

Q4 2016 LOOK AHEAD

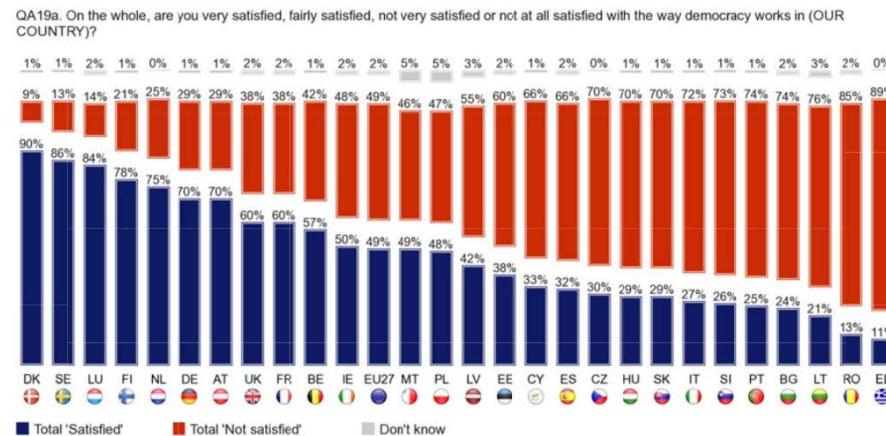
Disclaimer

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The Audience is Growing Restless

Global economic challenges are now full-fledged social political problems

- Growth is flagging
- Inflation is low
- The traditional and unconventional monetary policies are not working



Q4 2016

Global populist unrest and what it means for investing
Fixing the Fiscal vs. Monetary balance

Policy Driven World Rolls On

Cutting Deeper

“...The central bank should consider deeper negative rates or cutting the existing threshold for deposits now exempt from negative interest in order to make the franc even less attractive as a safe haven currency.” – Rachel van Elkan, IMF Mission Chief

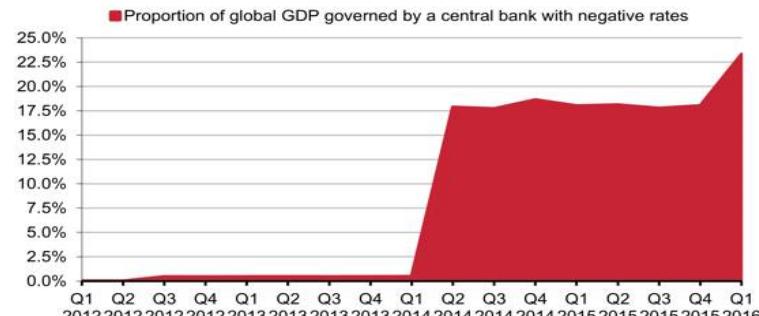
Negative Deposit Rates & Inflation

Country	Interest Rate	Inflation 2 Yrs. Before NIRP	Inflation 2 Yrs. After NIRP
Japan	-0.10%	0.08%	-0.02%
ECB	-0.40%	0.125%	0.008%
Sweden	-0.50%	-0.01%	0.03%
Denmark	-0.65%	0.215%	0.062%
Switzerland	-0.75%	0.041%	-0.043%

NIRPs cover 23.1% of Global GDP

Taking the plunge

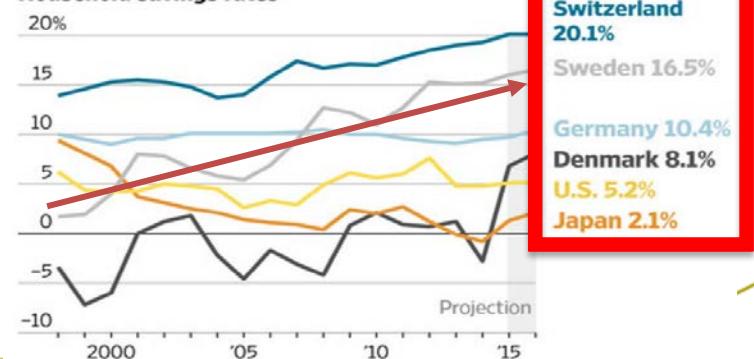
Negative rates are becoming the norm for a growing portion of the world



Source: FactSet, Oxford Economics, GDP share measured in nominal U.S. dollars | WSJ.com

Saving - Not Spending

Household savings rates



Sources:

<http://www.reuters.com/article/us-swiss-imf-idUSKCN11W18L>

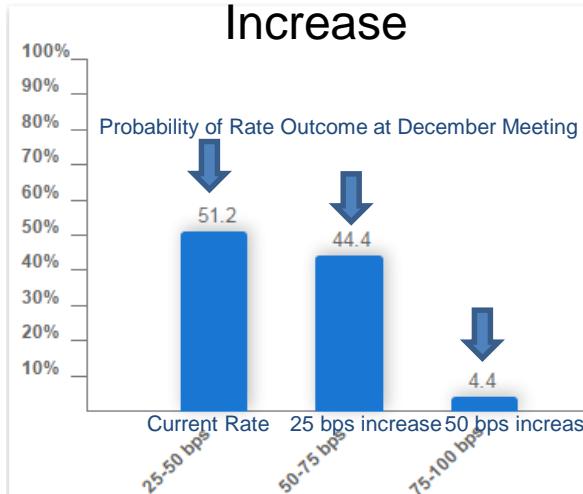
<http://blogs.wsj.com/moneybeat/2016/01/29/over-a-fifth-of-global-gdp-is-now-covered-by-a-central-bank-with-negative-rates/>

<http://www.valuewalk.com/2016/03/negative-interest-rate-policy-fed/>

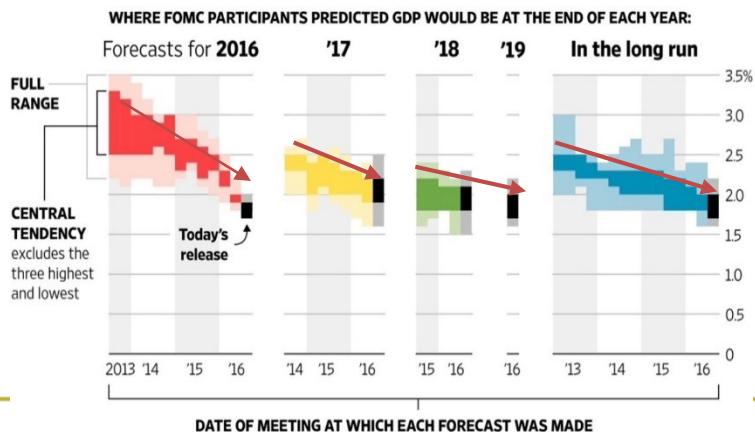
<http://www.wsj.com/articles/are-negative-rates-backfiring-heres-some-early-evidence-1470677642>

U.S. Policy Driven World

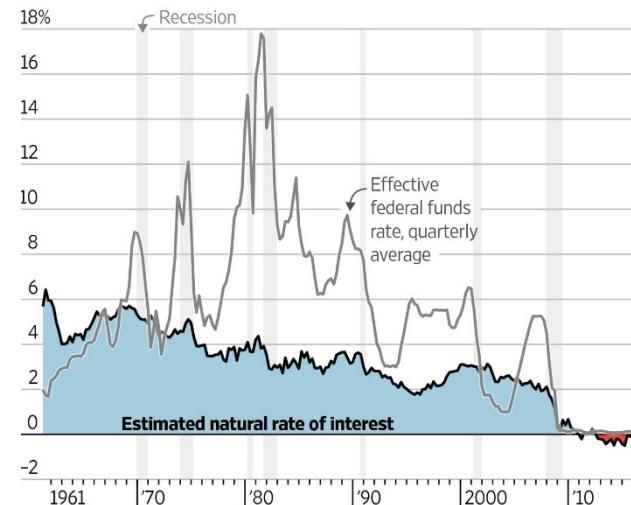
50/50 Chance of December Rate Increase



Fed Members GDP Expectations



Natural Rate vs. Effective Rate



Current Natural Interest Rate



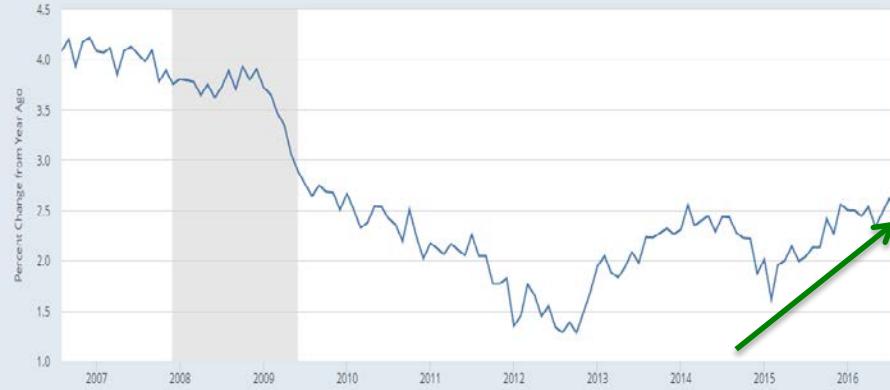
Sources:

<http://www.cmegroup.com/trading/interest-rates/countdown-to-fomc.html>

U.S. Consumer is Still Strong

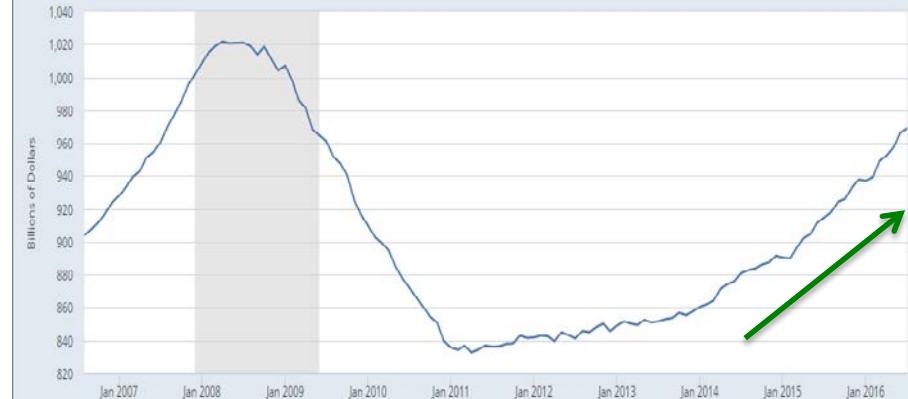
Wages

FRED — Average Hourly Earnings of Production and Nonsupervisory Employees: Total Private



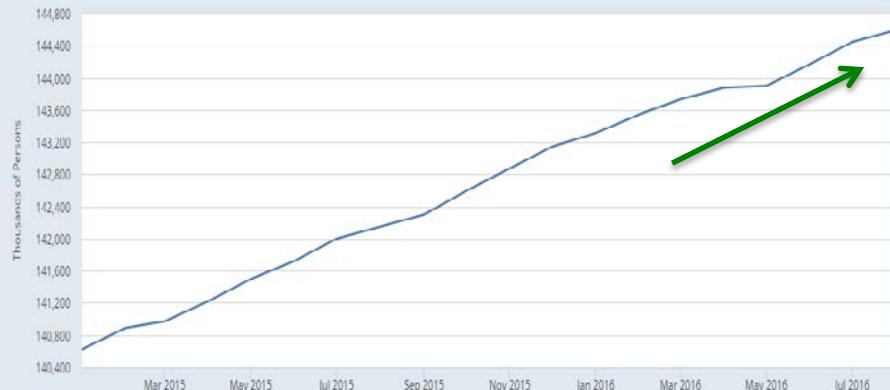
Credit

FRED — Total Revolving Credit Owned and Securitized, Outstanding



Employment

FRED — All Employees: Total Nonfarm Payrolls



Personal Savings Rate

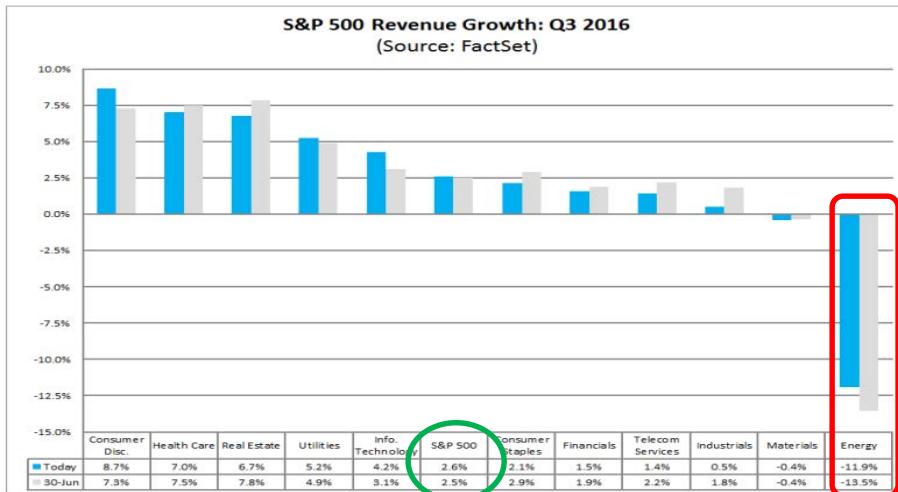
FRED — Personal Saving Rate



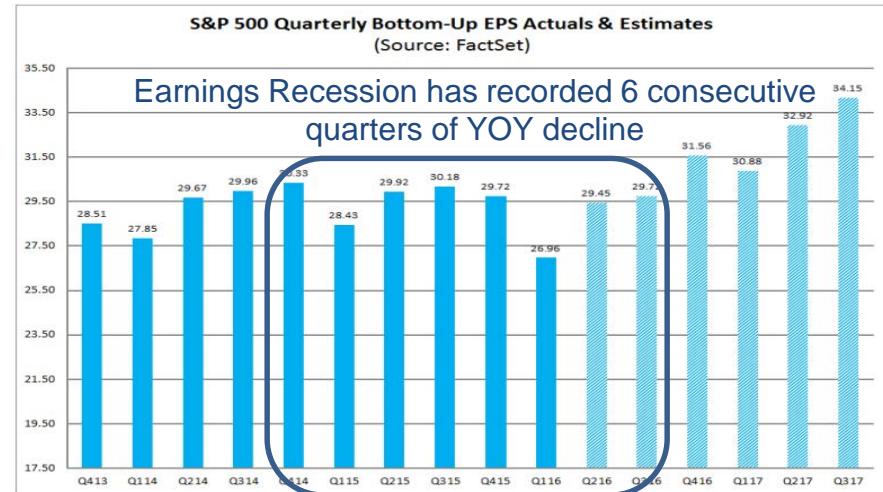
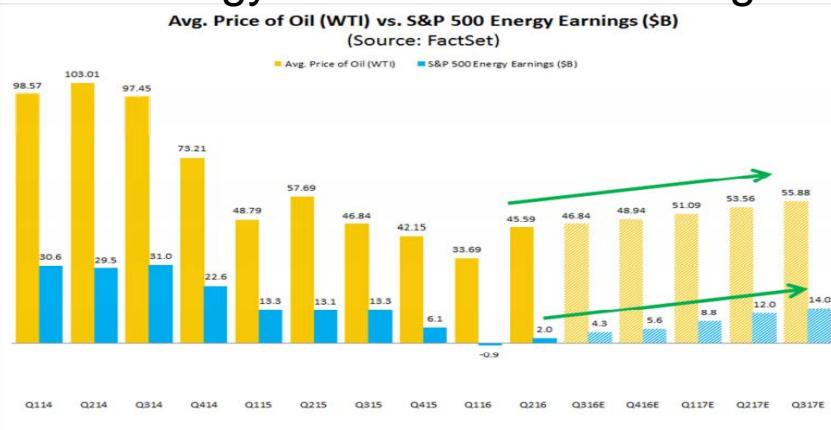
Sources:
St. Louis Fed

U.S. Earnings Recovery Expected

Expect Q3 Revenue Growth to lead to Q4 Earnings Growth



Energy Prices are Recovering



Dollar Has Weakened



Sources:

St Louis Fed

http://www.factset.com/websitemfiles/PDFs/earningsinsight/earningsinsight_9.23.16

Emerging Markets Recovery

Projected Annualized Market Return (%)



GDP Growth (%)



Contribution from Mean Revision (%)



GDP in \$Trillion USD

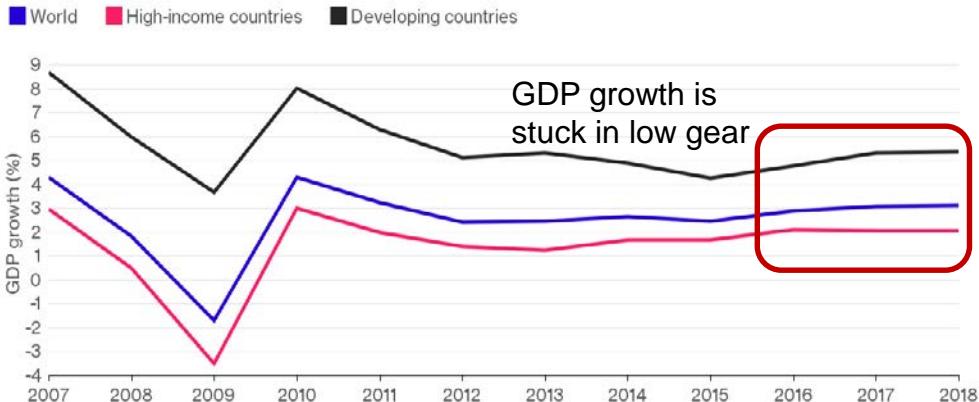
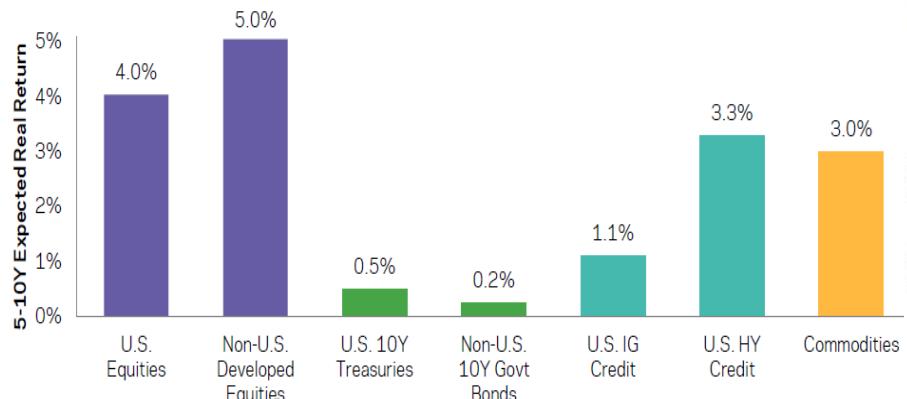


Sources:

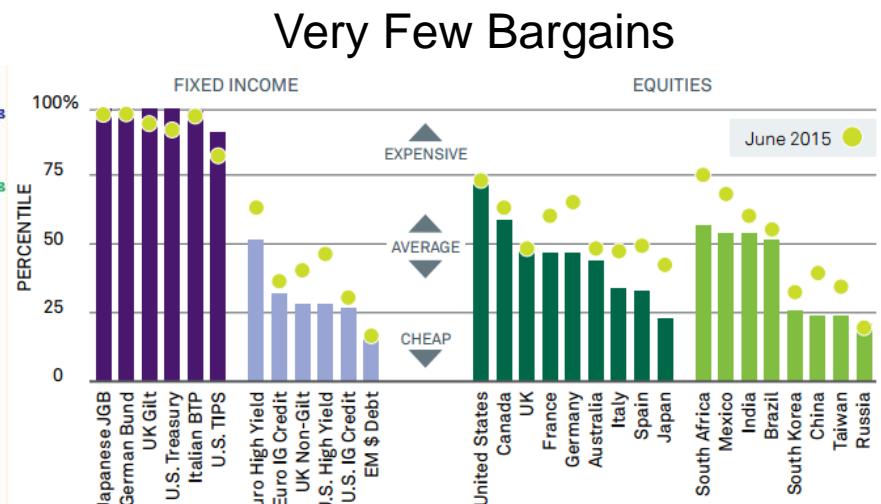
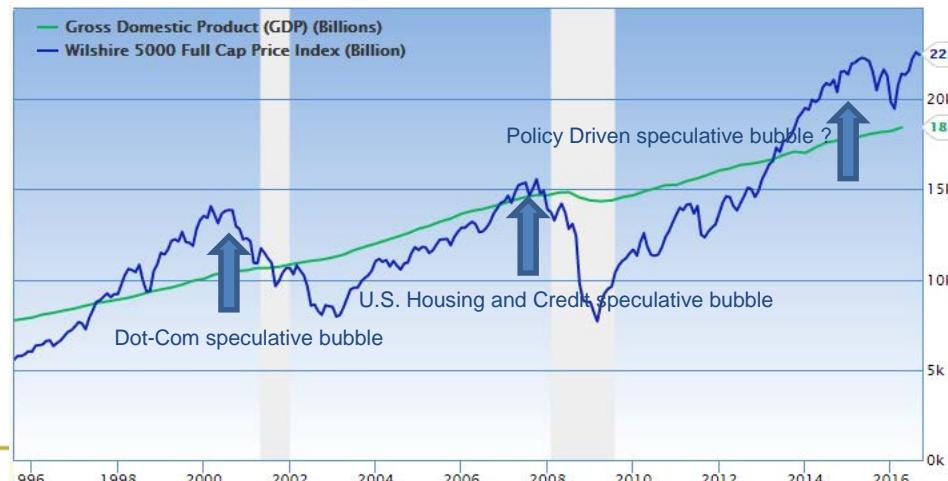
<http://www.gurufocus.com/global-market-valuation.php>

Global Valuations

Muted Return Expectations, Across All Developed Markets



Total Market Value is 121.4% of GDP



Sources:

AQR Alternative Thinking, First Quarter 2016, "2016 Capital Market Assumptions for Major Asset Classes"

<http://www.gurufocus.com/stock-market-valuation.php>

<http://www.bloomberg.com/news/articles/2016-01-06/world-bank-sees-global-growth-sputtering-along-amid-china-slump-ij392sat>

<https://www.blackrock.com/investing/literature/whitepaper/bii-global-investment-outlook-midyear-2016-us.pdf>

To Risk or Not To Risk

Macro Allocation Equity/Fix ed Income	20 Year Historic Std. Deviation	20 Year Annualized Return	(2013) Forward Looking Std. Deviation	(2013) Forward Looking Return	(2016) Forward Looking Std. Deviation	(2016) Forward Looking Return
100% / 0%	15.22%	9.22%	15.56%	8.08%	16.04%	6.70%
80% / 20%	12.21%	8.87%	12.50%	7.18%	13.32%	5.95%
70% / 30%	10.74%	8.63%	11.00%	6.73%	12.31%	5.57%
60% / 40%	9.29%	8.34%	9.52%	6.28%	11.29%	5.20%
40% / 60%	6.54%	7.65%	6.72%	5.38%	9.27%	4.45%
20% / 80%	4.32%	6.78%	4.46%	4.48%	7.24%	3.70%
0% / 100%	3.69%	5.74%	3.83%	3.58%	5.21%	2.95%

Investors grappling with lower interest rates have to take bigger risks if they want to equal returns of two decades ago.

Source: Martin, Timothy W. "Pension Funds Pile on Risk Just to Get a Reasonable Return." WSJ. Wall St Journal, 31 May 2016. Web. 01 June 2016.

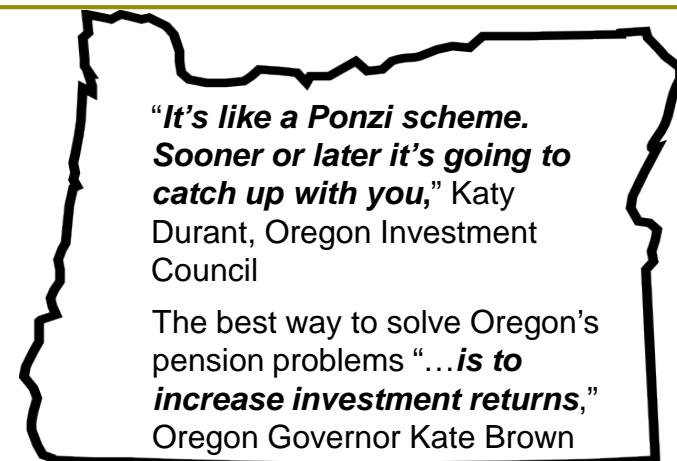
Challenges, Oregon is Not Alone

PERS Example

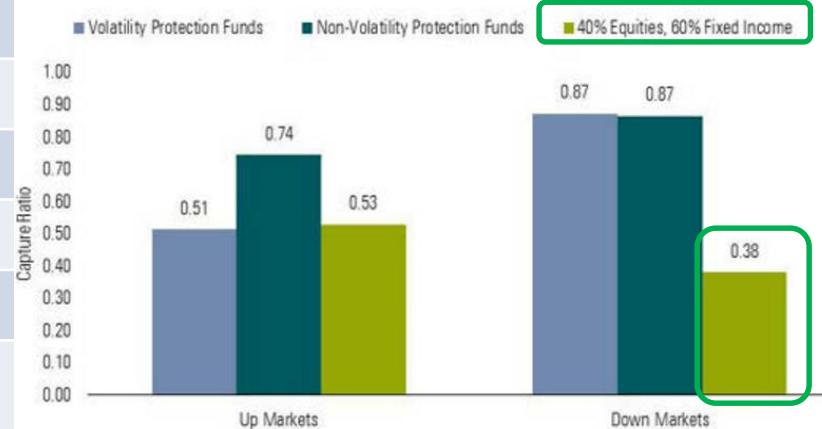
Year	Assumed Rate	Actual Rate
2014	7.75%	7.29%
2015	7.75%	2.11%
10 Year Annualized	7.85%	5.91%

What Can be Done to De-Risk?

	S&P 500	Long/Short	High Yield	Volatility	Risk Parity	Sovereign Bonds
S&P 500	1.000					
Long/Short	0.881	1.000				
High Yield	-0.521	-0.511	1.000			
Volatility	-0.851	-0.755	0.464	1.000		
Risk Parity	0.585	0.542	-0.387	-0.560	1.000	
Sovereign Bonds	-0.209	-0.195	0.347	0.158	0.222	1.00



Volatility-Protection Funds vs. The Blended Index



Sources:

Bloomberg, L.P.

http://www.oregon.gov/pers/docs/general_information/pers_by_the_numbers.pdf

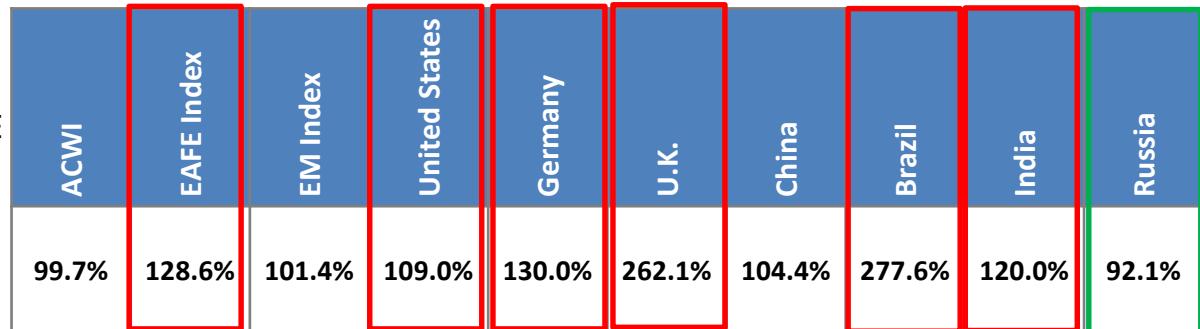
<http://news.morningstar.com/articleNet/article.aspx?id=769529>

Mean Reversion Dashboard

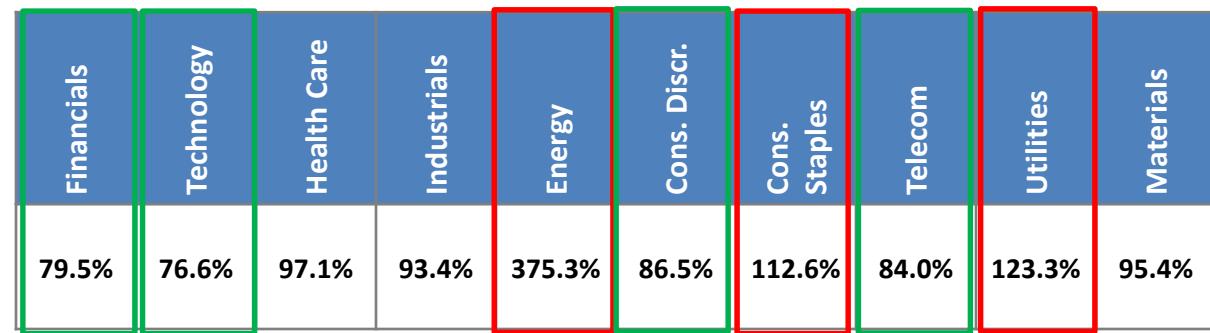
Style Current P/E as a % of 15yr Avg. P/E

	Value	Blend	Growth
Large	115.8%	109.4%	103.6%
Mid	115.1%	111.9%	104.5%
Small	107.1%	111.5%	112.0%

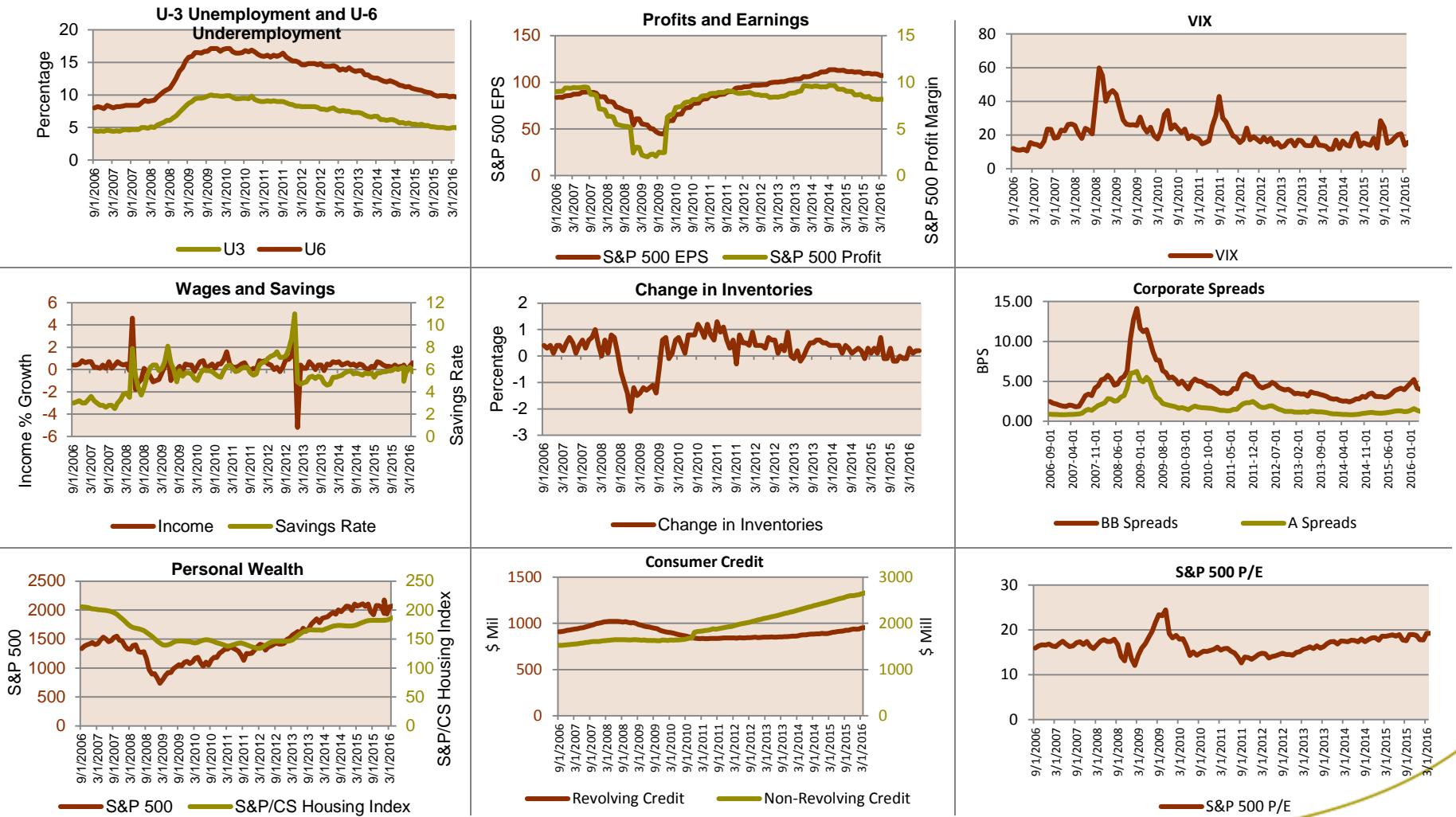
Regional Current P/E as a % of 10yr Avg. P/E



Sector Trailing P/E as a % of 20yr Avg. P/E



Economic Dashboard



Source: Bloomberg LP and Federal Reserve. Data is from sources deemed to be reliable. No representation or warranties either expressed or implied are made as to the accuracy of the information presented. Data retrieved on 9/27/2016.

Conclusions

- Countries pivot to domestic consumption throughout the globe
- Populism will dominate
- Return of Fiscal Stimulus
 - Economic / Social Shocks
- Safety has become expensive
 - Negative Rates
 - Investors are missing targeted returns for holding cash
 - Untested asset classes with unintended liquidity gates

Recommendations

- **High Quality Diversification**
 - **Assets and asset classes focused on:**
 1. High quality earnings
 2. Dividend growth
 3. Cash flow growth
- **Less Correlated Asset Classes – (maybe)**
 - **Exception(s) are:**
 1. Derivative vehicles
 2. Leveraged vehicles
 3. Liquidity challenged markets

THANK YOU