
The 100 Year Storm... Five Times in 15 Years?

MRA

MACRO RISK ADVISORS

March 5th, 2013

CBOE 2013 RISK MANAGEMENT
CONFERENCE

RIPS = Risk In Plain Sight

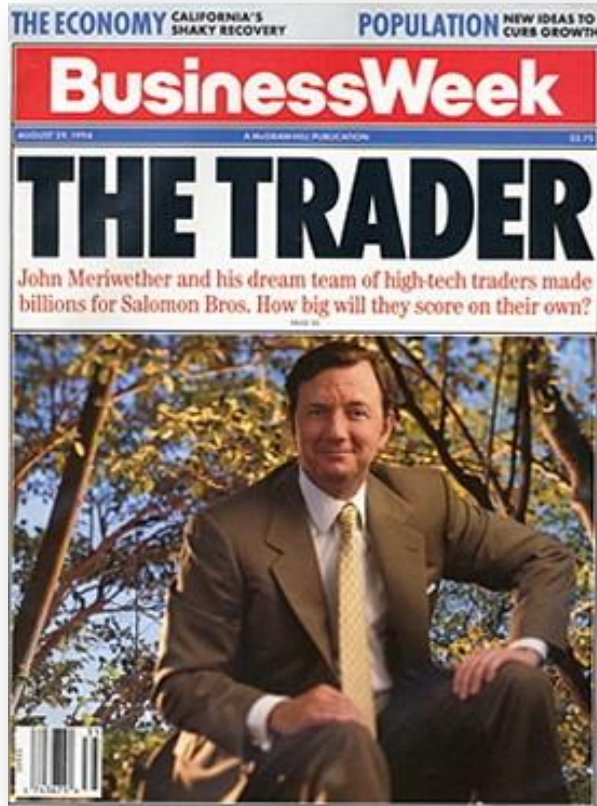
Five Very Recent Episodes Where The Market Got It Completely Wrong



LTCM



RIPS1: LTCM...40% Returns...No Risk, Just THAT Smart



Robert C. Merton



Myron S. Scholes

$$\frac{\partial V}{\partial t} + \frac{1}{2}\sigma^2 S^2 \frac{\partial^2 V}{\partial S^2} + rS \frac{\partial V}{\partial S} - rV = 0.$$

The Annual Report



People: The World's Best Finance Faculty

What distinguishes LTCM is our remarkable talent. The quality, background and recognition of our employees is top notch. Our various strategy teams are comprised of a unique combination of specialists in trading, economics, mathematics, and computer science.

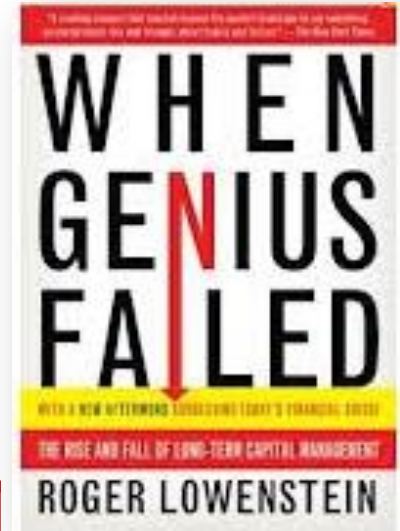
We understand finance, we understand the design of products, and we understand the ins and outs of institutions. We are the ones who created the models – and we have used them on a grand scale. And with our outstanding academic credentials, LTCM is considered to have one of the best finance departments in the world.

The philosophy of LTCM is basic: Use a firm foundation of financial principles to analyze investment opportunities and challenges and find the highest rewards at a targeted level of risk by integrating the research with market know-how. We do this by

- Uniquely integrating computer technology and mathematical models with financial theory; business experience and trading acumen, and market information flows and by;
- Capitalizing on financial research of the last 30 years.

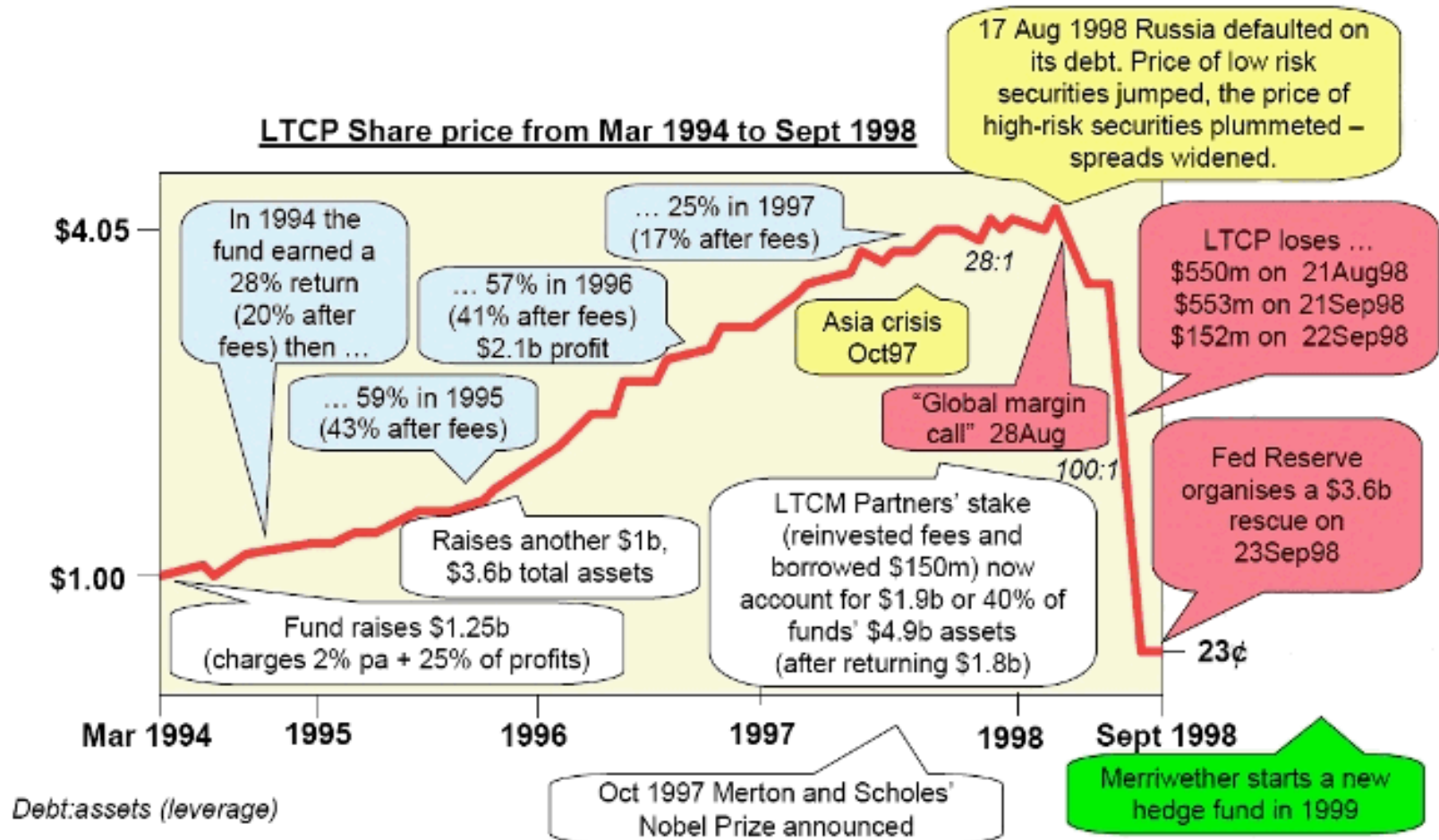
Creating the Hurricane...

Investment	Loss
Russia and other emerging markets	\$430 million
Directional trades in developed countries (such as shorter Japanese bonds)	\$371 million
Equity pairs trading	\$286 million
Yield-curve arbitrage	\$215 million
Standard & Poor's 500 stocks	\$203 million
High-yield (junk bond) arbitrage	\$100 million
Interest swaps	\$1.6 billion
Equity volatility bets	\$1.3 billion



*The hurricane is not more or less likely to hit because more hurricane insurance has been written. In financial markets this is not true. The more people write financial insurance, the more likely it is that the disaster will occur.. **John Meriwether....***

Short 80mln of Long Dated Index Vega...Wrong by 20 Vols



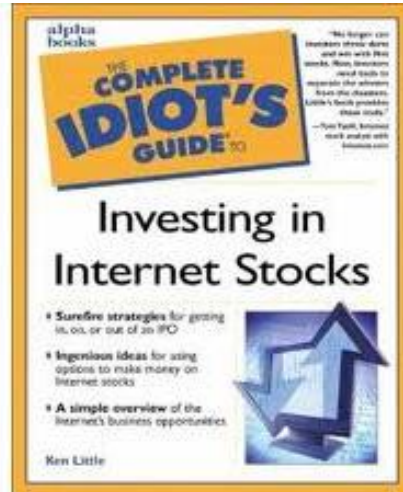
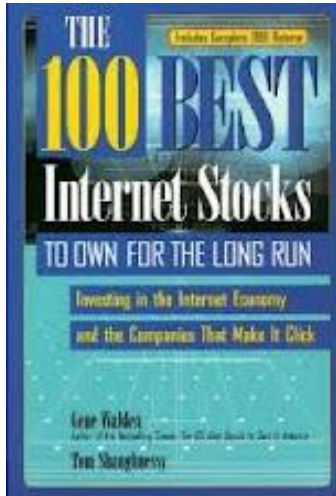
RIPS2: Nasdaq Bubble...Bricks to Clicks

The Rise and Fall

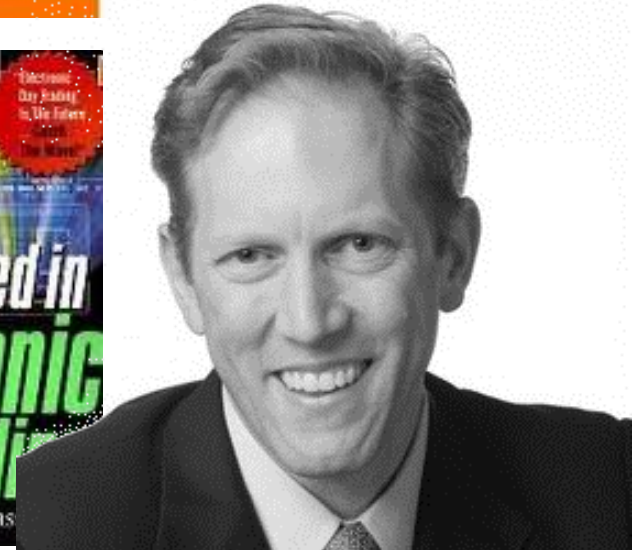
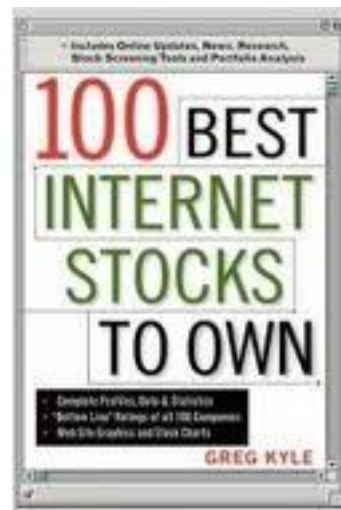
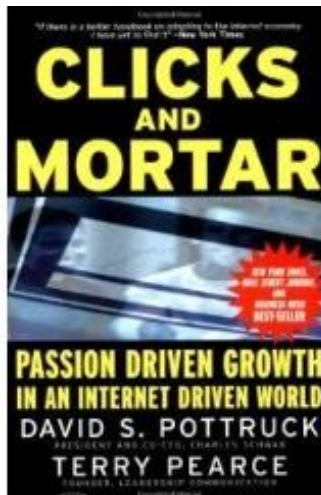
The Nasdaq Composite Index, daily close



Required Reading!



**READ THESE
AND GET
RICH!**

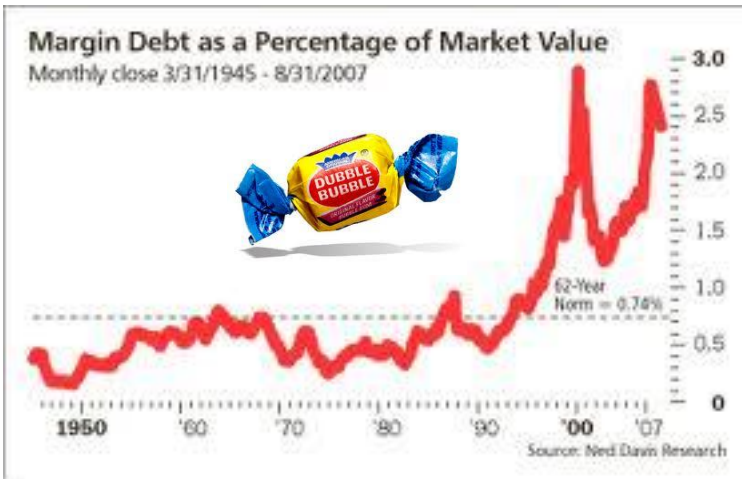
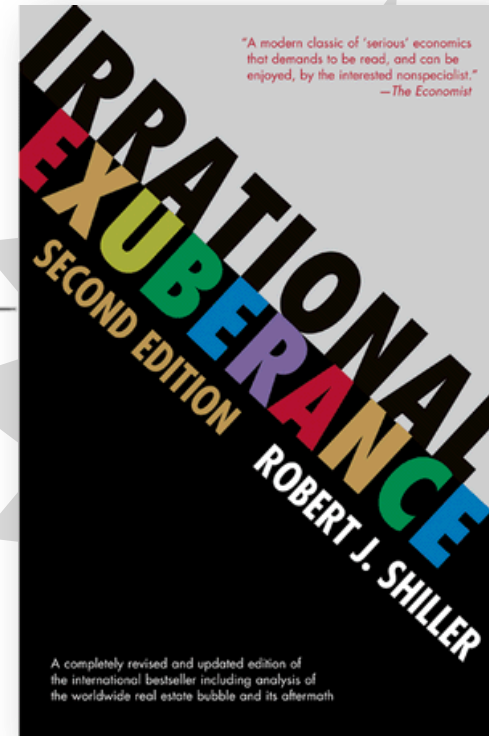
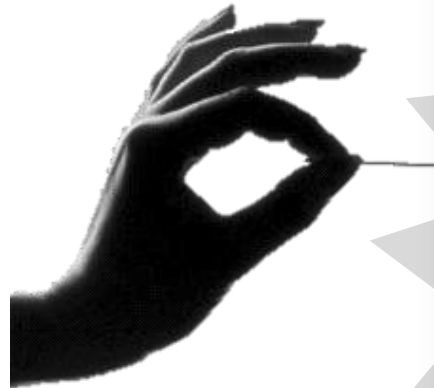


The New Value Stocks

Unsustainable Values
Large-cap companies with price/earnings ratios over 100

COMPANY	MARKET CAP (3/7/00, in bil.)	1999 P/E	EST. P/E IN GROWTH 5 YRS.	P/E IN 5 YRS.	P/E IN 10 YRS.
Cisco Systems	\$452	148.4	29.5%	73.9	40.9
AOL/Time Warner	232	217.4	31.5	100.0	51.1
Oracle	211	152.9	24.9	91.3	60.5
Nortel Networks	167	105.6	20.7	74.5	58.4
Sun Microsystems	149	119.0	21.1	82.8	64.0
EMC	130	115.4	31.1	54.0	28.1
JDS Uniphase	99	668.3	44.0	195.5	63.5
Qualcomm	91	166.8	37.3	61.8	25.5
Yahoo!	90	623.2	55.9	122.6	26.8
15 non-tech	2,361	30.4	13.7	23.8	20.3
S&P 500	11,281	28.6	12.5	23.8	21.3

Source: Bloomberg



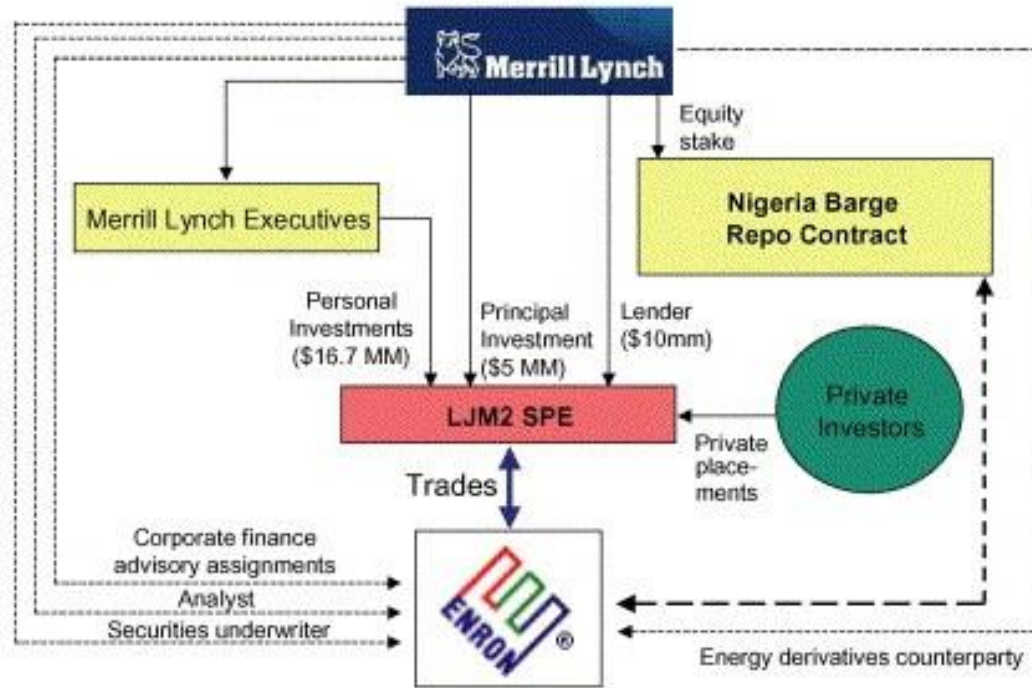
Spot Any Survivors?



RIPS3: ENRON...Harness the Complexity!



The Infamous Nigerian Barge Deal

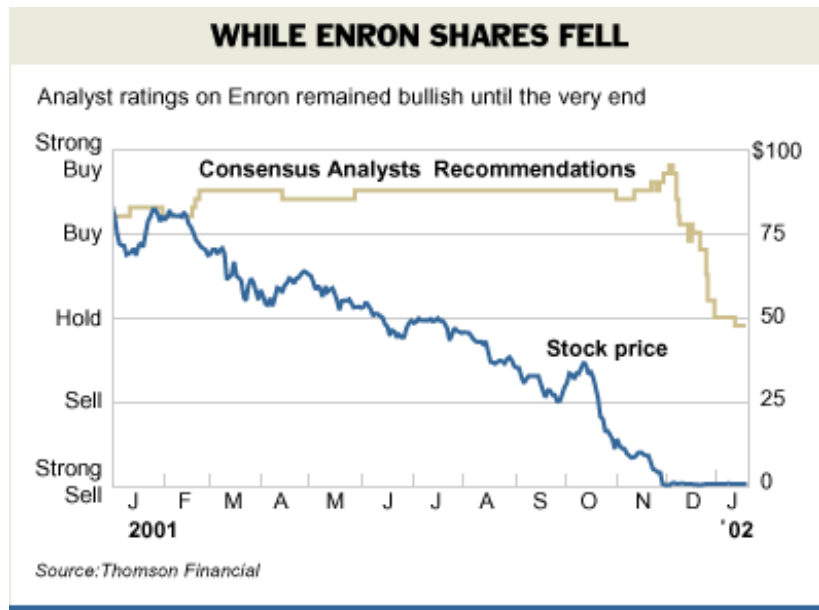
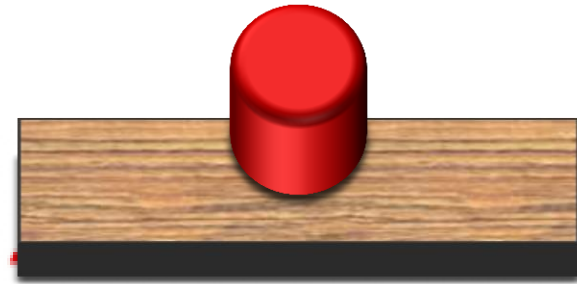


Fees 1999-2001: Underwriting \$20 million; Advisory \$18 million; Fund raising (\$265 million out of a total of \$387 million for LJM2).



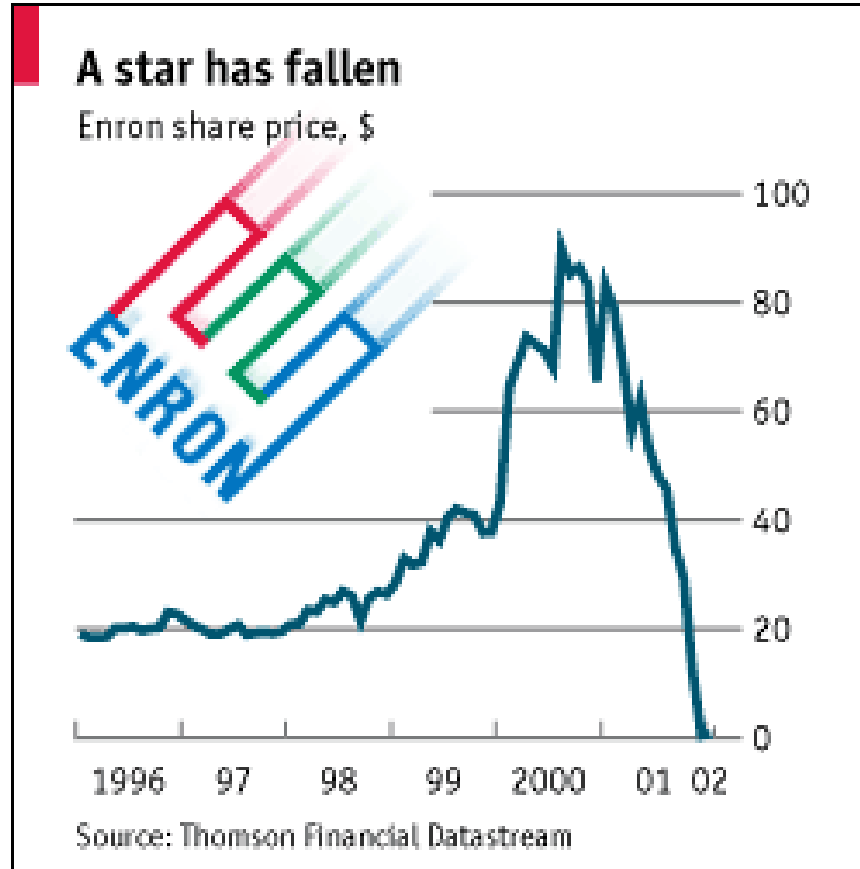
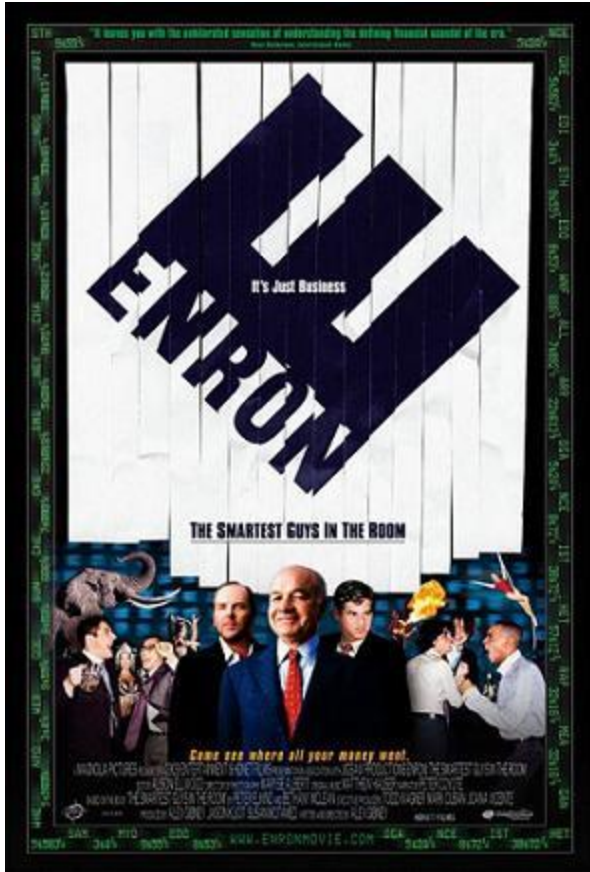
Fortune Mag's Most Innovative Company Six Straight Years!

??



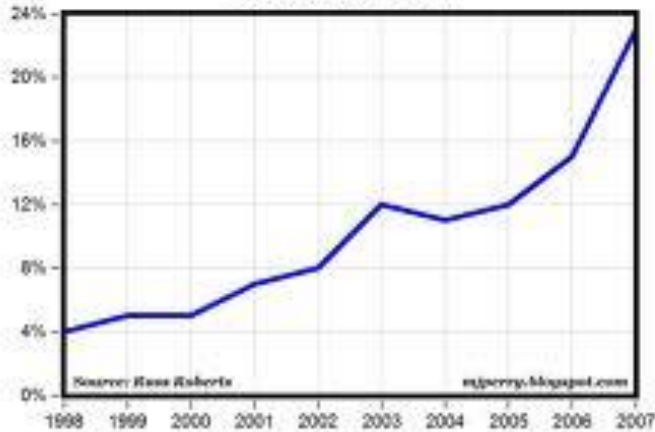
As of Oct. 18, all 15 analysts tracked by Thomson Financial/First Call rated Enron a "buy"--12 of the 15 called it a "strong buy." Even as late as Nov. 8, the date of Enron's disclosure that nearly five years of earnings would have to be recalculated, 11 of the 15 recommended buying the stock. (There were three "holds" and one "strong sell.")

Complexity in Plain Sight....

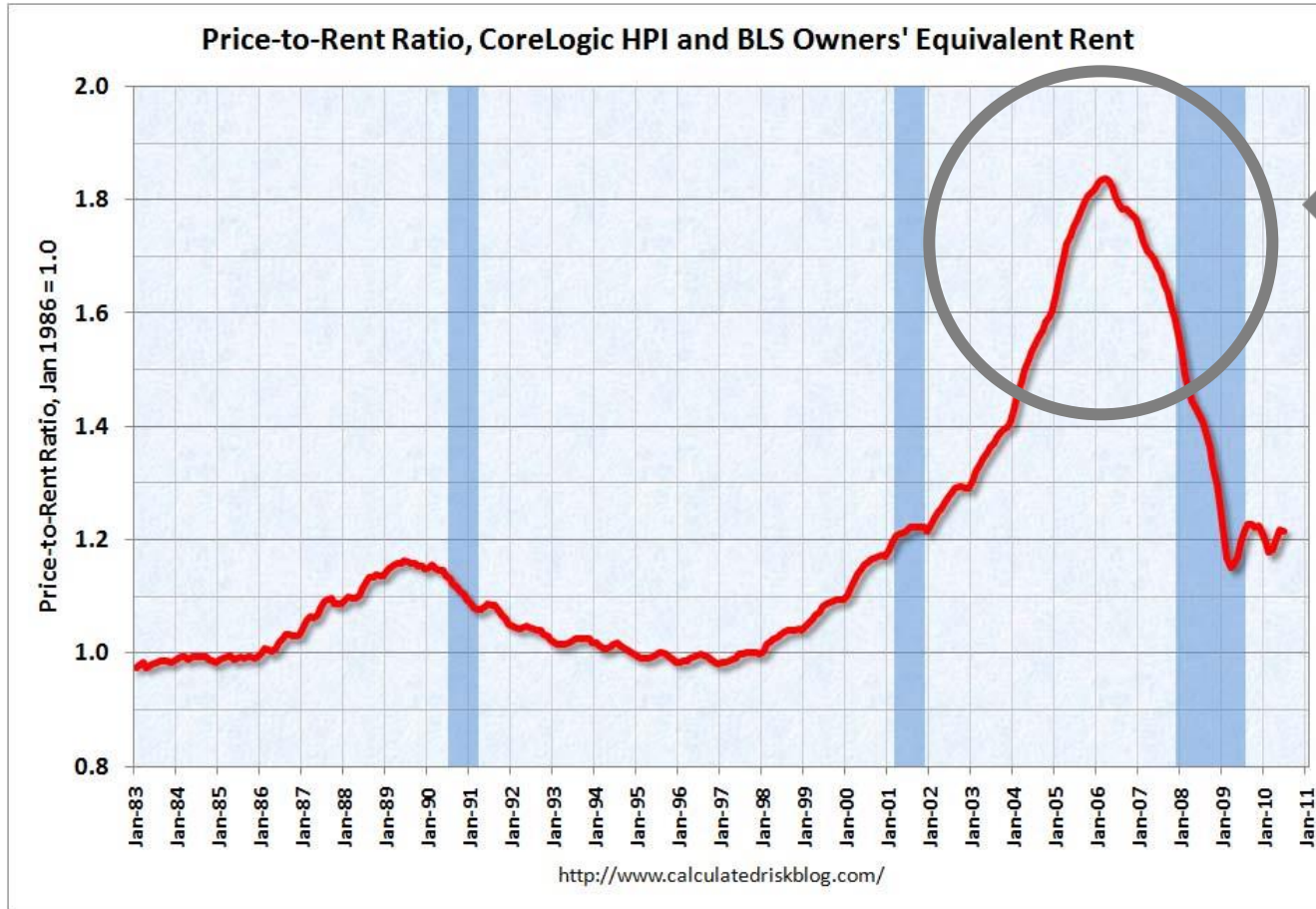


RIPS4: Housing and Mortgage Credit

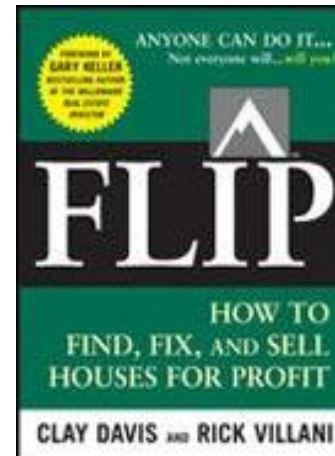
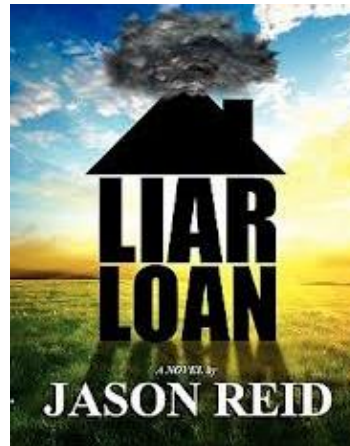
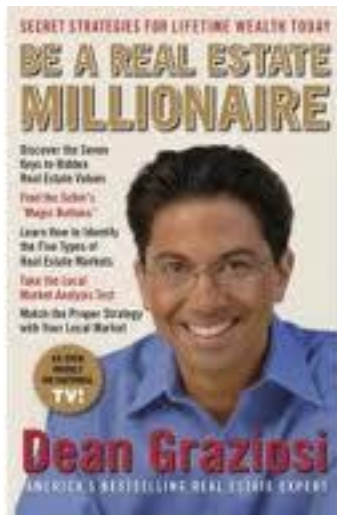
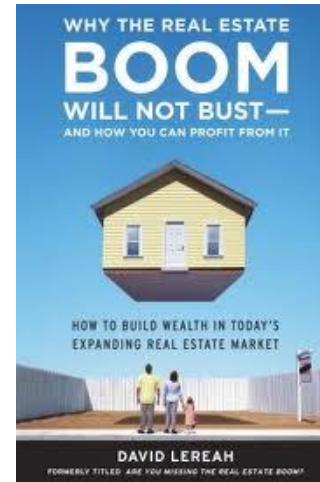
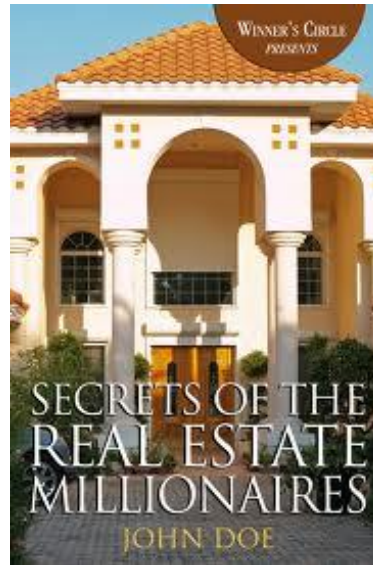
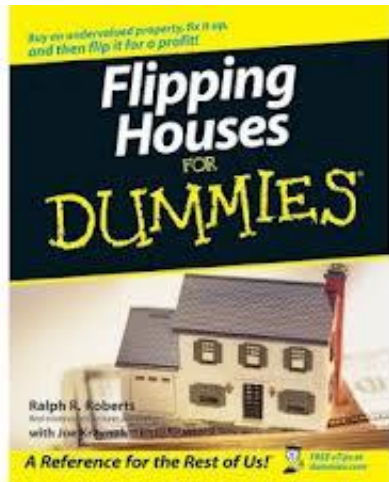
Percent of Fannie/Freddie Mortgages With Less Than 5% Down Payment 1998 to 2007



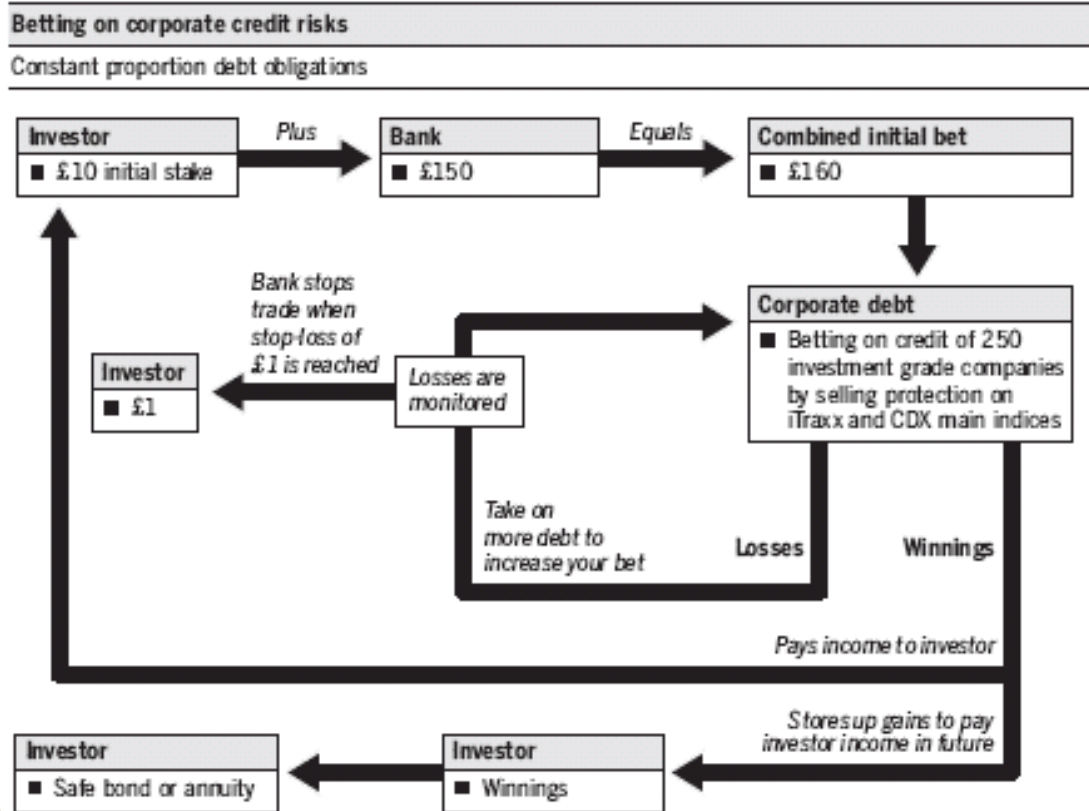
Did Anything Look Strange Here?



Gettin' Rich...

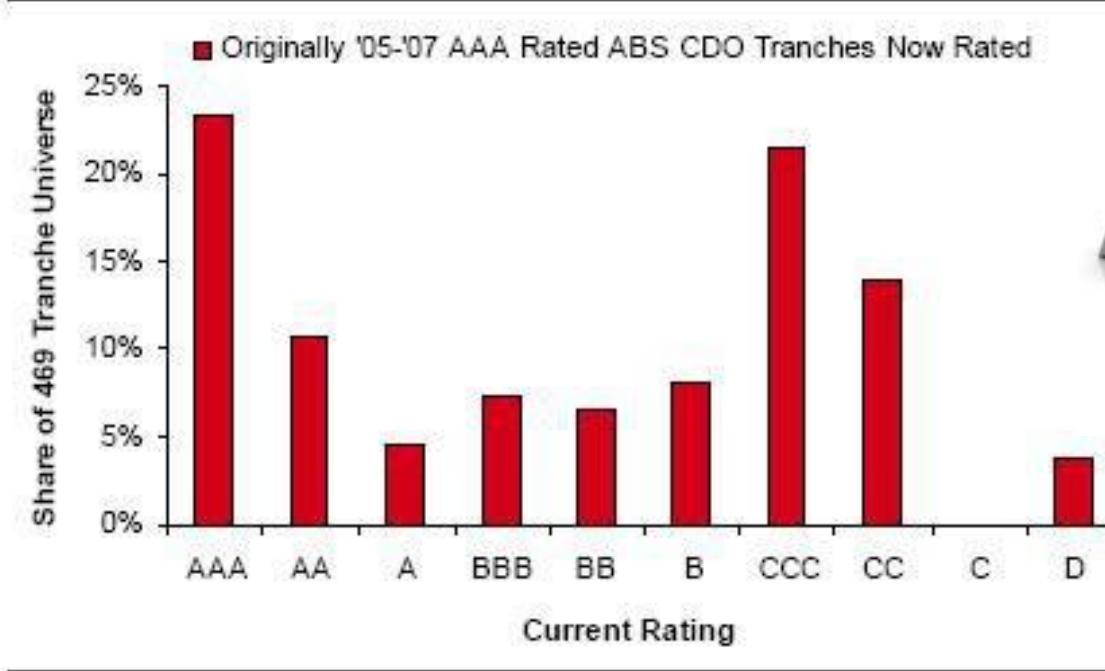


AAA and Libor plus 100! Welcome to the Magical CPDO

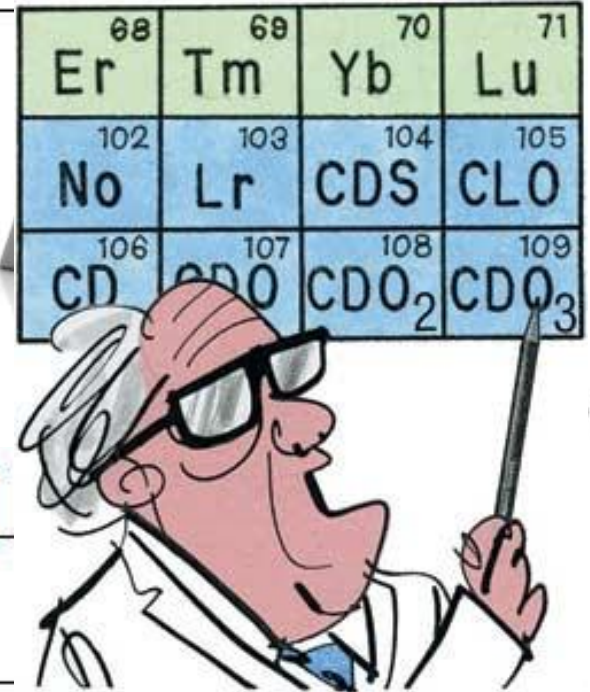


The Melting of AAA

Migration of Originally AAA-Rated 2005-2007 Vintage ABS CDO Tranches



Source: Standard & Poor's.



Walk Away and Jingle Mail!

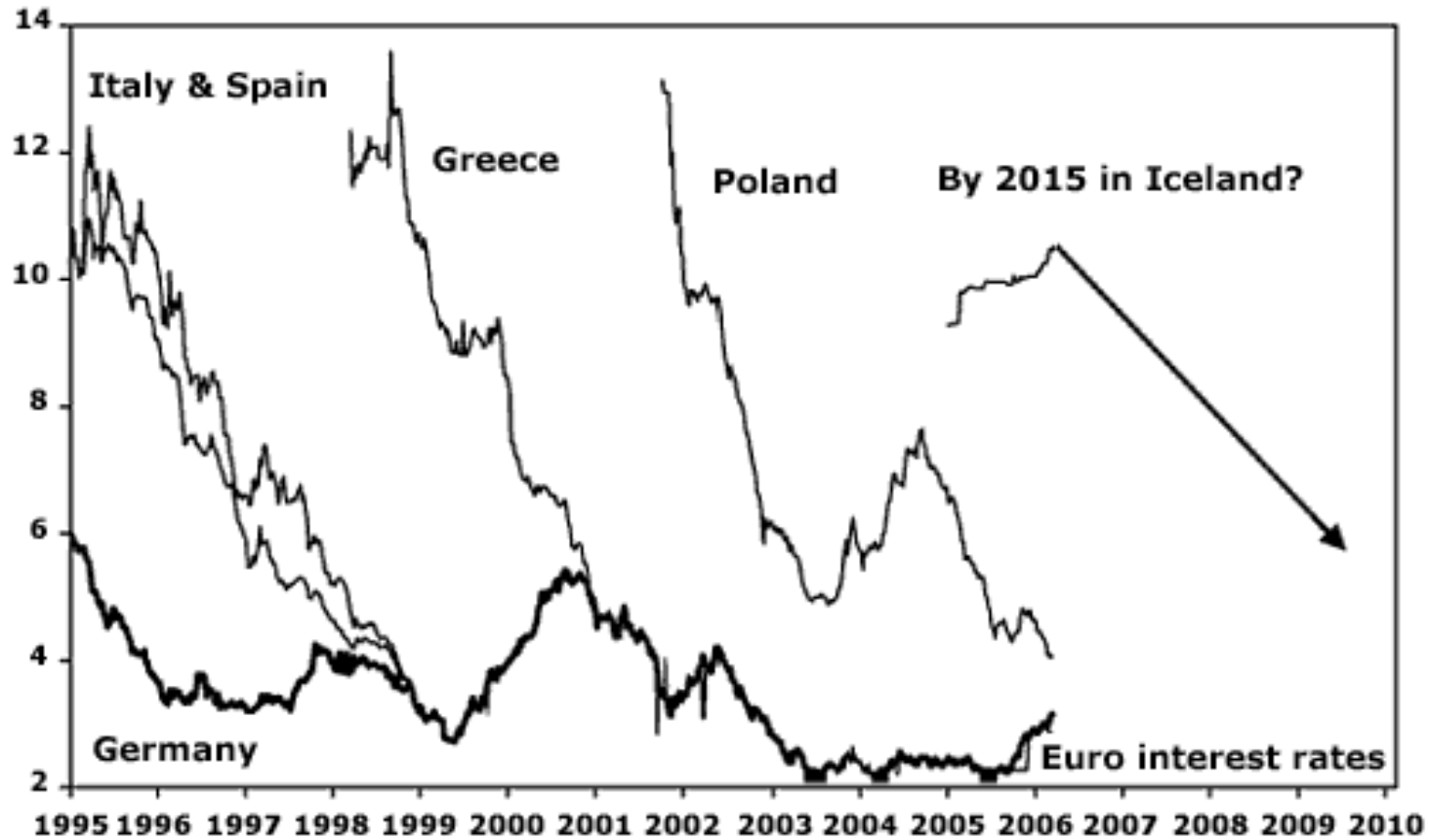
HONK
If you're paying my mortgage.
Filed for by the Tormented Republican Party. www.tgpp.org



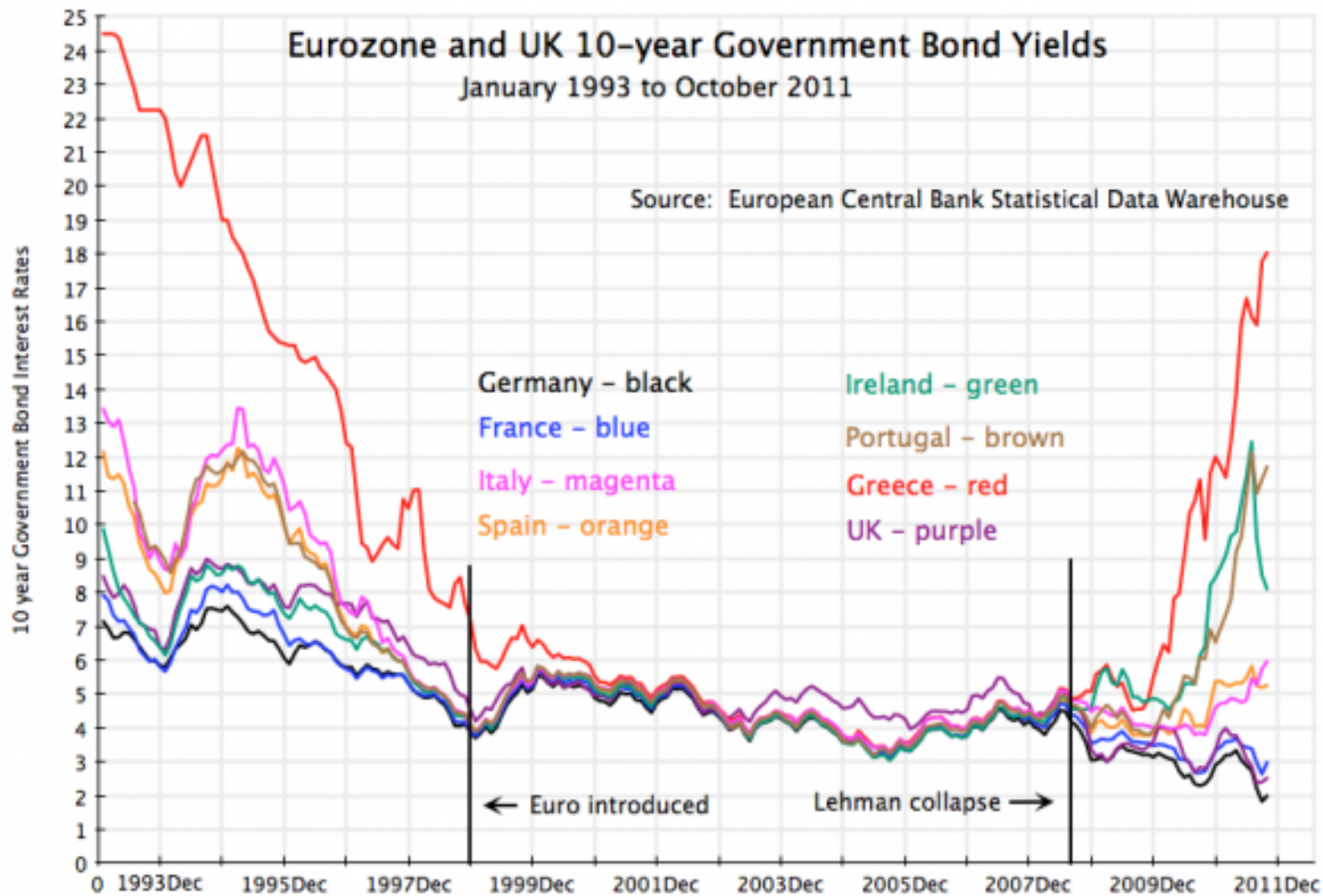
RIPS5: The Sovereign Meltdown



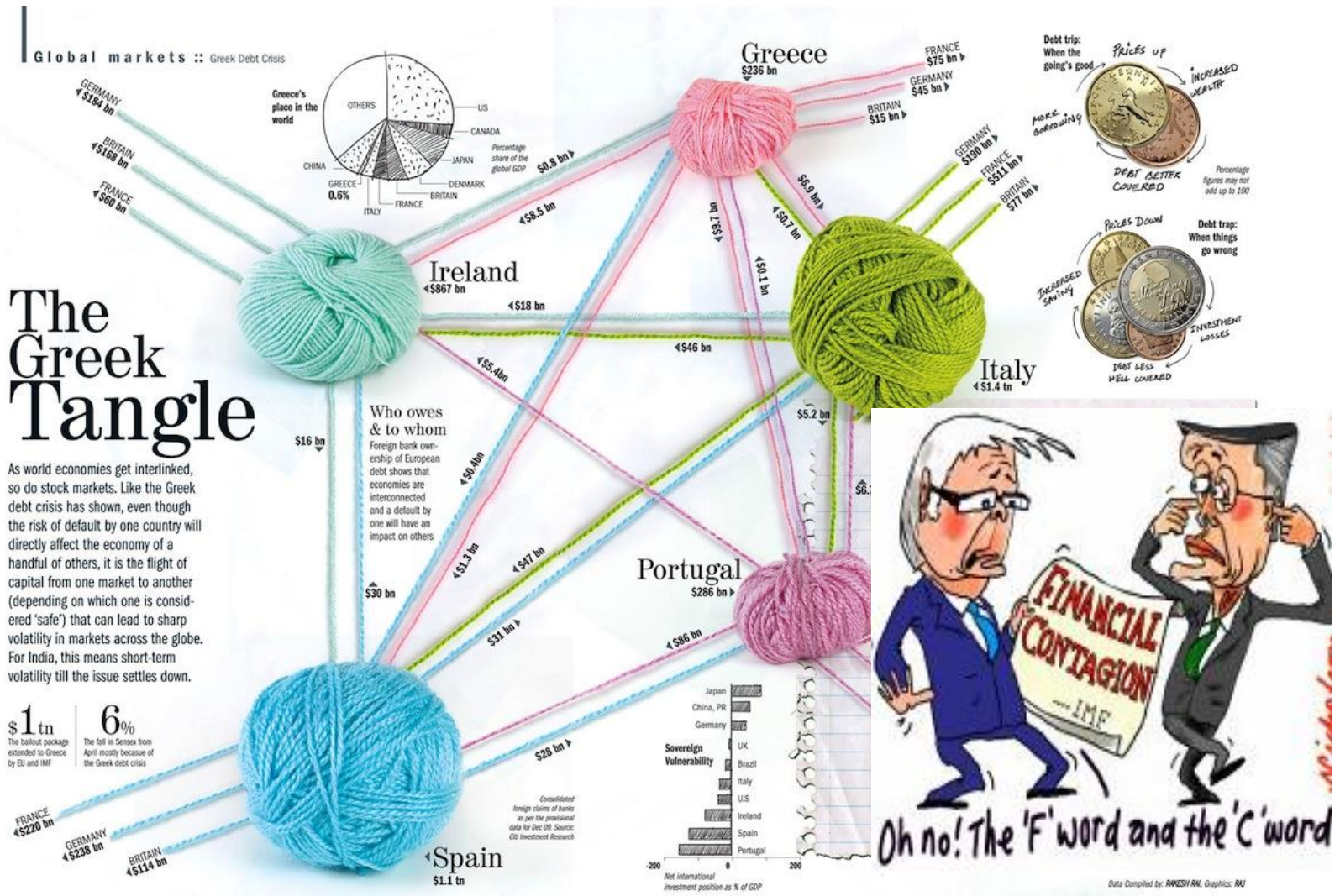
Convergence...A Wonderful Thing



But the Market Got it Wrong...Again



Financial Contagion...It Isn't Pretty...



Some Favorite Quotes from the Eurozone Crisis...

“I totally deny that there is a meeting, these reports are totally wrong”

- *Jean-Claude Juncker, denying emergency meeting on Greece, May, 2011*

“When it becomes serious, you have to lie.”

- *Jean-Claude Juncker, why he denied the emergency meeting on Greece, May, 2011*

“The debt is absolutely sustainable now”

- *George Papandreou, saying that a 50% haircut means sustainable debt, October 2011*

“I have always wanted to carry out reforms,” Mr. Berlusconi told Mr. Van Rompuy. To which the EC President replied: “Silvio, it's time to make your dreams come true.”

- *regarding Italy being placed under IMF monitoring, November 2011*

“There is widespread concern that Mr. Berlusconi is not in control of events in Italy. He fell asleep twice during the talks. It caused considerable alarm among his officials. They had to wake him up by giving him a nudge. Other leaders sitting around the table couldn't help but notice.”

- *A diplomat at the G20 Summit talks in France, November 2011*

“It's relatively good news”

- *Christian Noyer, Bank of France Governor, on Moody's downgrade of two French banks*

* *EU SAID TO SEEK ECB SIGNAL WHILE RESPECTING ECB INDEPENDENCE*

Name the European Policymaker!



And of Course...



Lest We Forget !



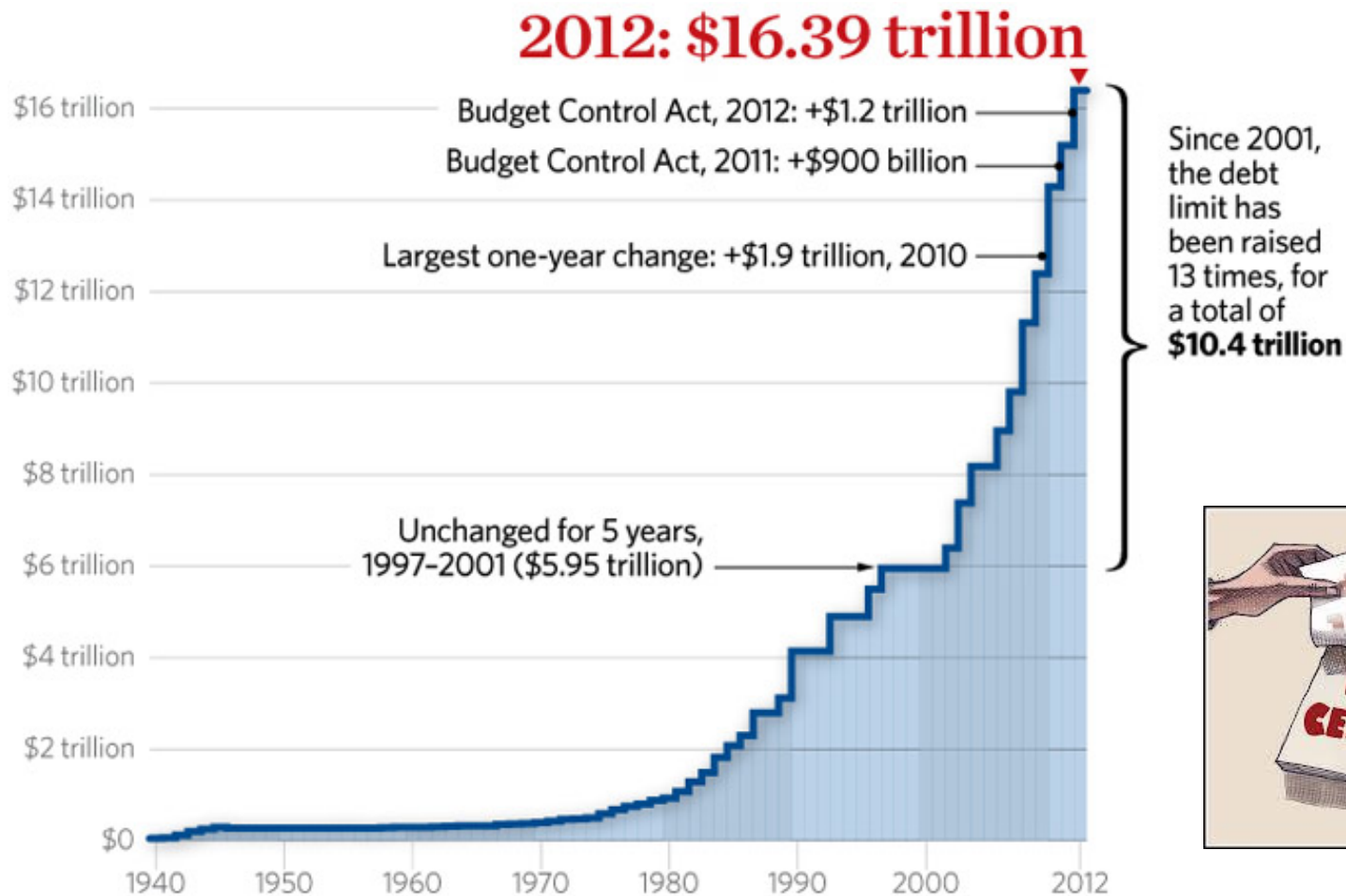
Just Who is in Charge Here?



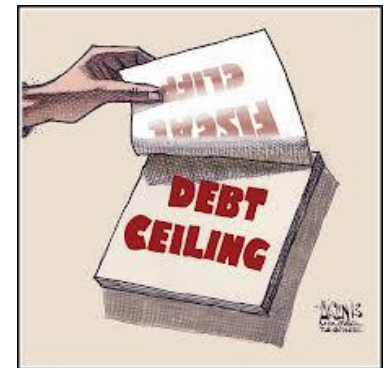
And Now...

**Some (Somewhat Skeptical)
Thoughts on the US**

Redefining the Term Ceiling



Note: Figure for 2012 is current as of April 6.



Is There an Adult in the Room?



Our Debt...There's Lots to Cry About



**U.S. NATIONAL
DEBT CLOCK**
The Outstanding Public
Debt as of 26 Feb 2013 is:



\$16,623,923,027,214.37

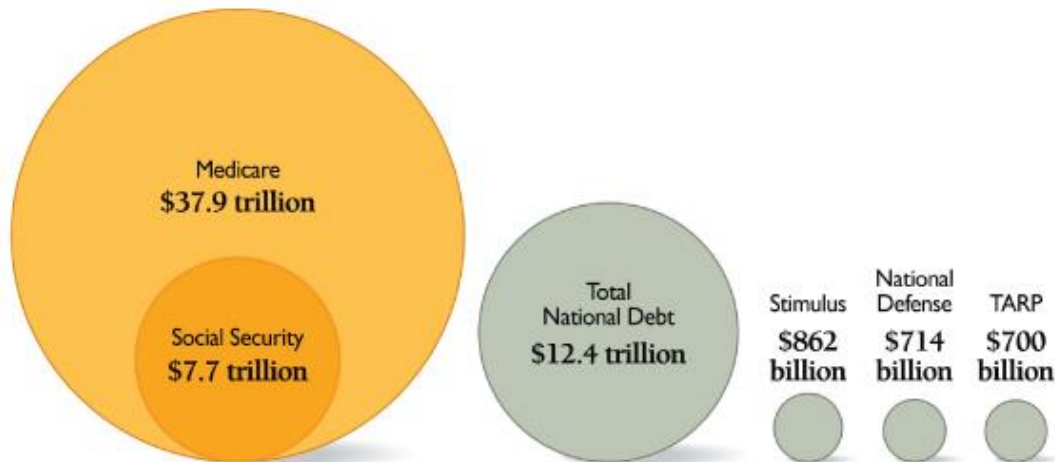


And That's Just ON Balance Sheet Debt

Entitlement Debt Dwarfs Other Spending, Including Bailouts

The nation cannot afford the Medicare and Social Security benefits that have been promised to future retirees. These long-term unfunded obligations dwarf spending on other expensive government programs, including the Troubled Asset Relief Program (TARP) and the 2009 economic stimulus bill, and vastly outweigh the entire national debt.

UNFUNDED OBLIGATIONS



Source: U.S. Department of the Treasury, U.S. Government Accountability Office, and Congressional Budget Office.

Entitlements Chart 5 • 2010 Budget Chart Book heritage.org

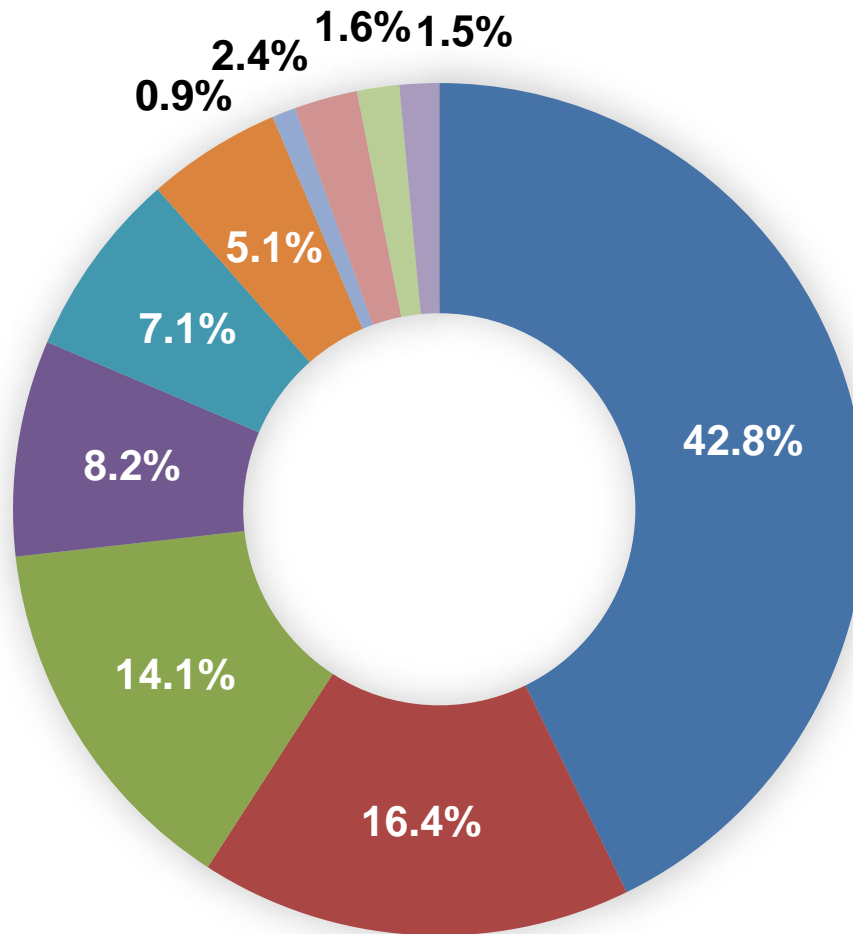
Unfunded Liabilities Monster



Sizing Up the Big T



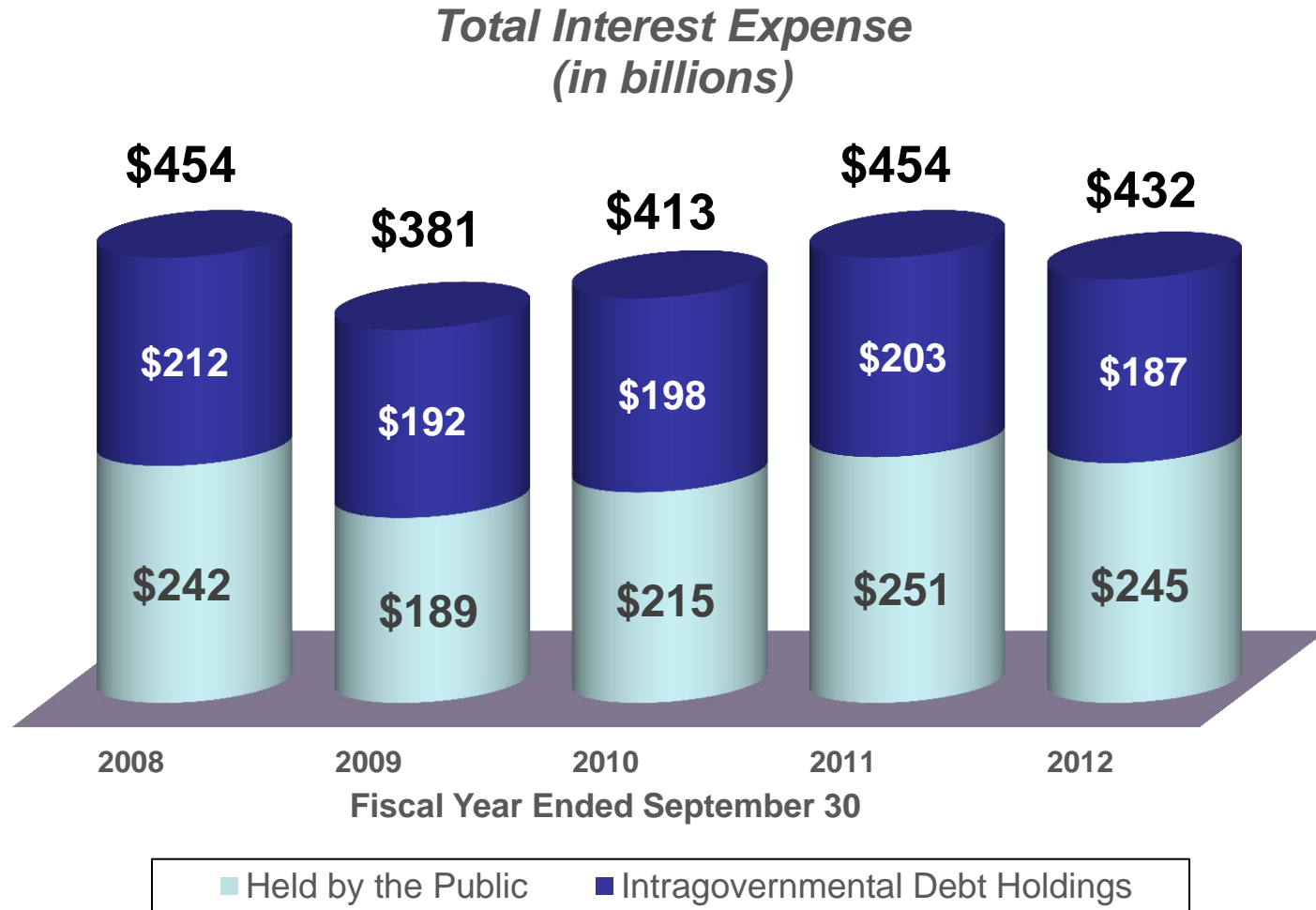
16T...To Whom Does the US Owe Money?



- US Individuals and Institutions
- Social Security Trust Fund
- All Other Foreign Nations
- China (and Hong Kong)
- Japan
- US Civil Service Retirement Fund
- United Kingdom
- US Military Retirement Fund
- "Oil Exporters"
- Brazil

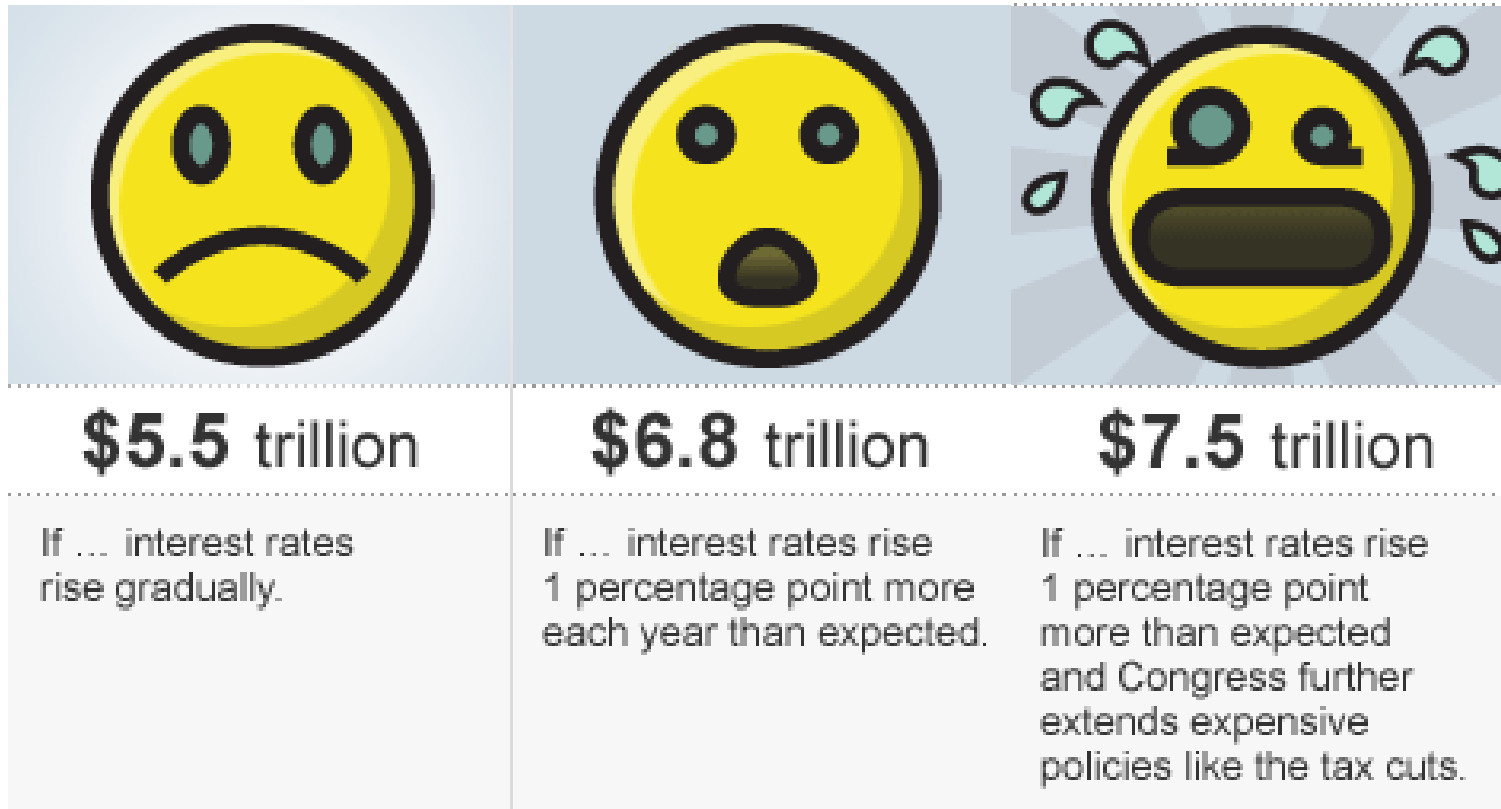
Source: US Treasury Department, June 2012

Paying the Vig on 16T: Interest on the U.S. National Debt

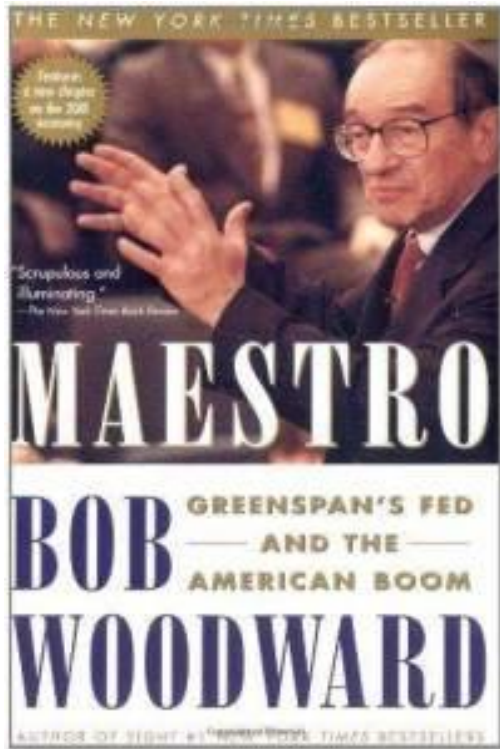


What Happens if Rates Rise?

Uncle Sam's projected interest costs in the next decade – from bad to worse



There Goes My Hero...

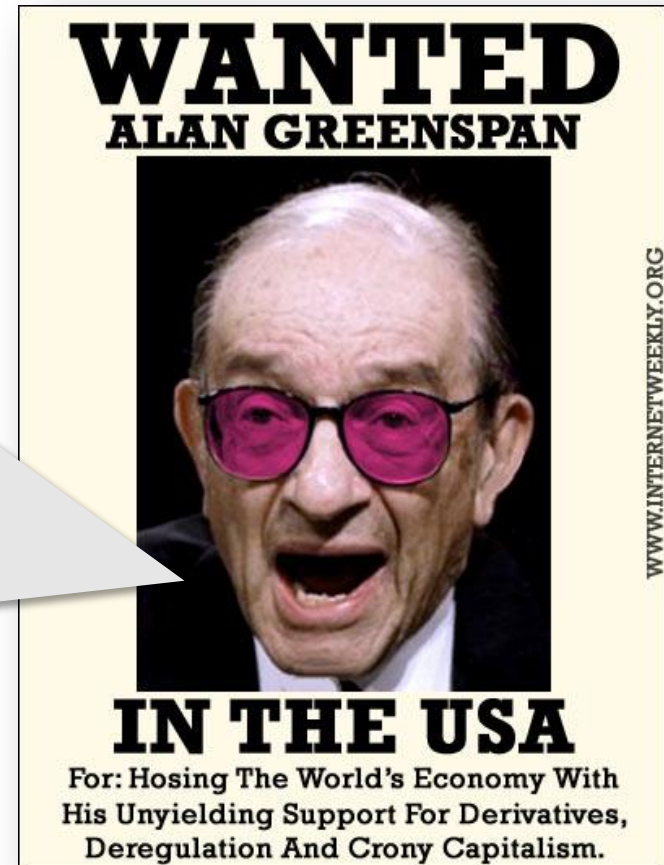


“I found a flaw in my logic” ...

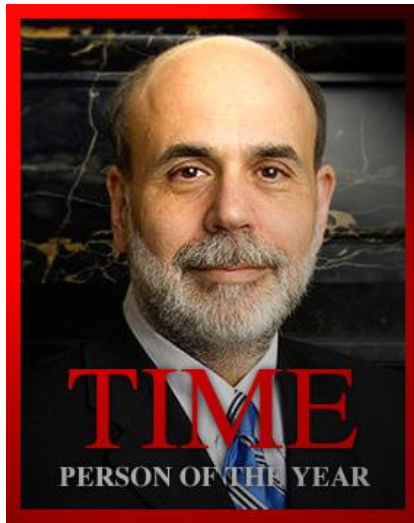
“Yes, I found a flaw. I don't know how significant or permanent it is, but I've been very distressed by that fact.”

Flaw in the model that I perceived is the critical functioning structure that defines how the world works, so to speak.”

~ Alan Greenspan, October 2008

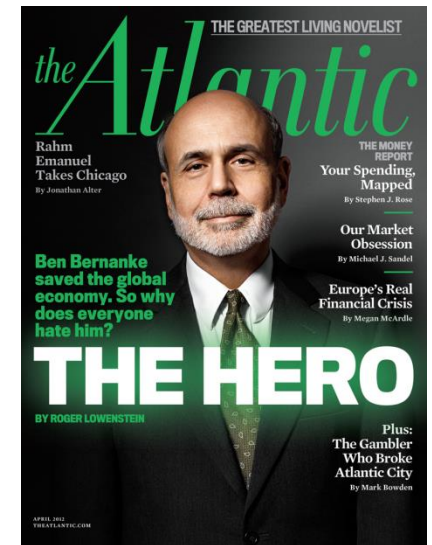


From Princeton Economics Department to ...

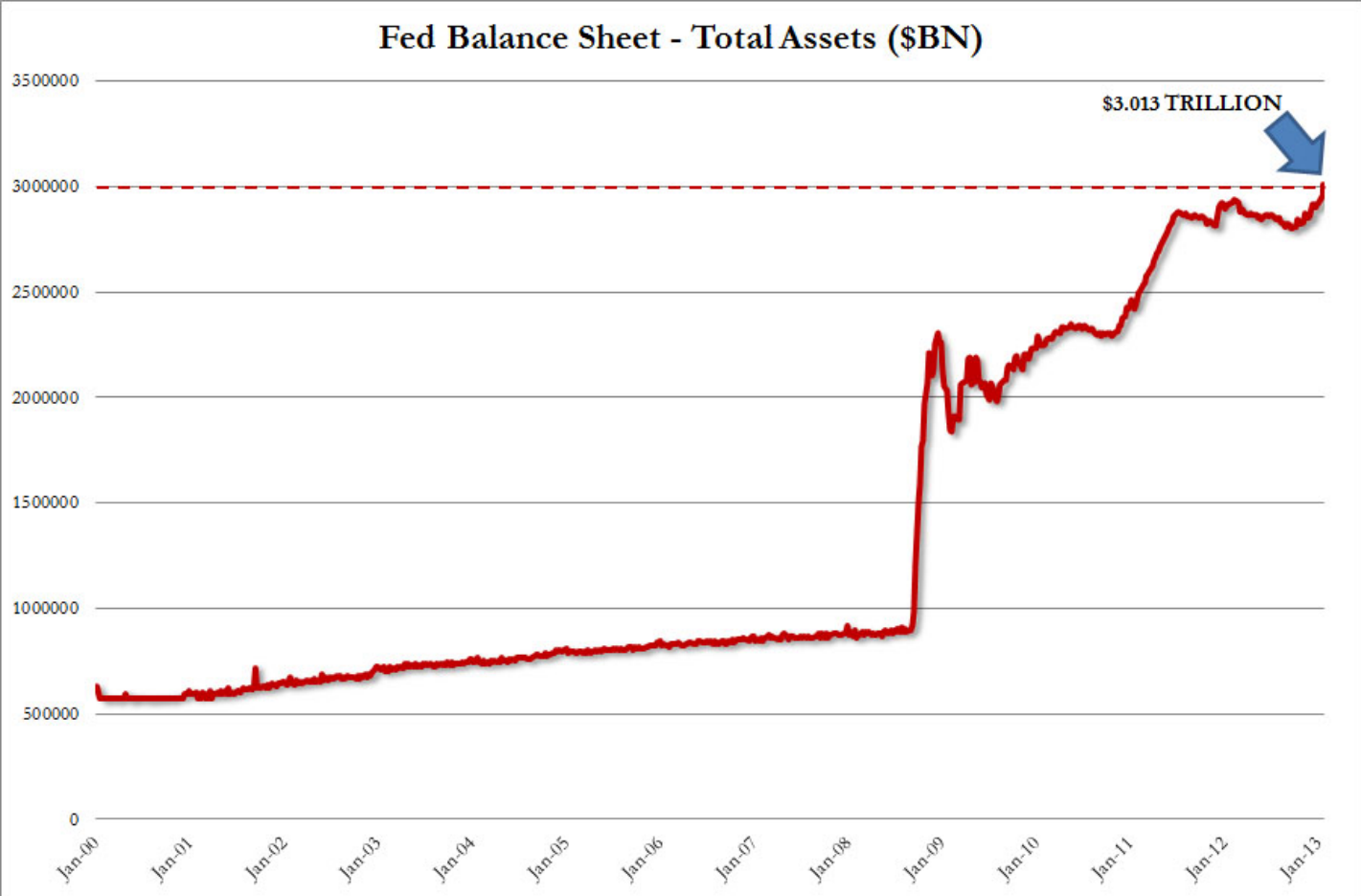


“In addressing the challenges and the risks that financial innovation may create, we should also always keep in view the enormous economic benefits that flow from a healthy and innovative financial sector. The increasing sophistication and depth of financial markets promote economic growth by allocating capital where it can be most productive. And the dispersion of risk more broadly across the financial system has, thus far, increased the resilience of the system and the economy to shocks. When proposing or implementing regulation, we must seek to preserve the benefits of financial innovation even as we address the risks that may accompany that innovation.”

Ben Bernanke address to the FRB of Atlanta's Financial Markets Conference, Georgia...May 15, 2007



The Bank of Bernanke Rakes in the Deposits...



...And Puts them to Use in The Grand Experiment

DR. BERNANKE EXPLAINS QUANTITATIVE EASING

IF WE FEED THE BANKS ENOUGH DOLLARS, SOMETHING GOOD IS BOUND TO COME OUT THE OTHER END EVENTUALLY...



Next Fed Chair?



Are You a Buyer?

Preliminary Prospectus Dated March 5, 2010

\$16,000,000,000

GRANT'S
INTEREST RATE OBSERVER[®]

The United States of America



% Bonds Due 2040



The Bonds are unconditional, direct and general obligations of the United States for the payment and performance of which the full faith and credit of the United States is pledged.

The Bonds will mature on April 15, 2040. Interest on the bonds is payable semiannually on April 15 and October 15, beginning October 15, 2010. Before giving effect to the offering of the Bonds and the securities to be issued concurrently, the United States had approximately \$12,500,000,000,000 of indebtedness subject to the statutory debt limitation.

FOR A DESCRIPTION OF CERTAIN RISKS CONCERNING AN INVESTMENT
IN THE BONDS OFFERED HEREBY, SEE "RISK FACTORS."

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE
SECURITIES AND EXCHANGE COMMISSION NOR HAS THE COMMISSION
PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS.

ANY REPRESENTATION TO THE CONTRARY
IS A CRIMINAL OFFENSE.

Some Thoughts on the Current State of Market Risk

- 1) 3 Month US T-Bill: 0.11% ; 10 Year UST Yield: 1.90%
- 2) Sovereign CDS: 285bps (avg of Portugal, Spain, Ireland, Italy)
- 3) VIX: 15
- 4) 5 Year SPX variance: 25
- 5) Brent Crude: \$113
- 6) Gold: \$1,575
- 7) Federal Budget Deficit: ~900 billion USD
- 8) Fed Balance Sheet: ~3 trillion USD
- 9) “Fiscal Cliff” / “Sequester” / “Debt Ceiling” / “Grand Bargain”
- 10) “Currency War” / “QE” / “EFSF” / “ESM” / “OMT”
- 11) “Conventional Unconventional Policy”

The Risk Backdrop...Crisis and Response

“The Vol Storm” *(late’08-early’09)*

- Significant **leverage** employed in housing bubble years by households (mortgage equity withdrawal) and complex financial institutions.
- Tremendous **credit growth** facilitated through Shadow Banking System.
- Wide scale use of **VAR** to assess exposures and view that low volatility was a permanent regime.
- Substantial **mispricing** of credit risk and degraded lending standards, centered in complex mortgage securities rated AAA.
- Lehman default leads to unprecedented levels of **risk in financials** (CDS, equity volatility).
- Uncertainty in **counterparty risk** leads to self-reinforcing deleveraging spiral and run on money market system.
- Damage from financial storm reaches **real economy** as unemployment rises sharply and growth slows markedly.
- **2008 Q4 Average VIX: 51.6**

“The Vol Crunch” *(2009)*

- Massive, **global monetary response** with no historical precedent (liquidity support, capital injections, asset purchases, liability guarantees)
- **TLPG program** created to facilitate recapitalizing of financial sector. Extremely effective.
- Huge **fiscal stimulus** package in the US aimed at job creation and economic growth.
- \$586 bln stimulus program launched in **China** designed to invest in infrastructure and stimulate bank lending.
- Unfreezing of primary **capital markets** activity concentrated in record bond market issuance.
- Fed focuses on **reducing risk aversion** by raising the cost for doing nothing (zero % short rates). Fed convinces market of “extended period”.
- Various other “**freebies**” ~ relaxation of MTM, cash for clunkers, mortgage modes, home-buyer tax credit, designed to stabilize system.
- **2009 Q4 Average VIX: 23.5**

...and the Aftermath

“Risk Aftershocks” (2010)

- **Greece** shocks market with announcement that budget deficits largely understated. Sovereign yields in Greece skyrocket.
- Televised riots in Greece coincide with violent market sell-off that becomes the **flash crash**.
- Large **risk unwind event** occurs. SPX skew hits record levels. European div swap levels plummet.
- Short covering of large positions causes long dated equity volatility to spike. **10 Year SPX variance trades at 40 !**
- **Inflation break-evens** fall fast (10 year from 2 to 1.15%), leaving market calling for more stimulus. Bernanke delivers speech at Jackson Hole paving the way for further Fed unconventional policy.
- **Sovereign risk** premia rise broadly – Ireland wins \$120bln bailout, its CDS ends year >600bps; Spain CDS nearly triples to 350bps by year end.
- **QE2 impact** on SPX vol shows up in more pronounced upward sloping termstructure.
- **2010 Q4 Average VIX: 20.1**

“Brinksmanship” (2011)

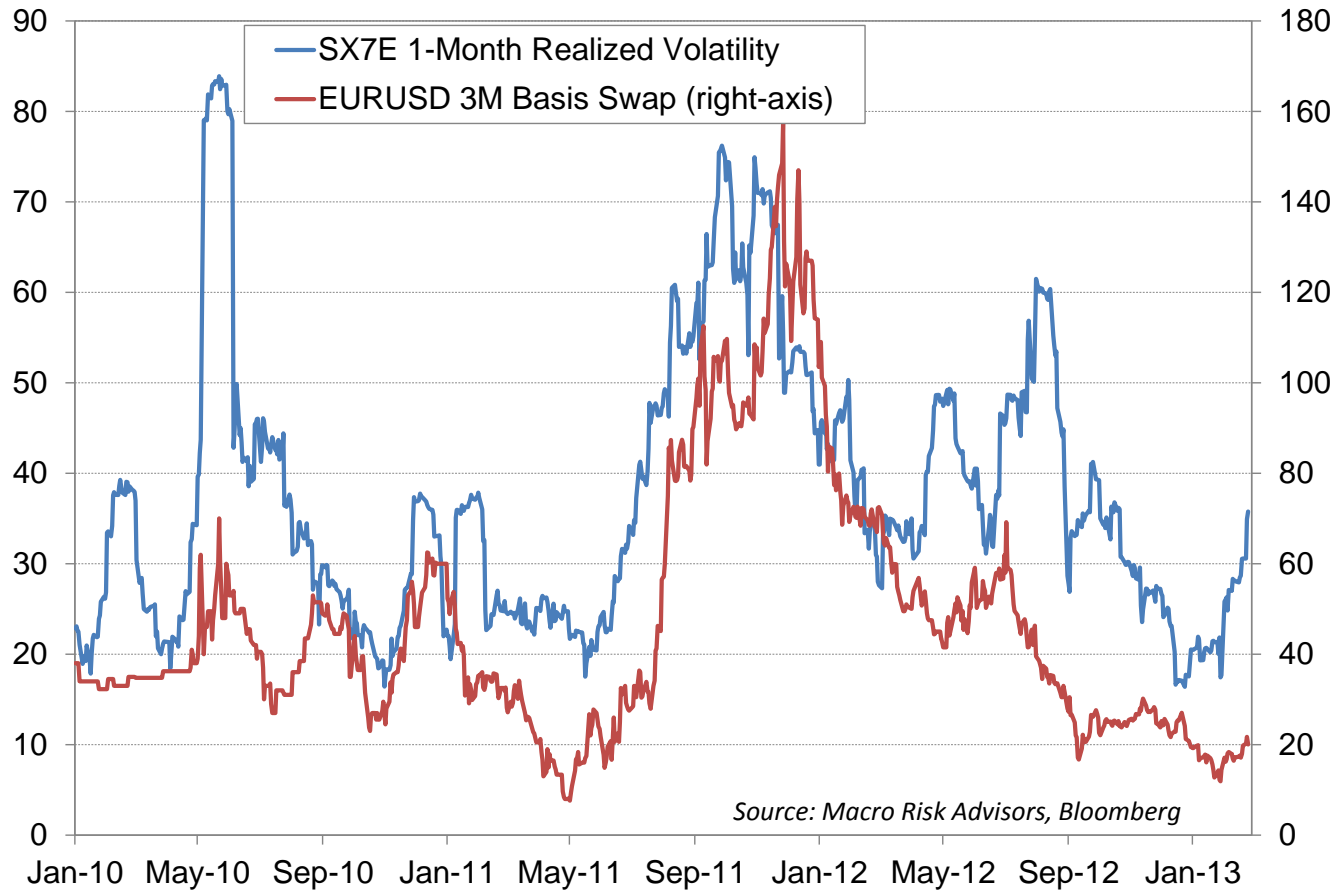
- **The Tea Party** surges in late 2010, setting the stage for political dysfunction and gridlock that culminates in the **debt ceiling crisis and US sovereign credit downgrade**.
- Mid-summer’s **surge in Italian spreads** breaches the notion of a firewall that protected larger peripherals Spain and Italy from the fate of their smaller brethren.
- Bank Stress Tests measuring sensitivity to peripheral debt haircuts and recapitalization studies ahead of the new BIS regulations cause a **European bank melt down**.
- Amid US and Eurozone chaos, a **spike in gold begets the anti-SPX trade** as the correlation between the two turns decidedly negative.
- Greece masters the art of threatening default and euro exit to extract more money and concessions, foreshadowing the region’s first **Sovereign debt restructuring (PSI)** the following year.
- **2011 Q4 Average VIX: 29.9**

...Now Leaving a Challenging Investment Climate

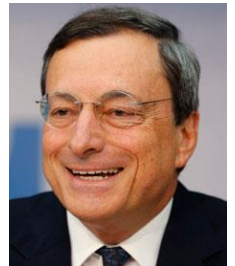
- A **Global Growth Shortfall** characterized by renewed recession in Europe and a frustratingly slow recovery in the US is the result of the post-crisis “New Normal” predicted by Pimco’s Mohamed El-Erian in 2010 – one of deleveraging, re-regulation, and de-globalization.
- The developed world is on an **Unsustainable Fiscal Path** set in motion before the crisis by over-generous social programs, and tipped into permanent imbalance as sovereigns spent stimulus money to offset declines and assumed the bubble-fueled debts of the private sector.
- A **Polarized, Ineffective US Electorate** has enabled political dysfunction to metastasize. The US fiscal imbalance constitutes a substantial threat both for its potential economic headwind as well as the negative impact it has on business and consumer sentiment. **Ratings Agencies** remain key to watch.
- There are **positive signs of economic growth**, and housing, long a source of economic drag, is on better footing. Corporate profits remain robust, supported by strong margins.
- Draghi has bought time with a more **Aggressive ECB**, but his fixes are ultimately flawed and vulnerable to the next bout of peripheral stress. The European periphery remains stuck in a **Debt Trap** with no visibility on how to restart economic growth amidst the aims of budgetary austerity.
- Asset prices are artificially inflated due to the powerful **Global Central Bank Put**, causing confusion for investors in their attempts to judge the true state of the economy and the value of assets. Equities are often deemed attractive only in the context of comparison to US treasuries.
- **Very Difficult Carry Conditions** have punished long volatility strategies and produced a desperate search for yield. A frothy high yield bond market has enabled risky issuers to turn covenant-lite and use proceeds to pay dividends to private equity holders.
- The battle **between Deflationary Forces and the Reflationary Policies** of Central Banks continues leaving investors with few safe alternatives on the investment landscape.

In Europe, Stress Indicators are Considerably More Benign...

SX7E 1m Realized Vol and EURUSD 3m Basis Swap



I will save the euro!



But the Economic Weakness is Troubling

Countries	GDP			Debt / GDP		Deficit / GDP		Unemployment Rate
	% EZ GDP	2012 Growth	2013 Growth	2012	2013	2012	2013	
Portugal	1.7%	-3.2%	-2.1%	119%	124%	5.0%	4.9%	16.9%
Spain	10.9%	-1.4%	-1.5%	91%	97%	8.0%	6.0%	26.0%
Ireland	1.7%	0.1%	1.0%	118%	119%	8.5%	7.5%	14.1%
Greece	1.9%	-6.4%	-4.3%	171%	182%	7.3%	5.9%	24.8%
Italy	16.4%	-2.2%	-0.9%	126%	128%	2.9%	2.1%	11.2%
Germany	28.1%	0.7%	0.8%	83%	82%	0.0%	0.3%	6.8%
France	21.4%	0.0%	0.2%	90%	92%	4.6%	3.5%	10.3%
Belgium	4.0%	-0.2%	0.2%	99%	99%	3.0%	2.7%	7.5%
UK	N/A	0.2%	1.0%	89%	93%	6.5%	6.3%	7.8%
Switzerland	N/A	0.9%	1.2%	47%	46%	-0.7%	0.5%	3.4%
EZ GDP Wgt Avg*		-0.6%	-0.2%	98%	100%	3.3%	2.6%	11.7%
PIGS Avg**		-2.7%	-1.7%	125%	130%	7.2%	6.1%	20.5%

*GDP Weighted Average of EZ Countries Displayed

**unweighted Average of PIGS (Portugal, Ireland, Greece, Spain)

Source: Bloomberg, IMF

We will be just fine !



...and Solvency Hurdles are Formidable

Country	Primary Budget Balance solvency hurdle (S)	Cost of 10-year debt (r)	Nominal GDP Growth 2013 (g) ¹	Debt to GDP 2013 (D) ²	Primary Balance 2013 ³	Solvency Gap
Portugal	8.9%	6.2%	-1.0%	124%	-0.5%	9.4%
Spain	4.6%	5.1%	0.3%	97%	-3.2%	7.8%
Ireland	1.4%	3.5%	2.3%	119%	-2.4%	3.8%
Greece	30.0%	10.9%	-5.6%	182%	0.0%	30.0%
Italy	5.2%	4.8%	0.7%	128%	3.2%	2.0%
Germany	-0.5%	1.4%	2.0%	82%	2.2%	-2.7%
France	0.6%	2.2%	1.6%	92%	-1.2%	1.8%
Belgium	0.1%	2.3%	2.2%	99%	0.3%	-0.2%
UK	-1.5%	2.0%	3.6%	93%	-4.3%	2.8%
Japan	-1.0%	0.7%	1.1%	245%	-6.9%	5.9%

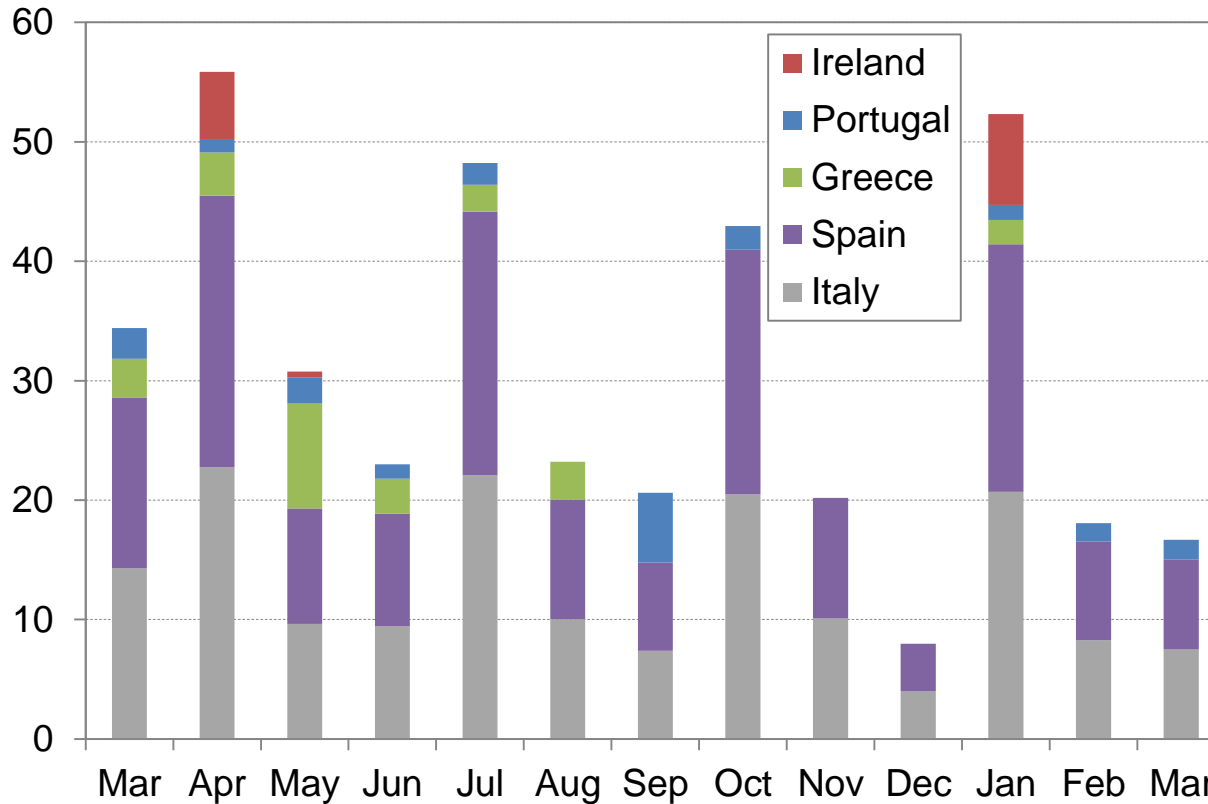
Send me money!



Source: Macro Risk Advisors, Bloomberg, IMF, Eurostat

...With Lots of Debt to Still Roll-over....

PIIGS Debt Maturity Profile (€ blns)



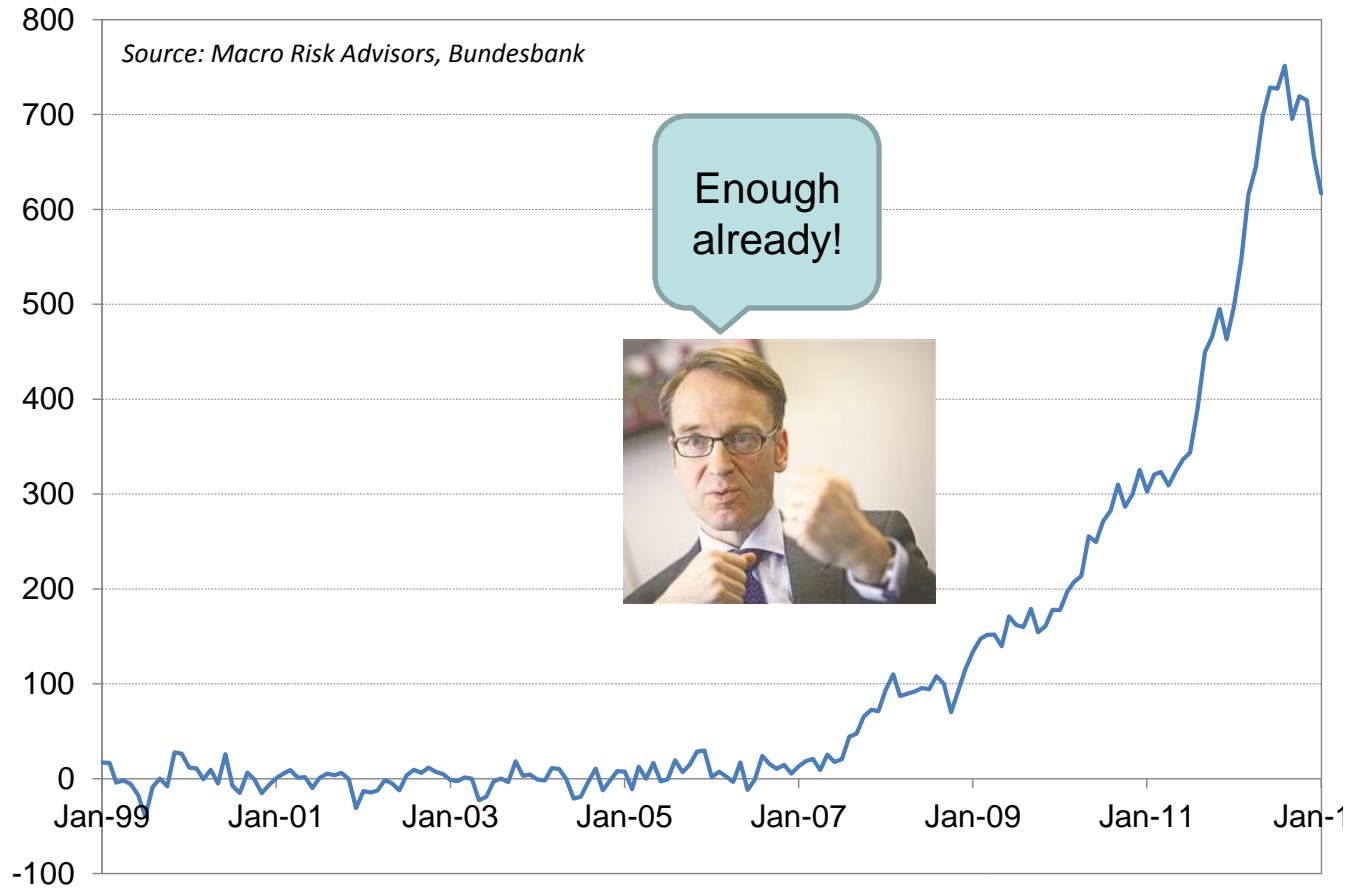
Source: Macro Risk Advisors, Bloomberg

I see no reason why the banks can't buy this debt



Creating Instability in the Overall System...

Bundesbank Target2 Claims (EUR bln)

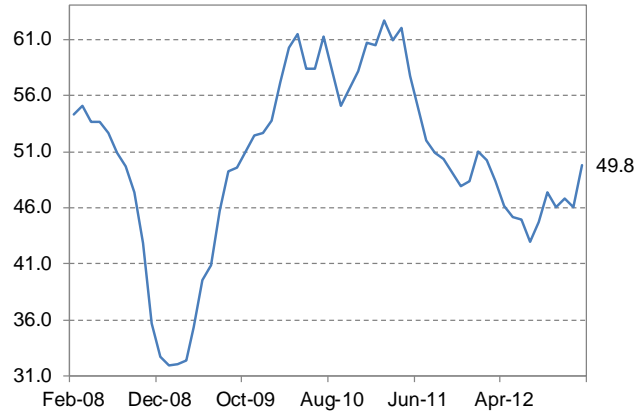


Outside Europe, Things Have Slowly Improved

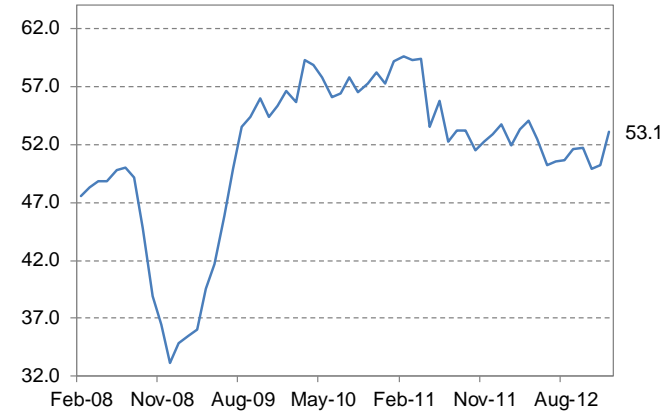
There will be no eurobonds!



Germany PMI



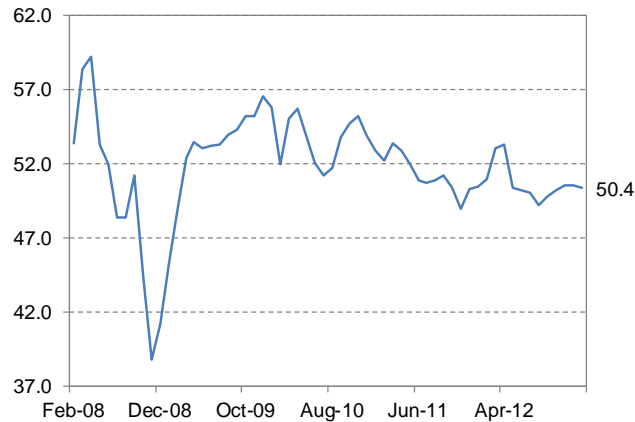
US PMI



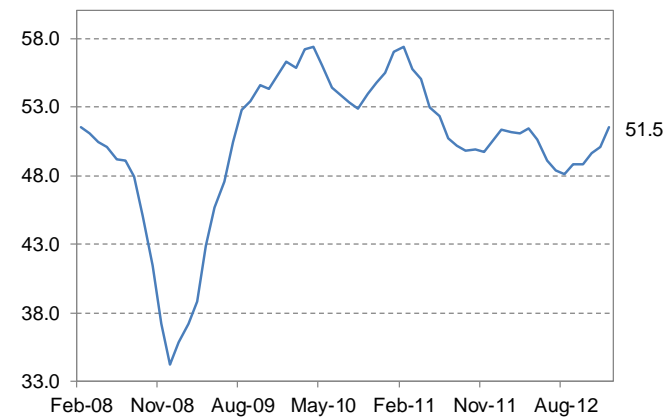
We wouldn't buy them anyway...



China PMI



JPM Global PMI Index



But Global Monetary Policy is Ultra Stimulative...

	Money Supply Broadest YoY%%	Money Supply Narrow YoY %	LIBOR 3M	Central Bank Rate	10Y Govt Yield
Americas					
Brazil	14.85%	10.37%		7.25%	
Canada	5.18%	7.47%	1.19%	1.00%	1.85%
Mexico	14.50%	9.40%		4.50%	5.09%
US	7.50%	11.80%	0.29%	0.25%	1.88%
Europe/Africa/ME					
Eurozone (Germany)	3.50%	6.50%	0.13%	0.75%	1.45%
South Africa	5.17%		5.08%	5.00%	6.72%
Sweden	1.93%	-4.60%	1.22%	1.00%	1.87%
Switzerland	9.23%	51.00%	0.02%	0.00%	0.71%
Turkey			5.64%	4.50%	
UK	-1.00%	4.00%	0.51%	0.50%	1.96%
Asia/Pacific					
Australia	7.12%		3.17%	3.00%	3.34%
China	15.90%	4.40%	3.89%	6.00%	3.60%
India	12.70%	7.62%	9.34%	6.75%	7.80%
Japan	2.30%	3.50%	0.16%	0.09%	0.67%
Russia	11.90%	7.00%	7.00%	8.25%	7.10%

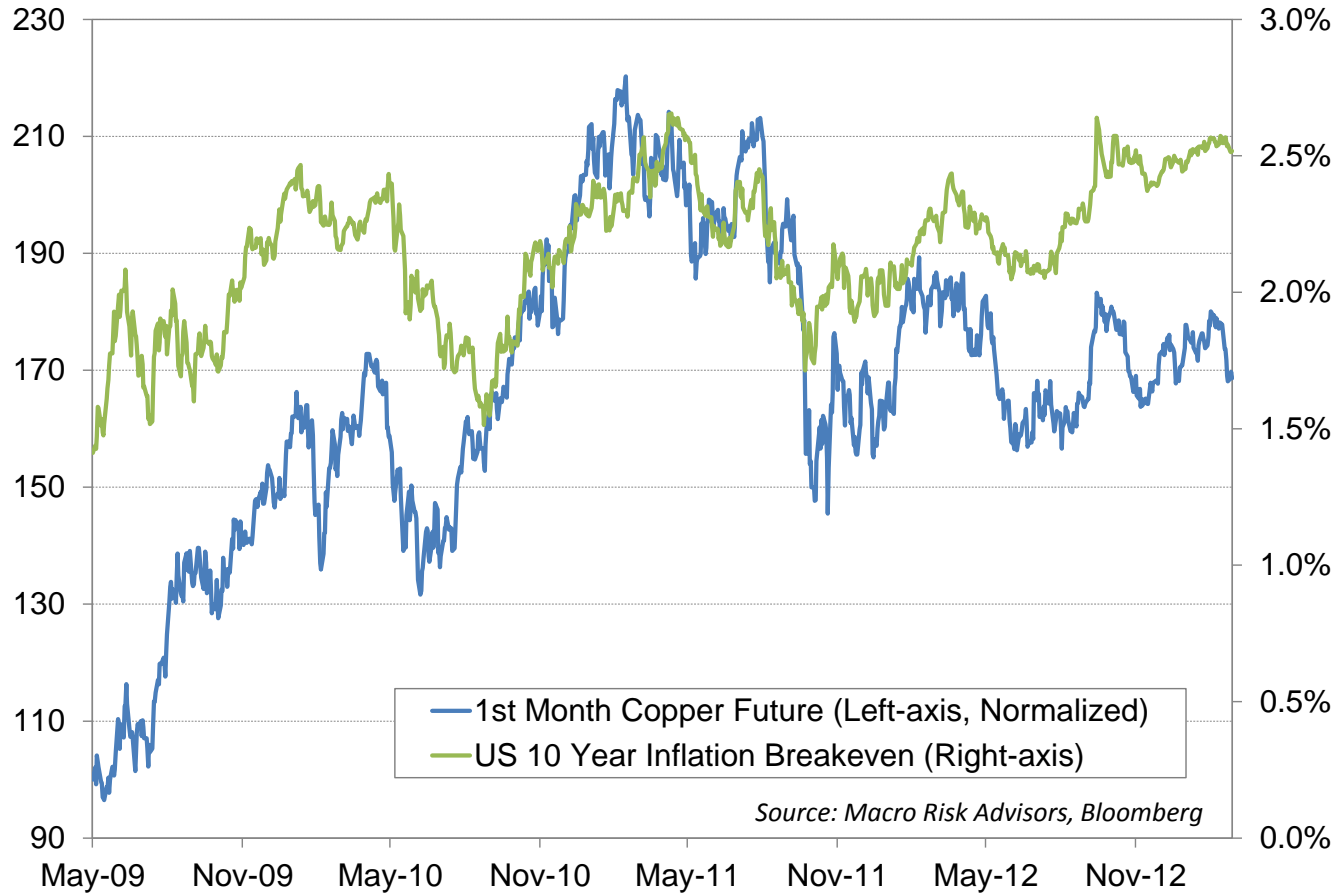
Yes, rates can go negative



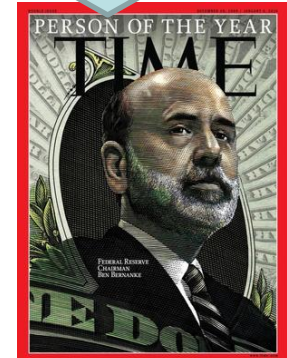
* Color Gradient depicts range across each metric (Green for highest, Red for lowest)

In the US, Big Ben is Hard at Work....

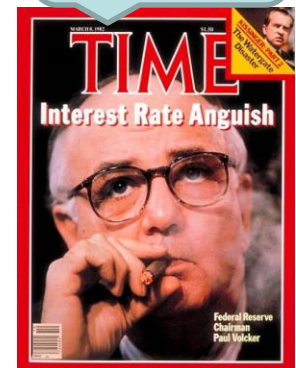
Copper and US Inflation Breakevens



I'm the man...



What is he doing?

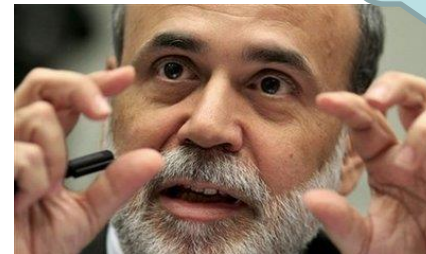


...Providing Investors with Free Puts...

SPX realized since 02/27/2012		
Realized Vol	13.0%	
Realized Vol Up days	13.4%	
Realized Vol Down days	12.7%	
Realized Vol Up-Down	0.7%	
Realized Vol Up/Down	1.06	
# days	251	
# up days	130	52%
# down days	121	48%
# up days (> 1%)	28	11%
# down days (< -1%)	24	10%
# up days (> 1.5%)	14	6%
# down days (< -1.5%)	10	4%
# up days (> 2%)	4	2%
# down days (< -2%)	3	1%

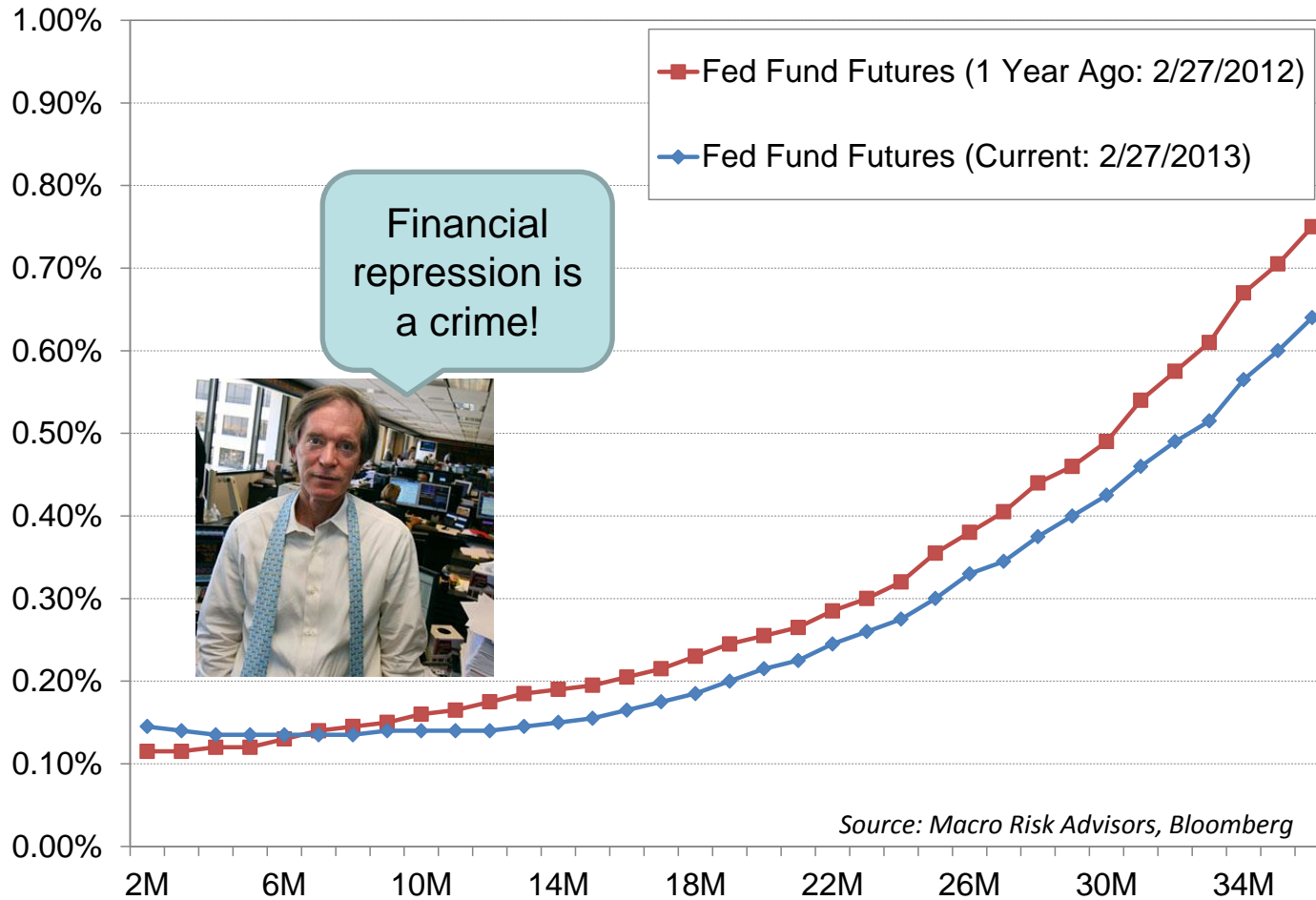
Market is less volatile on the way down than on the way up! Thanks Ben!

I will make realized vol this small!



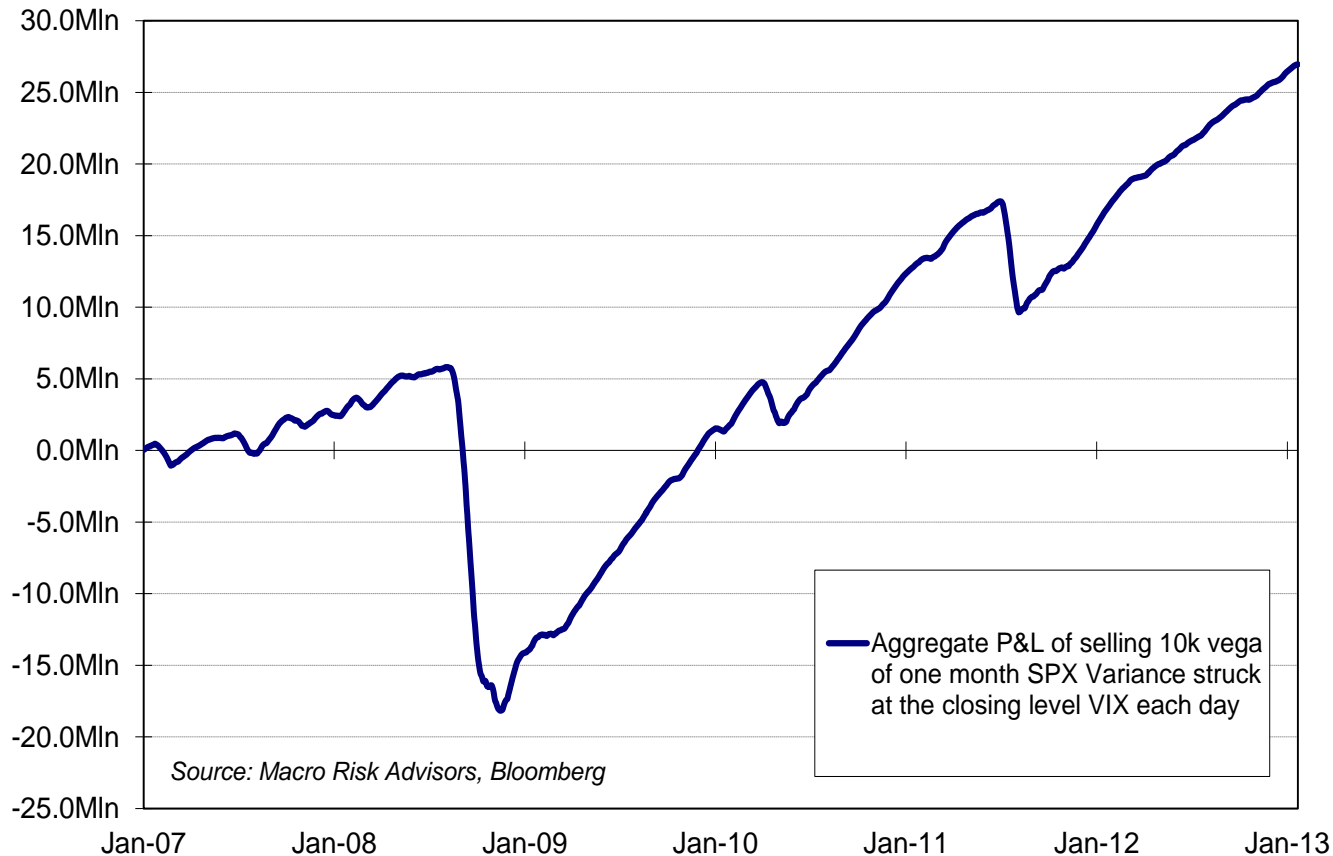
And Turning Cash into Trash...

Fed Fund Futures Curve



...Forcing Investors Back into Carry

Aggregate P/L of Selling One Month SPX Variance



I was right !
Just early...



...and Crunching Risk Premiums Across Asset Classes

RISK MEASURES		Min / Median / Max (last 2 Years)						
(Source: Macro Risk Advisors, Bloomberg)		■ - 1m ago		■ - current level		- Median		
	Close	5d chg	1m chg	6m chg	Min		Max	%-tile
US Equities								
SPX 3m IV	13.0	0.2	0.5	-3.8	11.7		36.7	4%
SPX 12m IV	15.6	0.2	0.4	-5.8	15.0		32.7	4%
International Equities								
EFA 3m IV (World)	15.8	1.7	1.6	-7.1	13.5		46.8	5%
EEM 3m IV (EM)	15.7	1.2	-1.1	-9.0	14.3		52.9	1%
FXI 3m IV (China)	20.1	0.7	0.6	-3.3	19.0		52.7	5%
Equity Correlation								
SPX top 50 3m R-Corr	34.9	5.1	-2.5	-20.8	24.7		94.3	11%
SPX top 50 3m I-Corr	45.0	-3.2	-3.7	-17.0	40.9		90.0	2%
Commodities								
GLD 3m IV	13.8	-1.0	0.5	-4.0	12.4		34.1	12%
USO 3m IV (WTI Crude)	23.9	1.8	1.6	-8.0	19.3		52.6	4%
FX Volatility								
EUR 1m IV	9.4	1.0	1.9	-0.6	6.7		17.7	35%
EURJPY 1m IV	16.7	2.0	2.8	5.3	9.4		20.3	94%
CDS Spreads								
CDX IG 5Y	87	-0	1	-15	83		151	6%
ITR EUR 5Y	117	6	6	-35	94		208	27%
Funding Spreads (bps)								
LIBOR - OIS spread	14.5	-0.1	-2.5	-15.2	12		50	8%
EURIBOR-EONIA spread	12.8	0.7	1.7	-8.2	9		103	18%
EURUSD 3m basis swap	-19.5	-2.4	-5.2	7.8	-8		-158	15%
Breakeven Inflation								
US 5Y Inflation BE	2.29	-0.0	0.0	0.3	2.5		1.4	10%
Japan 5Y Inflation BE	1.28	0.1	0.4	0.6	1.3		-1.0	0%
UK 5Y Inflation BE	3.00	-0.1	0.2	0.8	3.1		2.0	1%



Yield Pledge® Money Market

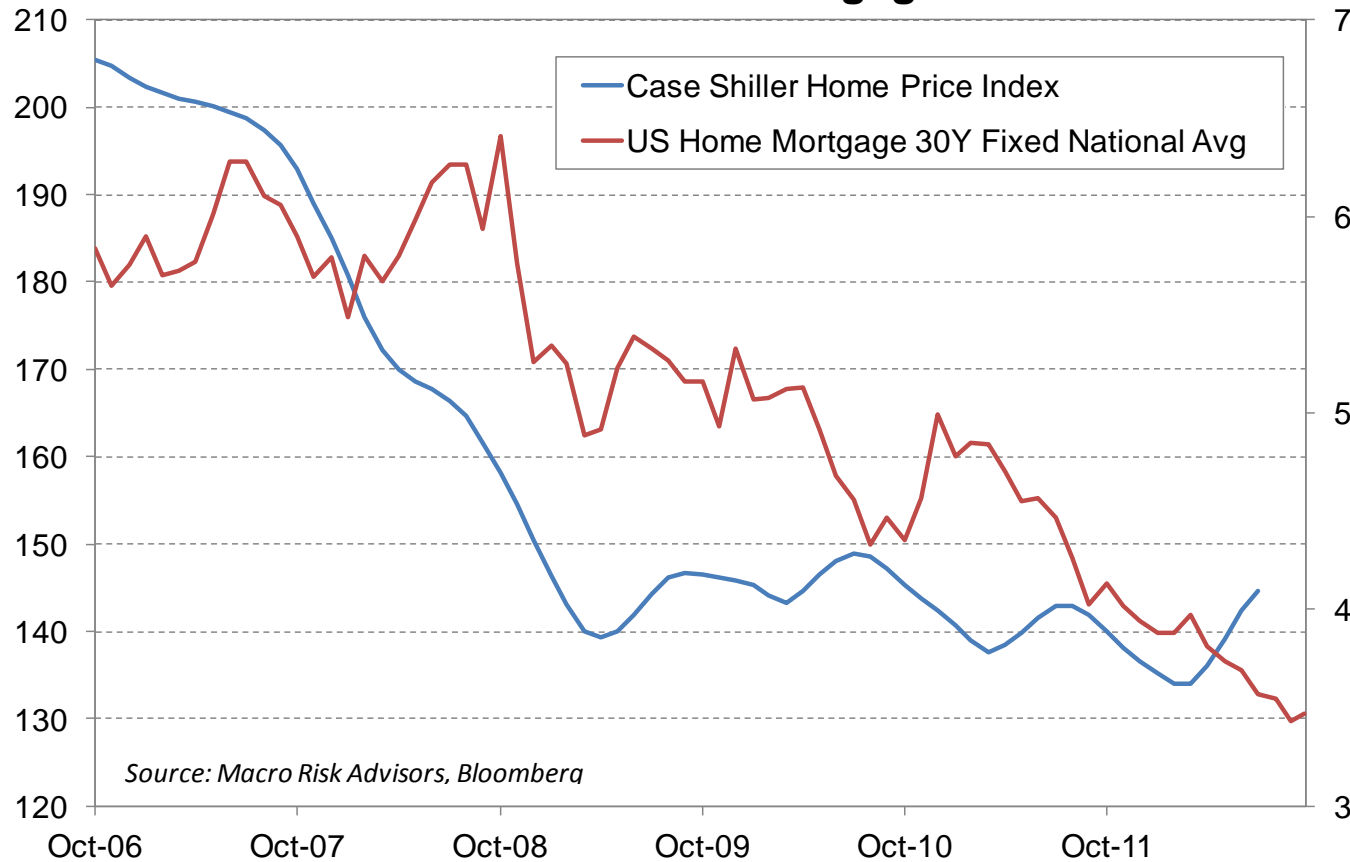
1.25% | **1.01%**

6-month bonus rate¹ | 1st-year APY up to \$50K¹

At this rate, you will *never* look at another bank again.

For the Economy, Housing Fundamentals are Improving...

US Case Shiller Home Prices and 30Y Fixed Rate Mortgage



It's a great time to buy!

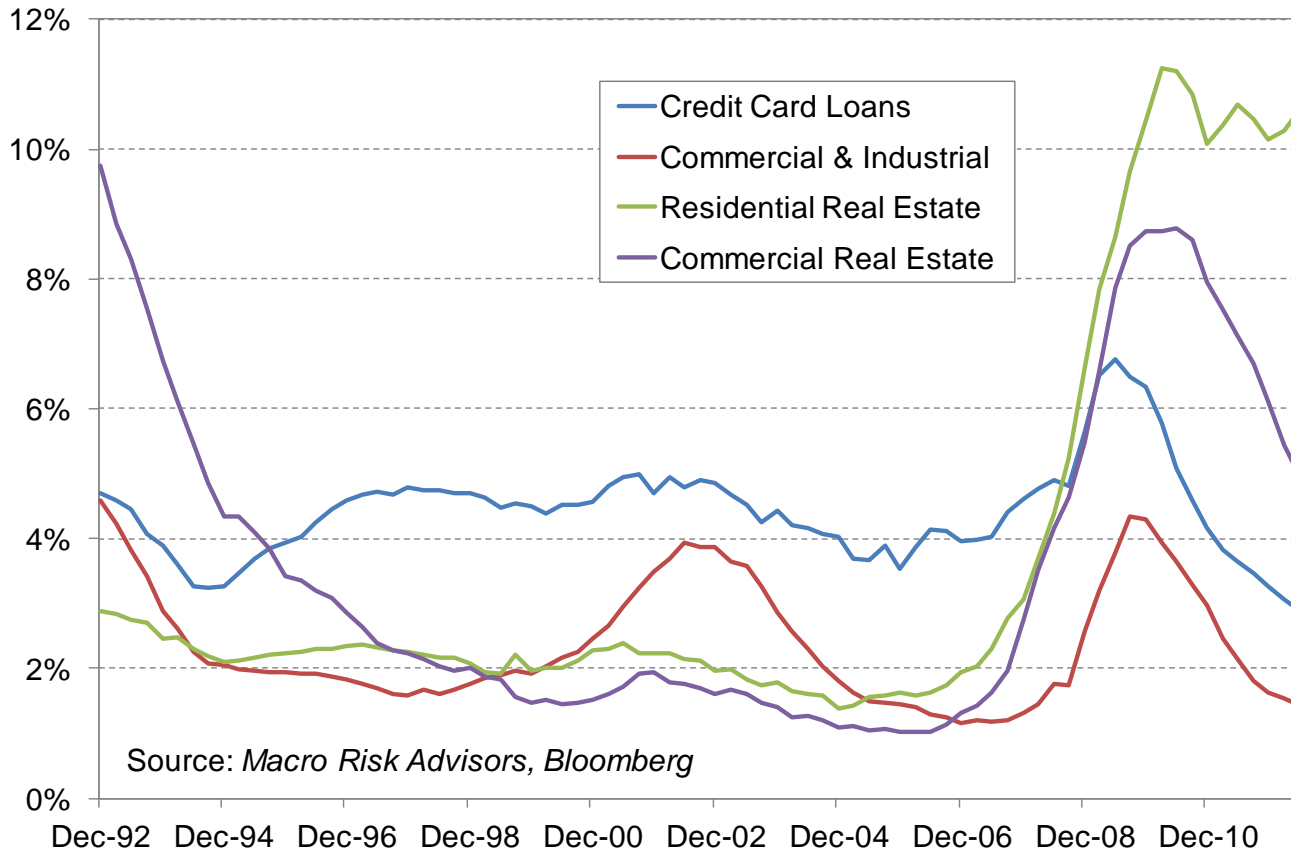


Can I get an FOA loan?



...Leaving Bank Portfolios Breathing Easier...

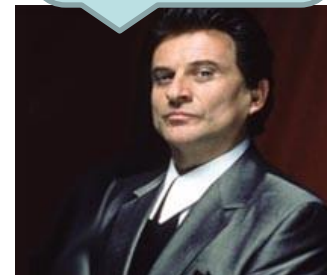
Delinquency Stats - All Banks



This helps me fund CIO losses...

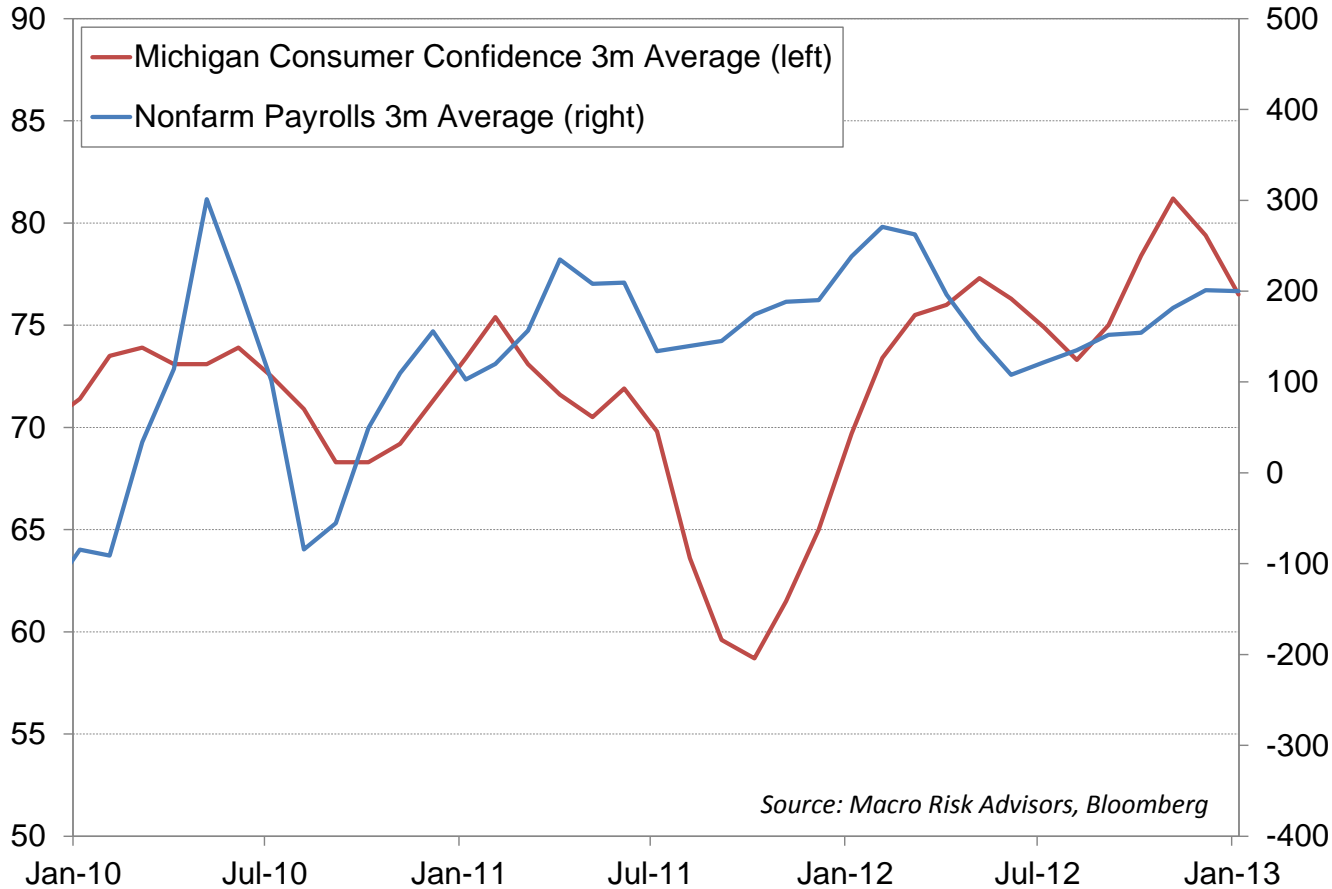


I'll get your money back



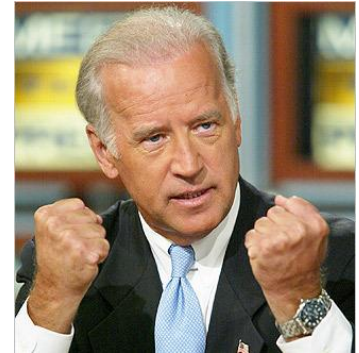
Payrolls and Confidence on Better Footing...

Michigan Consumer Confidence and Nonfarm Payrolls



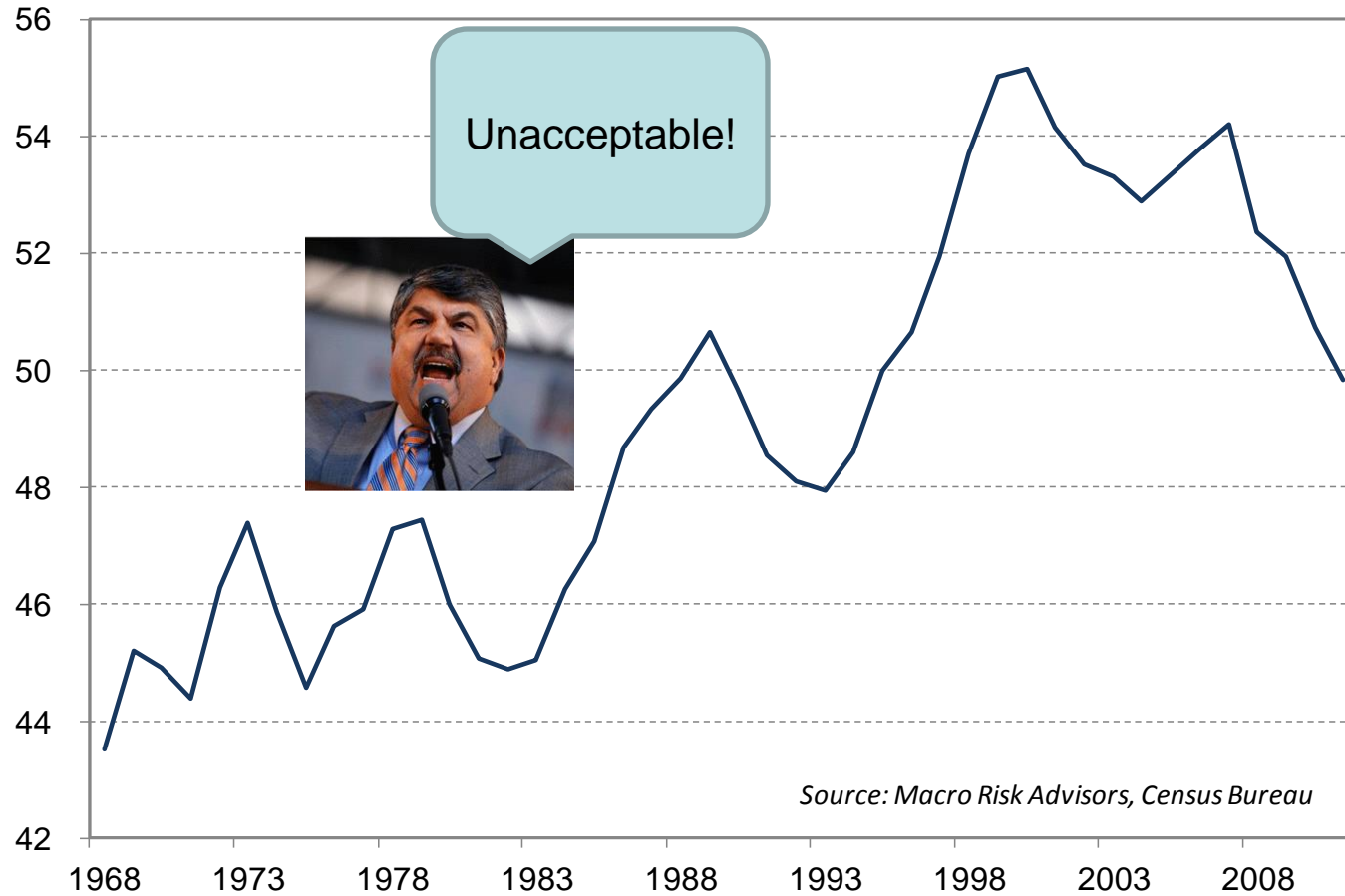
Source: Macro Risk Advisors, Bloomberg

Stay the course!

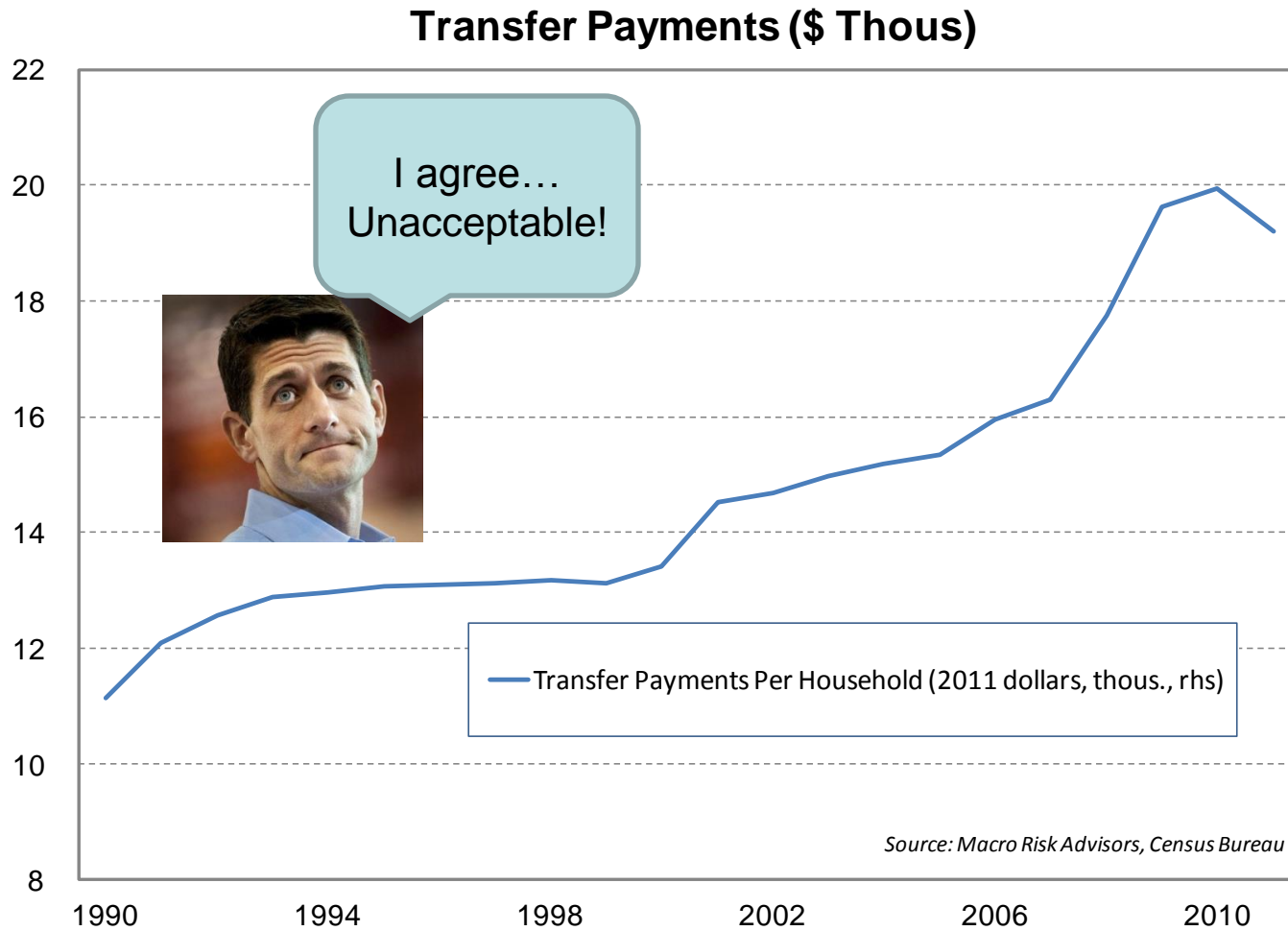


But Income Growth has Stagnated...

Median Household Real Income (2011 dollars, thous.)

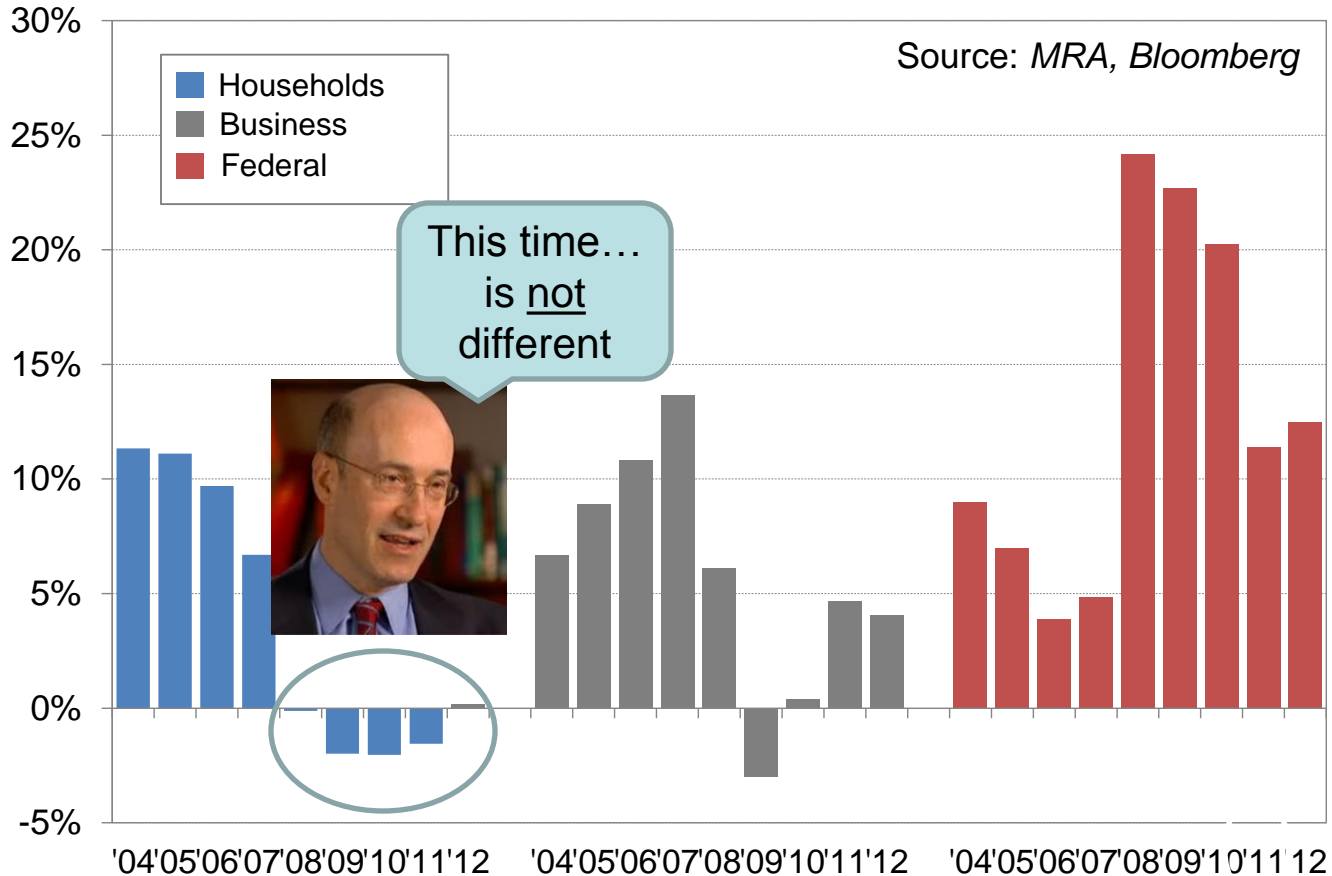


Offset by a Larger Safety Net...

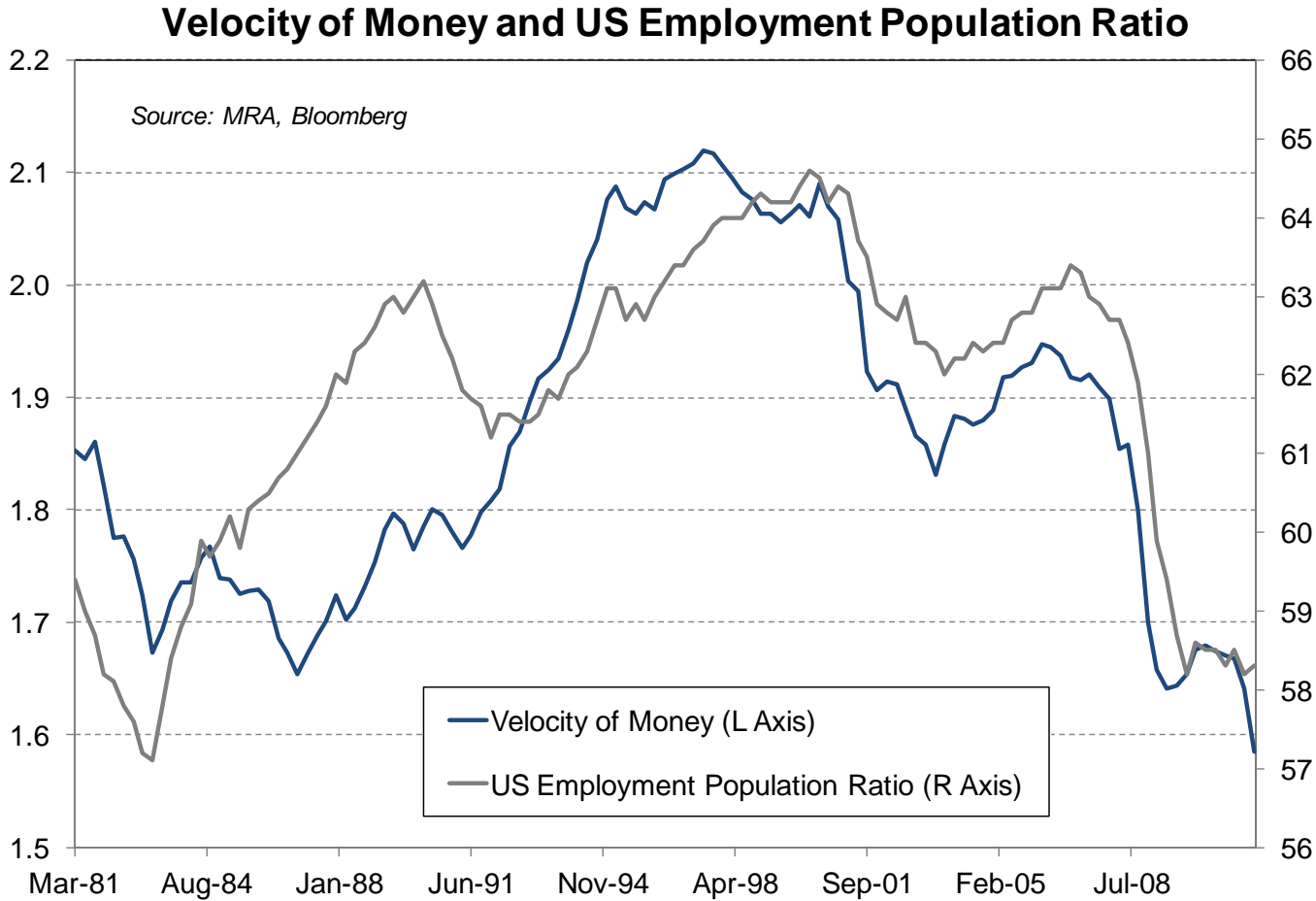


But Balance Sheets Remain a Headwind...

Growth of Domestic Nonfinancial Debt



...and the Velocity of Money is Less Powerful...



MV=PQ?



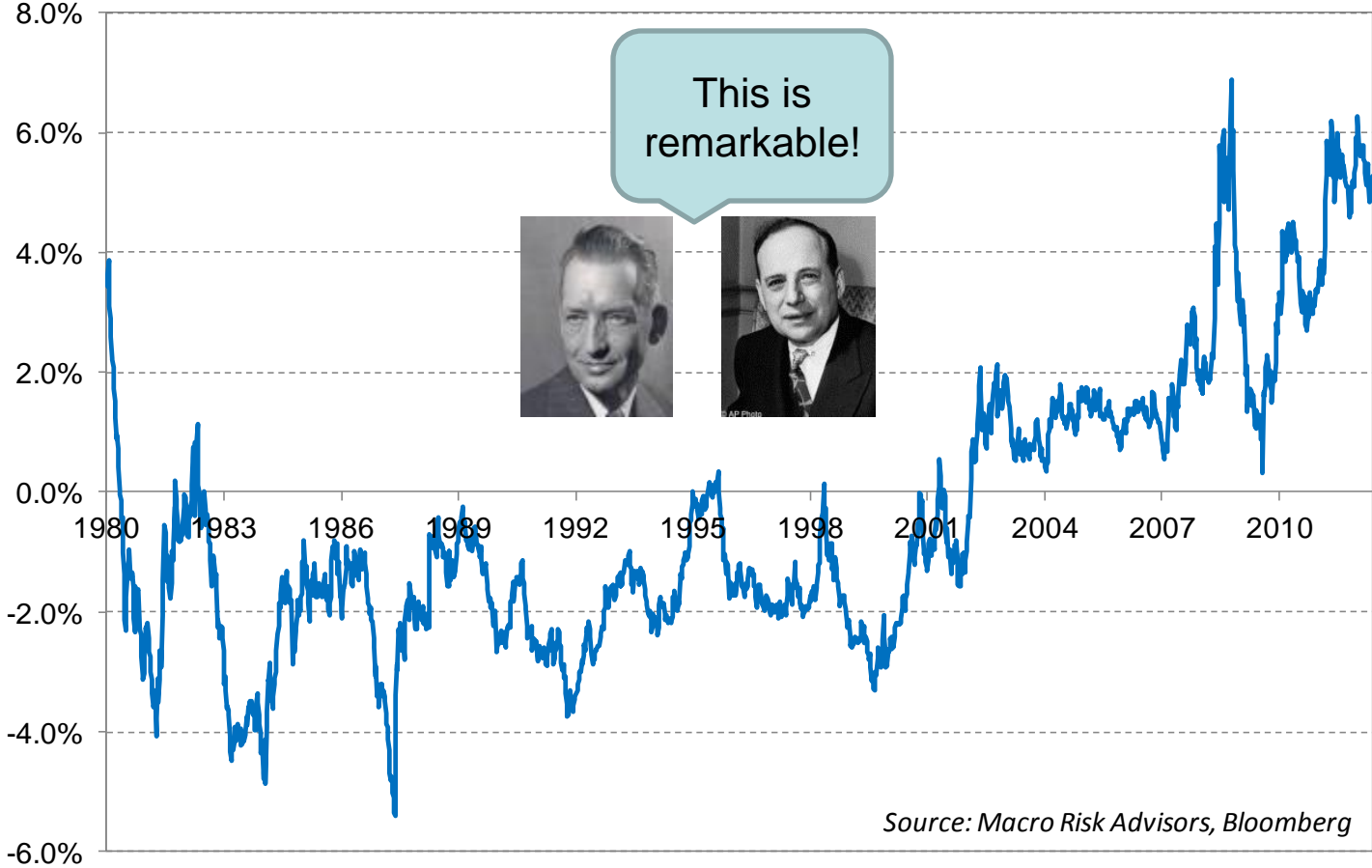
...But (Shocker Alert) the Street is Constructive on Earnings

Firm	EPS '12 Forecast at end 2011	EPS '13 Current Forecast
Bank of America	104.5	110
Bank of Montreal	102	106.25
Barclays	103	105
Citigroup	101	110
Credit Suisse		104.9
Deutsche Bank	106	108
Goldman Sachs	100	107
JPMorgan	105	110
Morgan Stanley	103.2	98.71
Oppenheimer	101	108
RBC	101	106
Stifel Nicolaus		113
UBS	99	108
Weeden		103
Wells Fargo	101.99	103
Average	102.31	106.72



And Equity Fundamentals are Relatively Attractive...

SPX Earnings Yield - 10-yr Yield



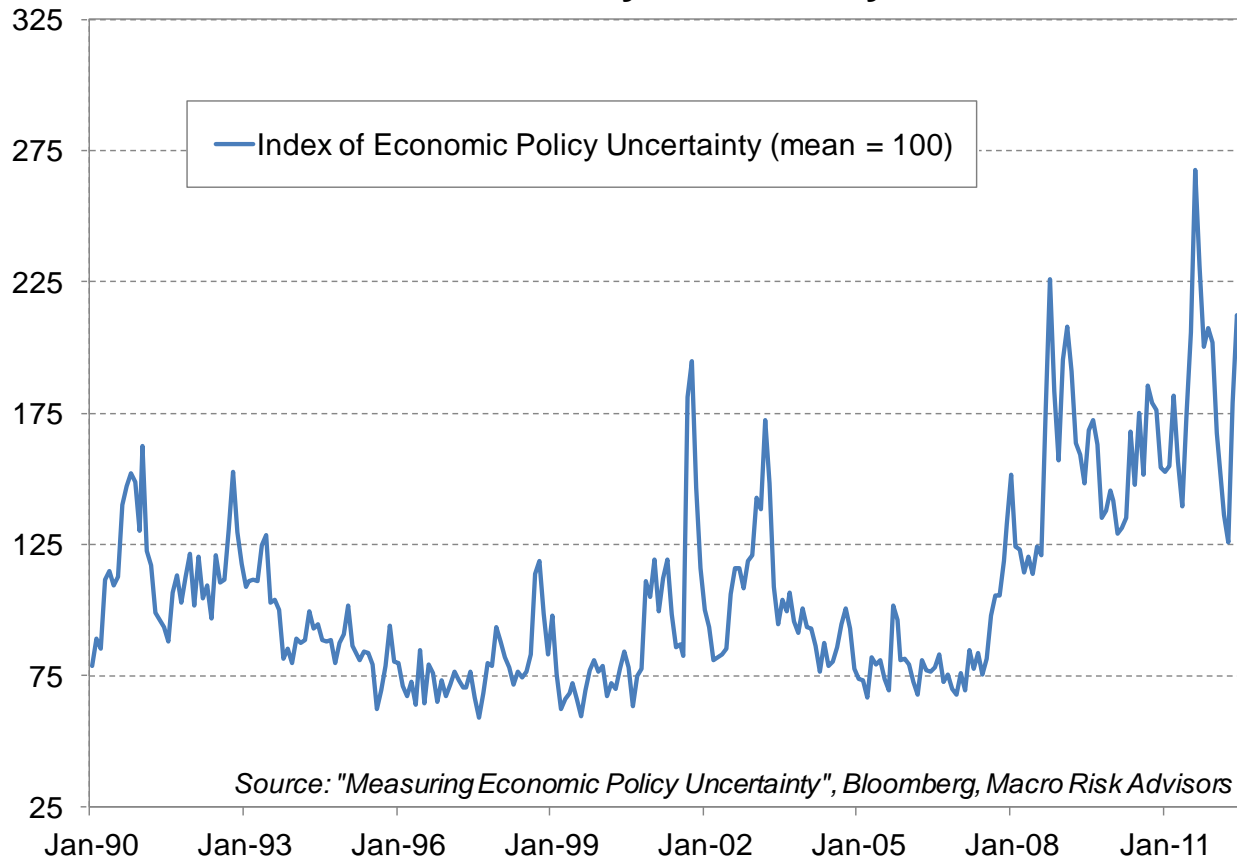
...and Can Record Margins Continue?



Source: NIPA, Flow of Funds As of 9/30/11

Policy Uncertainty Also Matters...

Economic Policy Uncertainty Index



More Spending!

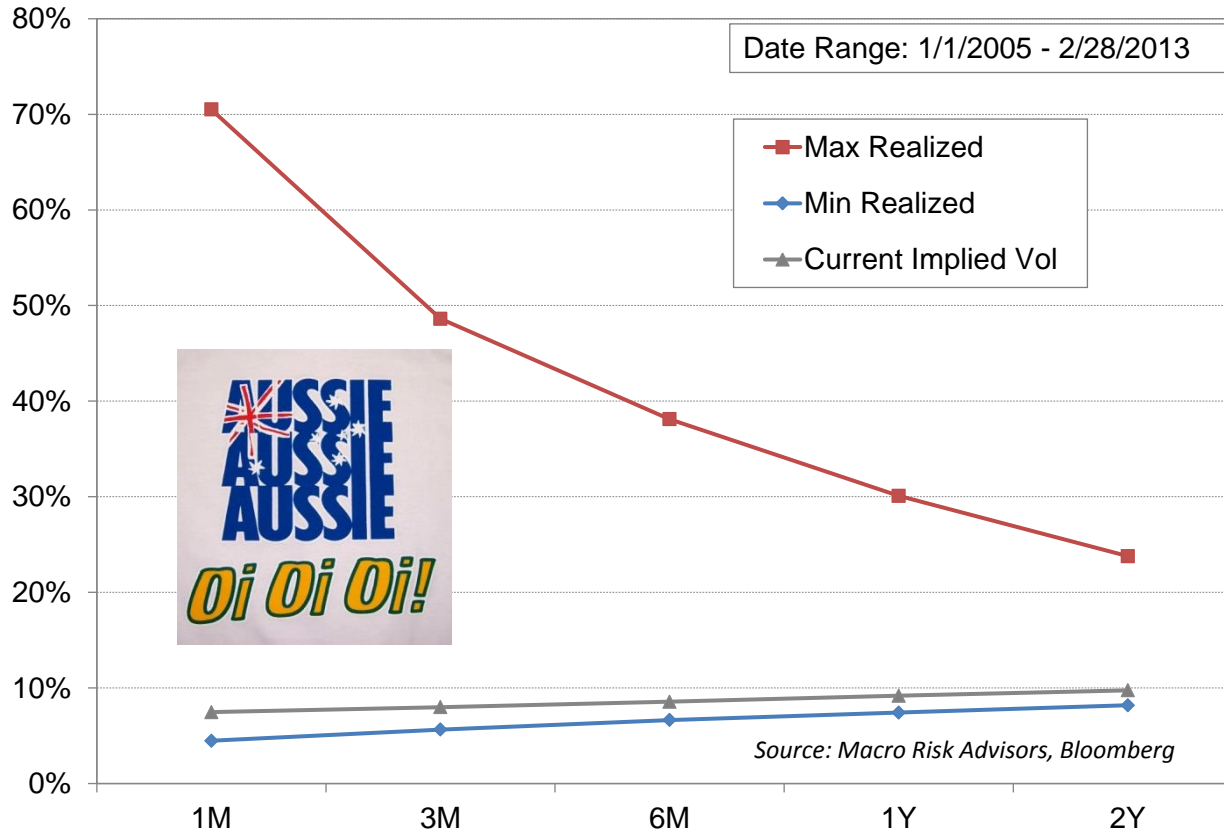


No taxes!



Land Down Under for Value in Vol ?

AUD FX Realized Volatility Cone



Attractiveness of Aussie *Put Reapers*

- ✓ Low Implied vol
- ✓ Small spread to realized
- ✓ Flat skew
- ✓ Flat termstructure
- ✓ High SPX correlation
- ✓ Good macro risk story

*In a put reaper, an investor sells one downside put and buys two or more further downside puts. The structure has strong convexity characteristics, especially to a down move.

France and Germany Head to Head

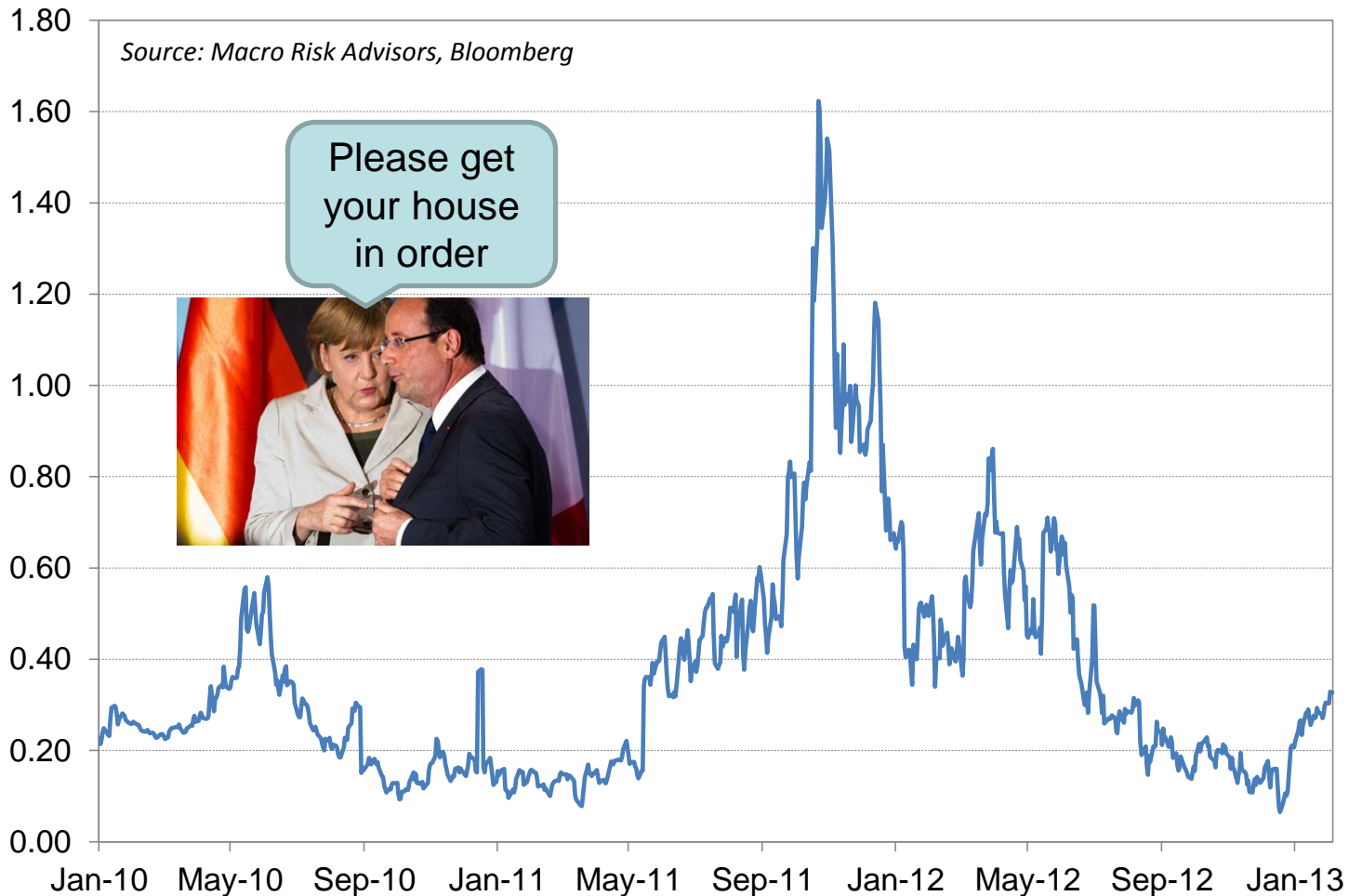
	Germany	France
Expected 2013 GDP Growth	0.8%	0.2%
Expected 2013 GDP Relative to 2007	+ 4.1%	+ 0.1%
Government Debt to GDP	82%	92%
Total Debt to GDP (Govt, Household, Fncl & Non-fncl firms)	302%	463%
Government Spending % of GDP	45%	57%
Expected 2013 Budget Balance	-0.2%	-3.5%
Expected 2013 Current Account Balance	6.1%	-1.9%
Unemployment Rate	6.9%	10.3%
Unit Labor Costs, 1999 = 100%	103%	127%
Retirement Age in 2007	65	62
Retirement Age Today	67	60
Retirement Age in 2015	69	??
Public Pensions Liability (Off Balance Sheet)	Small	Large
10-year Government Bond Yield	1.5%	2.2%

Source: Macro Risk Advisors, Bloomberg



Or Perhaps Using Bond Spreads as Options...

France - Germany 3Y Yield Spread

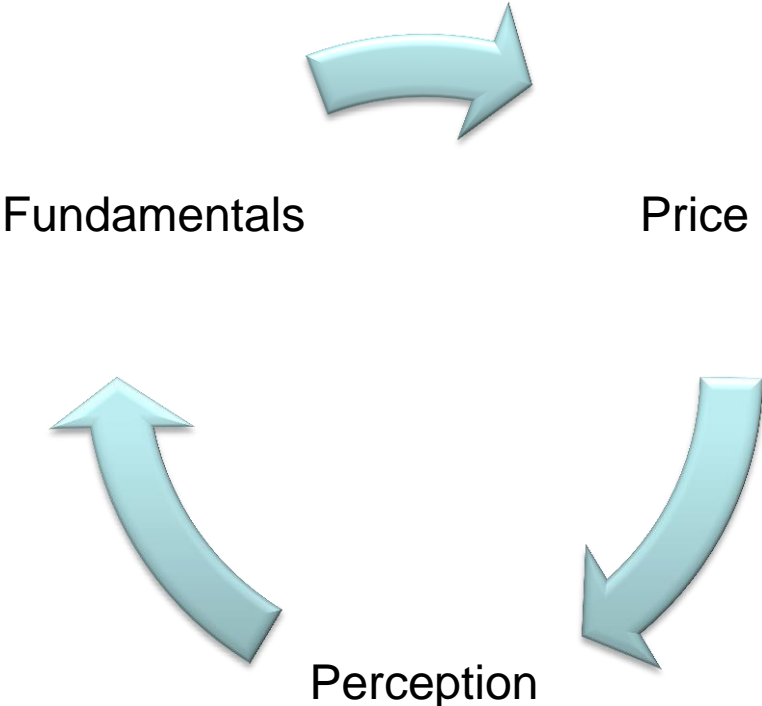


...Or Just Stick with the Widow Maker...

US 2Y10Y Swaption Implied Vol and 10Y Real Rate



What Comes Next? Market Prices Shape Future Outcomes...



THANK YOU !

Notes

Notes

