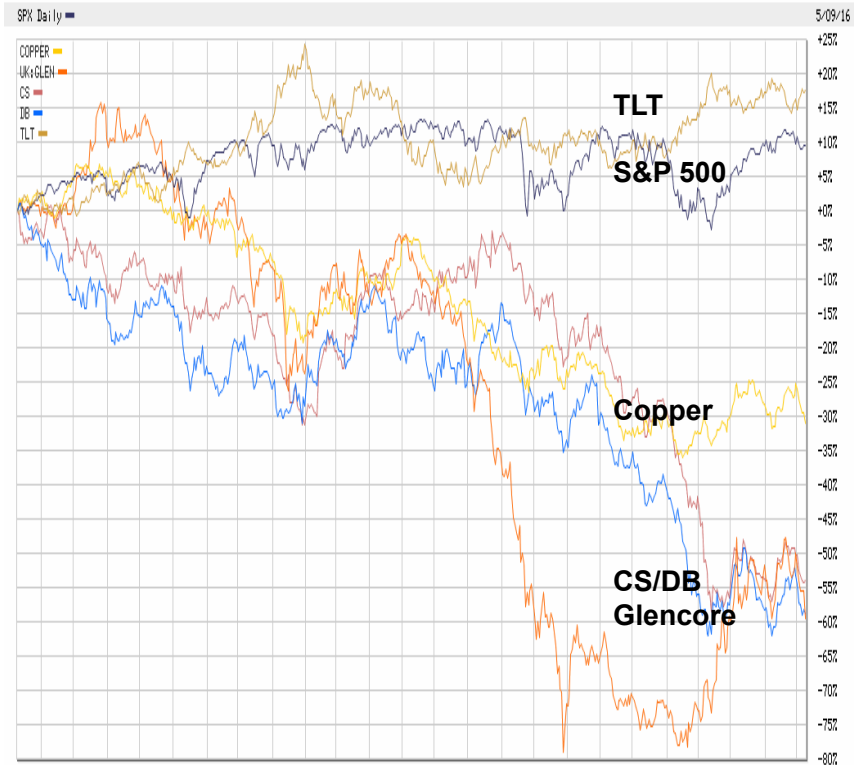
# Dr. Copper Sick: Growthpocalypse OR Structural Unwind?

## COPPER OVERBOUGHT & REVERSING AT RESISTANCE



Source(s): Strategas

# Copper Trading Damage at Glencore? Not Going Away?



Source(s): Bigcharts.com

## Surprise #6

## Déjà Vu, Welcome to #2000.2.0

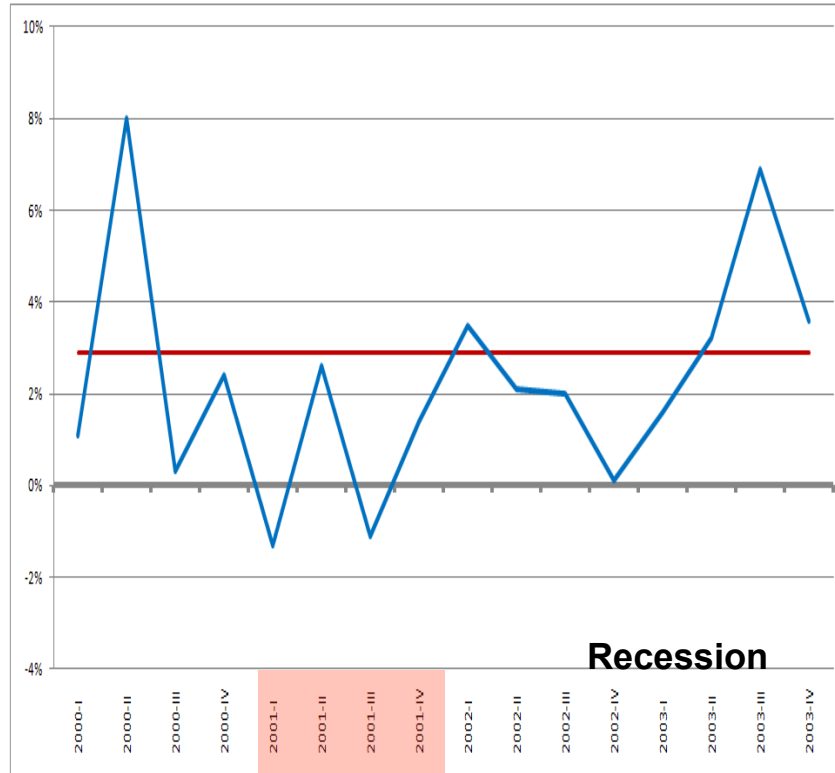
**The U.S. economy and equity markets have entered a challenging period resembling the unwinding of the Tech Bubble from April 2000 to April 2003 and 2016 closely resembles 2001 with the S&P 500 down in the low teens. Economic growth falters, corporate profits fall and equities begin a relentless decline that will last through the end of 2017.**



Source(s): MerckInvestments.com

# 2001 Recession Was Shallow, But Had Big Market Impact

## U.S. GDP Growth

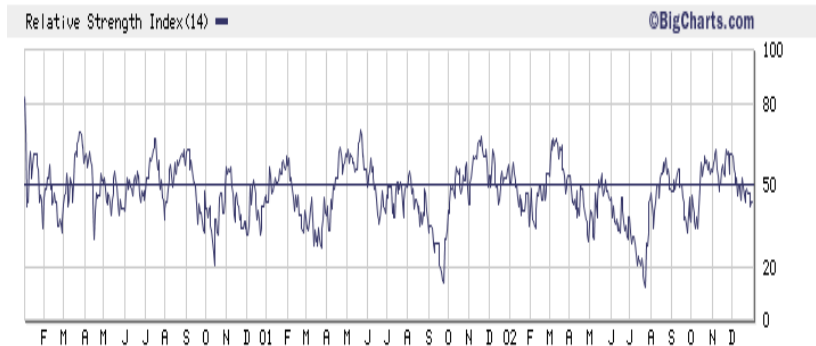


GDP growth from 2000-2003. Note the lack of two consecutive negative quarters. The profile matches that of a U shaped Recession with Growth remaining weak from 2000-III to 2003-I

— Percent Change From Preceding Period in Real Gross Domestic Product (annualized; seasonally adjusted);  
■ Average GDP growth 1970–2009



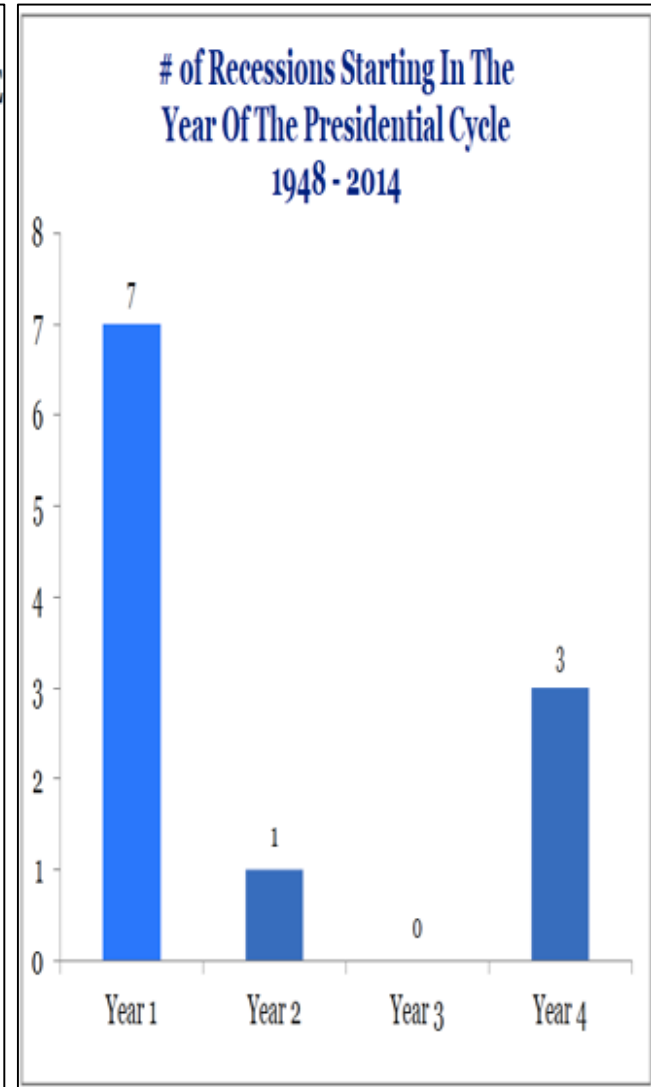
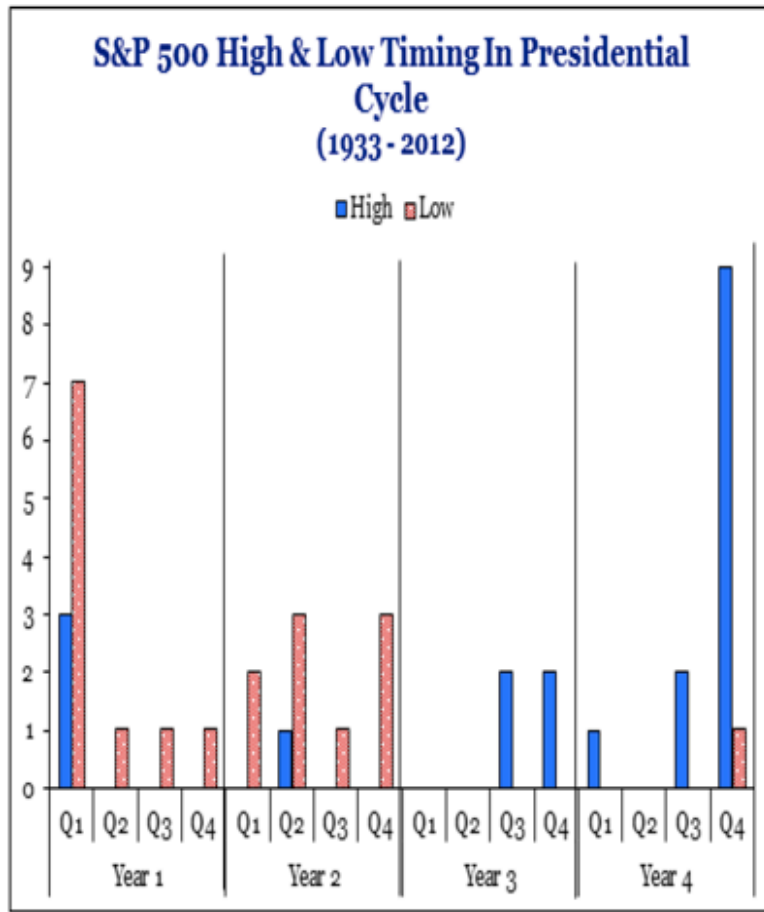
Source(s): Wikipedia, Bigcharts.com





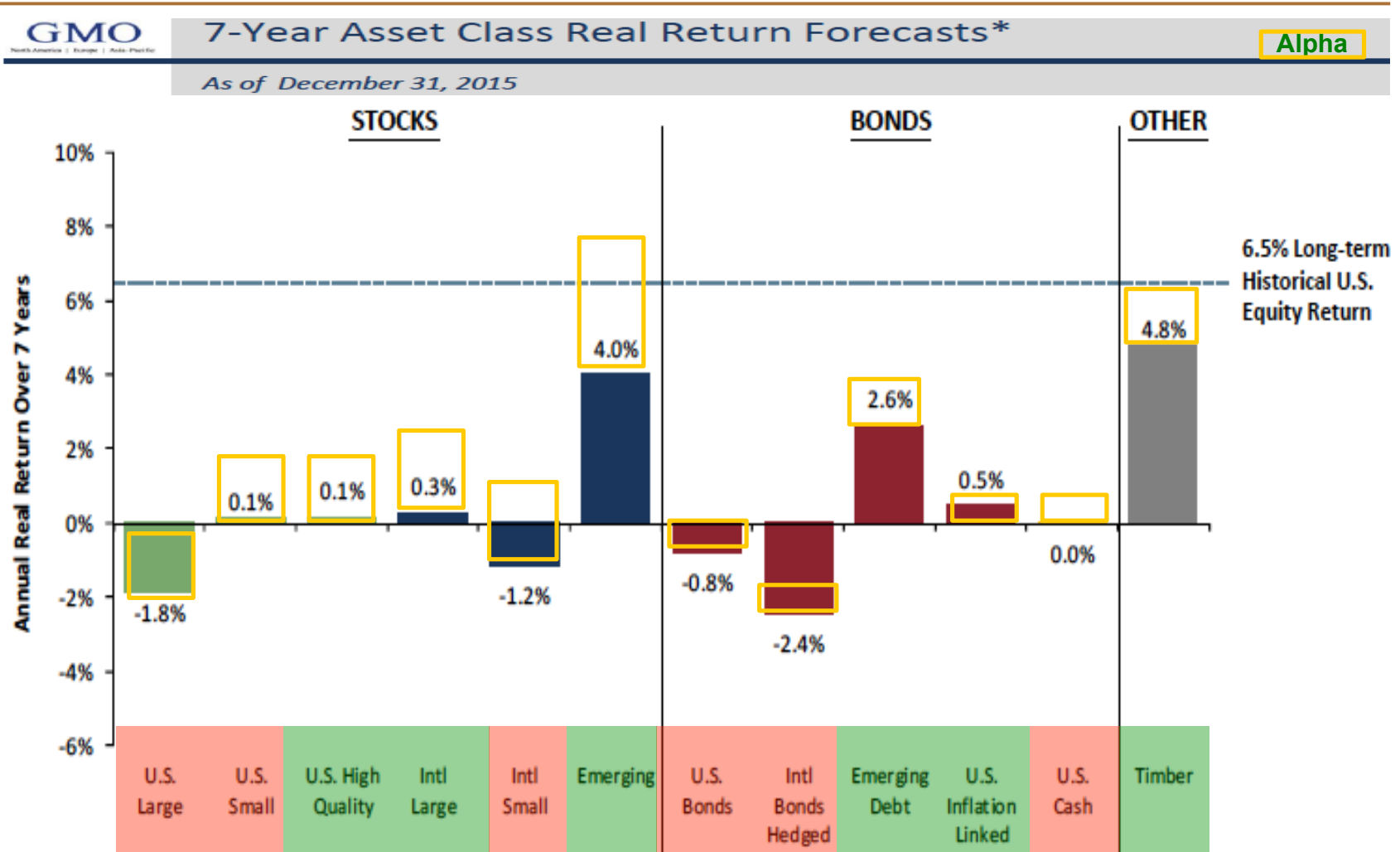
# S&P Cycle High Likely Q4 2016, Cycle Low Likely 2017/18

80% OF THE S&P 500 CYCLE HIGHS FALL IN YEAR 3 OR 4 OF THE PRESIDENTIAL CYCLE, 95% OF THE CYCLE LOWS WERE HIT IN YEAR 1 OR 2



Source(s): Strategas

# GMO Forecasts Poor Returns for Traditional Assets Again



\*The chart represents real return forecasts for several asset classes and not for any GMO fund or strategy. These forecasts are forward-looking statements based upon the reasonable beliefs of GMO and are not a guarantee of future performance. Forward-looking statements speak only as of the date they are made, and GMO assumes no duty to and does not undertake to update forward-looking statements. Forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Actual results may differ materially from those anticipated in forward-looking statements. U.S. inflation is assumed to mean revert to long-term inflation of 2.2% over 15 years.

Source(s): GMO.

# Last Time GMO Forecast Negative S&P 500 Returns, 2000

## Exhibit 1

Performance of GMO Asset Class Forecasts for the Decade Dec. 31, 1999 to Dec. 31, 2009

Asset Class	Estimated Rank	GMO 10-Yr Forecast Dec-31-99 (% Real Return/Yr)	Actual 10-Yr Return*	Actual Rank
U.S. REITs	1	10.0	7.4	3
Emerging Market Equities	2	7.8	8.1	1
Emerging Country Debt	3	6.1	7.5	2
U.S. TIPS	4	4.3	4.9	4
Barclays Capital U.S. Gov't. Debt	5	3.8	3.5	6
International Small Cap	6	3.4	3.5	7
Foreign Bonds	7	3.0	3.9	5
U.S. Small	8	2.5	2.3	8
U.S. T-Bills	9	2.1	0.3	9
EAFE	10	0.4	-1.4	10
S&P 500	11	-1.9	-3.5	11

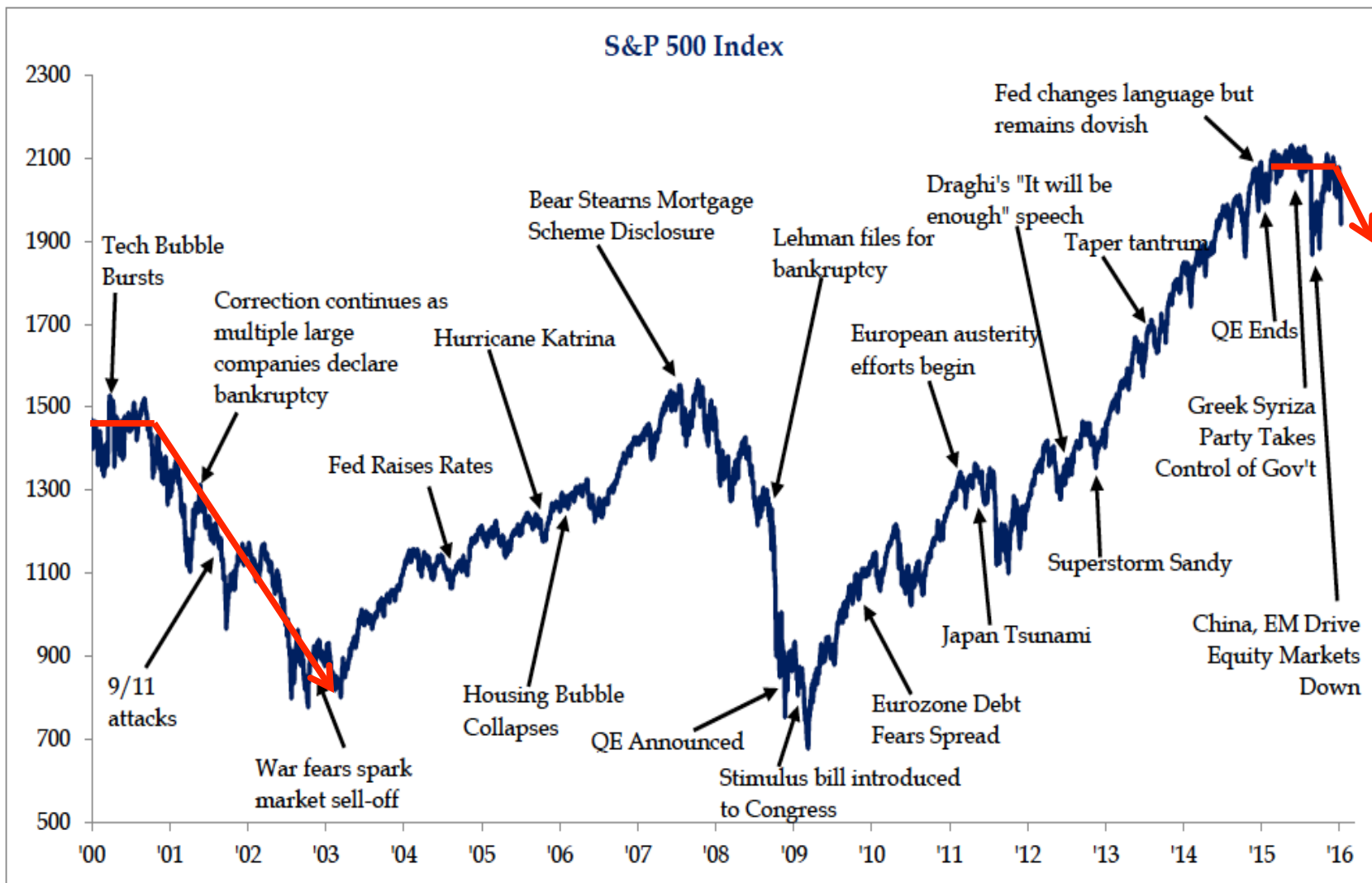
Correlation of rank order: 93.6%  
Probability of picking same or better rank order randomly: 1 in 550,000

\* Actual compound annual real returns are for the period 12/31/99 to 12/31/09.

The accuracy of past predictions does not guarantee that current or future predictions will be accurate either with respect to the ranking of asset classes over a 10-year period, the absolute levels of return, or results over shorter time periods. The accuracy of the forecast rankings and returns in the asset class forecasts generally varies from period to period.

Source: GMO

# 2015/16 Tracking 2000/01, Mr. Market Does Not Like Hikes



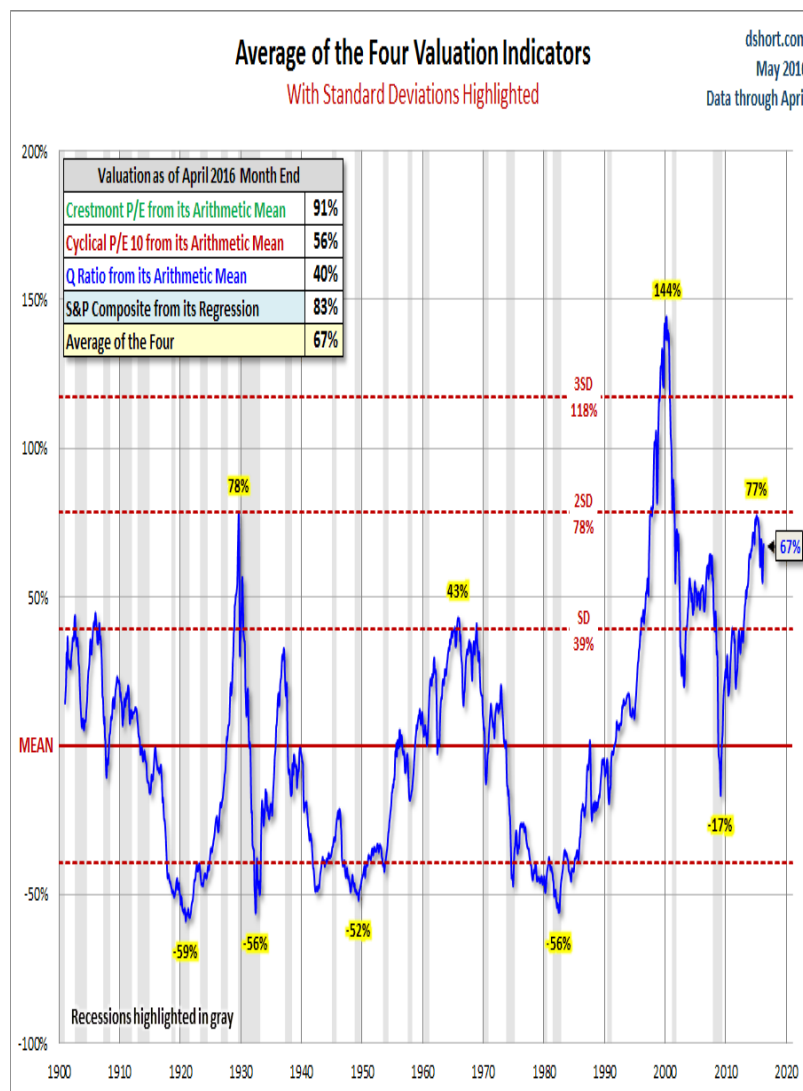
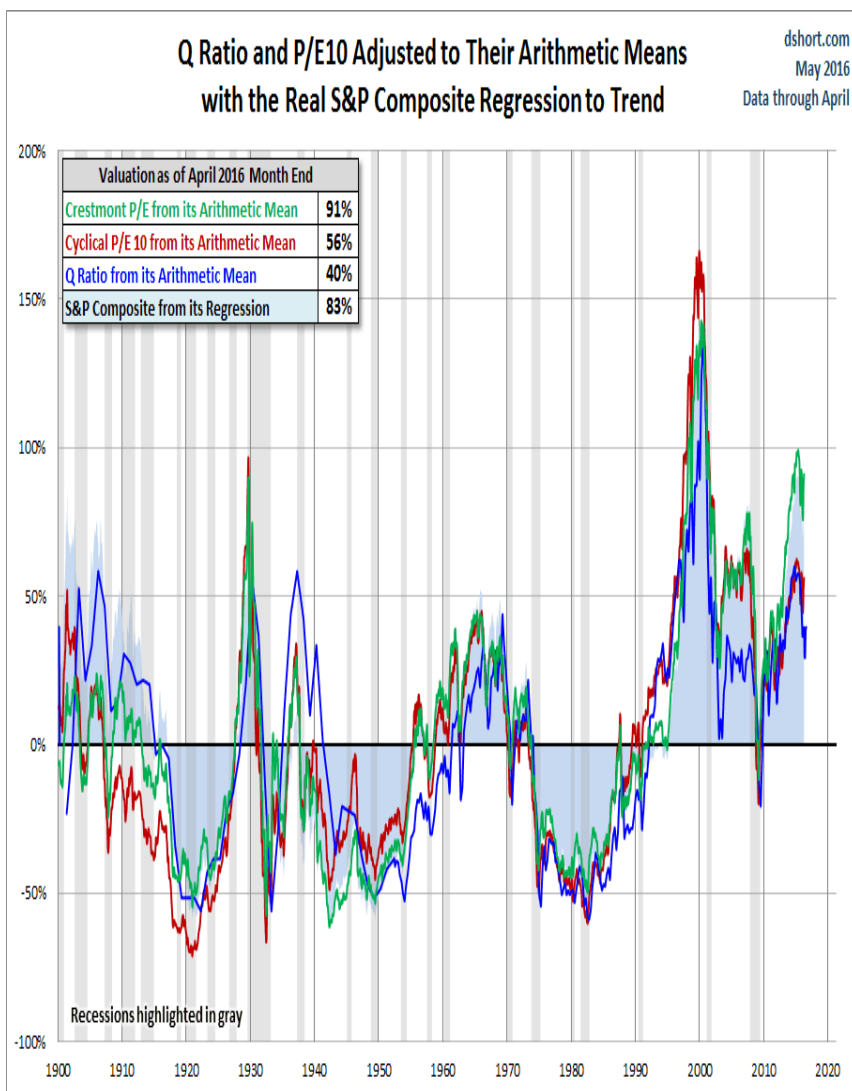
Source(s): Strategas

# 2000 Started Poorly, Volatile, Down (9%), Real Pain '01/'02



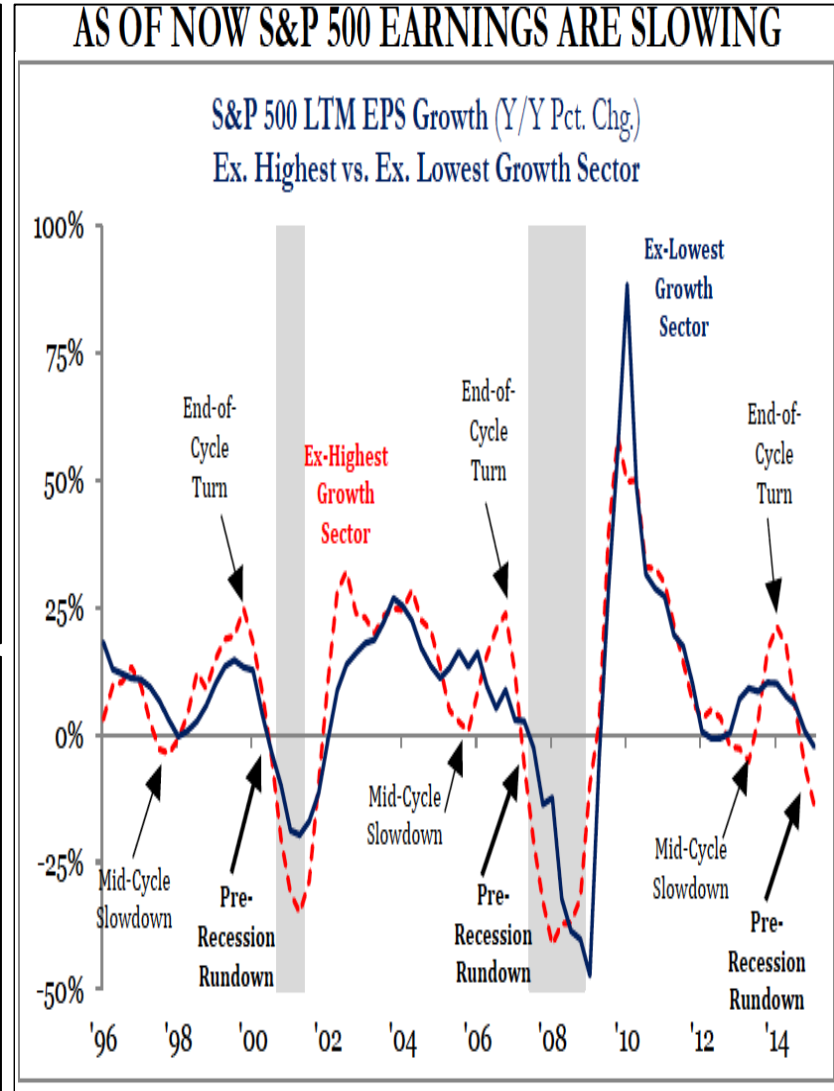
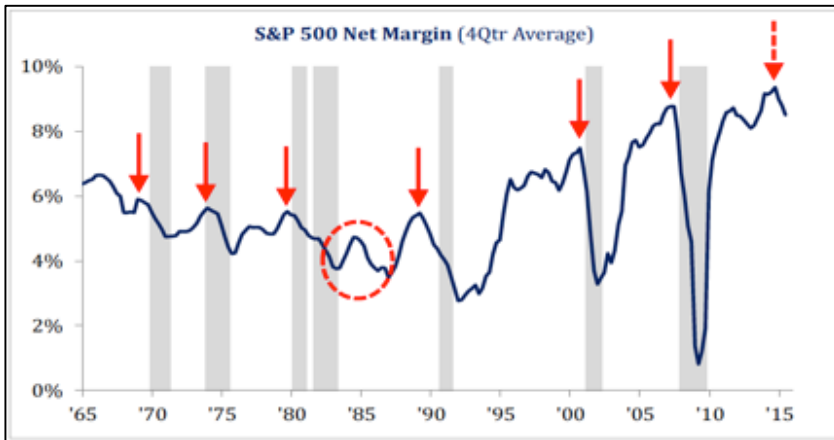
Source(s): Bigcharts.com

# US Equities Overvalued On Every Measure, 3<sup>rd</sup> Worst Ever



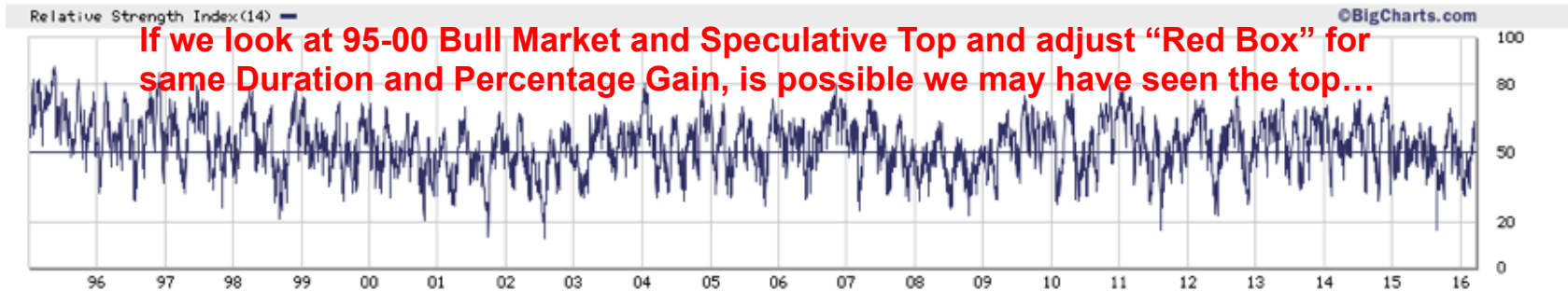
Source(s): AdvisorPerspectives.com.

# S&P 500 EPS Turning Down Hard as Margins Roll Over



Source(s): NeubergerBerman, Strategas

# Dec '14 Barron's Cover Could Be Front Page Syndrome...



Source(s): BigCharts.com.





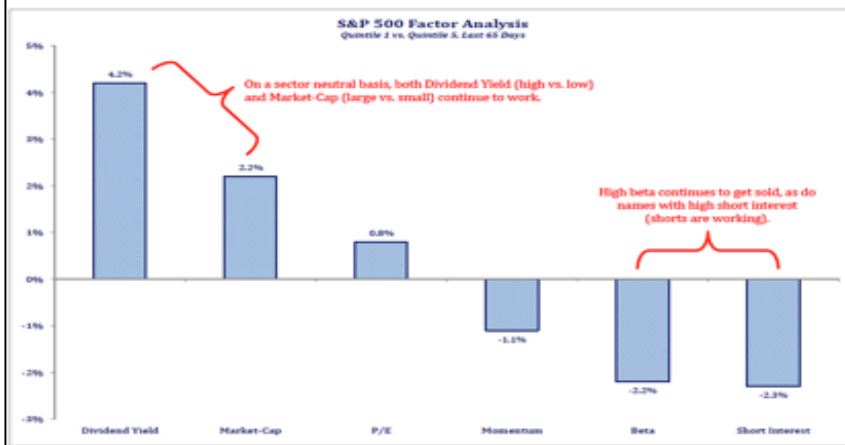
# As Goes January, So Goes The Year: Does Not Bode Well

## WORST START TO YEAR EVER

S&P PERFORMANCE FOLLOWING THE WORST 5 DAY STARTS TO THE YEAR						
RANK	YEAR	FIRST 5 DAYS	JANUARY	1Q	1H	FULL YEAR
1	2016	-5.96%	?	?	?	?
2	2008	-5.32%	-6.1%	-9.9%	-12.8%	-38.5%
3	1978	-4.69%	-6.2%	-6.2%	0.5%	1.1%
4	1991	-4.64%	4.2%	13.6%	12.4%	26.3%
5	1962	-3.40%	-3.8%	-2.8%	-23.5%	-11.8%
6	1969	-2.95%	-0.8%	-2.3%	-5.9%	-11.4%
7	1939	-2.66%	-6.4%	-16.4%	-17.4%	-5.2%
8	1982	-2.45%	-1.8%	-8.6%	-10.6%	14.8%
9	1977	-2.28%	-5.1%	-8.4%	-6.5%	-11.5%
10	1956	-2.13%	-3.6%	6.6%	3.3%	2.6%
Average			-3.3%	-3.8%	-6.7%	-3.7%
Median			-3.8%	-6.2%	-6.5%	-5.2%
% Positive			11.1%	22.2%	33.3%	44.4%
Max			4.2%	13.6%	12.4%	26.3%
Min			-6.4%	-16.4%	-23.5%	-38.5%

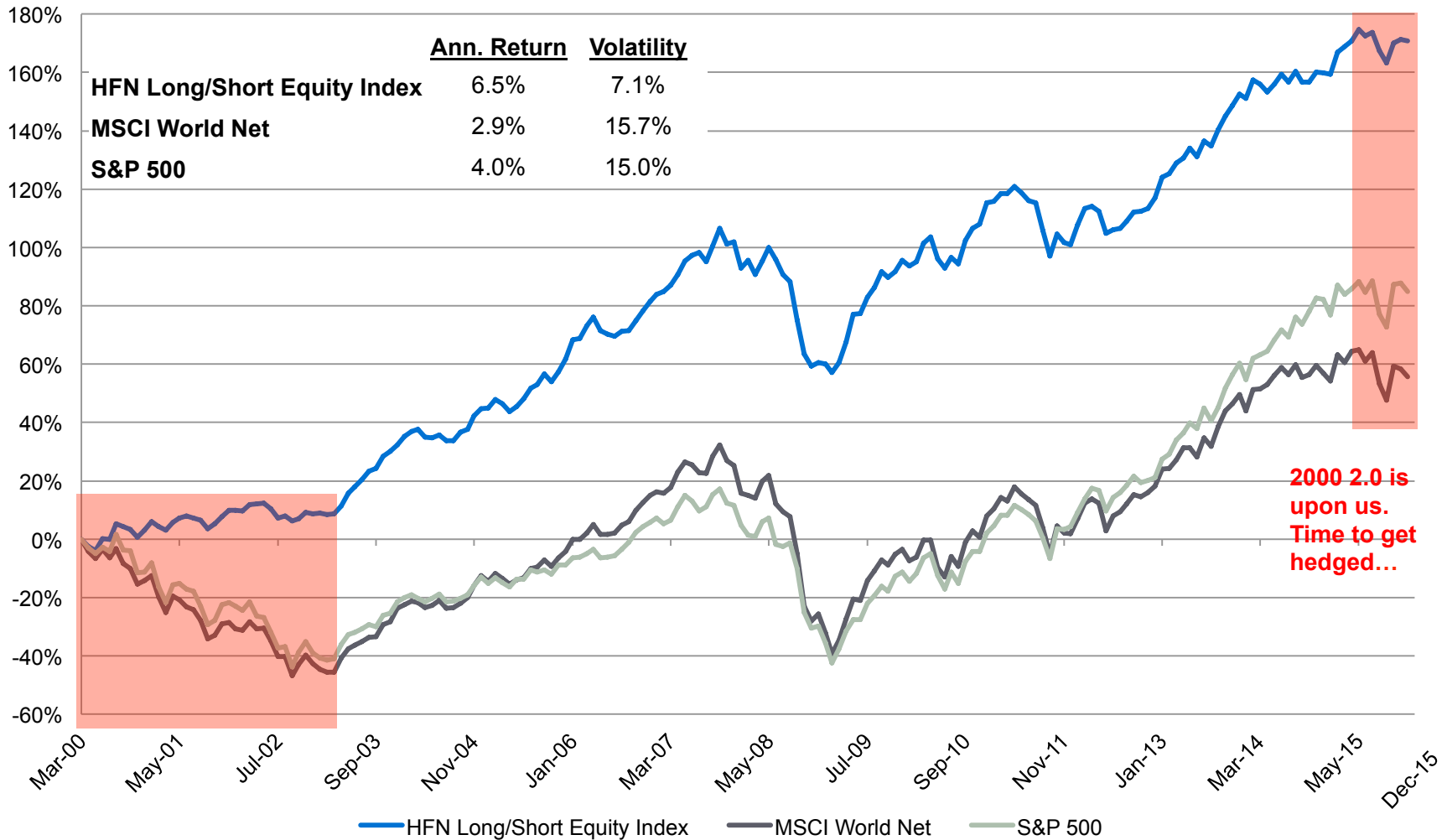


## ATTRIBUTION REMAINS DEFENSIVE



Source(s): Strategas, StockTradersAlmanac.com

# Long/Short Provides Protection When You Need It Most

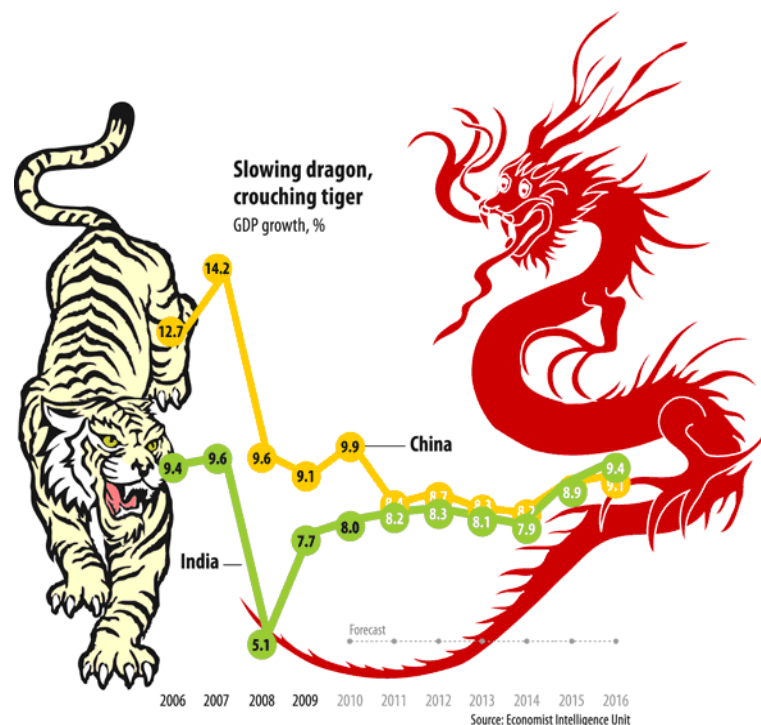


Source(s): PerTrac.

Note(s): Data shown from 04/01/00 to 12/31/15. Indices shown are for informational purposes only and are not reflective of any investment. As it is not possible to invest in the indices, the data shown does not reflect or compare features of an actual investment, such as its objectives, costs and expenses, liquidity, safety, guarantees or insurance, fluctuation of principal or return, or tax features. Past performance does not guarantee future results. There is no guarantee that any investment strategy will achieve its objectives, generate profits or avoid losses. Diversification does not ensure profit or prevent losses.

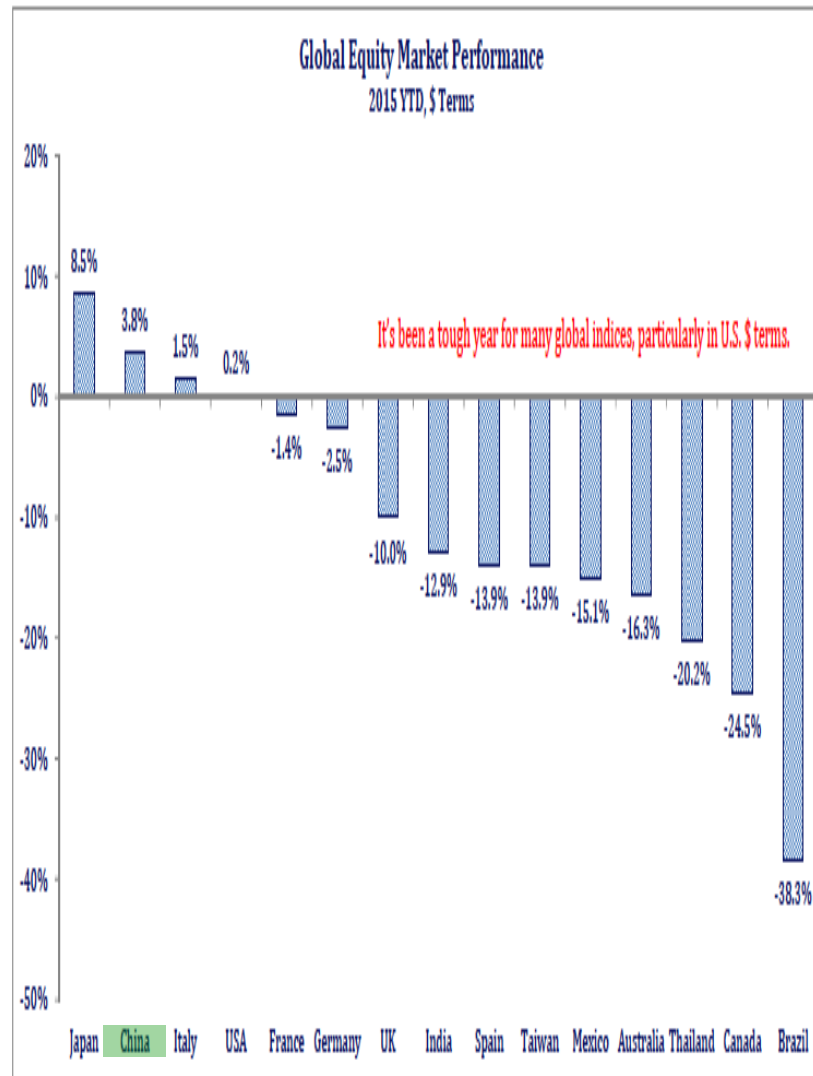
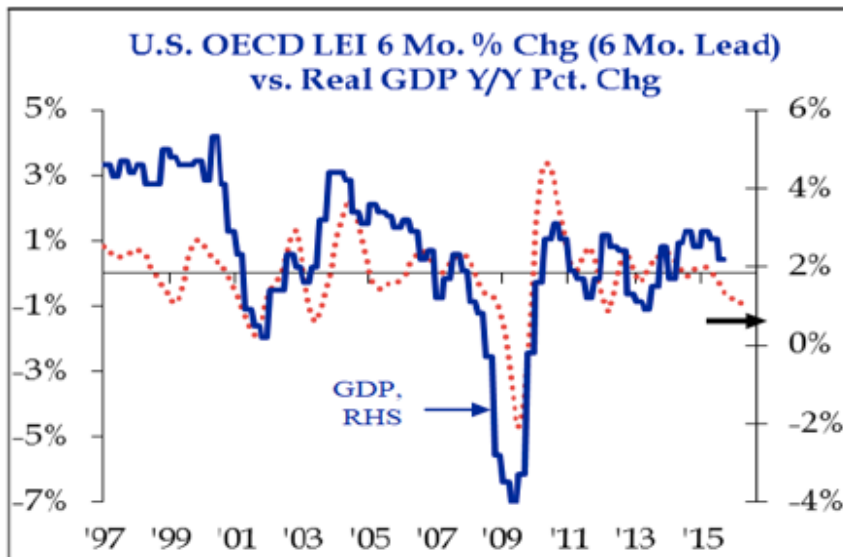
## Surprise #7      Dragons & Tigers Beat Bears, Oh My!

**Emerging Markets divide into two very different groups based on whether they are commodity producers or commodity consumers. Producers (Brazil, Russia) continue to struggle with budget deficits and pervasive currency weakness, while Consumers (China, India) enjoy the tailwinds of lower inflation and higher growth courtesy of lower commodity prices and the Dragon and Tiger markets beat the Bear and finish up for the year.**



Source(s): Economist.com

# Anomaly: DM LEI Down, China LEI Up; Explains '15 Perf



Source(s): Strategas

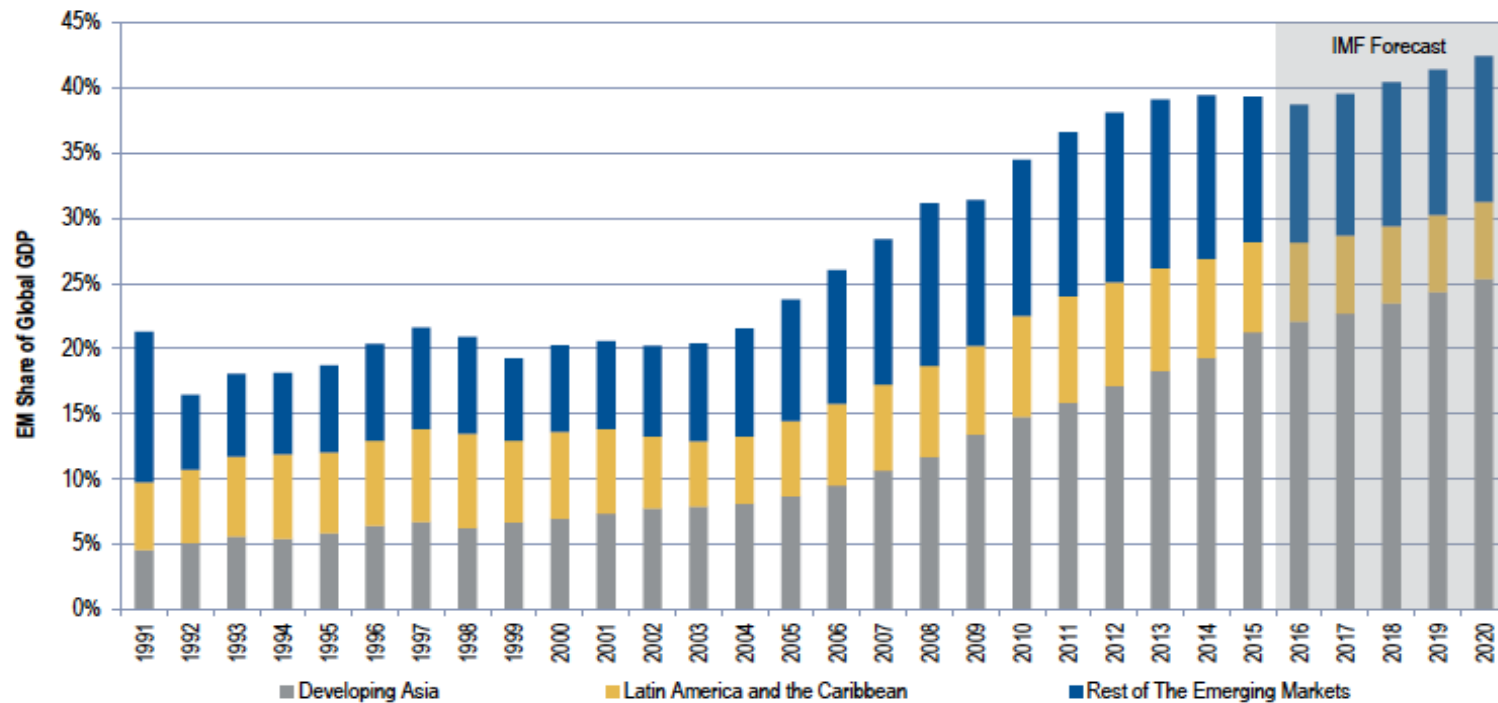
# EM Has Demographic Advantage Over DM; But Volatile

## Emerging Markets Share of Global GDP

Emerging market's share of global GDP has grown from 20% to 39% in the last decade, and it is estimated to reach 40% by 2016

High level of Emerging Markets GDP growth makes EM equities attractive as a higher GDP growth is likely to improve EPS growth of EM equities which in turn can produce better performance for EM equities

### EMERGING MARKETS SHARE OF GLOBAL GDP



Source: International Monetary Fund; Neuberger Berman. As of March 2016.

Third-party economic or market estimates discussed herein may or may not be realized and no representation is being given regarding such estimates. See Additional Disclosures at the end of this presentation, which are an important part of this presentation.

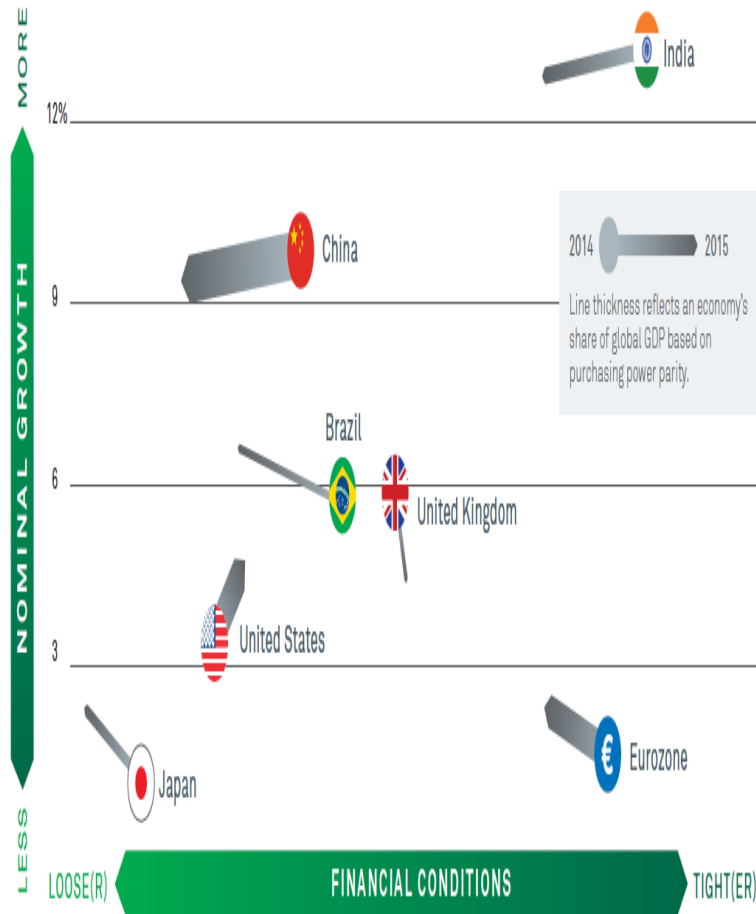
Source(s): Neuberger Berman,

# China/India Have Material Growth Advantage Over ROW

## THE YEAR OF LIVING DIVERGENTLY

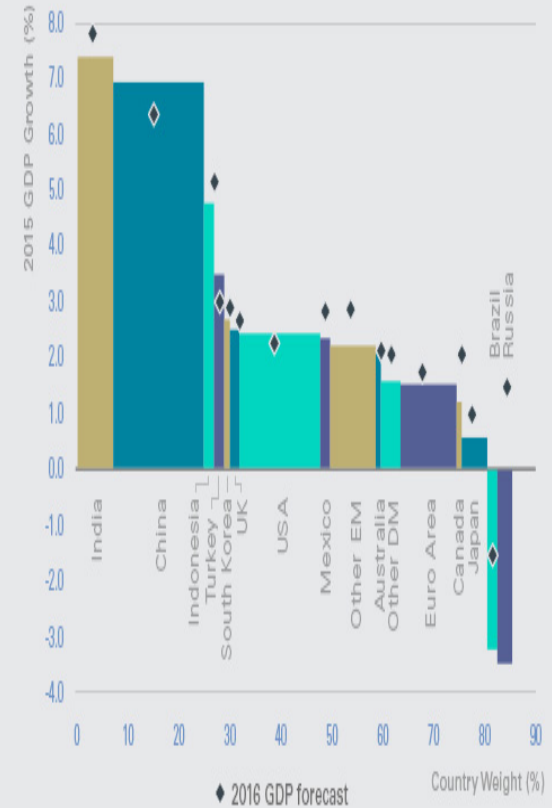
GDP Growth and Financial Conditions in Selected Economies, 2014-2015

CLICK FOR INTERACTIVE DATA 



## STABILIZING ECONOMIES TO DRIVE GLOBAL GROWTH IN 2016

- GDP growth will grind higher to 3.5% from 3.2% as recovery from crisis continues
- Growth will come from rebounds in hard-hit emerging markets and small improvements in Europe, Japan
- Labor markets will continue march toward full employment in economies such as the US, UK



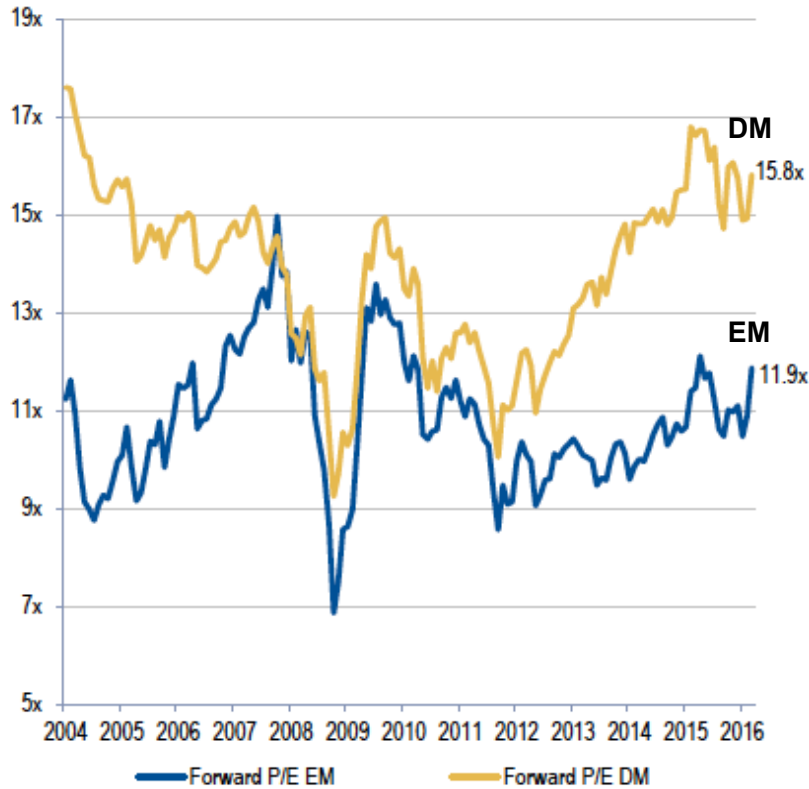
Source: Goldman Sachs Global Investment Research.

Source(s): Blackrock

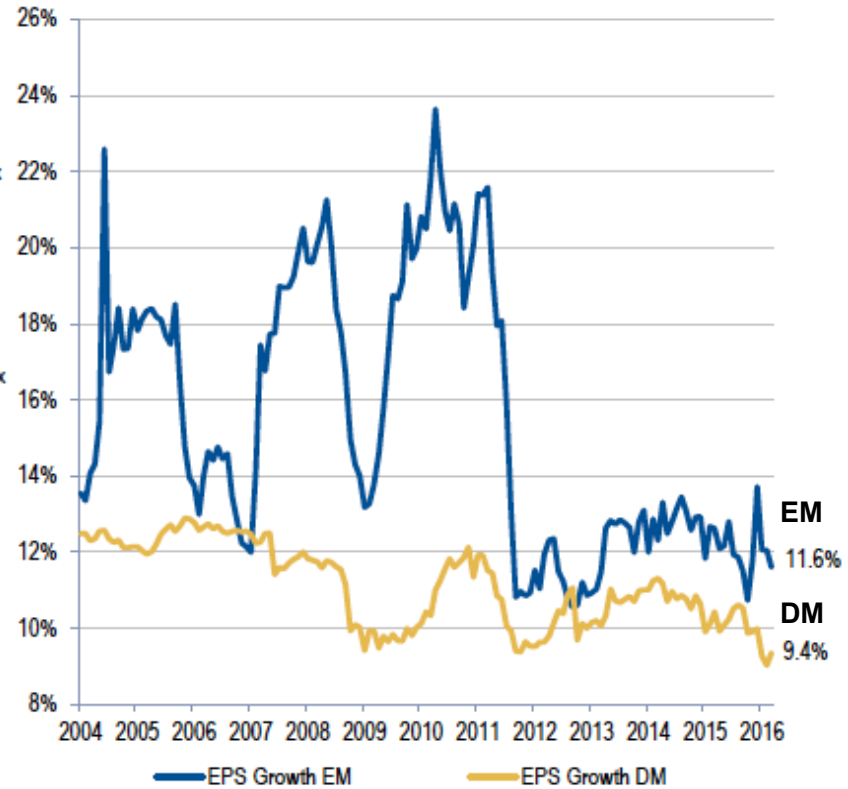
# Looking Forward, EM vs. DM, Higher Growth & Cheaper

## Where are Valuations Currently?

FORWARD P/E<sup>1</sup>



FORWARD EPS GROWTH RATES<sup>2</sup>



Sources: FactSet, Bloomberg. Data as of March 31, 2016.

1. Based on FY1 P/E estimates.

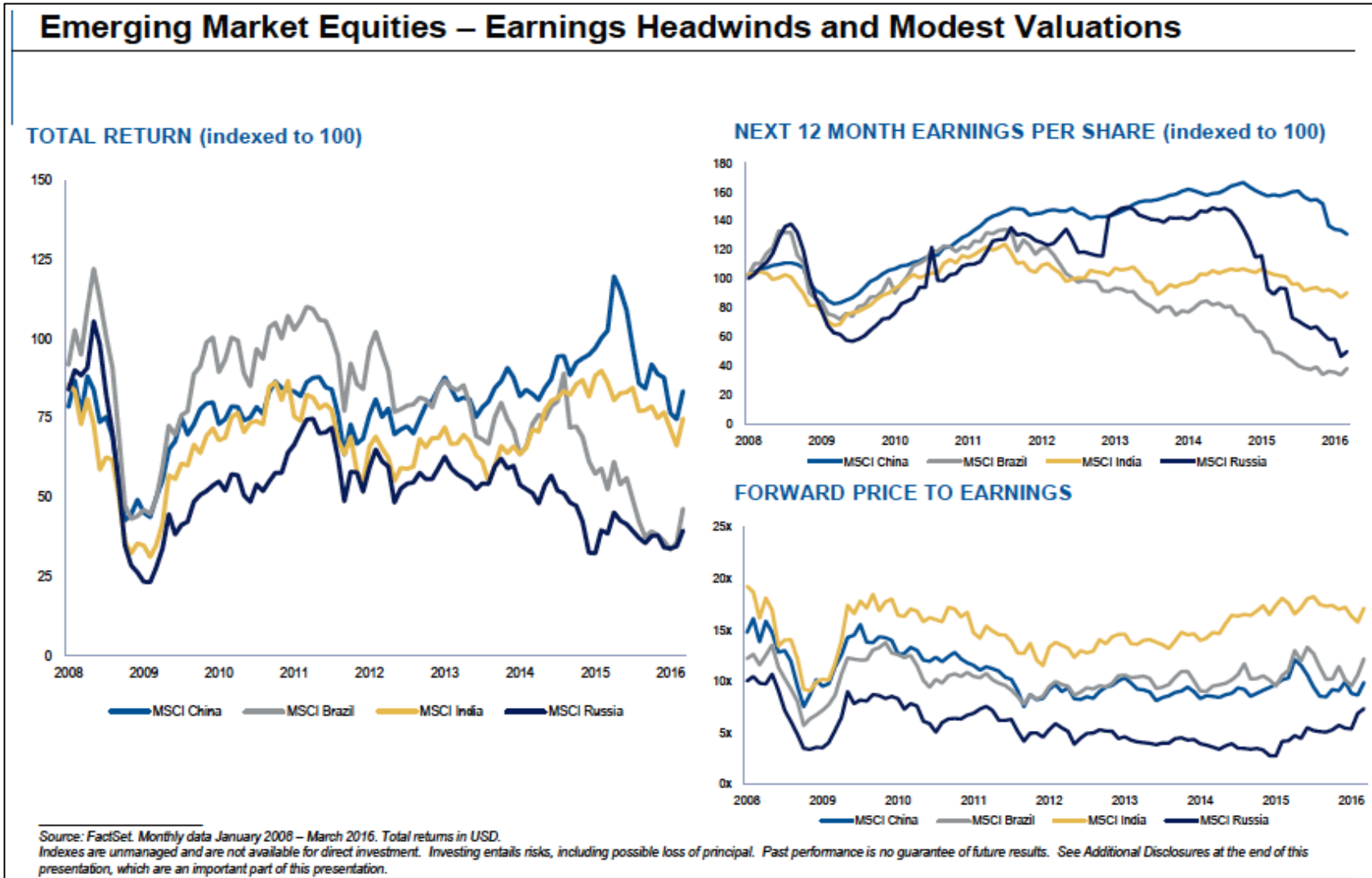
2. Based on 3-5 EPS growth rates.

Any ratios or other measurements using a factor of forecasted earnings of a company discussed herein are based on consensus estimates, not Neuberger Berman's own estimates, and they may or may not be realized. In addition, any revision to a forecast could affect the market price of a security. By quoting them herein, Neuberger Berman does not offer an opinion as to the accuracy of and does not guarantee such estimates. See Additional Disclosures at the end of this presentation, which are an important part of this presentation.

Source(s): Neuberger Berman

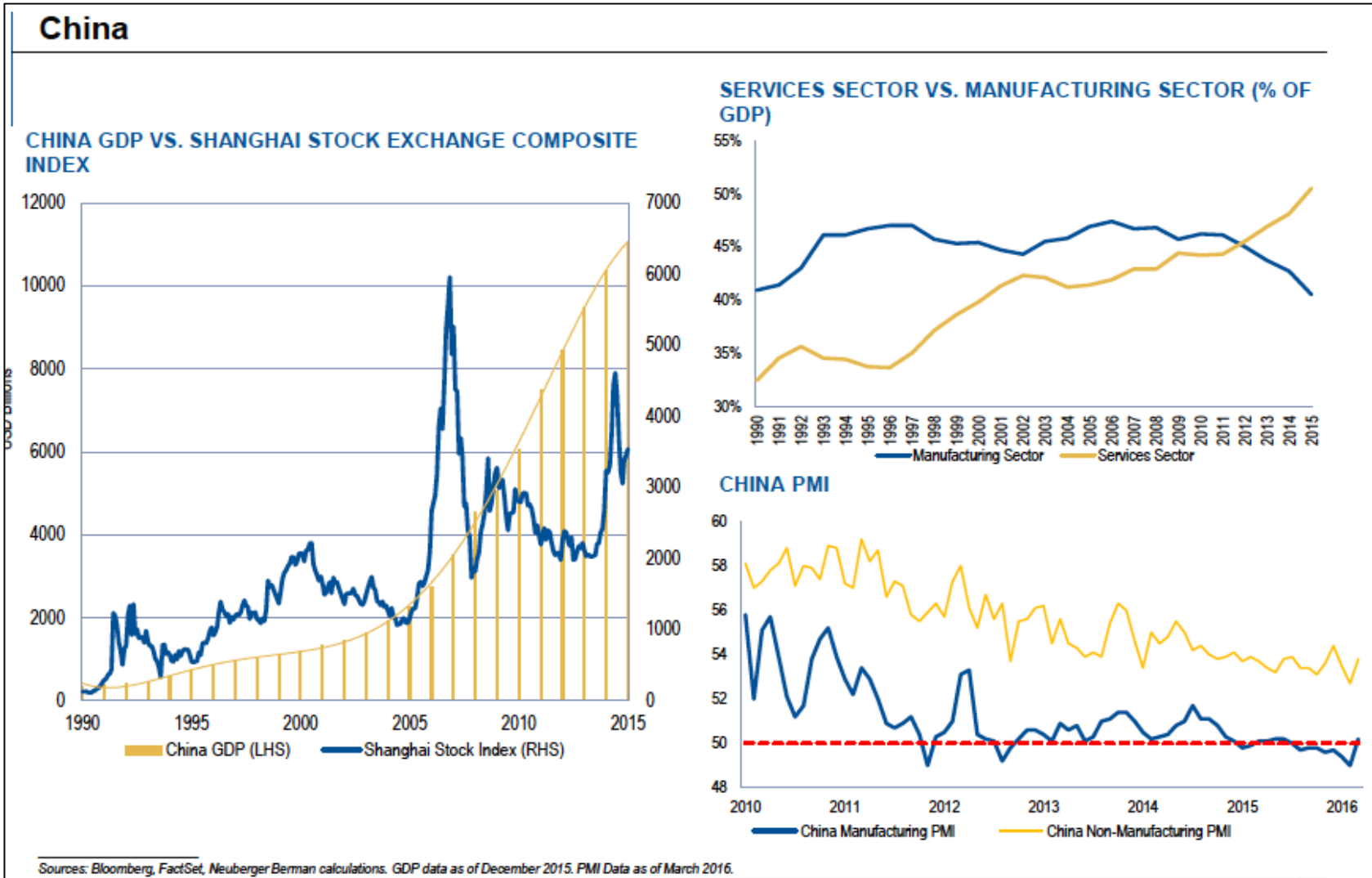


# China Been Best of BRICs, Best Combo EPS & Valuation



Source(s): Neuberger Berman

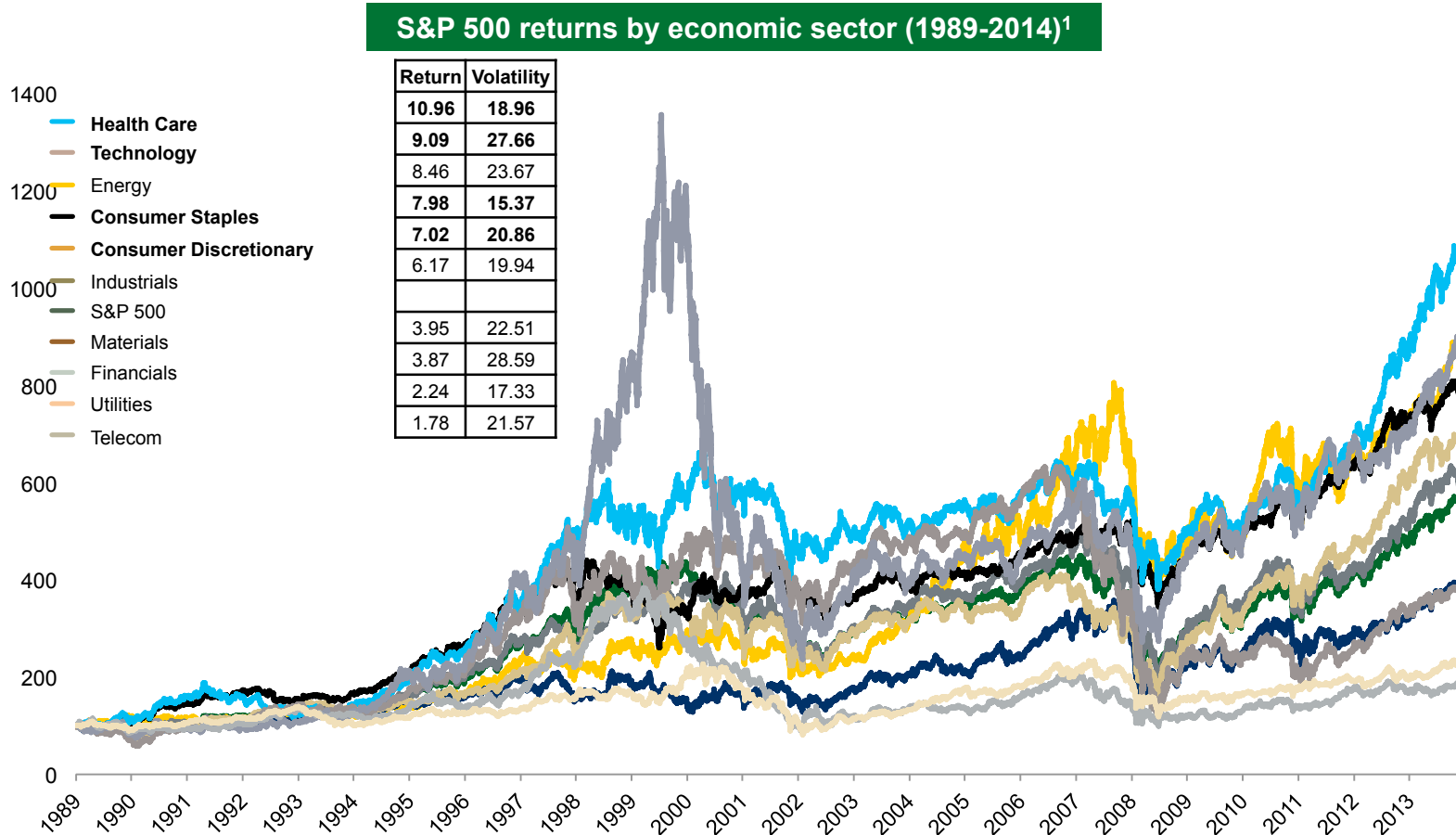
# China Economic Transition Proceeding, Stocks < GDP



Source(s): Neuberger Berman

# History Rhymes: China to Follow Path of U.S. Consumer

As people age, wealth increases, Consumption rises => opportunities in 5 key sectors: Healthcare, Technology, Energy, Consumer Staples & Consumer Discretionary

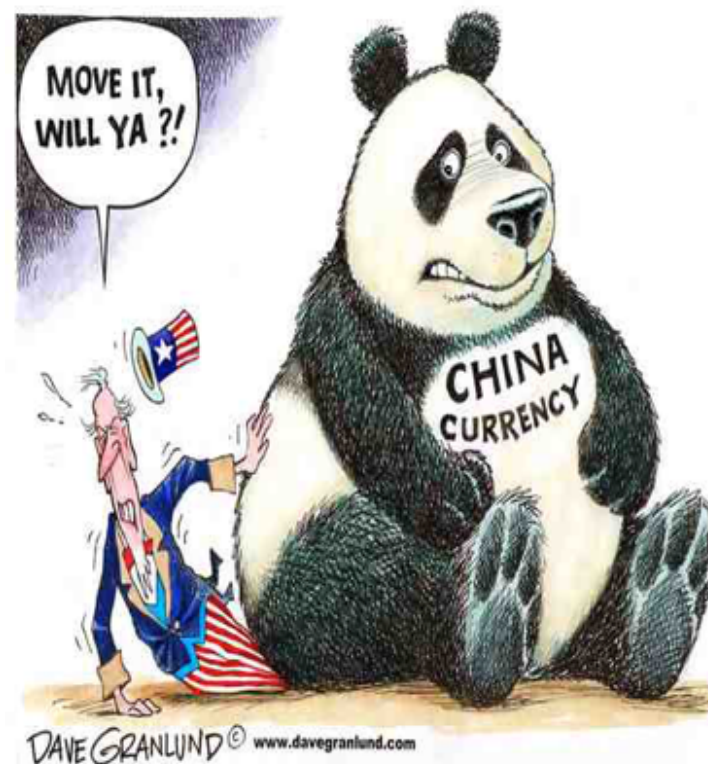


Source(s): Bureau of Labor Statistics, Employment, Hours, Earnings from the Current Employment Statistics survey (National); Bureau of Economic Analysis, "GDP by Industry."; China Statistical Yearbook 2012 (ISBN 978-7-5037-6693-0/C•2752), Bloomberg. Bigcharts.com

## Surprise #8

## King Dollar Gets Dethroned

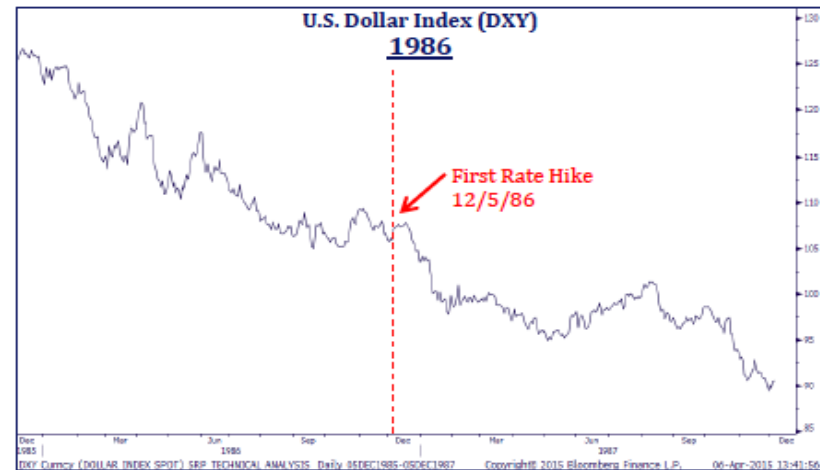
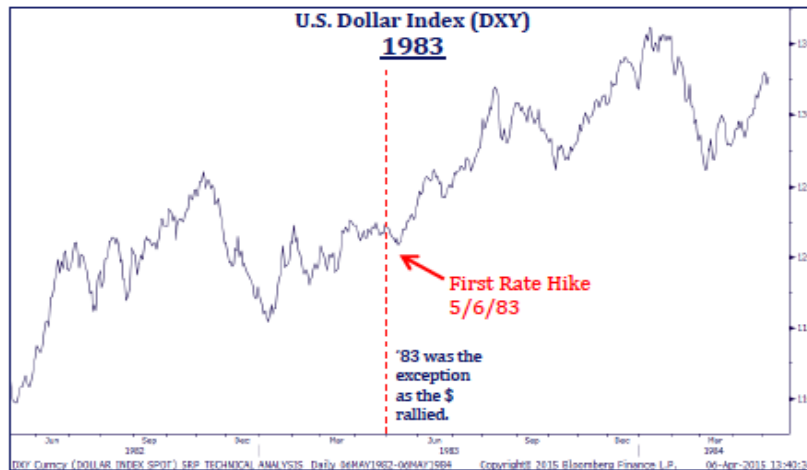
Contrary to the powerful narrative that the U.S. Dollar must continue to appreciate in the face of the Fed taking a different monetary policy course (or at least threatening to take a different course...) than the ECB & BOJ, the old saw “Buy the Rumor, Sell the News” turns out to be true once again and the USD peaks and actually begins to weaken against other global currencies. The surprising Dollar weakness takes some pressure off of the Chinese to further weaken the RMB and the Yuan continues on a path toward becoming a World Reserve Currency.



Source(s): China-Mike.com

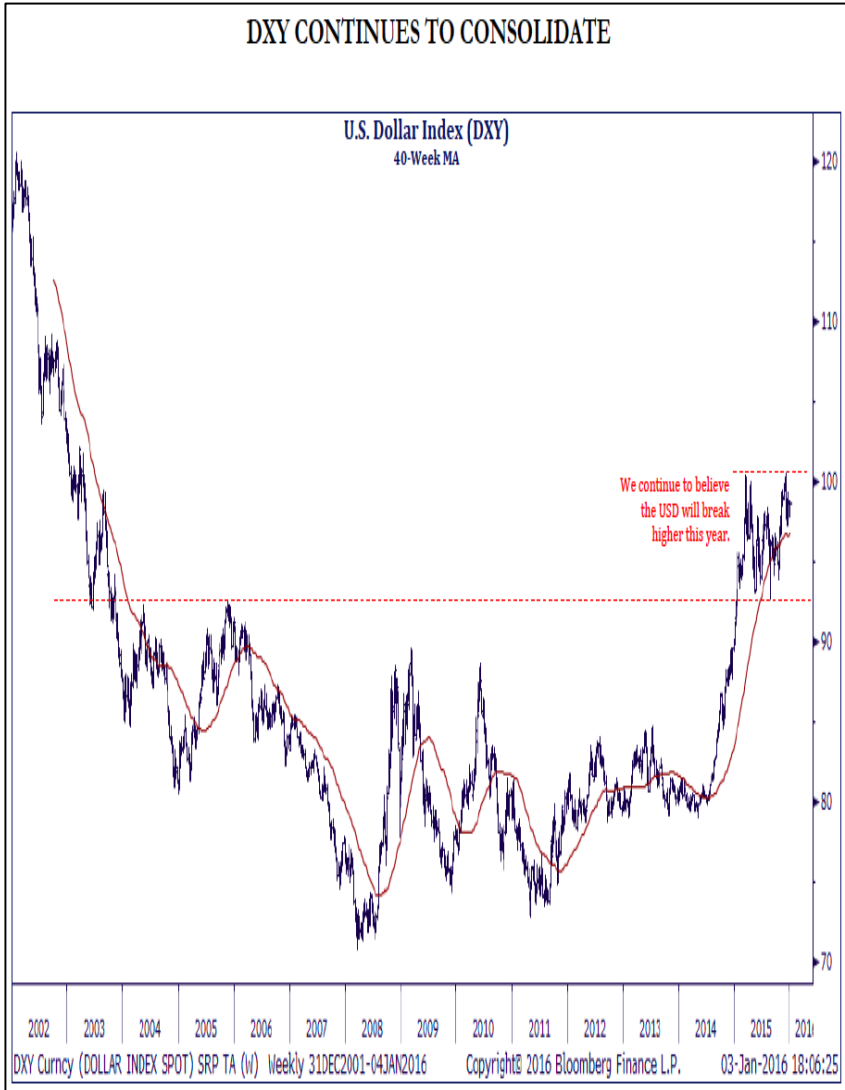
# Dollar Tends To Peak When Fed Actually Raises Rates

FED HIKE IS ACTUALLY ONE RISK FOR OUR NEAR-TERM DOLLAR CALL



Source(s): Strategas.com

# King Dollar Looking Like Wants to Abdicate Throne



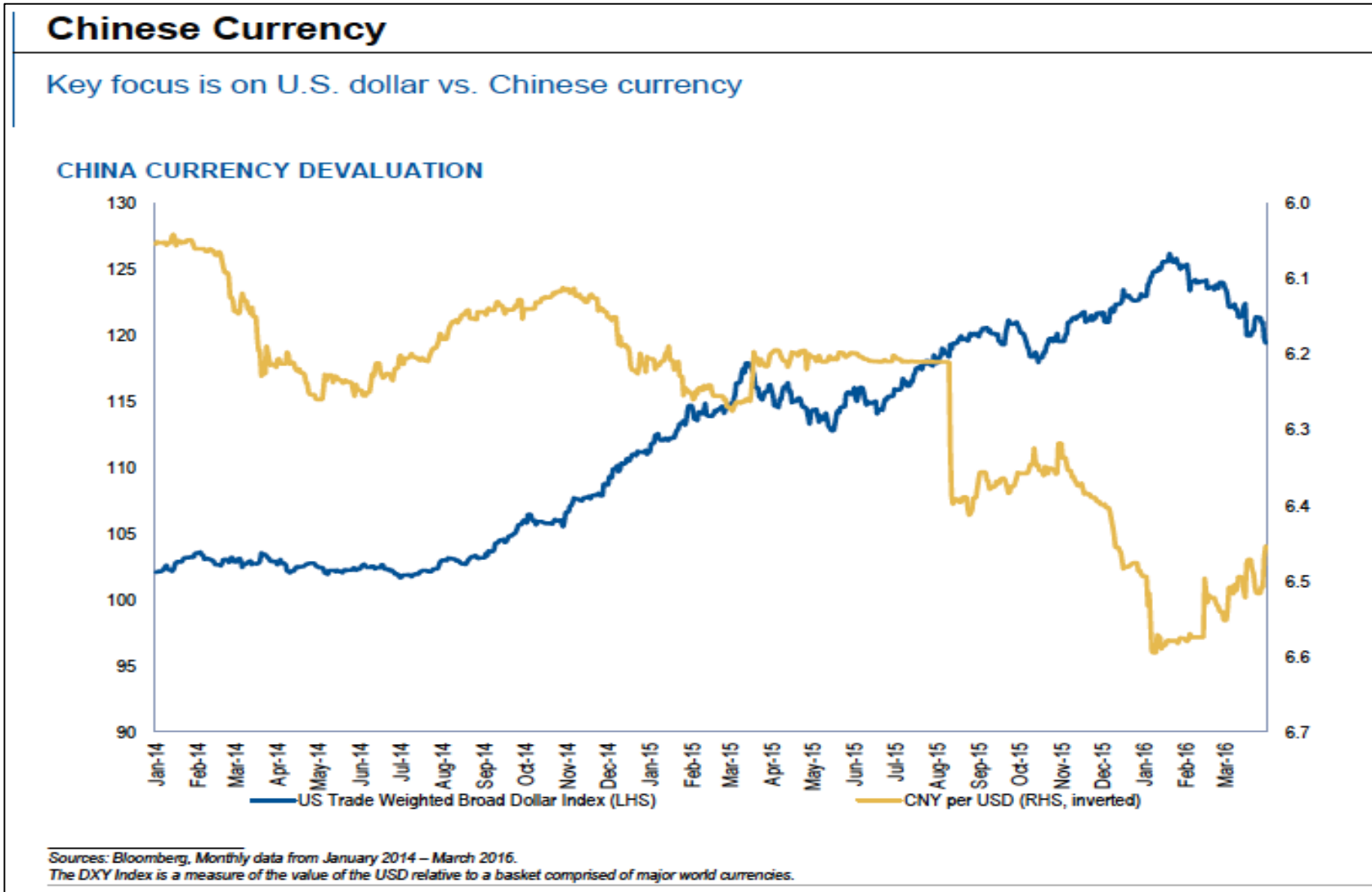
Source(s): Strategas, MarketWatch.com

# King Dollar Appears to Have Made Cyclical Peak



Source(s): 13d Research

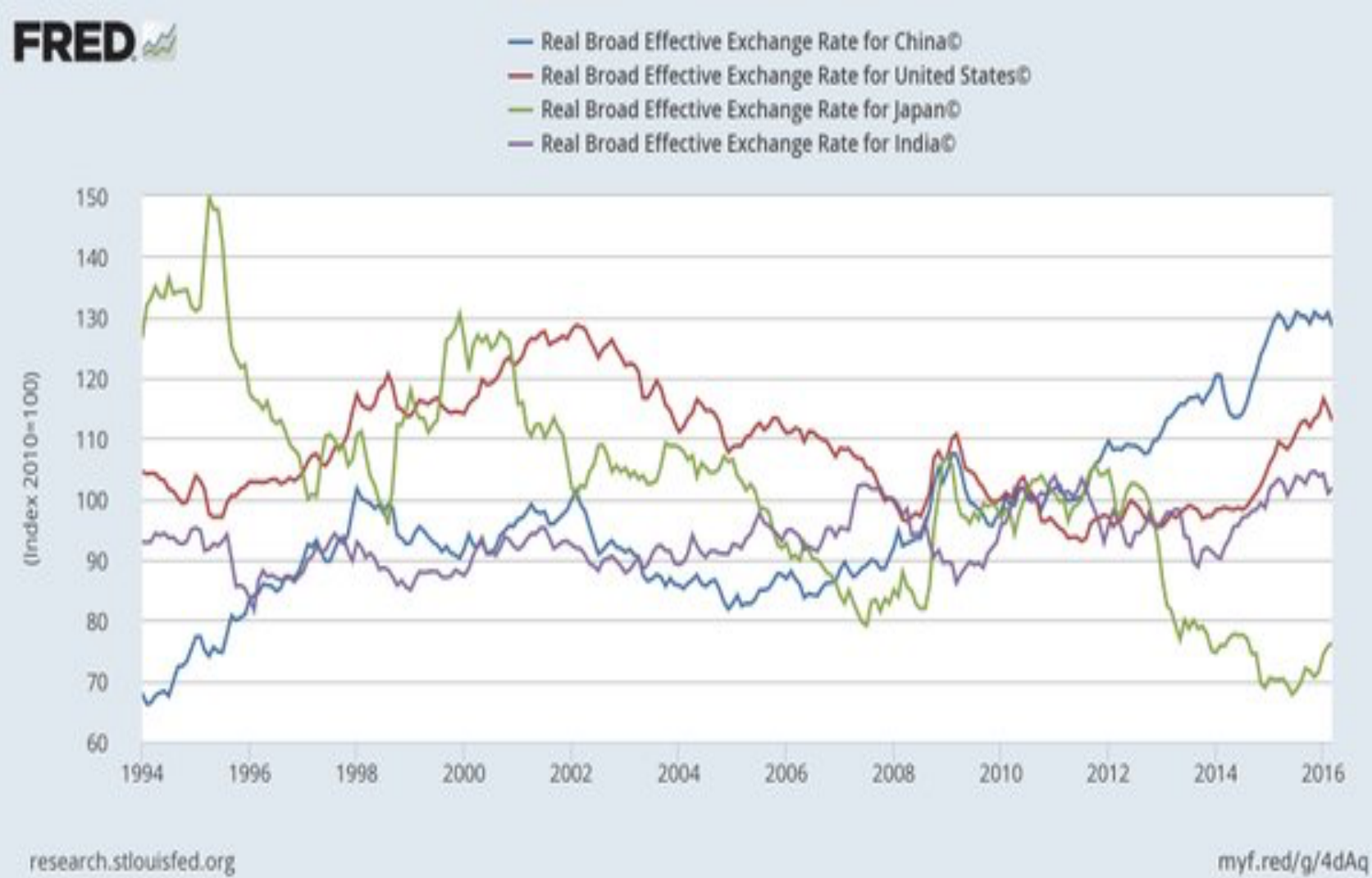
# Rapid Appreciation of Dollar in 2014/15 Pressured RMB



Source(s): Neuberger Berman



# Bears Argue RMB Appreciation Hurting Competitiveness



Source(s): FRED

# Chinese Plan for RMB Better Than The Media Reports

The first general fallacy is that China did not devalue the Yuan against the US\$. They removed the peg and have since taken the currency into a managed float. There are many Chinese and foreign economists who talk about a further float downwards of the Yuan. First, this would assume a continued strengthening of the U.S. dollar which we don't think will last beyond early 2016. Such an assumed change will work heavily on their currency planning.

Yuan Trade Weighted Index



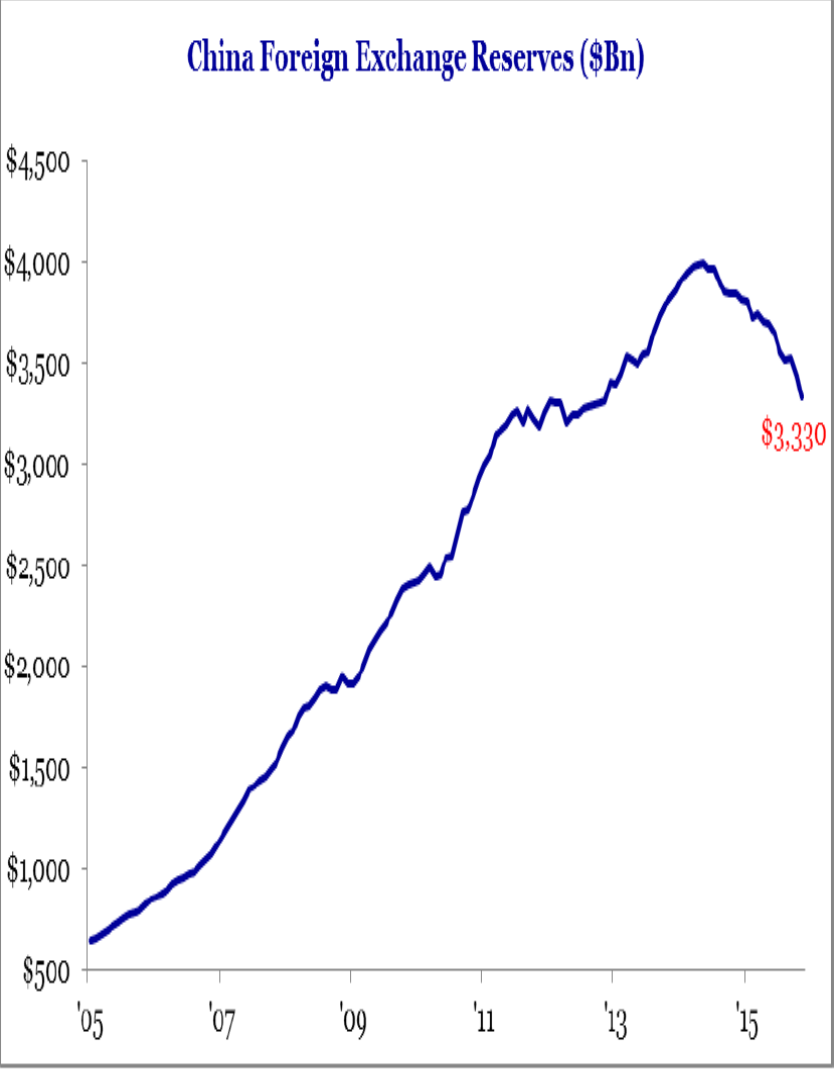
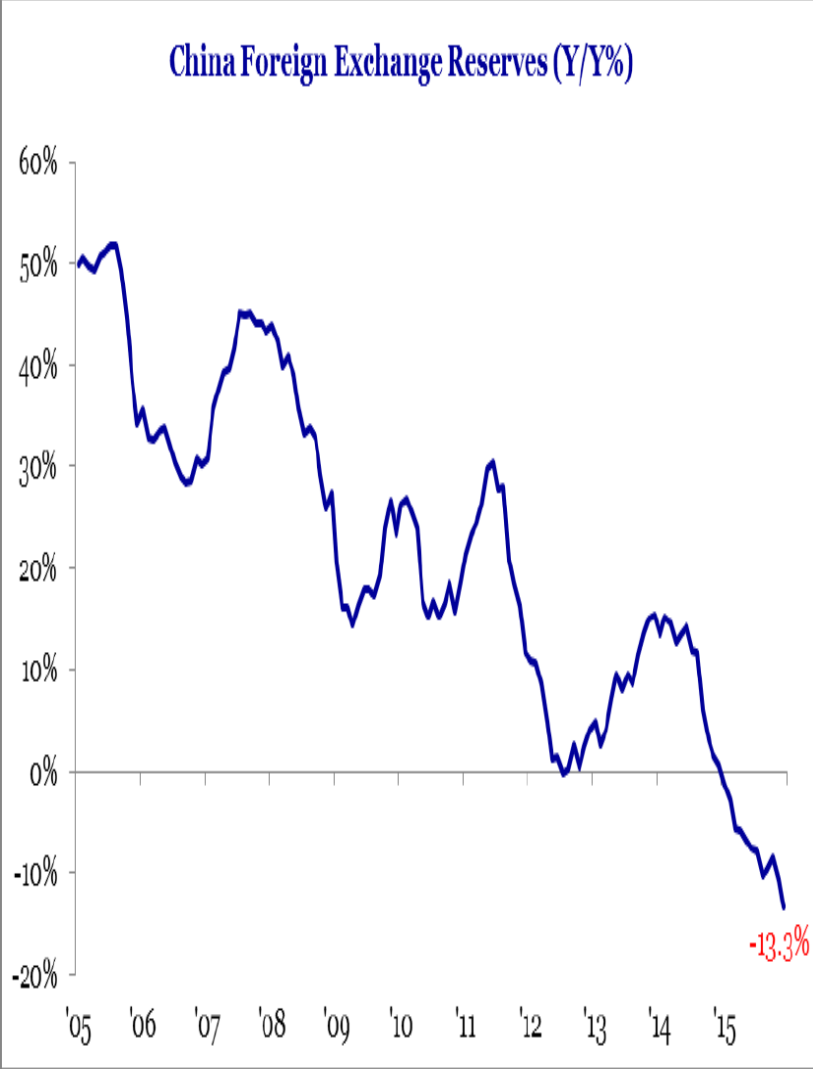
Source: BIS

Second, China focuses much more on its trade weighted index than it does against the U.S. dollar. Against the trade weighted index the Yuan has appreciated by 2% so far this year and since January 2014 by 9.8%. Focusing on the trade weighted index is hardly surprising since only 17% of the country's exports went to the USA last year with 16% destined to the EU, 12% to ASEAN, 16% to Hong Kong, 4% to S Korea and 2% to both India and Russia.

Third, China's objective is not to follow the devaluation route of other countries but for the Yuan to be seen as a stable unit of appreciation that central banks and financial institutions feel comfortable in holding in their portfolios.

It is the trade weighted index that is far more relevant than the U.S. dollar rate against the Yuan.

# China Has Plenty of Firepower to Win a Currency War

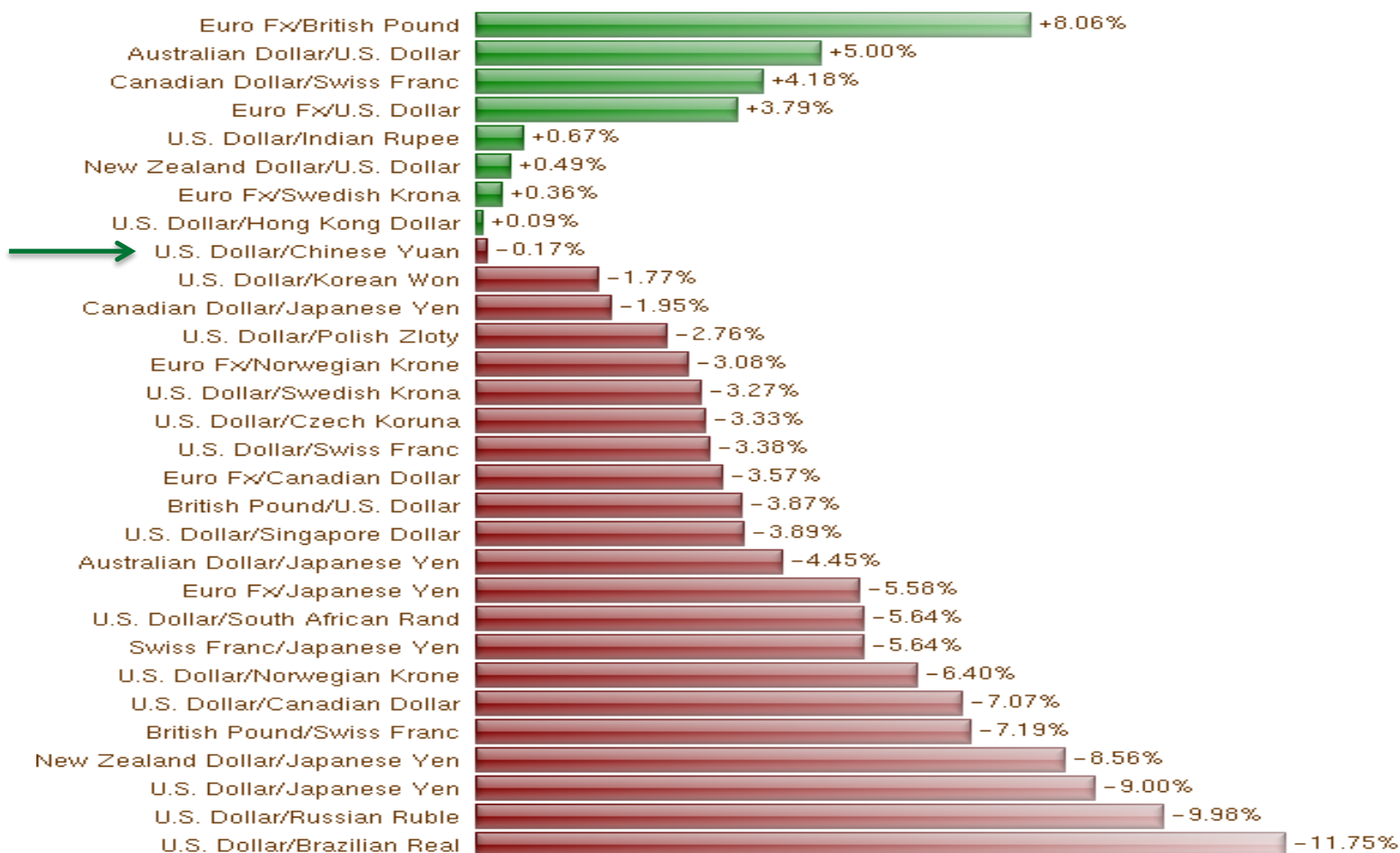


Source(s): Strategas

# RMB Stabilized in 2016, EM FX Rebounds Strongly vs. \$

## CHINESE YUAN IS NOT ALONE IN EARLY 2016 WEAKNESS

Barchart.com Year-To-Date Performance Leaders



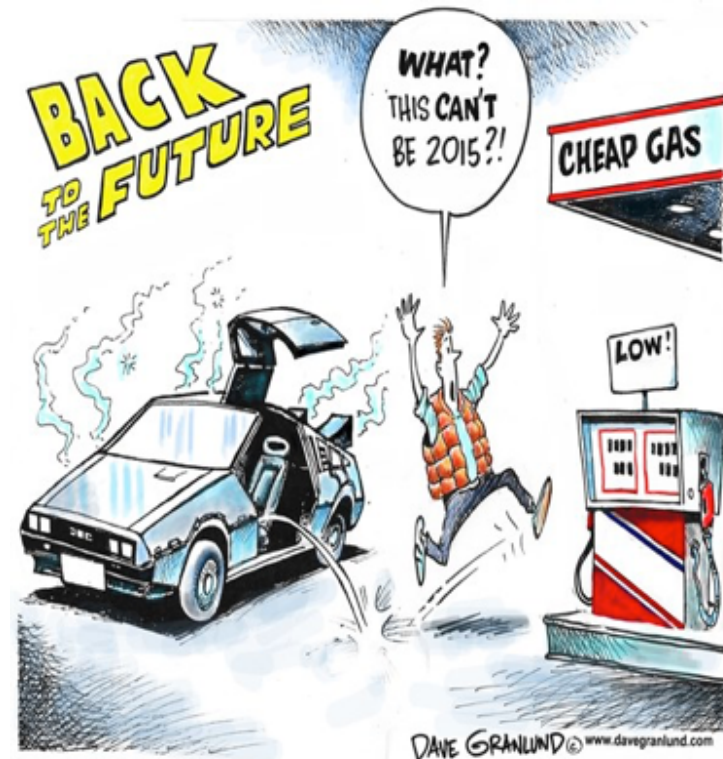
(c) Barchart.com

Source(s): Barchart.com

## Surprise #9

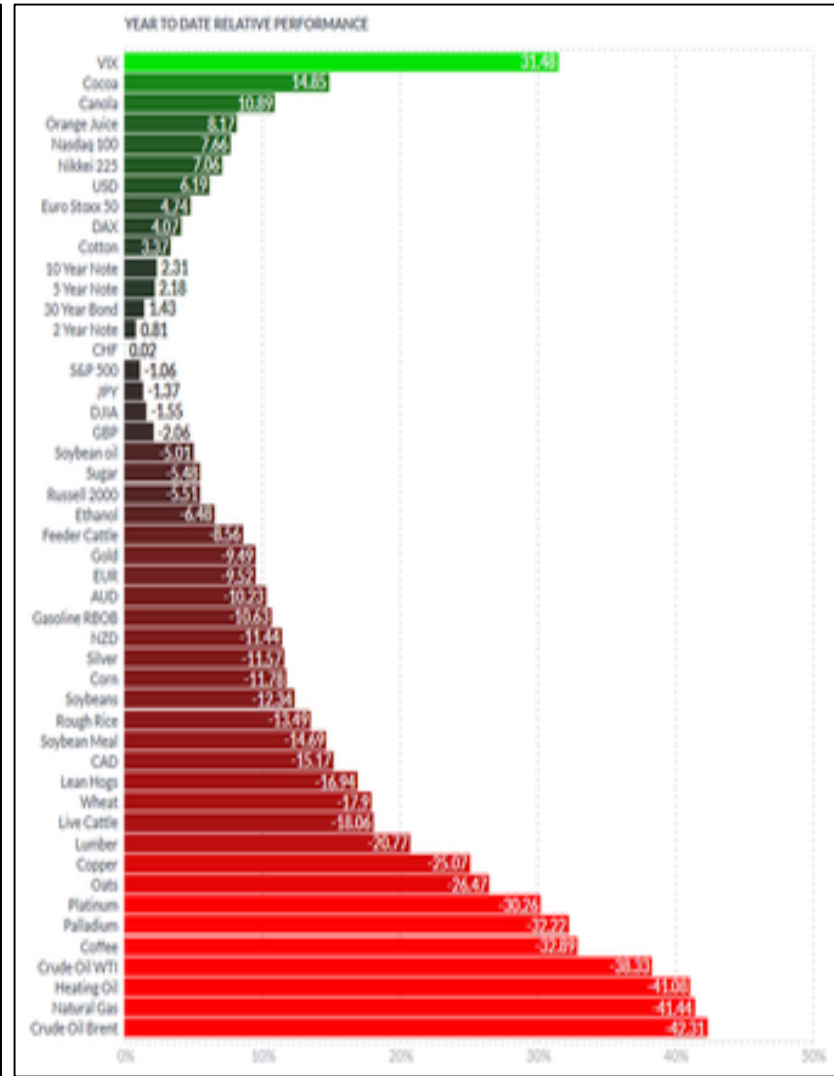
## Cure For Low Prices Is Low Prices

The severe Bear Market in Commodities that began in 2011 destroys sufficient industry market capitalization spurring companies to dramatically slash capital spending, cancel large swaths of projects and reduce productive capacity to a point where commodity prices begin to find a floor and some generational investment opportunities arise amidst the bankruptcies and restructurings in places like MLPs, Miners and Exploration & Production companies.



Source(s): CuriousMindBox.com

# USD Surge Crushed Commodities in 2015; VIX Best A/C?!



Source(s): 13d Resaerch

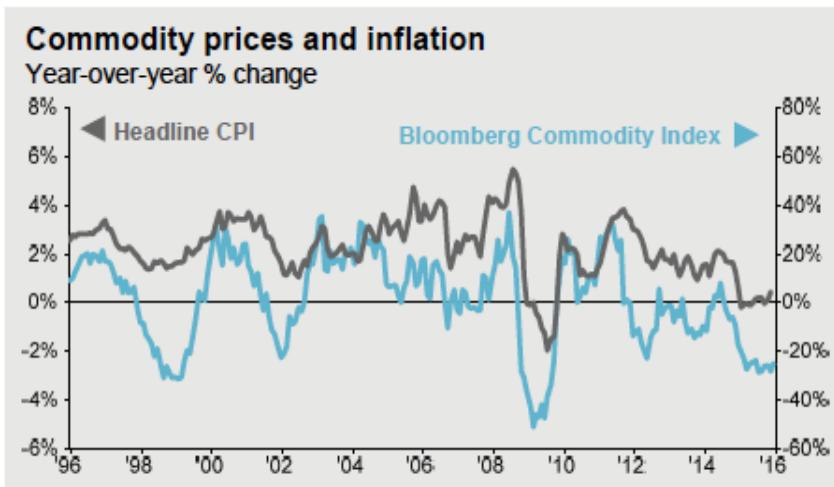
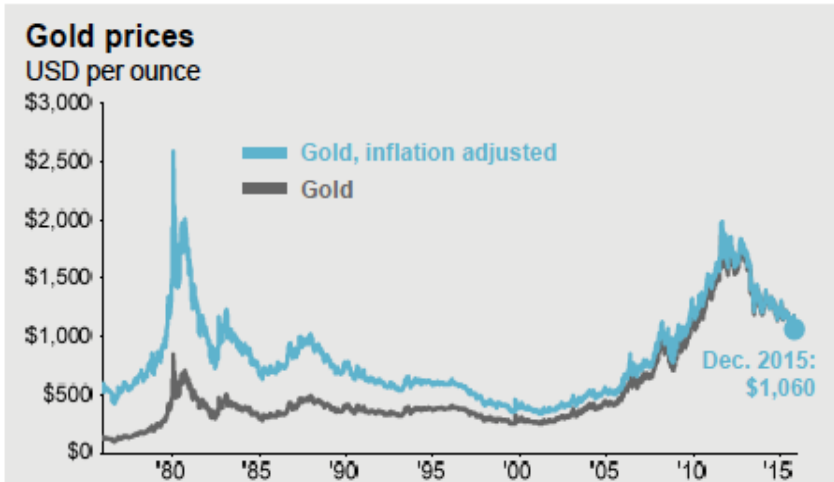
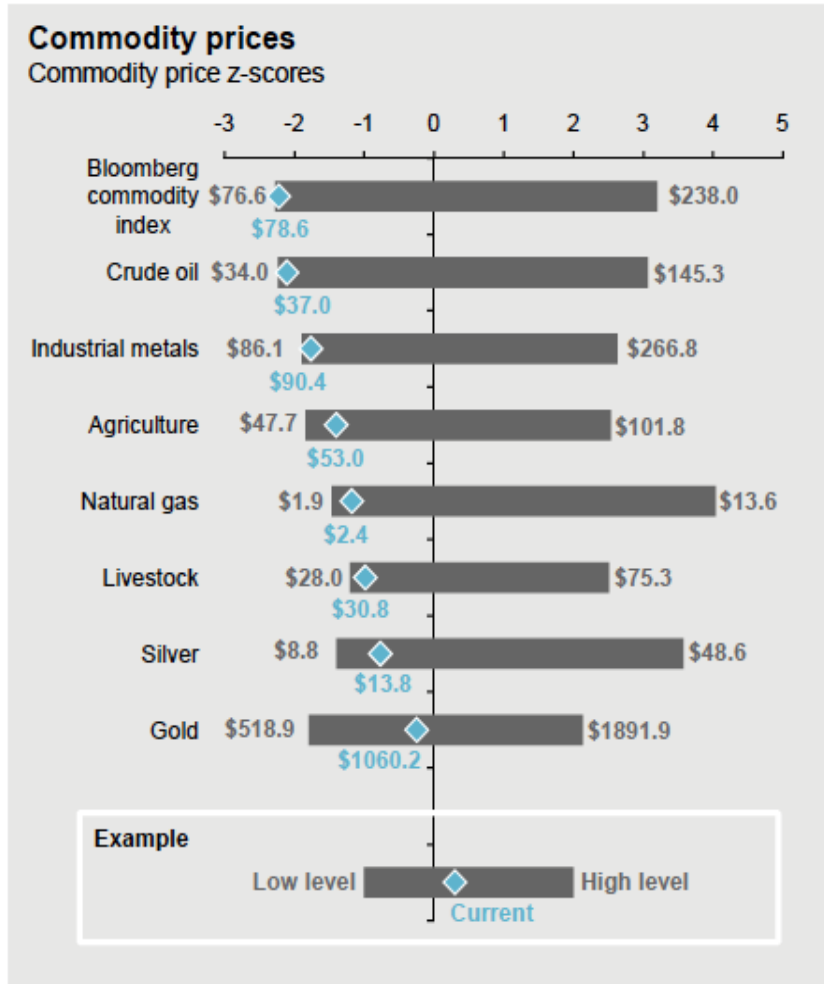
# After Severe Price Declines, CRB Bounced Off 5 Yr Lows

Commodity	Price as on 6/1/2011	Price as on 11/30/2015	% Decline
Iron Ore Price	169.8	46.1	-72.8%
SILVER	37.7	14.1	-62.7%
Chinese HRC Steel Price	4,815.0	1,815.0	-62.3%
Black Sea HRC Steel Price	690.0	262.5	-62.0%
Generic Nickel	23,247.0	8,870.5	-61.8%
Turkish Scrap Price	468.0	190.0	-59.4%
OIL	99.6	41.7	-58.2%
SPOT Platinum	1,818.5	831.3	-54.3%
Generic Corn	758.5	365.0	-51.9%
Generic Copper	410.7	204.5	-50.2%
US HRC Steel Price	735.0	376.0	-48.8%
Generic Wheat	759.3	460.0	-39.4%
GOLD	1,539.8	1,064.8	-30.9%
Spot Palladium	771.3	544.4	-29.4%
Metallurgical coke price (US)	169.3	133.7	-21.0%



Source(s): StockCharts.com, 13d Research

# Most Commodities at Extreme Levels of Undervaluation

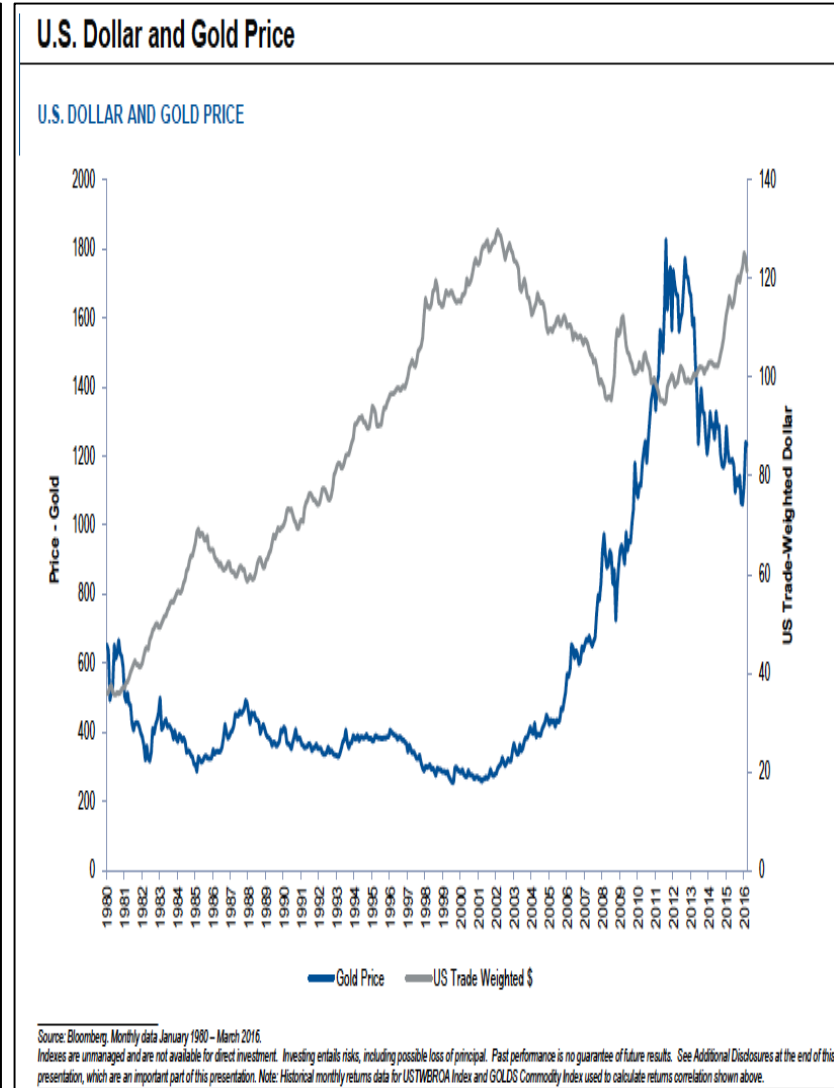
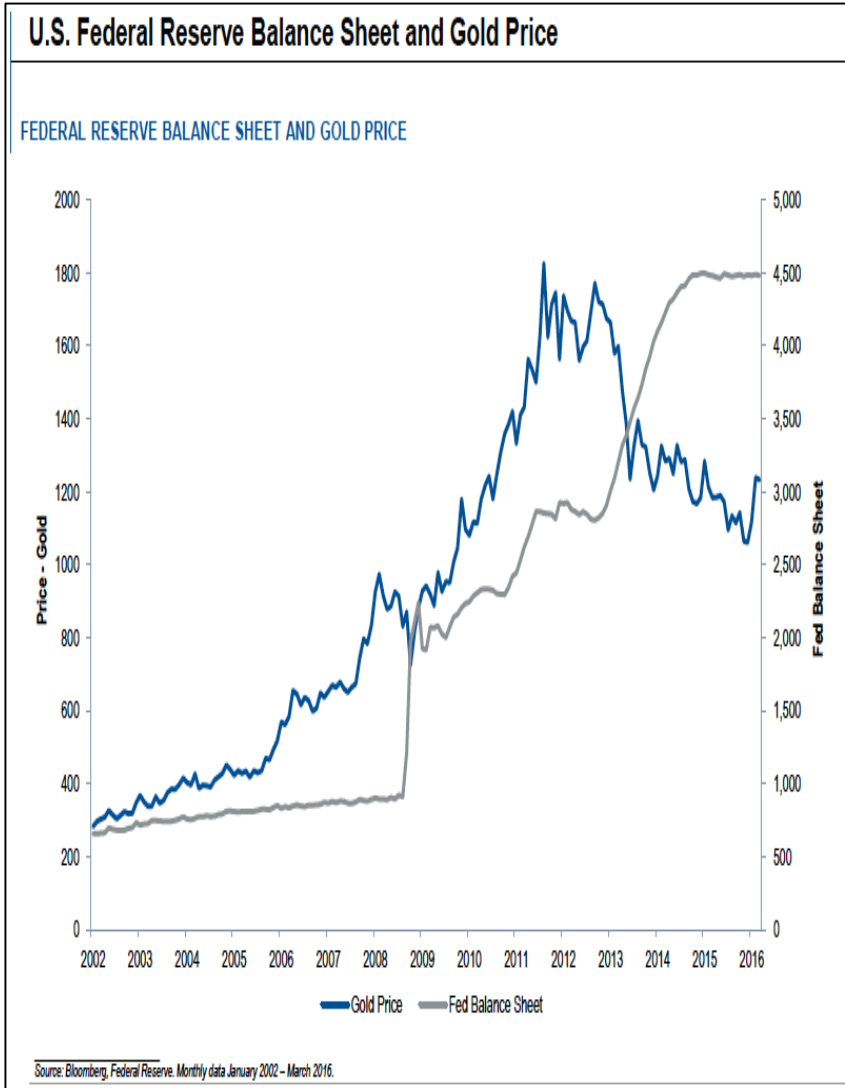


Source: FactSet, J.P. Morgan Asset Management; (Left) Bloomberg, CME; (Top right) BLS, CME; (Bottom right) Bloomberg, BLS.  
 Commodity prices are represented by the appropriate Bloomberg Commodity sub-index. Other commodity prices are represented by futures contracts. Z-scores are calculated using daily prices over the past 10 years.  
 Guide to the Markets – U.S. Data are as of December 31, 2015.

Source(s): JPMorgan



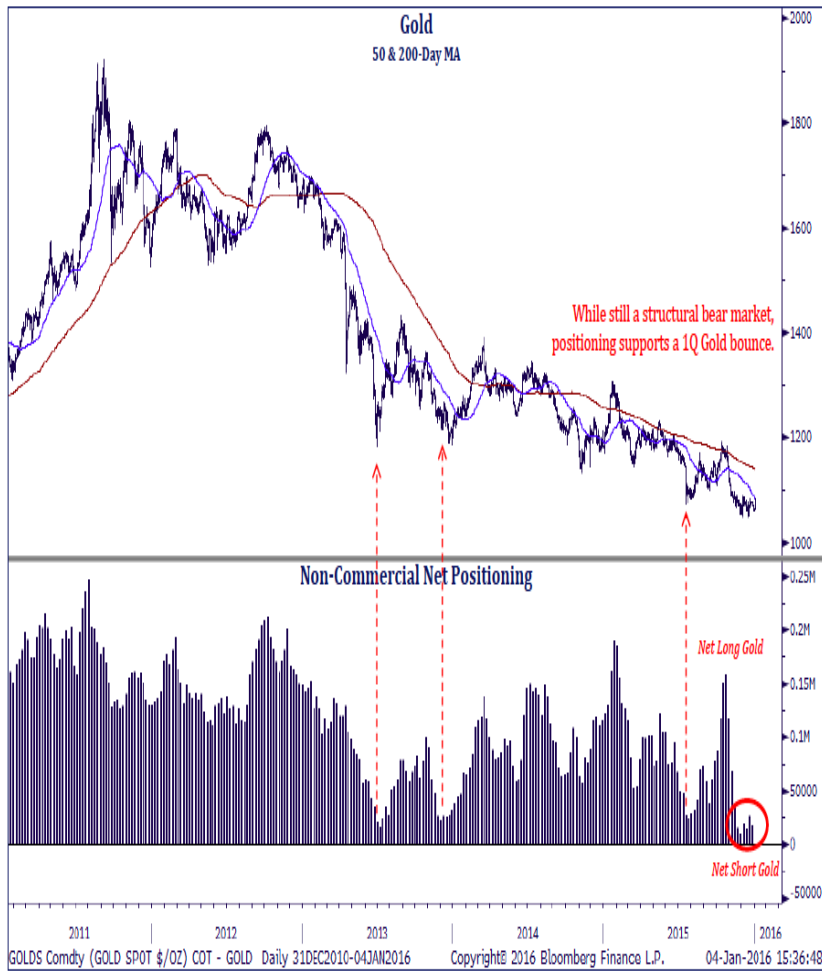
# Gold Up & Dollar Down 2001-2011, Then Reversed Hard



Source(s): Neuberger Berman

# Gold Formed Bottom During Year End Equity Turmoil

GOLD SENTIMENT SUPPORTIVE OF A BOUNCE



SMALL BASE FOR GOLD (IT'S A TACTICAL CALL)

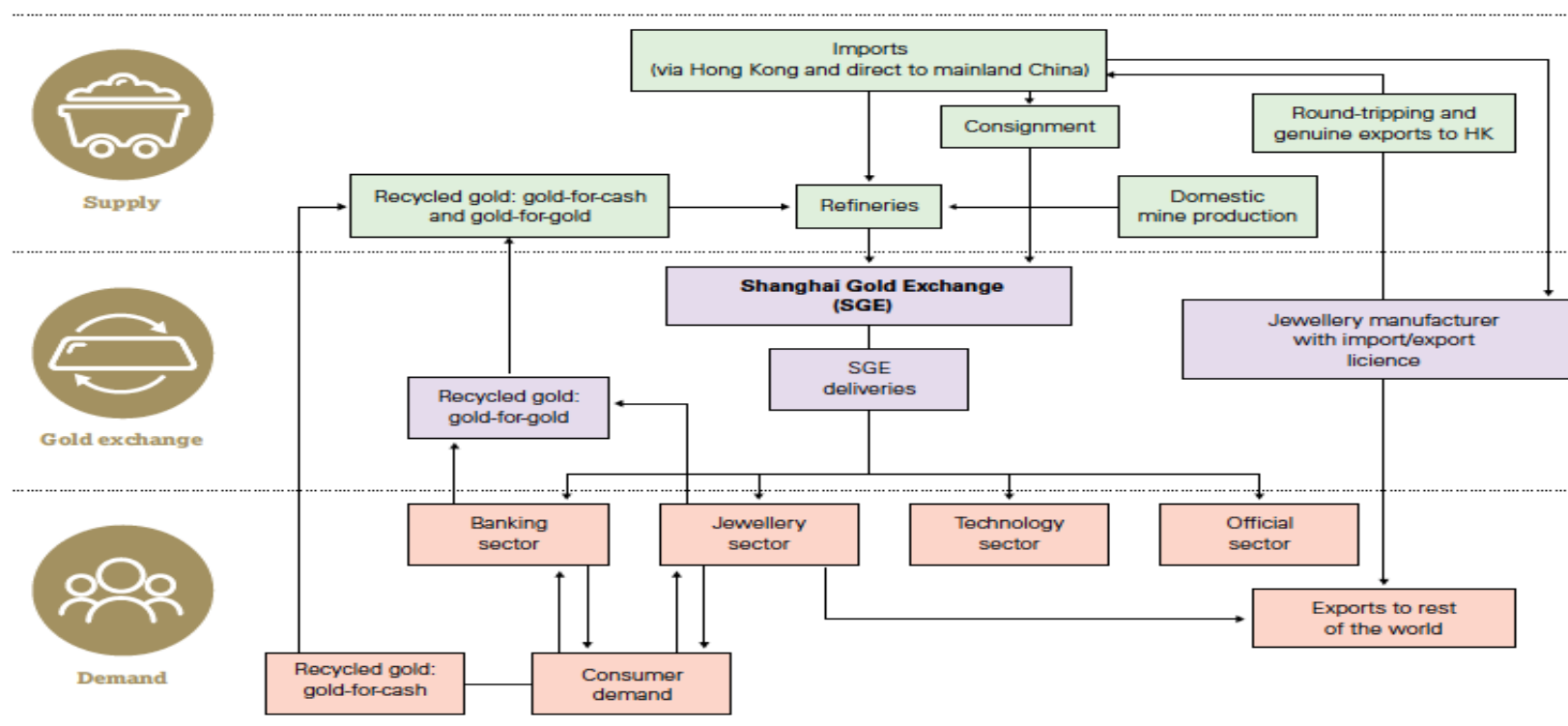


Source(s): Strategas

# China Has Quietly Become World's Largest Gold Market

In 2013 China became the world's largest gold market, accounting for around a third of global gold demand. By the end of 2017, we expect demand to have grown by at least a further 20%. Because of its sheer size and impact on the global gold market, China is firmly in the spotlight.

Figure 1: Schematic diagram of gold flows in China



Source(s): World Gold Council

# China Has Moved to Create Linkage of Gold to RMB

## ➤ CHINA & A NEW ERA FOR GOLD

As we've been writing about for many months, China has finally opened its gold trading platform in an attempt to compete with London. On Tuesday, the Shanghai Gold Exchange began a twice-daily price fixing (just like the London Metals Exchange) for grams of gold in Yuan. The market's reaction was a dramatic jump in precious metals prices, and a solid drop in the USD below the 94 handle.

**U.S. Dollar Index (2 years)**



Source: Bloomberg LP

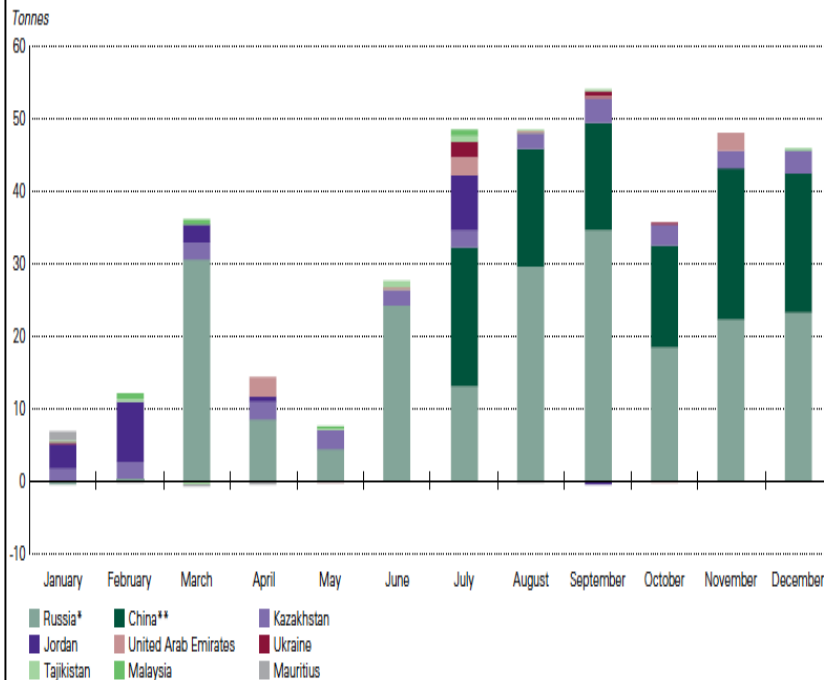
All of this assumes gold stays where it is. However, if China wants to enter the world currency market, they will need to shed their global reputation as a risky place to put capital. A gold link or the appearance of a gold-stabilized currency is one way to do that. The goal is to have the Yuan be used as an international standard for trade and commerce. Gold has a 3,500-year history in global trade, perhaps it makes sense to be linked to it in some way.

Source(s): TIS Group

# PBoC Purchases of Gold Surging, Total Holdings Small

**Chart 1: Reported central bank net purchases accelerated in the second half of 2015**

- A diverse range of countries reported purchases of gold in 2015 as the need for reserve asset diversification was globally recognised.
- As of July, China began to report regular purchases to the IMF; this helped to accelerate reported gold-buying activity among central banks.



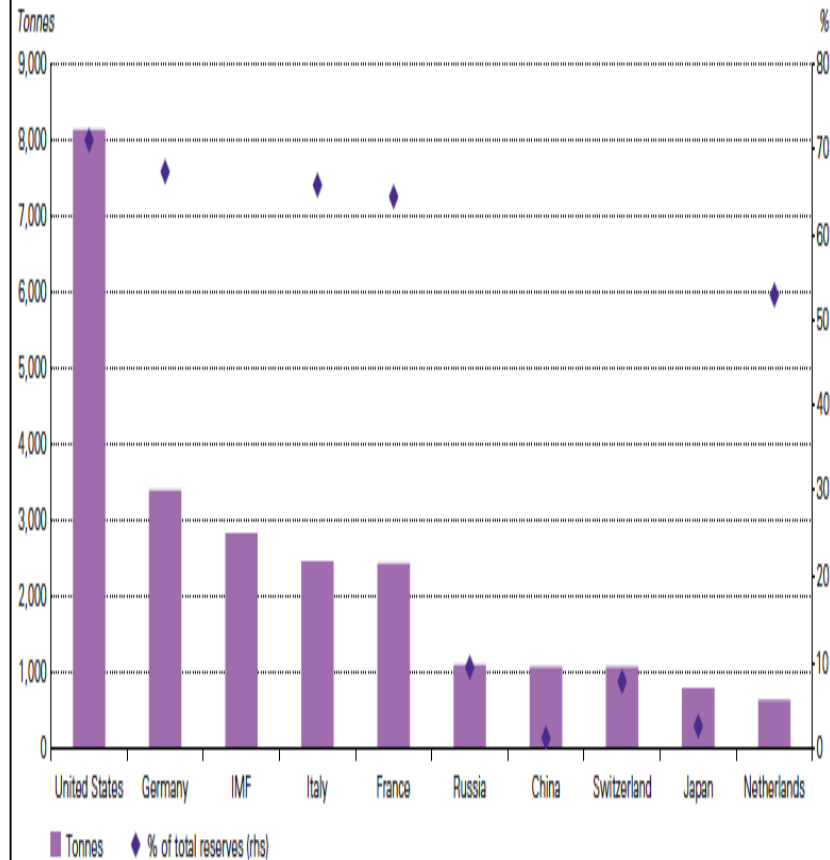
Note: Chart only includes central banks which reported to the IMF purchases of 1 tonne or more, on a net basis, in 2015. The IMF statistics in the chart differ from our data series, which includes proprietary information on non-reported purchases by central banks.

\*December net purchase for Russia is estimated.

\*\*In July 2015, China announced an increase of 60t over the period April 2009 – June 2015. Exact monthly purchases are not confirmed so are omitted from this chart, but our data series for central bank demand includes an allocation for regular quarterly purchases during this period.

Source: IMF IFS; World Gold Council

**Chart 4: As a percentage of total reserves, China's gold holdings are low**

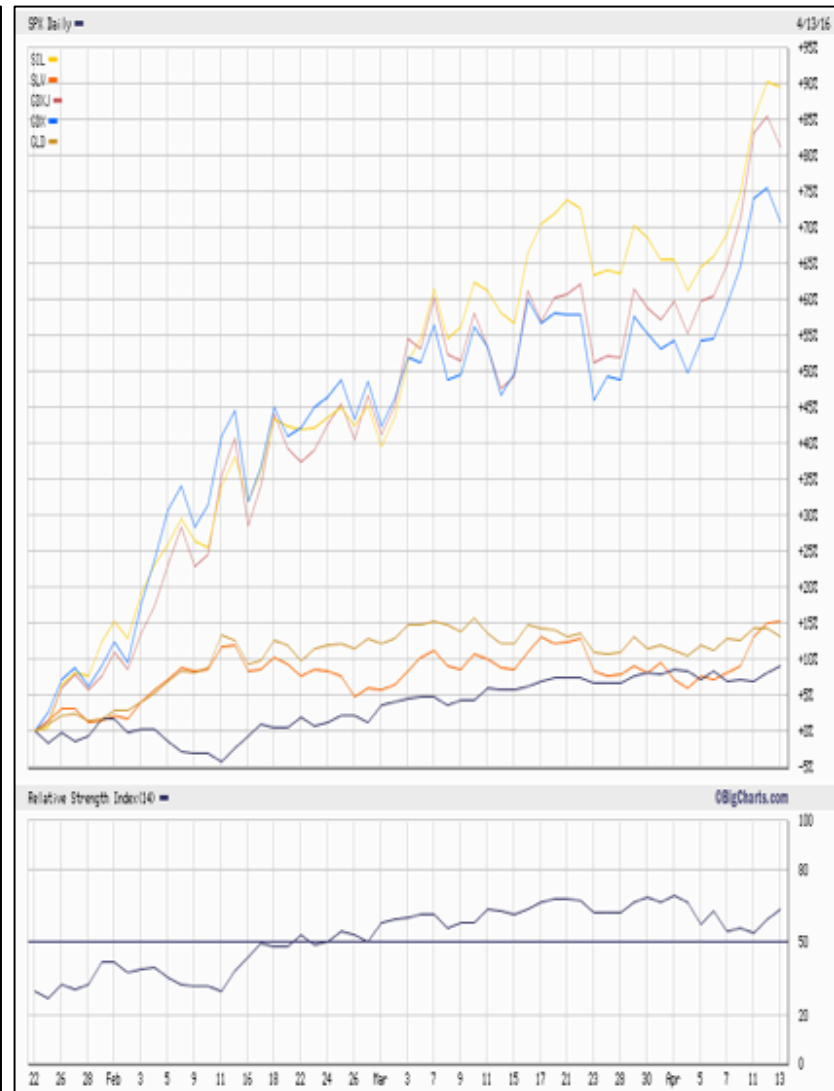
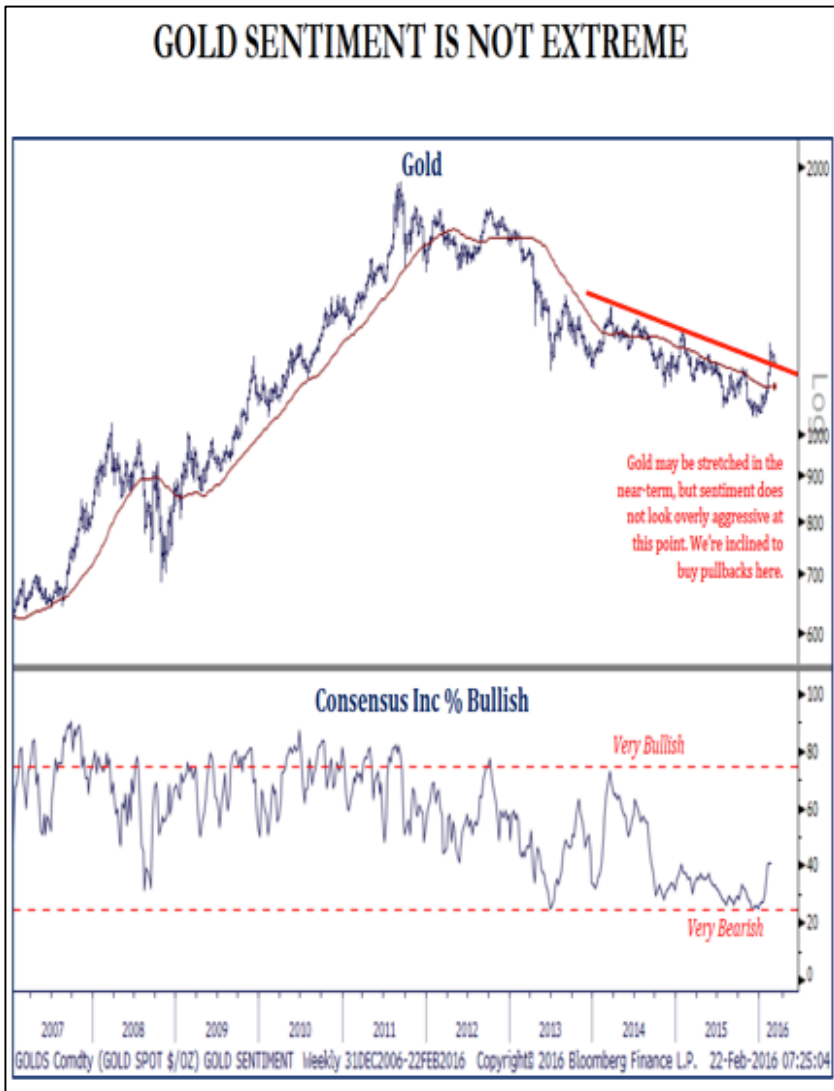


Note: Data as of May 2014.

Source: IMF International Financial Statistics; The London Gold Market Fixing Ltd; World Gold Council

Source(s): World Gold Council

# Gold & Gold Miners Suddenly Finding Natural Buyers



Source(s): Strategas, BigCharts.com

## Surprise #10

## The Bus Stops Here...

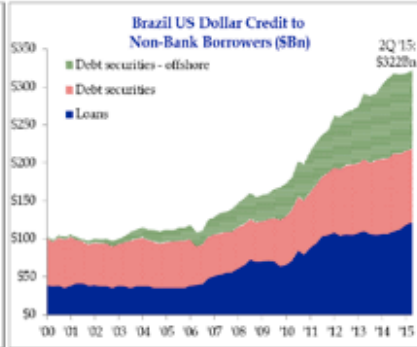
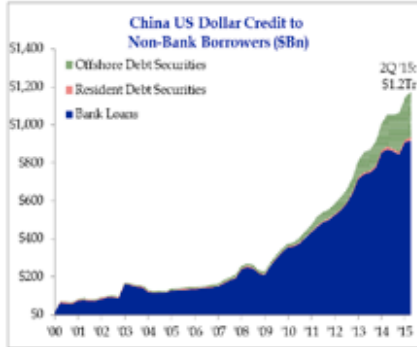
**Uncle Carl Icahn is right and there is Danger Ahead in the credit markets around the world. Excess Central Bank liquidity has created a bond bubble across myriad sectors and there are abundant opportunities to short credit in emerging markets, high yield (particularly energy) during this new distressed debt cycle.**



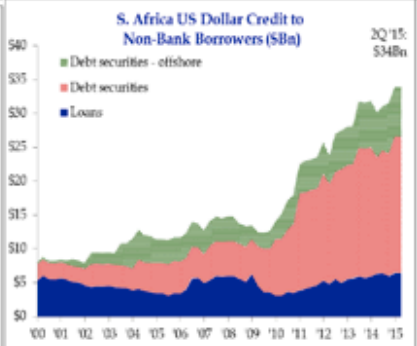
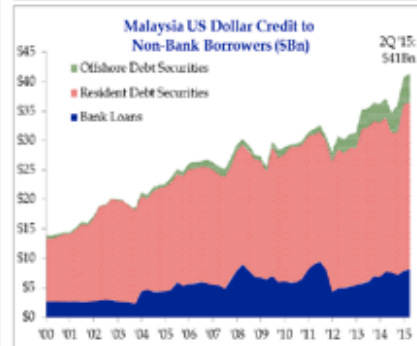
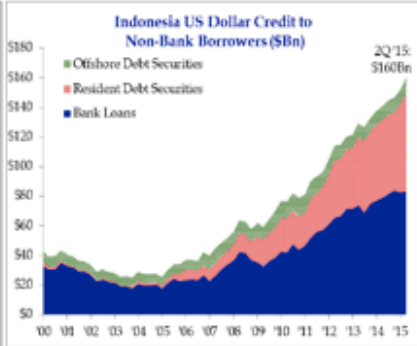
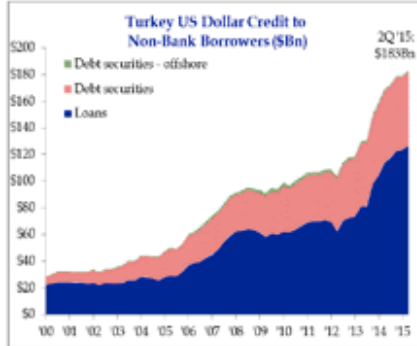
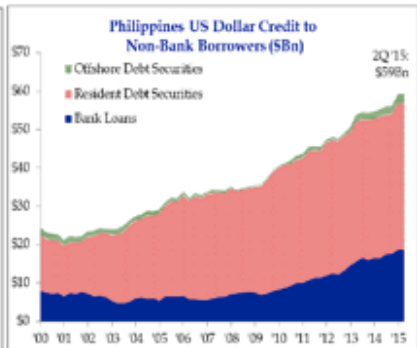
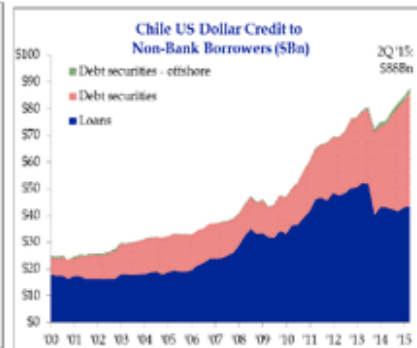
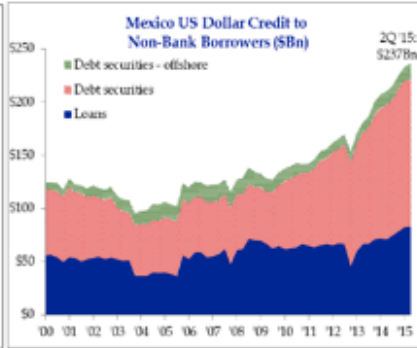
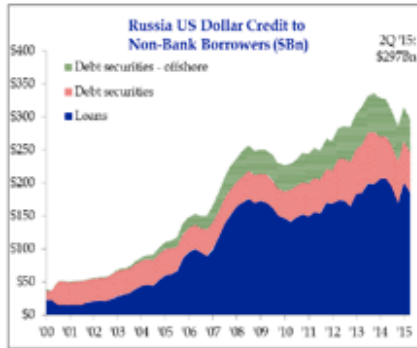
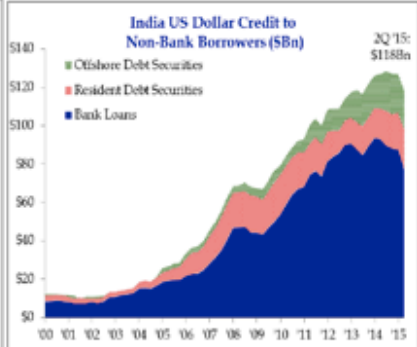
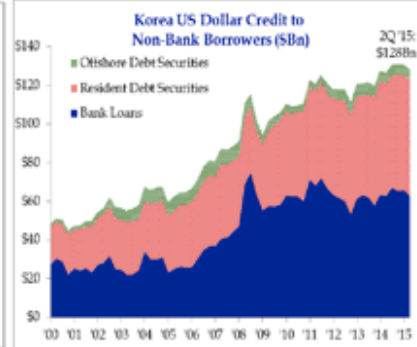
Source(s): BusinessInsider.com

# EM Debt Has Exploded Over Past 15 Yrs in a ZIRP World

EMERGING MARKET DOLLAR DEBT PORTFOLIOS



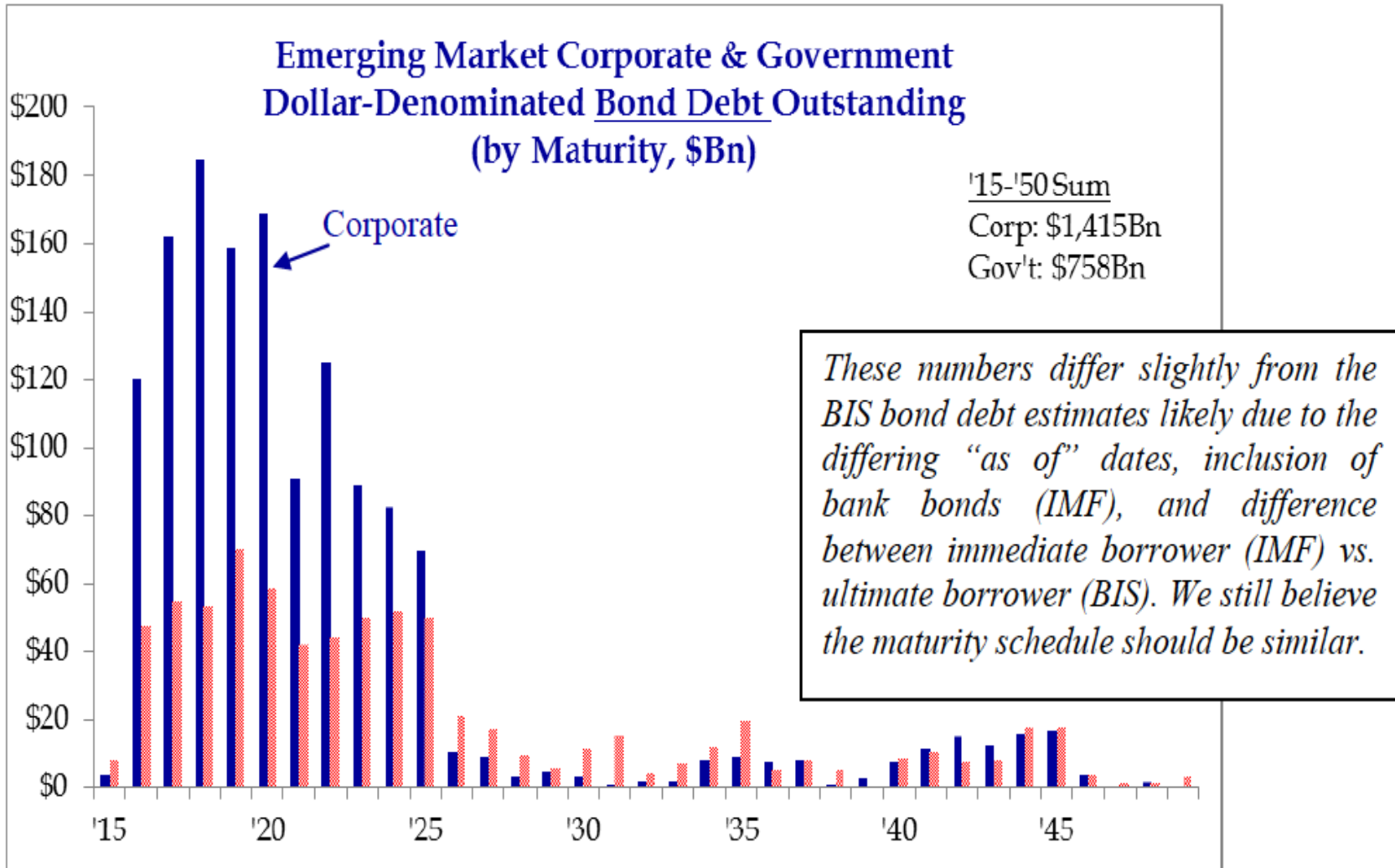
EMERGING MARKET DOLLAR DEBT PORTFOLIOS



Source(s): Strategas



# Excessive Leverage Not Confined to Dev Mkt Companies



Source: IMF, as of 12/8/15

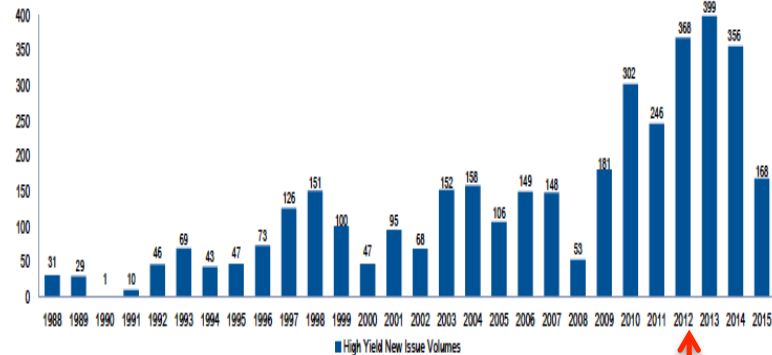
Source(s): Strategas

# High Yield Defaults Follow Issuance with Four Year Lag

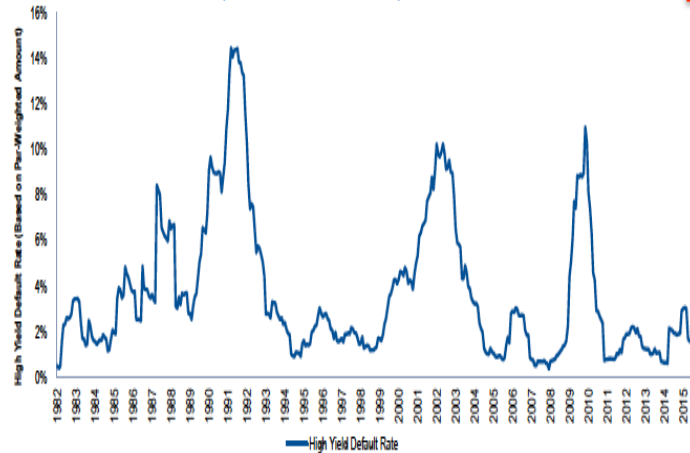
## U.S. High Yield Update

Fundamentals for the high yield market remain potent given the strong corporate sector balance sheets, historically low default rates and relatively high real yield for the asset class

### HIGH YIELD NEW ISSUE VOLUMES



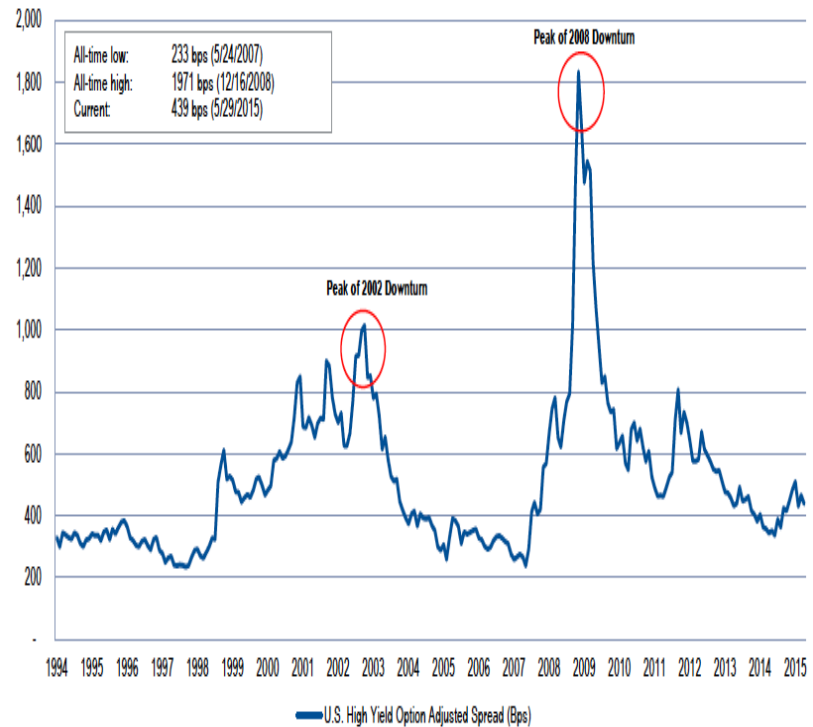
### HIGH YIELD BOND DEFAULTS (BASED ON PAR AMOUNT)



Source: J.P. Morgan. As of May 31, 2015.

## Pricing in High Yield Market

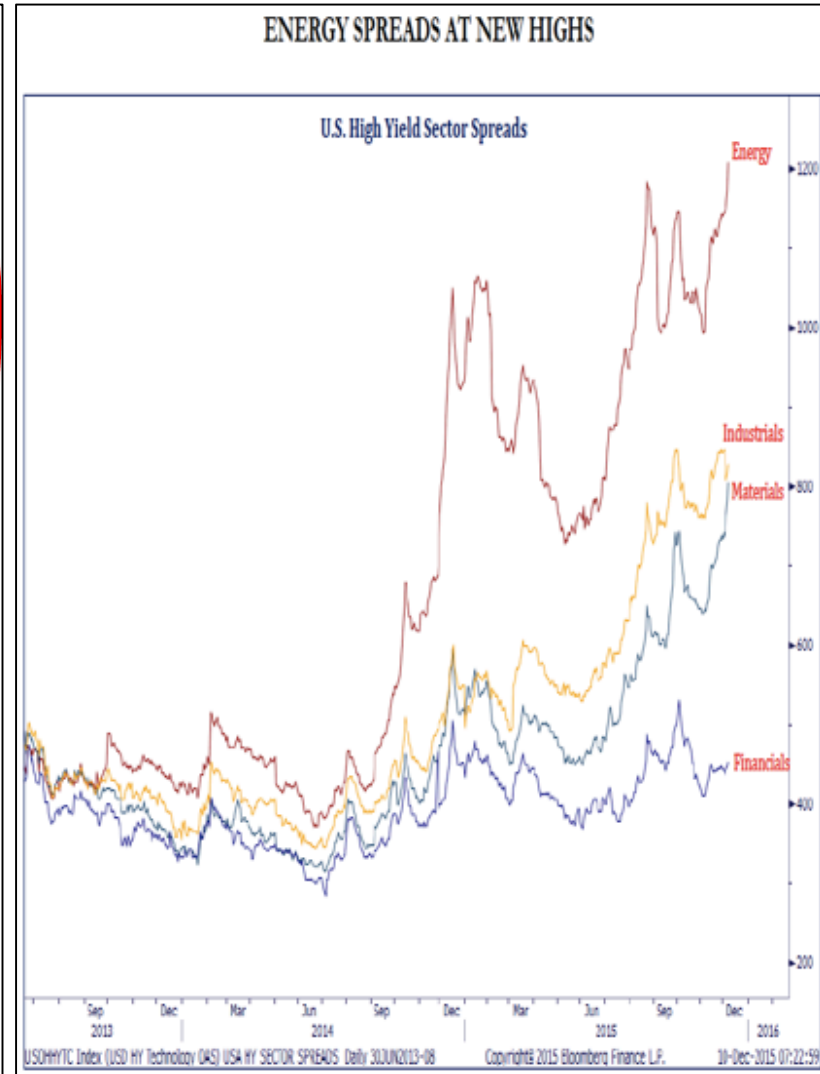
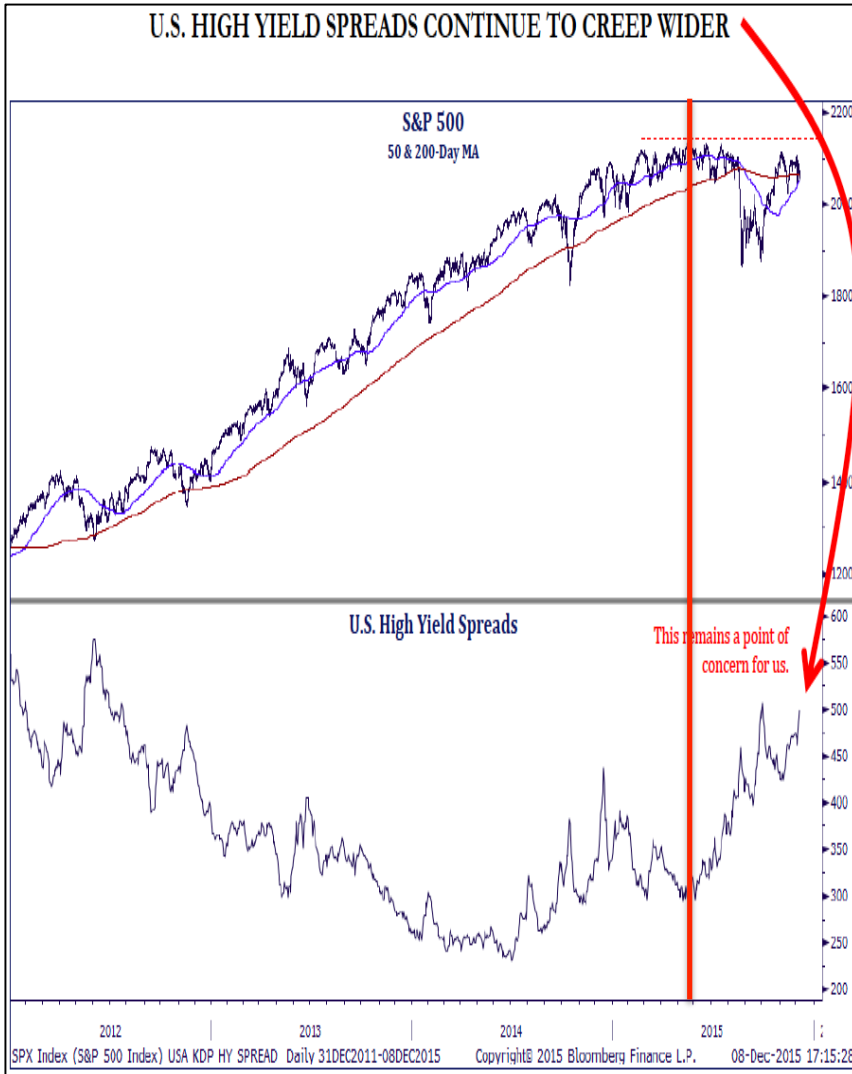
### BARCLAYS U.S. CORPORATE HIGH YIELD AVERAGE OPTION ADJUSTED SPREAD



Source: Barclays Capital. Spread on the Barclays U.S. High Yield Index. Monthly data January 1994 - May 2015.

Option-Adjusted Spread (OAS) is the spread over treasuries, adjusted for early call provisions. For informational purposes only. Historical trends do not imply, forecast or guarantee future results.

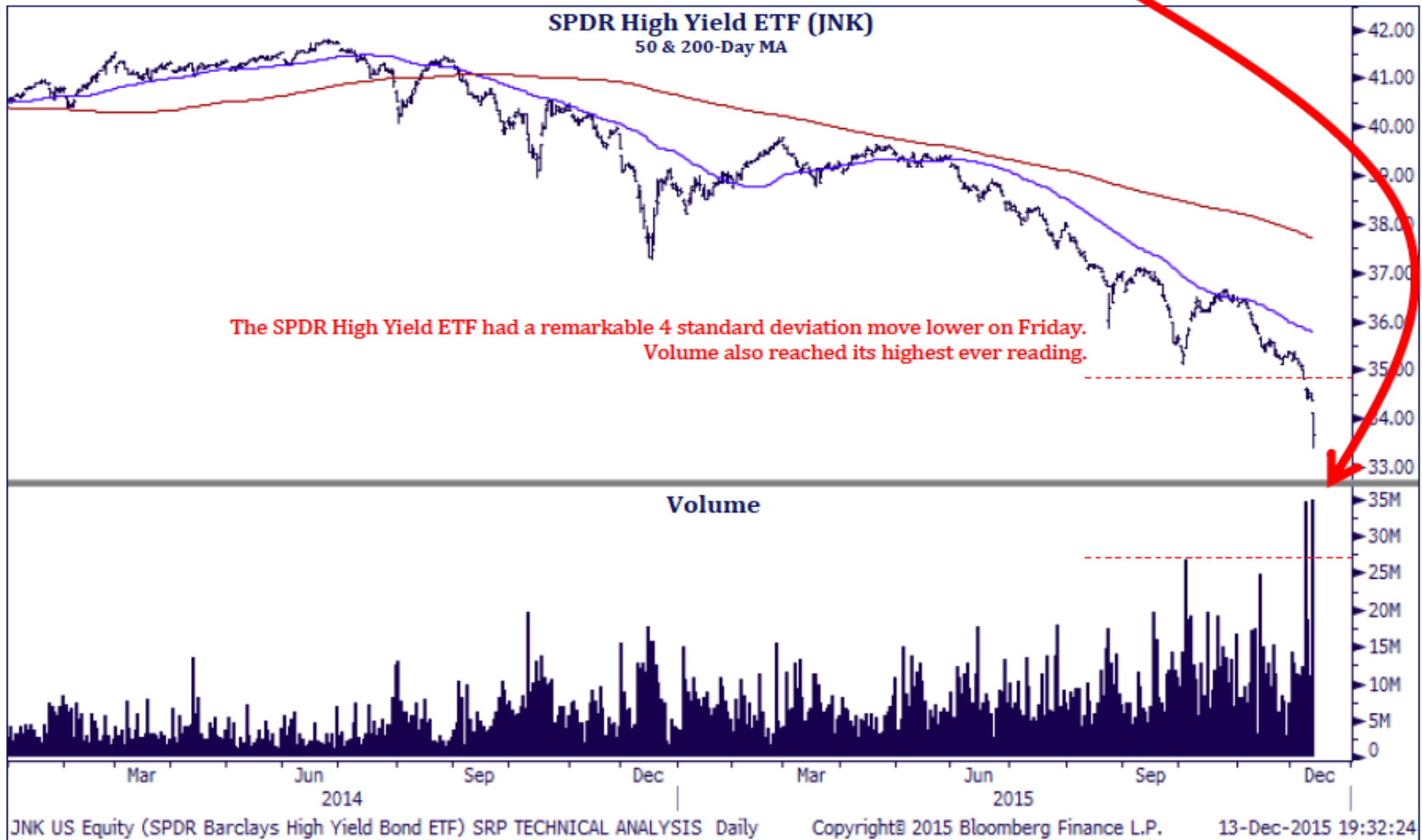
# Deterioration of HY Credit Coincides With Market Top?



Source(s): Strategas

# December Activity In HY Mkt Was a 6.9 on Richter Scale

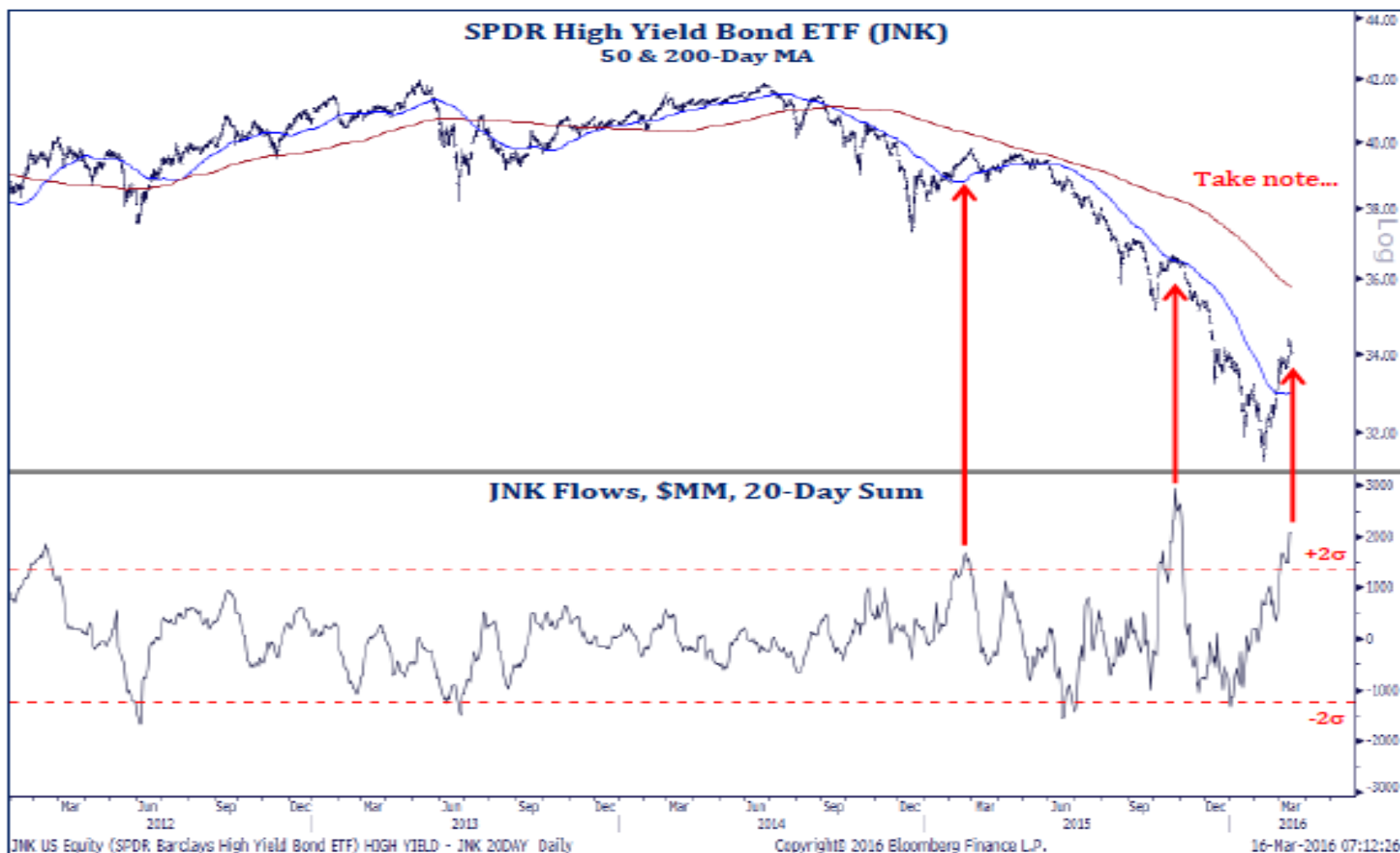
## RECORD HIGH YIELD ETF VOLUME



Source(s): Strategas

# Massive Spike In HY Flows Has Been Contrarian Indicator

## HIGH YIELD FLOWS AGGRESSIVE, CONTRARIANS TAKE NOTE



Source(s): Strategas

**Contrary to the drumbeat of negativity that too much money went into venture backed start-ups in 2015 pushing up valuations to levels triggering the mocking moniker “Unicorns”, disruptive innovation continues to emanate from Silicon Valley and Route 128 in Boston and late stage venture generates superior returns for investors.**



Source(s): galleryhip.com

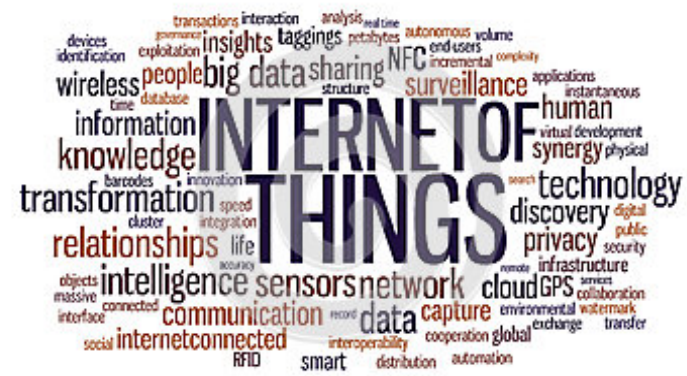
# Silicon Valley Operates on Law of Increasing Returns



Source(s): MapMusings, Dreamstime.com



marketoonist.com



dreamstime.com

# Invest in Obsolete Innovation; Disrupting Transportation

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**Last Round Almost Hit This  
Lofty Target, \$62.5B...**

**Last Round Included  
Saudi Prince and GM...**



Source(s): Money.CNN.com, LinkedIn.com



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**In Challenging Investment Environment,  
*Need an ALPHA Driven Model***

## Words of Wisdom

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*“There is a tide in the affairs of men, which taken at the flood, leads on to fortune; Omitted, all the voyage of their life is bound in shallows and in miseries. On such a full sea are we now afloat and we must take the current when it serves, or lose our ventures.”*

**William Shakespeare: Brutus – *Julius Caesar***

*“I was dreamin' when I wrote this, forgive me if it goes astray, but when I woke up this mornin' coulda sworn it was judgment day. The sky was all purple, there were people runnin' everywhere. Tryin' 2 run from the destruction, U know I didn't even care. 'Cuz they say two thousand zero zero party over, oops out of time. So tonight I'm gonna party like it's 1999”*

**Prince - 1999**

# In 2000, Buffett Wrote U.S. Equity Valuations Were Stupid



Source(s): InvestorFieldGuide.com

# GMO Forecasts Reflected U.S. Equity Valuation Stupidity

## Exhibit 1

Performance of GMO Asset Class Forecasts for the Decade Dec. 31, 1999 to Dec. 31, 2009

Asset Class	Estimated Rank	GMO 10-Yr Forecast Dec-31-99 (% Real Return/Yr)	Actual 10-Yr Return*	Actual Rank
U.S. REITs	1	10.0	7.4	3
Emerging Market Equities	2	7.8	8.1	1
Emerging Country Debt	3	6.1	7.5	2
U.S. TIPS	4	4.3	4.9	4
Barclays Capital U.S. Gov't. Debt	5	3.8	3.5	6
International Small Cap	6	3.4	3.5	7
Foreign Bonds	7	3.0	3.9	5
U.S. Small	8	2.5	2.3	8
U.S. T-Bills	9	2.1	0.3	9
EAFE	10	0.4	-1.4	10
S&P 500	11	-1.9	-3.5	11

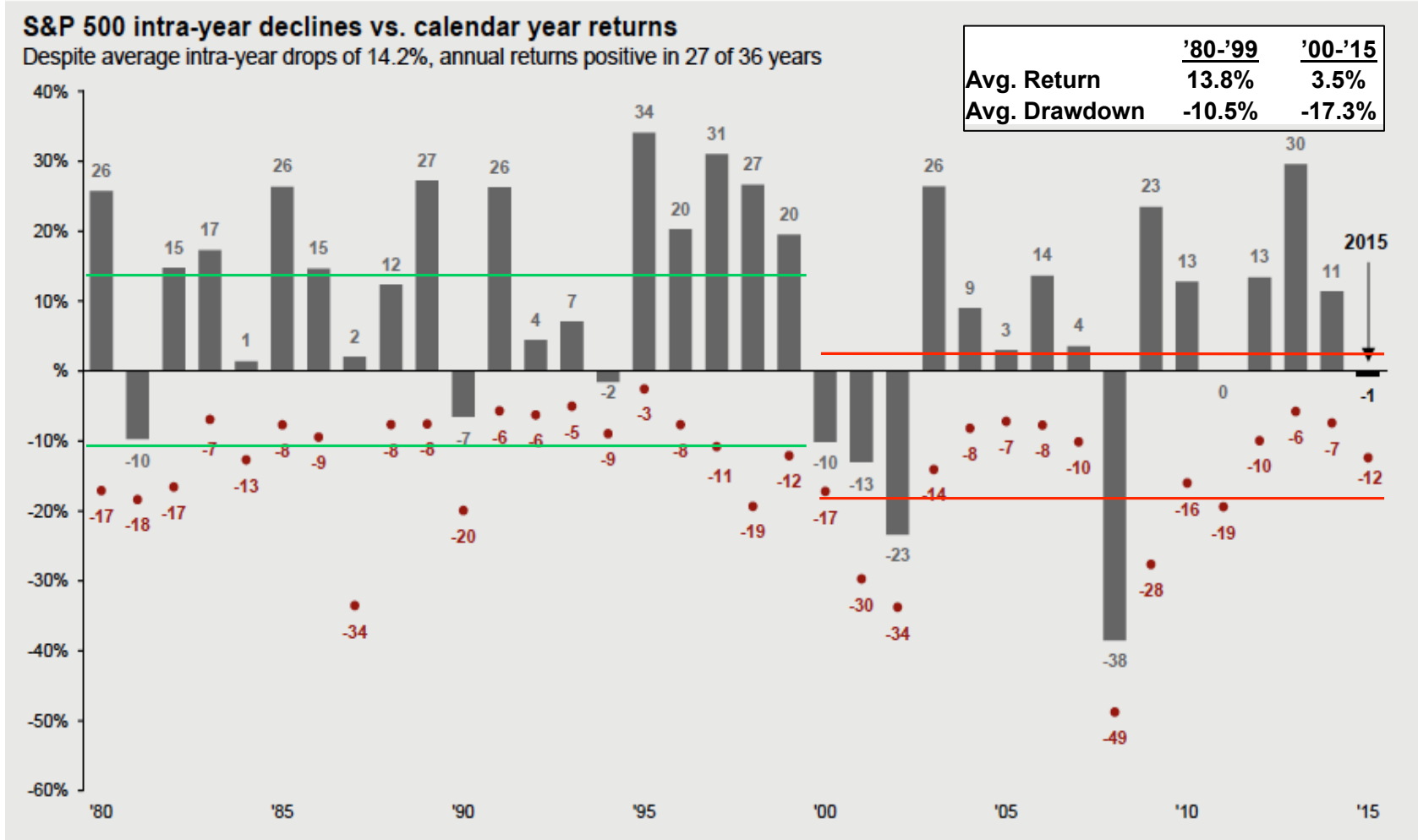
Correlation of rank order: 93.6%  
Probability of picking same or better rank order randomly: 1 in 550,000

\* Actual compound annual real returns are for the period 12/31/99 to 12/31/09.

The accuracy of past predictions does not guarantee that current or future predictions will be accurate either with respect to the ranking of asset classes over a 10-year period, the absolute levels of return, or results over shorter time periods. The accuracy of the forecast rankings and returns in the asset class forecasts generally varies from period to period.

Source: GMO

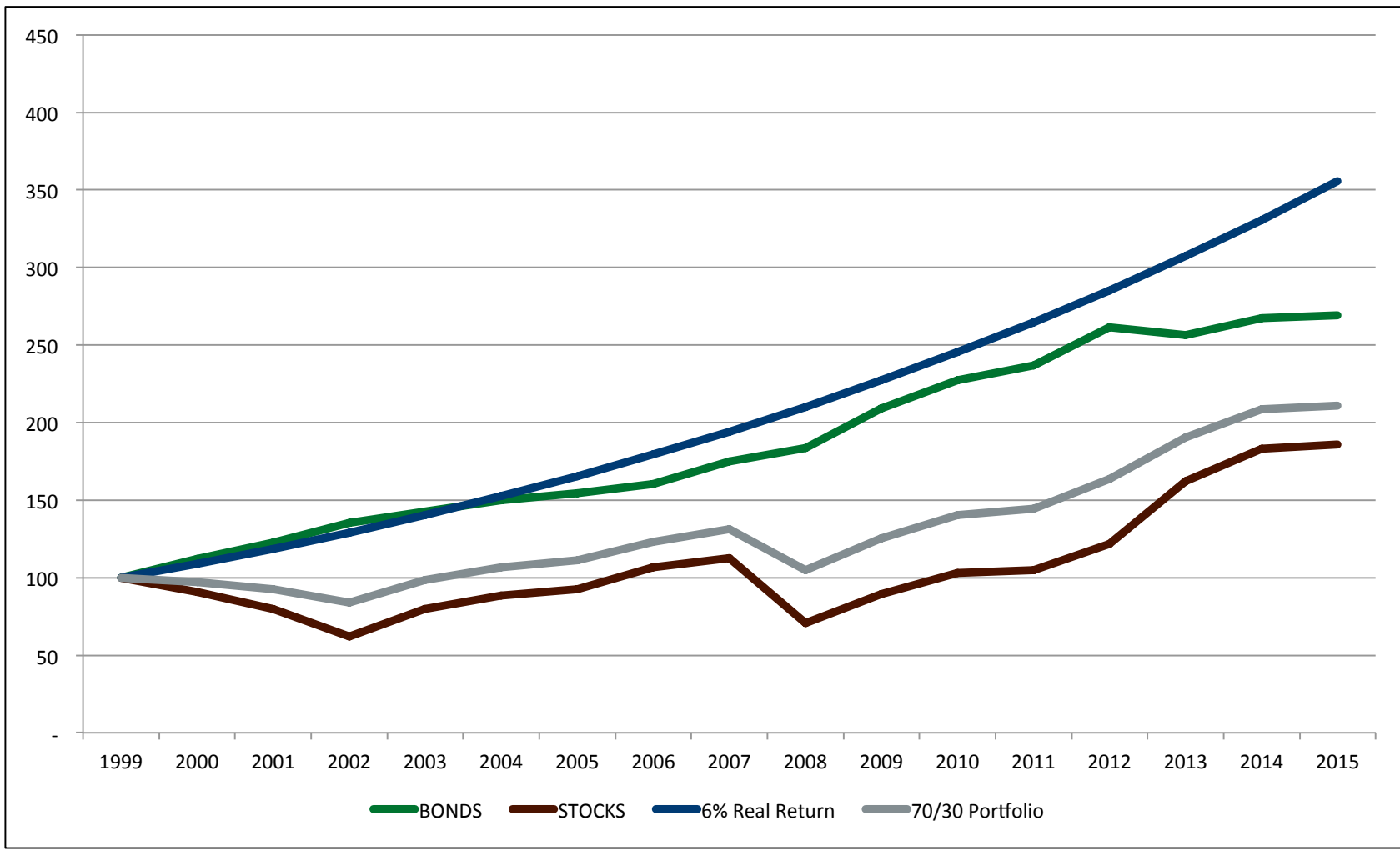
# Circumstances Set In Extremes Led To “New Abnormal”



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.  
 Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2015.  
 Guide to the Markets – U.S. Data are as of December 31, 2015.  
 Source(s): JPMorgan Performance does not include dividends

# The “Old Plan” Has Not Worked Since Extremes of 2000

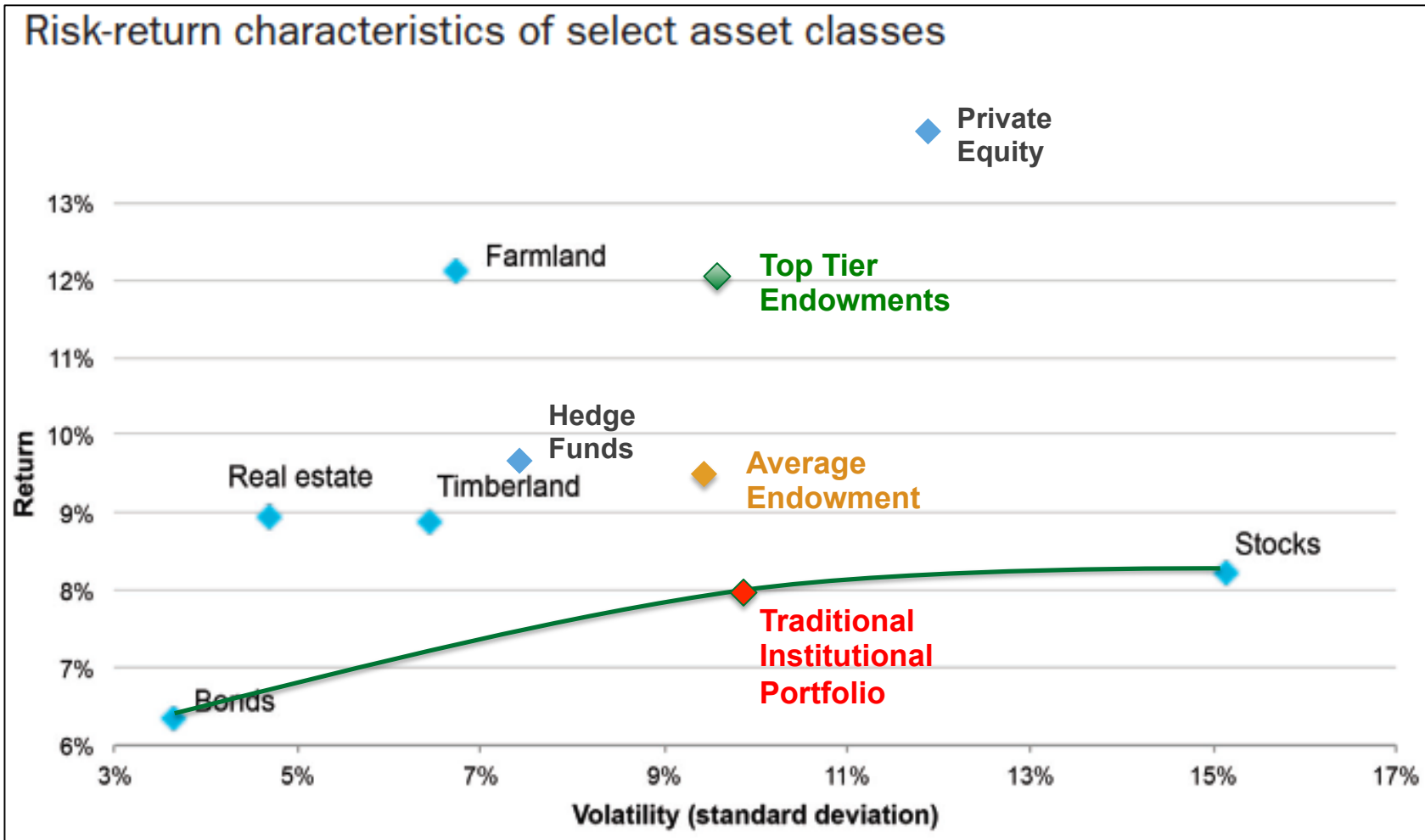
## Cumulative Total Return



Source: Bloomberg

Note(s): Neither diversification nor asset allocation ensures a profit or guarantees against loss. Please see index definitions at the end of this presentation. Past performance is no guarantee of future results.

# But, Endowment Model Achieved 6% Real Target Return



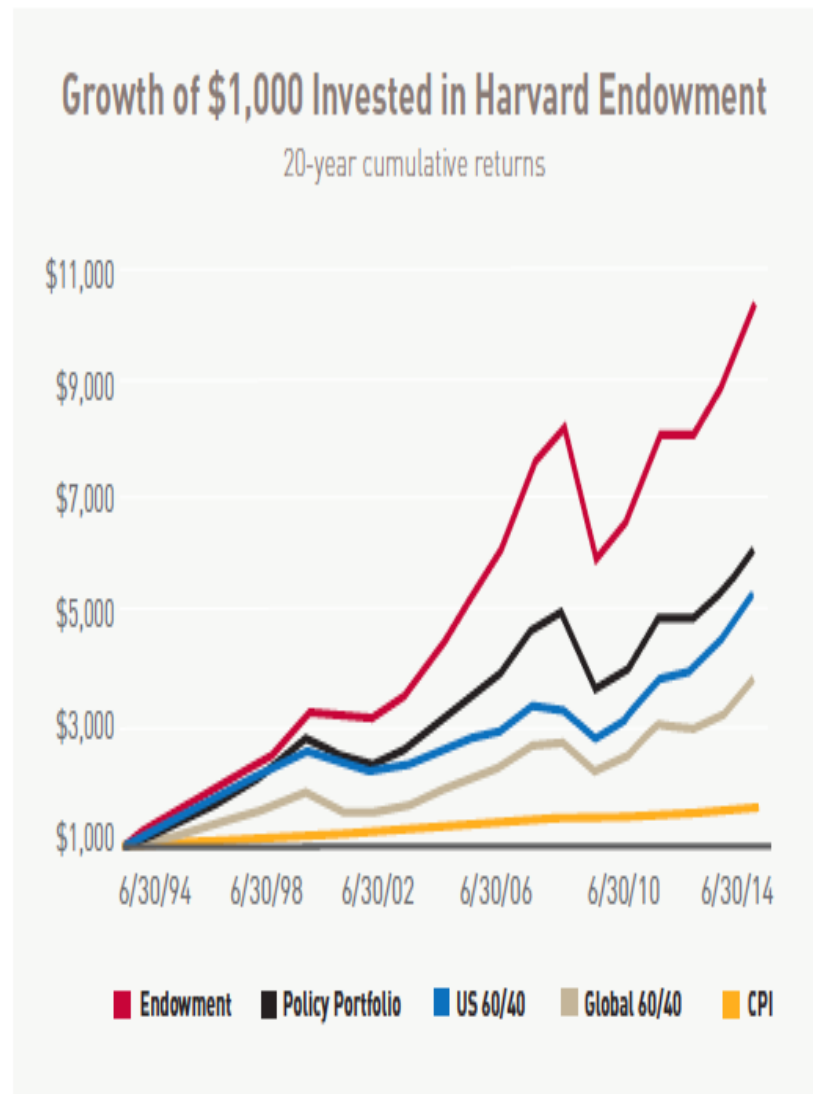
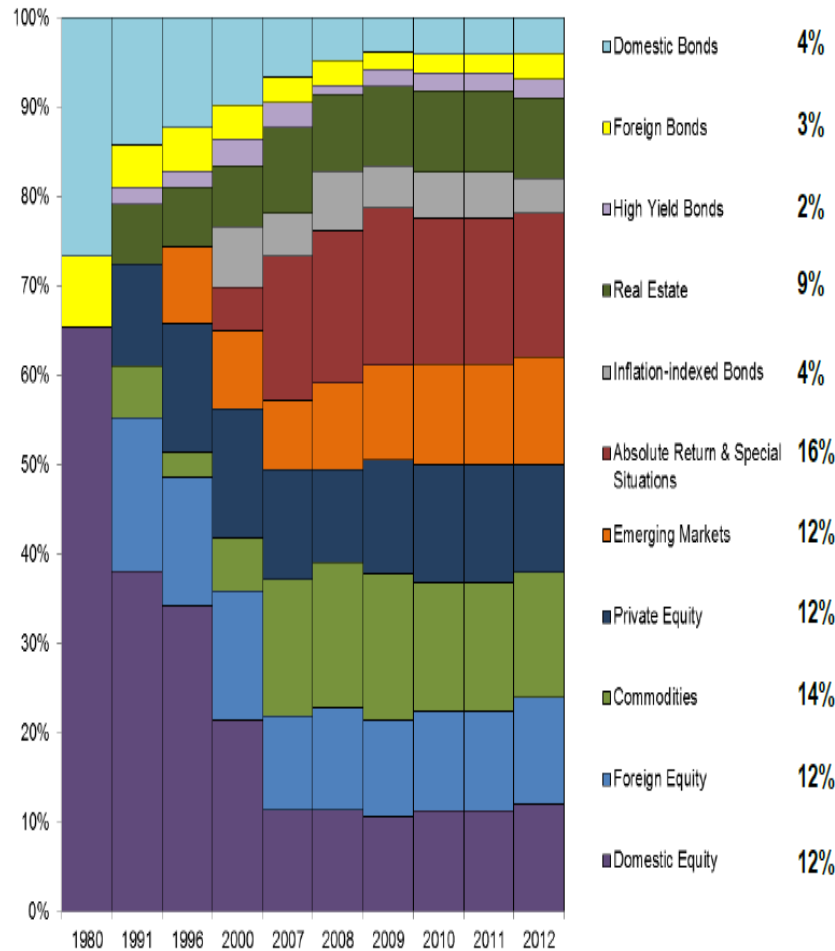
Asset classes represented by respective indices: stocks (S&P 500 Index); bonds (Barclays U.S. Aggregate Bond Index); real estate (NCREIF National Property Index); timberland (NCREIF Timberland Index); farmland (NCREIF Farmland Index).

Sources: National Council of Real Estate Investment Fiduciaries (NCREIF), FactSet, Morningstar.

Source(s): 20 years ended 6/30/2015 TIAA CREF, HFRI, CA Private Equity Index, Public Pension Data, NACUBO 6/30/15, Top Tier Endowments (Yale, Harvard, Notre Dame, Princeton, Stanford)

# Harvard: Private Investments Doubled Endowment Growth

## Harvard's Portfolio Evolved From Traditional 65% equity / 35% bonds to Fully Diversified



Source(s): Harvard Management Company.

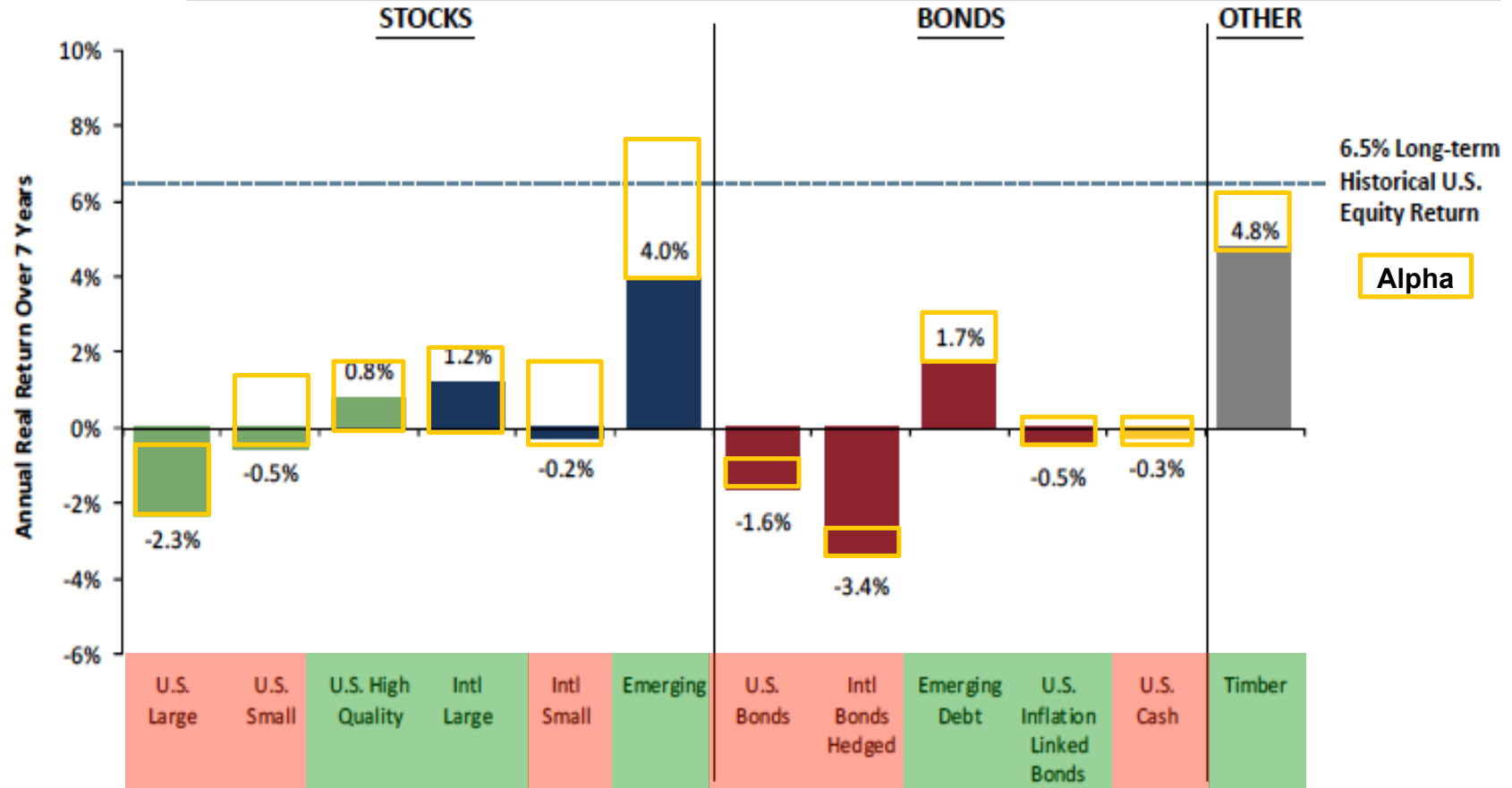


# GMO Forecasts Poor Returns for Traditional Assets Again



## 7-Year Asset Class Real Return Forecasts\*

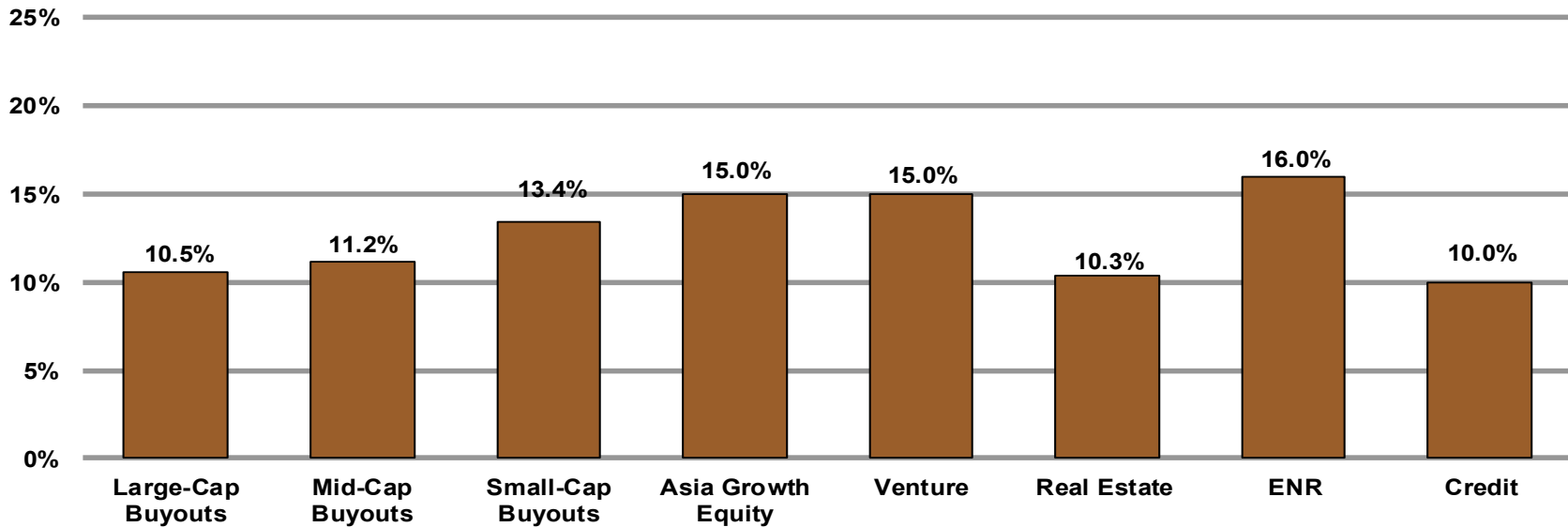
As of March 31, 2016



\*The chart represents real return forecasts for several asset classes and not for any GMO fund or strategy. These forecasts are forward-looking statements based upon the reasonable beliefs of GMO and are not a guarantee of future performance. Forward-looking statements speak only as of the date they are made, and GMO assumes no duty to and does not undertake to update forward-looking statements. Forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Actual results may differ materially from those anticipated in forward-looking statements. U.S. inflation is assumed to mean revert to long-term inflation of 2.2% over 15 years.

Source(s): GMO.

# MCCM Private Investment Market Return Expectations



## Expectations Model

### Framework:

- Quantitative baseline: initial expectations based on long-term trend data from indices and Morgan Creek portfolios
- Qualitative adjustment: expectations adjusted for each markets' unique situation

### Key inputs:

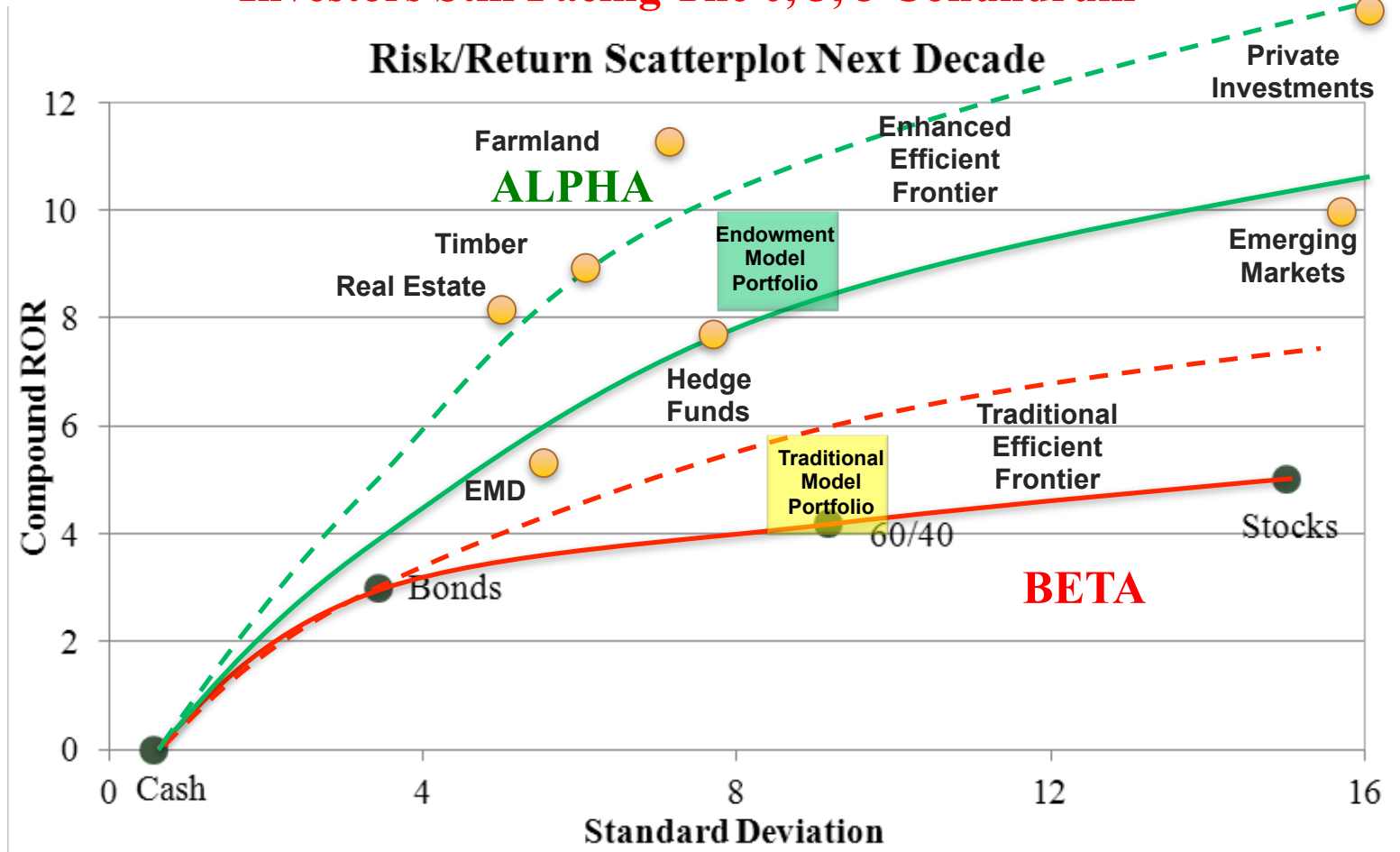
- Dividend Yield:** expectations typically based on Morgan Creek manager data
- Earnings Growth:** expectations typically based on long-term average historical earnings growth rates of indices or Morgan Creek portfolios
- Leverage:** expectations typically based on Morgan Creek manager data and S&P/LCD averages
- P/E Multiple:** expectations typically based on distribution of multiple
- Fees:** based on typical fee structure of limited partnership

Source(s): Baird, S&P/LCD, Bloomberg, Thomson Reuters, Real Capital Analytics, PricewaterhouseCoopers, NCREIF, CapitalIQ, Morgan Creek.

Note(s): Private credit expectation represents the average expected return for senior and subordinated debt strategies of 8% and 12%, respectively. Top quartile venture expectation is based on a 15-20% range, though we expect outliers in the left and right tail of a return distribution. This document reflects opinions of Morgan Creek as of the time it was written and all such opinions are subject to change. There is no guarantee that these expectations will be met. No representation or warranty, express or implied, is given by Morgan Creek as to the accuracy of such opinions and no liability is accepted by such persons for the accuracy or completeness of any such opinions.

# Challenging Environment: Need Alpha Focused Approach

## Investors Still Facing The 0, 3, 5 Conundrum



Source(s): GMO, MCCM estimates., TIAA CREF returns for Real Assets

Forecasts: returns for cash/bonds = current yield, returns for equities = GMO estimates, returns for hedge funds = stocks+3% alpha, returns for private = 20 year historical average

Definition(s): Compound ROR = compound rate of return; Annualized standard deviation = risk as measured by the variability of performance. The higher the standard deviation, the greater the variability (and therefore, the risk) of the fund or index; Traditional Efficient Frontier = addition of traditional asset classes such as stocks and bonds; Enhanced Efficient Frontier = addition of more alternative asset classes. Endowment Model Portfolio estimates calculated using Policy Portfolio and forecast asset class returns

# That Said, Best Solution Is Big Private Investment Weight

## The Yale Endowment 2015

Asset Class	June 2015 Actual	June 2015 Target
Absolute Return	20.5%	21.5%
Domestic Equity	3.9	4.0
Fixed Income	4.9	8.5
Foreign Equity	14.7	14.5
Leveraged Buyouts	16.2	16.0
Natural Resources	6.7	8.5
Real Estate	14.0	13.0
Venture Capital	16.3	14.0
Cash	2.8	0.0

**20% Hedge Funds** (includes Absolute Return, Domestic Equity, Fixed Income, Foreign Equity, Leveraged Buyouts, Natural Resources, Real Estate, Venture Capital)  
**27% Traditional** (includes Fixed Income, Foreign Equity)  
**53% Private** (includes Leveraged Buyouts, Natural Resources, Real Estate, Venture Capital)

**21% Hedge Funds** (includes Absolute Return, Domestic Equity, Foreign Equity, Leveraged Buyouts, Natural Resources, Real Estate, Venture Capital)  
**27% Traditional** (includes Fixed Income, Foreign Equity)  
**52% Private** (includes Leveraged Buyouts, Natural Resources, Real Estate, Venture Capital)

Source: Yale Endowment Annual Report

# Which 1950's TV Hero Would You Pick For Portfolio Core?



Source(s): DenofGeek.com, Wikipedia

# Important Disclosures

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## **General**

This is neither an offer to sell nor a solicitation of an offer to buy interests in any investment fund managed by Morgan Creek Capital Management, LLC or its affiliates. Any such offering can be made only at the time a qualified offeree receives a Confidential Private Offering Memorandum and other operative documents which contain significant details with respect to risks and should be carefully read. Neither the Securities and Exchange Commission nor any State securities administrator has passed on or endorsed the merits of any such offerings of these securities, nor is it intended that they will. This document is for informational purposes only and should not be distributed. Securities distributed through Town Hall, Member FINRA/SIPC.

## **Indices**

The index information is included merely to show the general trends in certain markets in the periods indicated and is not intended to imply that the portfolio of any fund managed by Morgan Creek Capital Management, LLC was similar to the indices in composition or element of risk. The indices are unmanaged, not investable, have no expenses and reflect reinvestment of dividends and distributions. Index data is provided for comparative purposes only. A variety of factors may cause an index to be an inaccurate benchmark for a particular portfolio and the index does not necessarily reflect the actual investment strategy of the portfolio.

## **No Warranty**

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## **Risk Summary**

Investment objectives are not projections of expected performance or guarantees of anticipated investment results. Actual performance and results may vary substantially from the stated objectives with respect to risks. Investments are speculative and are meant for sophisticated investors. An investor may lose all or a substantial part of its investment in funds managed by Morgan Creek Capital Management, LLC. There are also substantial restrictions on transfers. Certain of the underlying investment managers in which the funds managed by Morgan Creek Capital Management, LLC invest may employ leverage (certain Morgan Creek funds also employ leverage) or short selling, may purchase or sell options or derivatives and may invest in speculative or illiquid securities. Funds of funds have a number of layers of fees and expenses which may offset profits. This is a brief summary of investment risks. Prospective investors should carefully review the risk disclosures contained in the funds' Confidential Private Offering Memoranda. No investment is risk free; loss of principal is possible. Alternative investments involve specific risks that may be greater than those associated with traditional investments. One should consider the special risks with alternative investments, including limited liquidity, tax considerations, incentive fee structures, potentially speculative investment strategies, and different regularly and reporting requirements. There can be no assurance that any investment will meet its performance objectives or that substantial losses will be avoided.

## Contact Information

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