

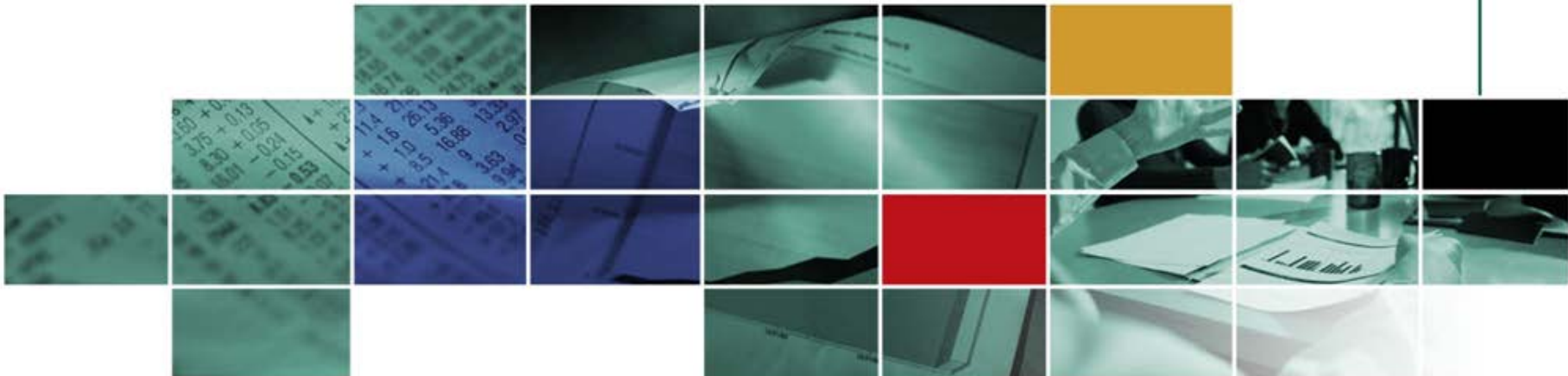
RVKuhns

▶▶▶ & ASSOCIATES, INC.

Navigating the Current Economic Environment — Challenges Facing Institutional Investors

Texas Municipal Retirement System

October 8, 2012





RVK Consulting Team

Texas Municipal Retirement System



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The RVK consulting team approach enables the System to leverage the diverse capabilities of our entire firm.



Institutional Investing

- ▶ *“The only people who think successfully managing a \$20+ billion dollar fund is easy..... are those who have never had to actually do it”*



The Challenges Facing Institutional Investors – Including TMRS

“Not Since the Days of Stagflation”

- ▶ **Not since the stagflation of the 1970’s have institutional investors faced such daunting challenges**

Period	Performance		US Government Debt/GDP	
	S&P 500 Index	Barclays US Agg Index*	Beginning of Period	End of Period
Jan 1973 - Dec 1978	0.91%	5.64%	37.10%	35.00%

*1973-1975 consists of Barclays US Gov/Credit Index

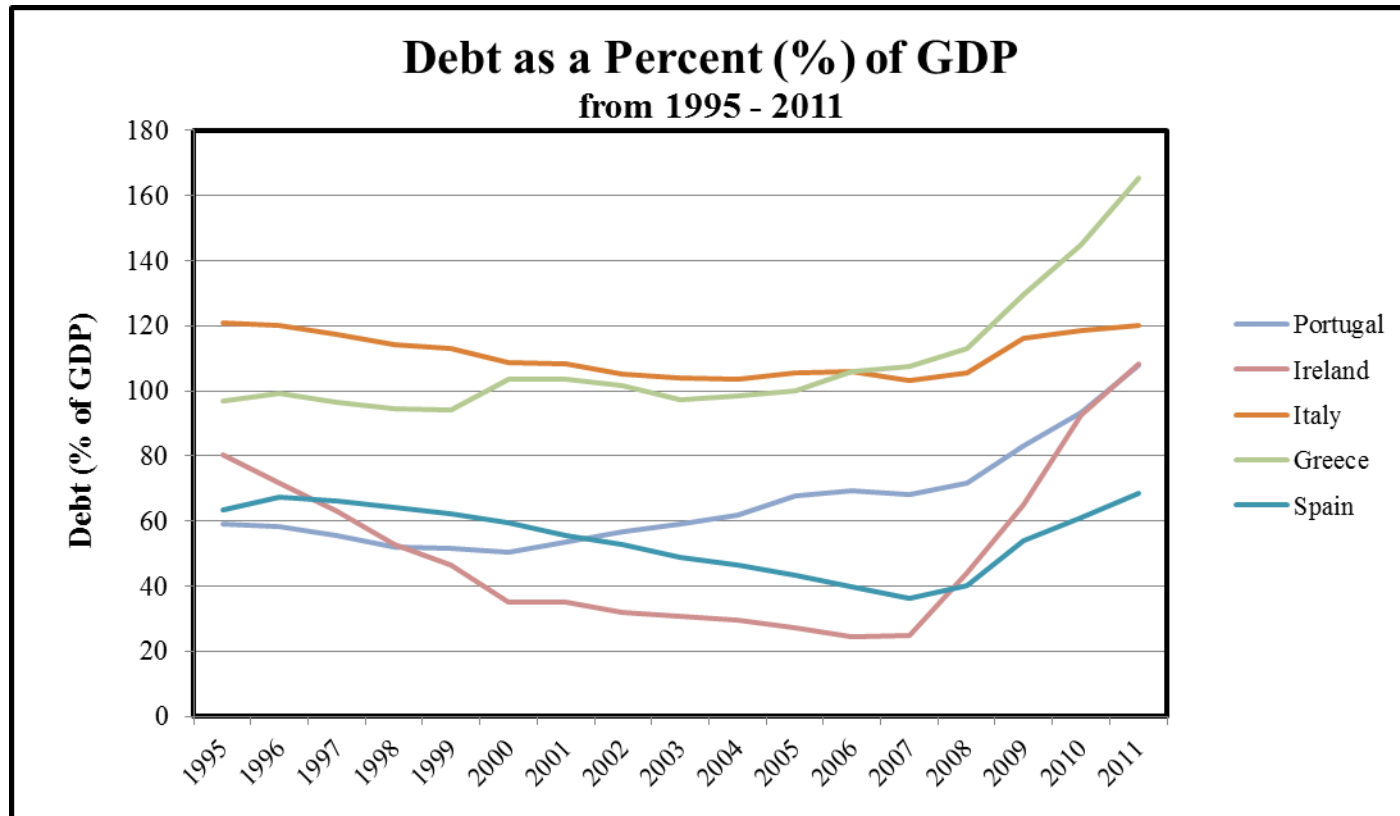
Period	Performance		US Government Debt/GDP	
	S&P 500 Index	Barclays US Agg Index	Beginning of Period	End of Period
Jan 2000 - Aug 2012	1.53%	6.44%	57.30%	104.80%

Total federal debt—also known as gross debt—is the amount of the federal government's outstanding debt issued by the Treasury and other federal government agencies. 2012 estimate of \$16.35 trillion.

Challenge #1 – Debt

Too Much Debt --- Everywhere

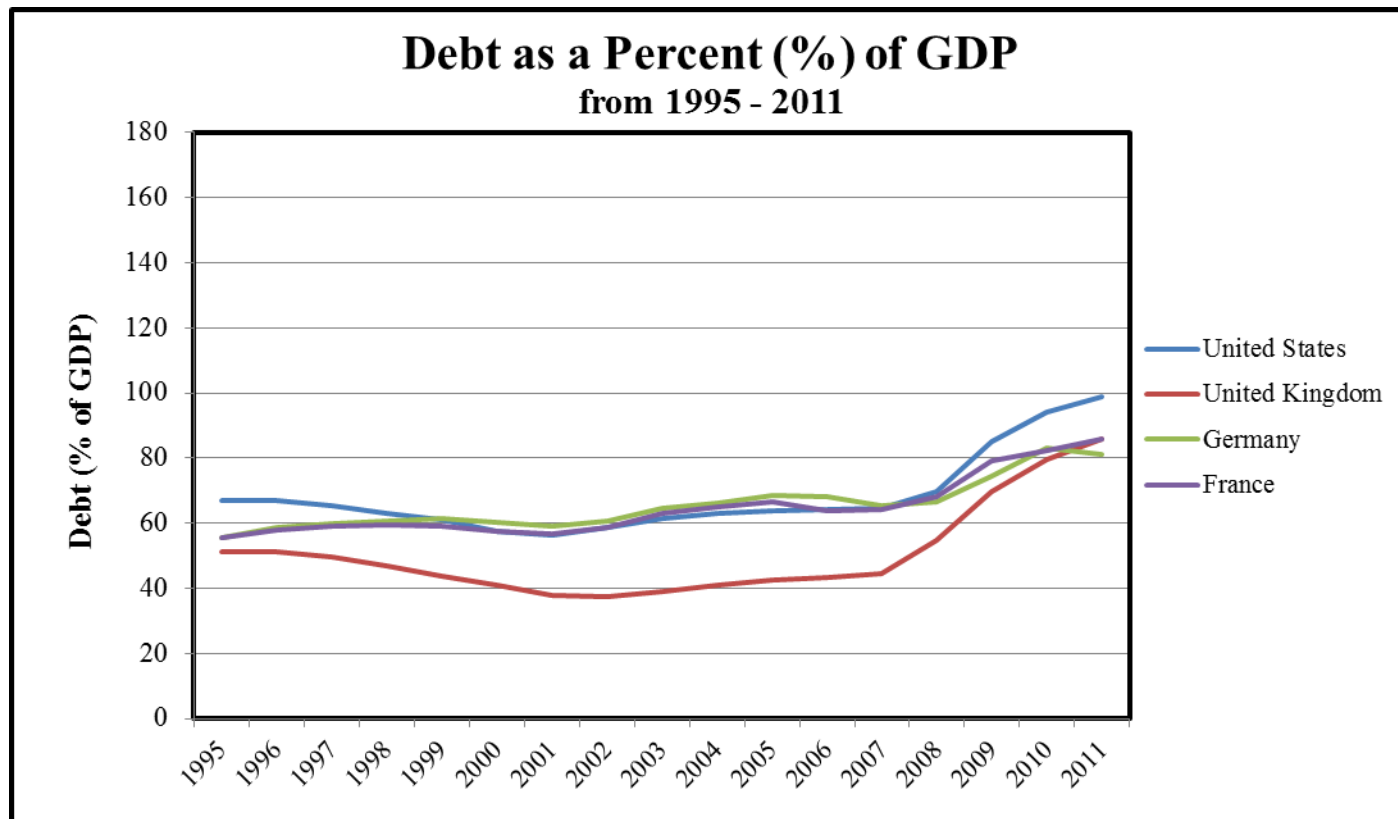
- ▶ Debt as a percentage of Gross Domestic Product (GDP) has been rising to high levels for European countries with generally weaker economies (recently labeled the “PIIGS”)



Challenge #1 – Debt

We Mean Too Much Debt --- Everywhere

- ▶ However, other developed countries have also seen their debt as a percentage of GDP increase since the financial crisis of 2008

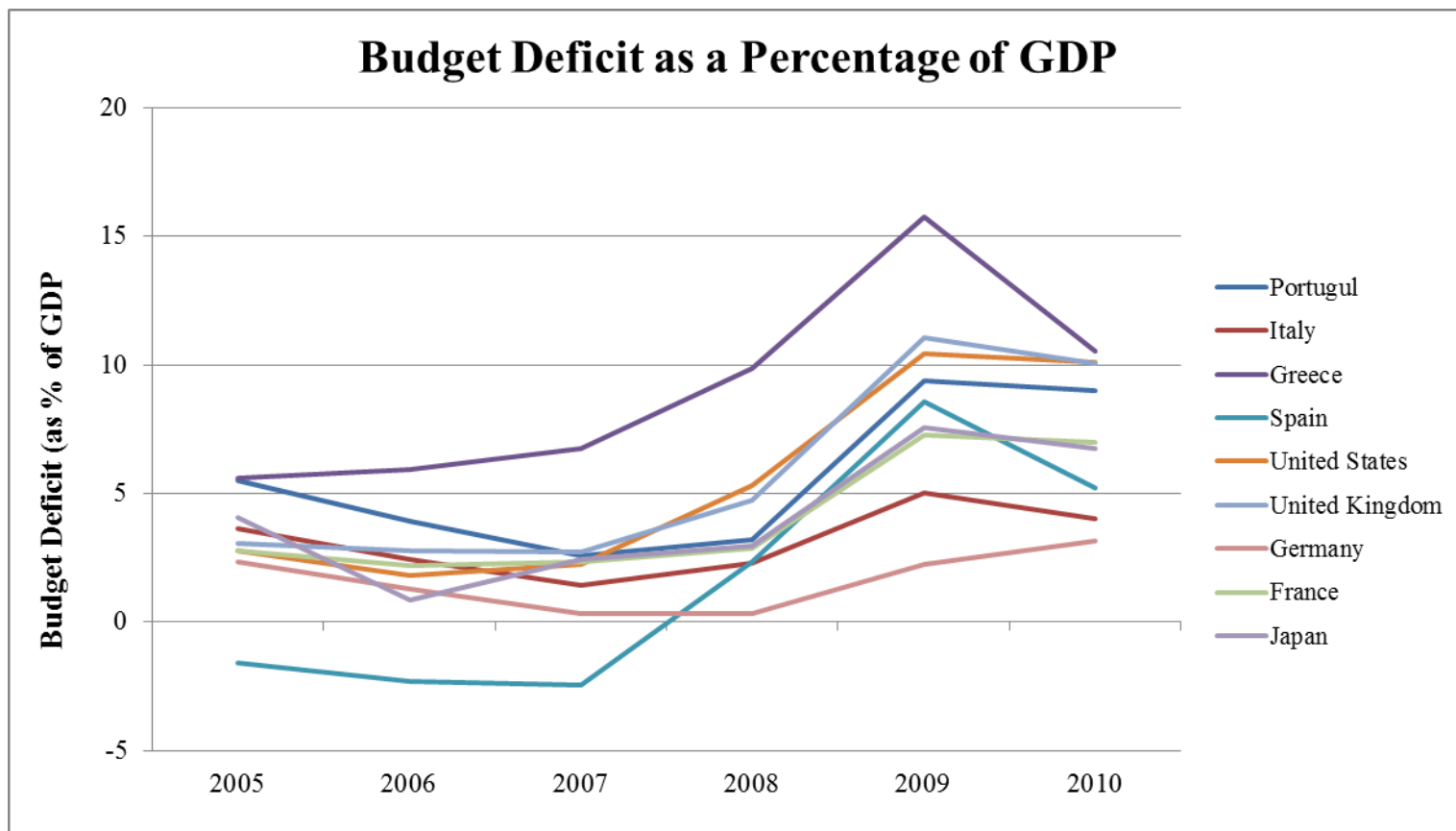




Challenge #1 – Debt

And the Debt Machine Rolls On

- ▶ **Budget Deficits have increased over the past five years**

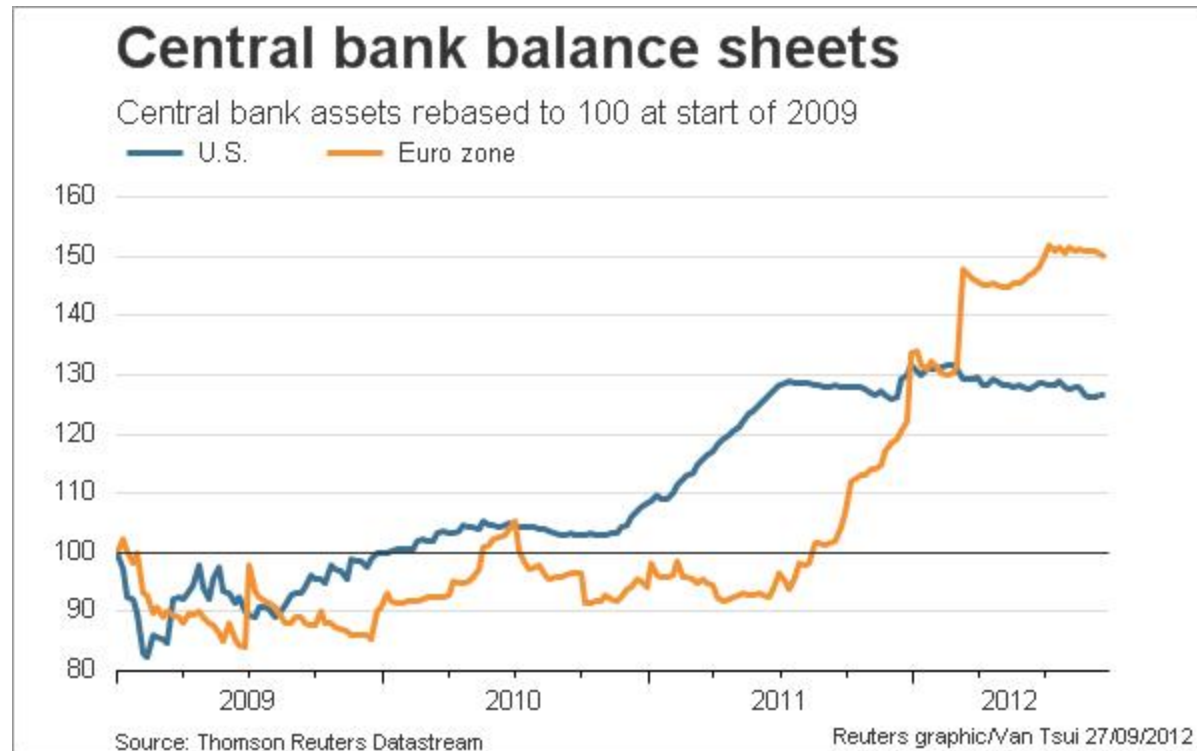


Negative numbers represent a budget surplus.

Challenge #2 – Monetary Policy

Excessive and Prolonged Reliance on Monetary Policy

- ▶ Balance sheets for central banks have increased significantly

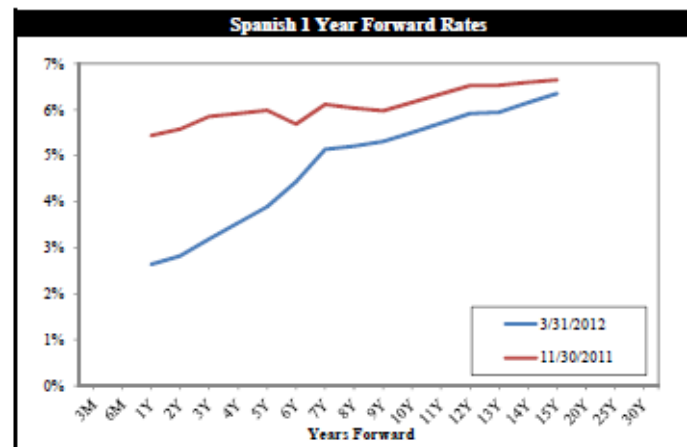
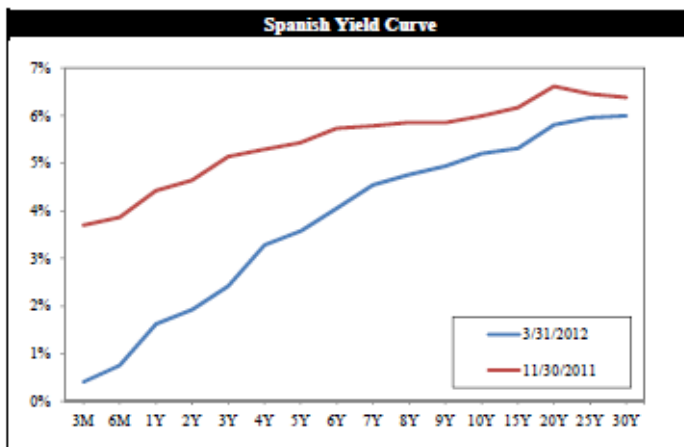
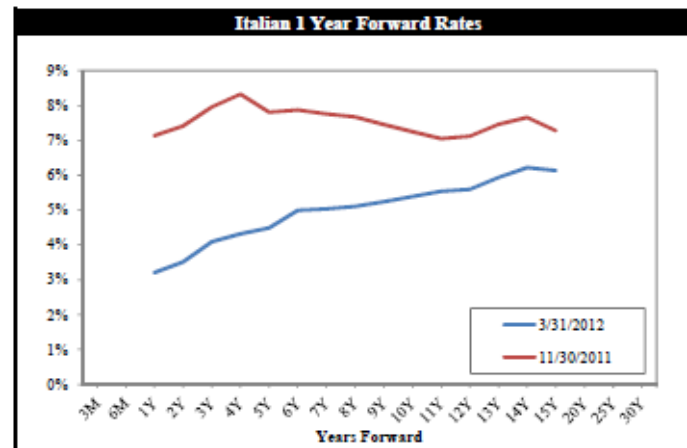
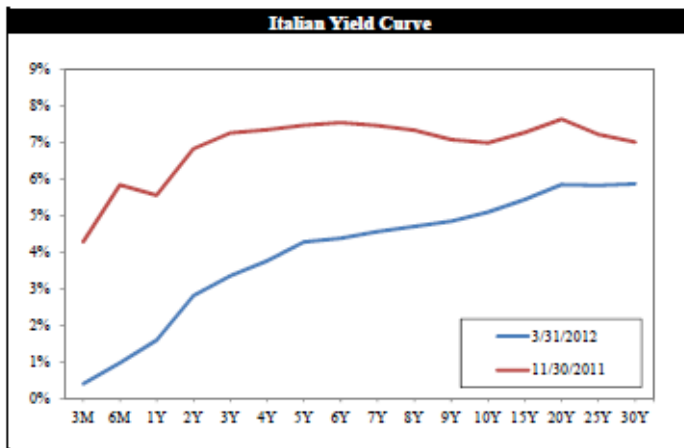


- ▶ *So, Why is Excessive and Prolonged Reliance on Monetary Policy a Challenge for Institutional Investors?*

Challenge #2 – Monetary Policy

Why is Excessive and Prolonged Reliance on Monetary Policy a Challenge for Institutional Investors?

- ▶ Because The Law of Diminishing Marginal Returns is eroding the efficacy of monetary policy
 - ▶ Limited impact on longer maturities

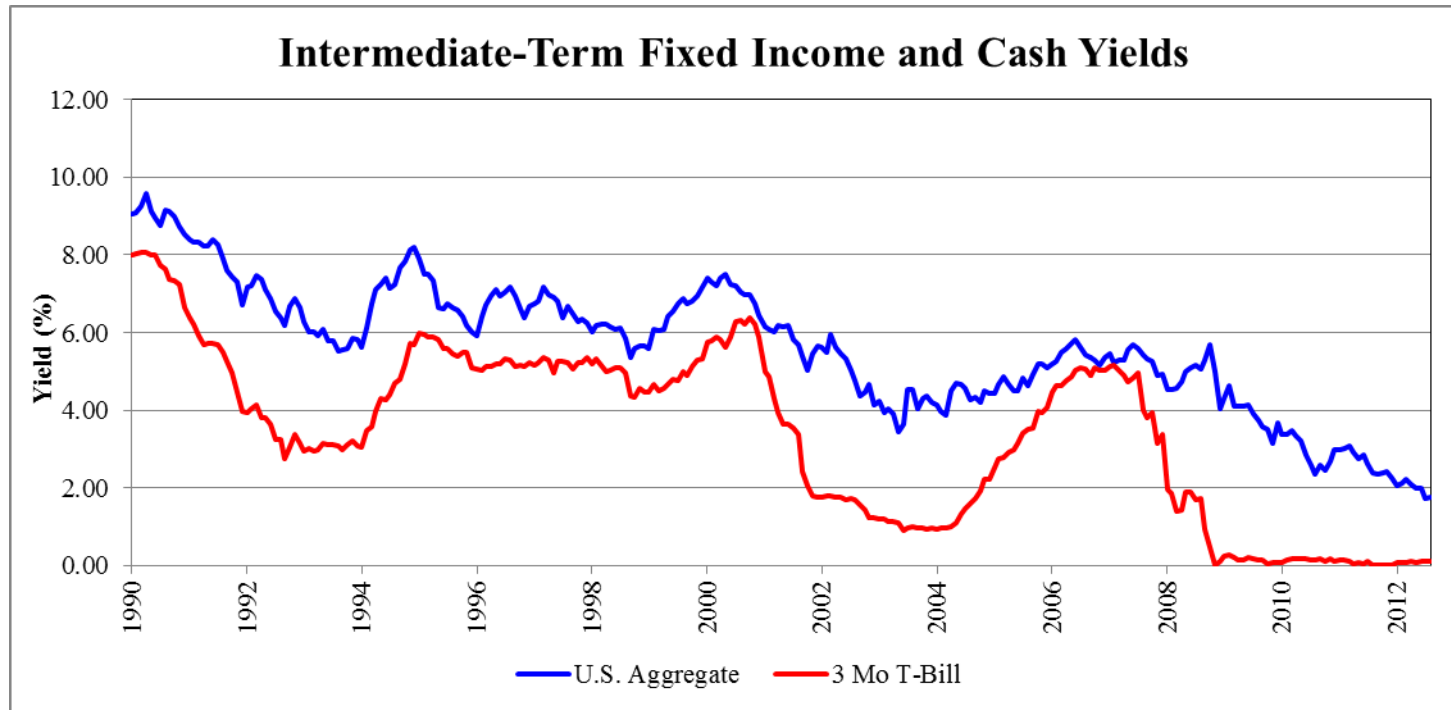


¹All data courtesy of Bloomberg Professional Service.

Challenge #2 – Monetary Policy

Why is Excessive and Prolonged Reliance on Monetary Policy a Challenge for Institutional Investors?

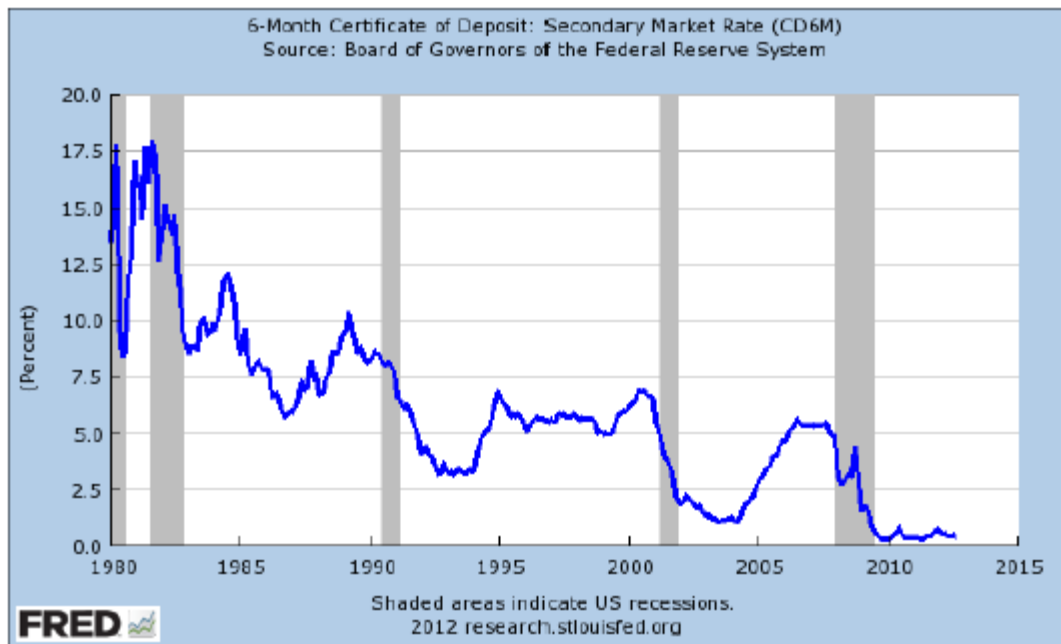
- ▶ Because It creates havoc for Savers, and TMRS, as well as other pension plans, are essentially savers!



Challenge #2 – Monetary Policy

Why is Excessive and Prolonged Reliance on Monetary Policy a Challenge for Institutional Investors?

- ▶ **Because It crushes Senior Citizens and Other People on fixed incomes**
 - ▶ 6-month Certificate of Deposit rates have decreased to historical lows over the recent years

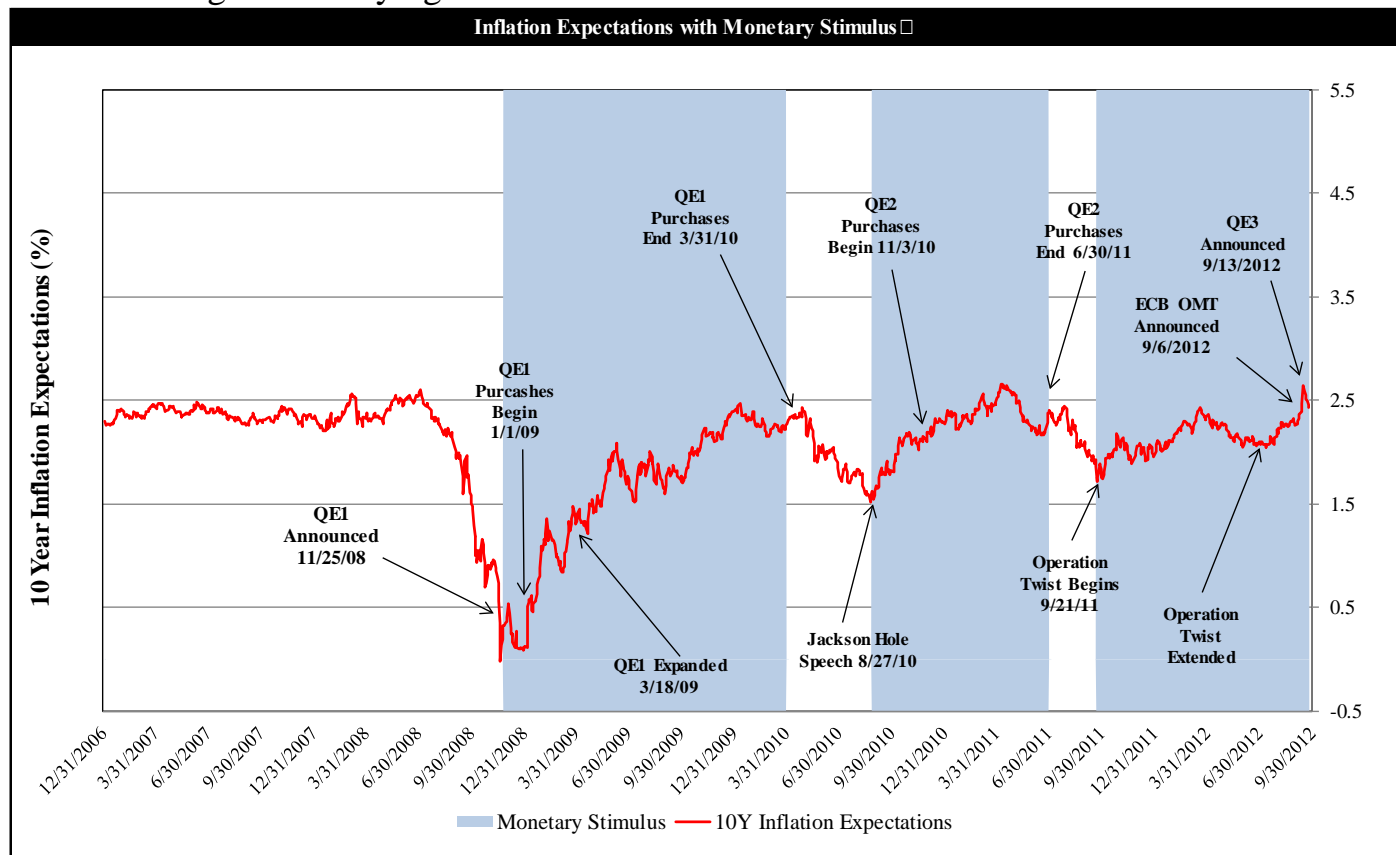


Challenge #2 – Monetary Policy

Why is Excessive and Prolonged Reliance on Monetary Policy a Challenge for Institutional Investors?

- ▶ **Because It Risks Reigniting Inflation**

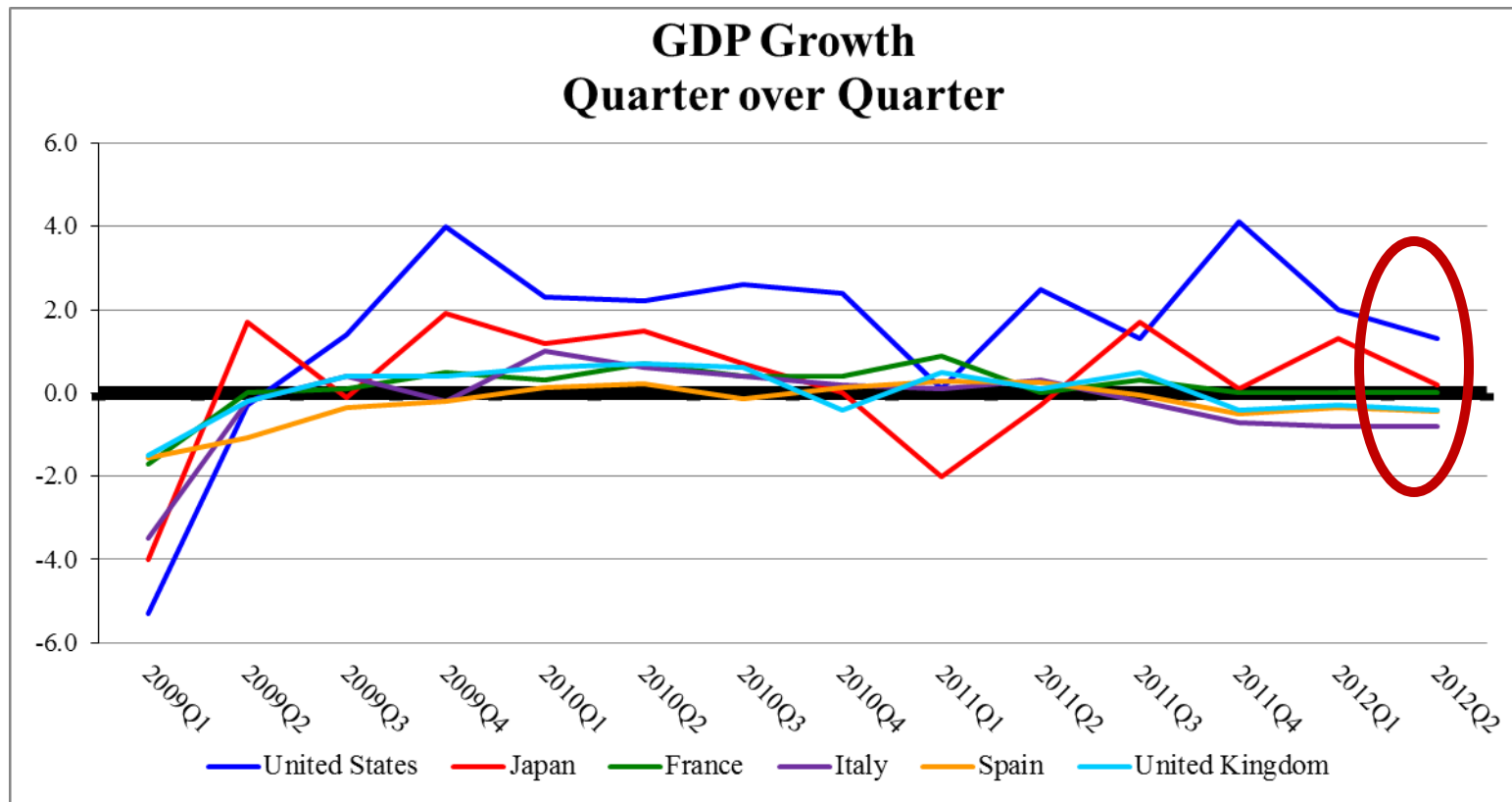
- ▶ Inflation expectations are low, but open-ended stimulus focused on employment versus inflation is creating an underlying fear



Challenge #3 – Growth

Too Little Growth

- ▶ Although the monetary response from governments has been significant, developed economies continue to see little growth





Challenge #3 – Growth

A Short Digression

- ▶ **Why Are We Relying So Much on Monetary Policy Around the World?**
 - ▶ Fear of Deflation
 - ▶ Ease of Control/Action
 - ▶ Belief that Liquidity Powers Growth
 - ▶ Need to Monetize Large and Expanding Sovereign Debt
 - ▶ Fear of Creditor Losses (total or partial defaults)
 - ▶ Fear of the Wrath of Current Consumers/Voters
 - ▶ It Postpones the Pain of Debt Repayment
 - ▶ It's So Much Easier than Fiscal Reforms (Spending Cuts and Tax Reforms) that Promote Growth



Challenge #3 – Growth

If Monetary Policy is “Out of Gas,” Historically, What Has Led to Sustainable Economic Growth?

- ▶ **Sustainable Economic Growth Drivers = Permanent, Dependable Incentives to Undertake Value Creating Activities, such as:**
 1. Going to Work
 2. Working Longer
 3. Working Smarter
 4. Starting a Business
 5. Expanding a Business
 6. Making an Investment (provide risk capital)
 7. Creating a new product or service better than what it replaces/displaces
 8. Providing credit to qualified borrowers
 9. Providing dependable, stable, easily understood rules for #'s 1-8
 10. Enforcing those rules in a dependably stable and predictable manner



Other Challenges

What We Don't Know That Could Matter – And Maybe Quite a Bit

- ▶ **Iran/Israel**
 - ▶ Israel reacting to Iran's nuclear program by taking action

- ▶ **The Fiscal Cliff**
 - ▶ We are on autopilot heading toward the largest tax increase in U.S. history in 2013 precisely at a time when economic growth is declining toward zero

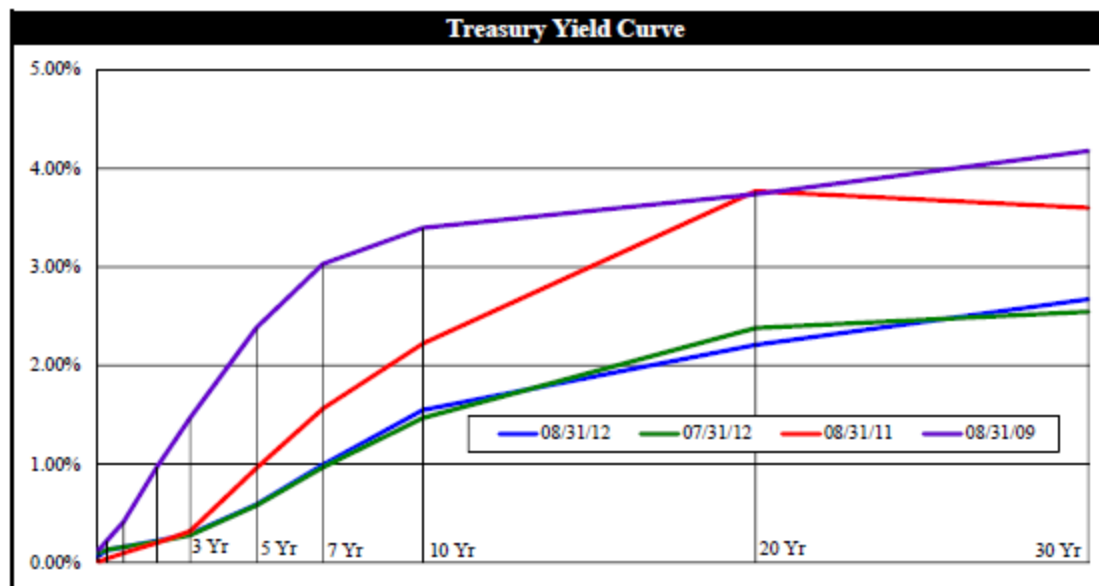
- ▶ **The Exit Strategy from Full On Monetary Stimulus**
 - ▶ “Take offs are Optional: Landings are Mandatory.” The Fed now owns approximately \$918 billion* in mortgages. When it is time to sell those?

*The Fed's ownership of mortgage bonds guaranteed by Fannie Mae, Freddie Mac and Ginnie Mae totaled \$834.98 billion; holdings of debt issued by Fannie Mae, Freddie Mac and the Federal Home Loan Bank system totaled \$83.41 billion. (Reuters, 9/27/2012).

So Where Do Institutional Investors Stand?

Fixed Income

- ▶ **Currently, historically low yield on Fixed Income investments**
 - ▶ Bonds generally perform better when starting at greater yields

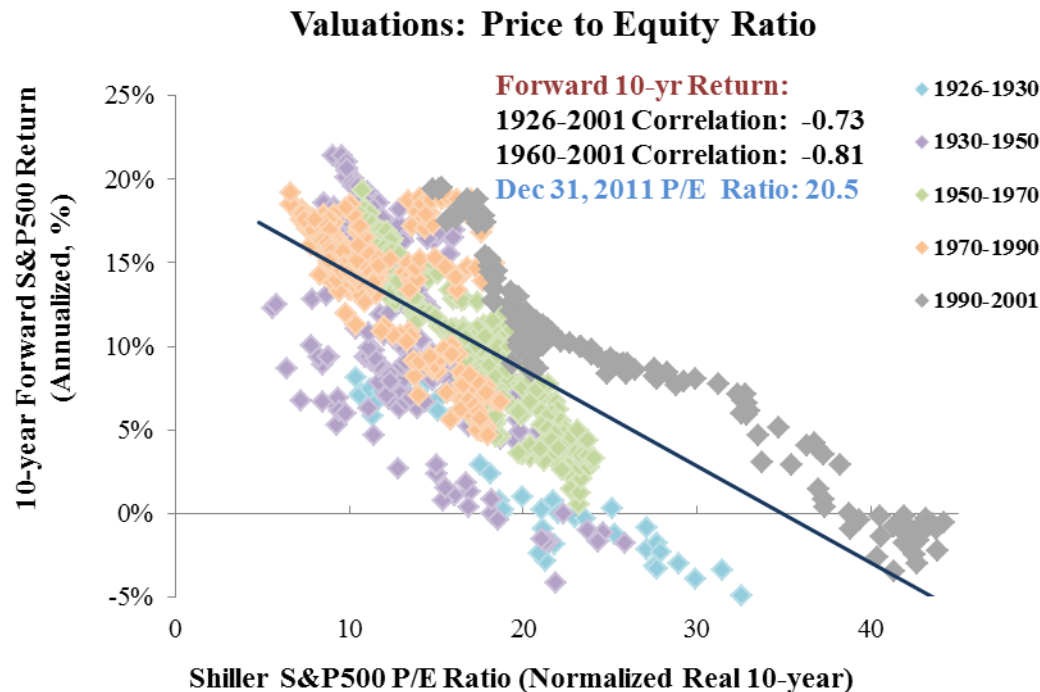


Treasury Yield Curve	08/31/12	07/31/12	08/31/11	08/31/09
3 Month	0.07%	0.10%	0.01%	0.13%
6 Month	0.13%	0.13%	0.04%	0.22%
1 Year	0.16%	0.16%	0.10%	0.41%
3 Year	0.29%	0.28%	0.32%	1.47%
5 Year	0.59%	0.58%	0.96%	2.39%
7 Year	1.00%	0.97%	1.56%	3.03%
10 Year	1.55%	1.47%	2.22%	3.40%
20 Year	2.21%	2.38%	3.77%	3.74%
30 Year	2.67%	2.55%	3.60%	4.18%

So Where Do Institutional Investors Stand?

Equity

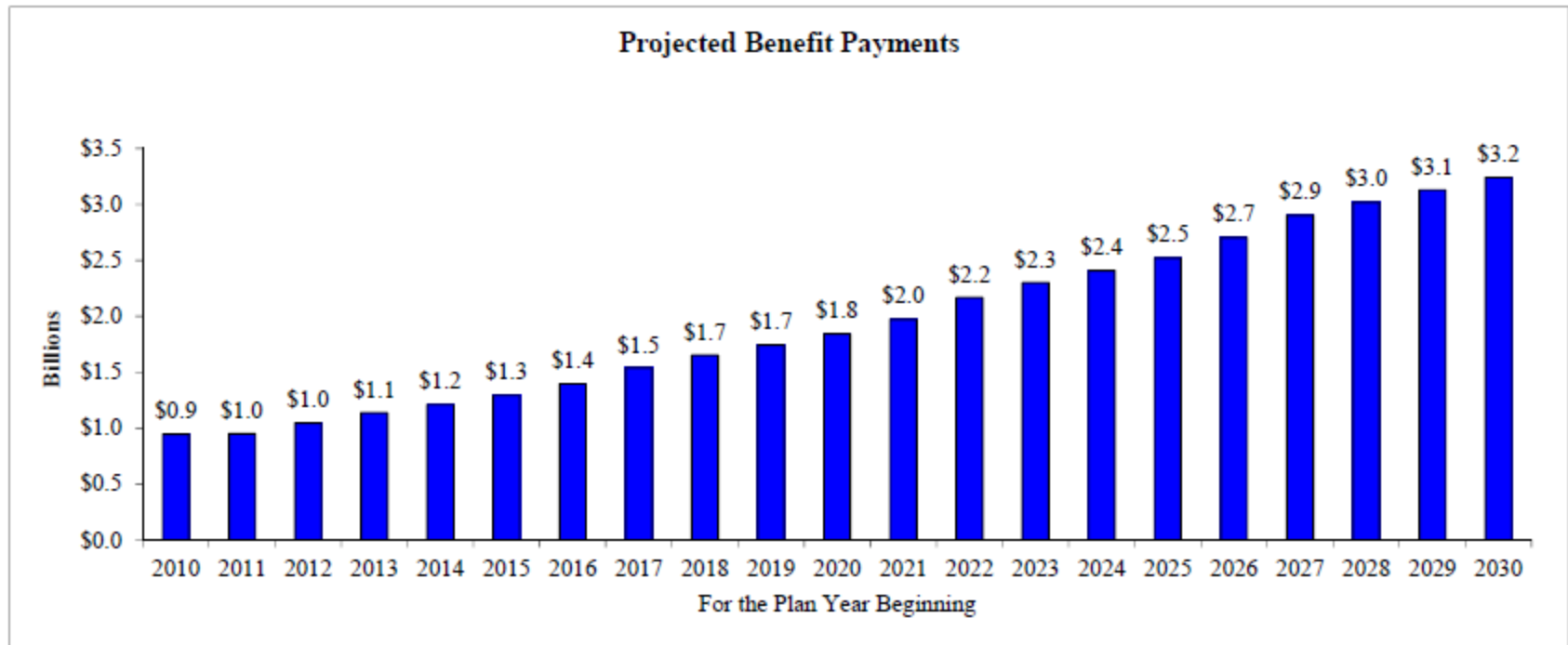
- ▶ **Uncomfortably high Price to Earnings Ratio (P/E) and a diminished outlook for equity returns**
 - ▶ Stocks generally perform better when starting at lower P/E ratios



So Where Do Institutional Investors Stand?

Rising Pension Benefits Well Into the Future

- ▶ **Projected benefit payments are expected to increase over the next 20 years, but only slightly increase as a percentage of TMRs assets over this same time period**
 - ▶ Not only do benefit payments as a percentage of System assets increase slightly, they are also healthy and sustainable on an absolute basis during this period and lower than we have observed in many other plans



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Annual Percent Change	N/A	0.5%	10.0%	8.6%	6.4%	6.9%	8.0%	10.1%	7.4%	5.5%	5.8%	7.0%	9.8%	6.3%	4.7%	4.6%	7.2%	7.4%	4.0%	3.6%	3.7%

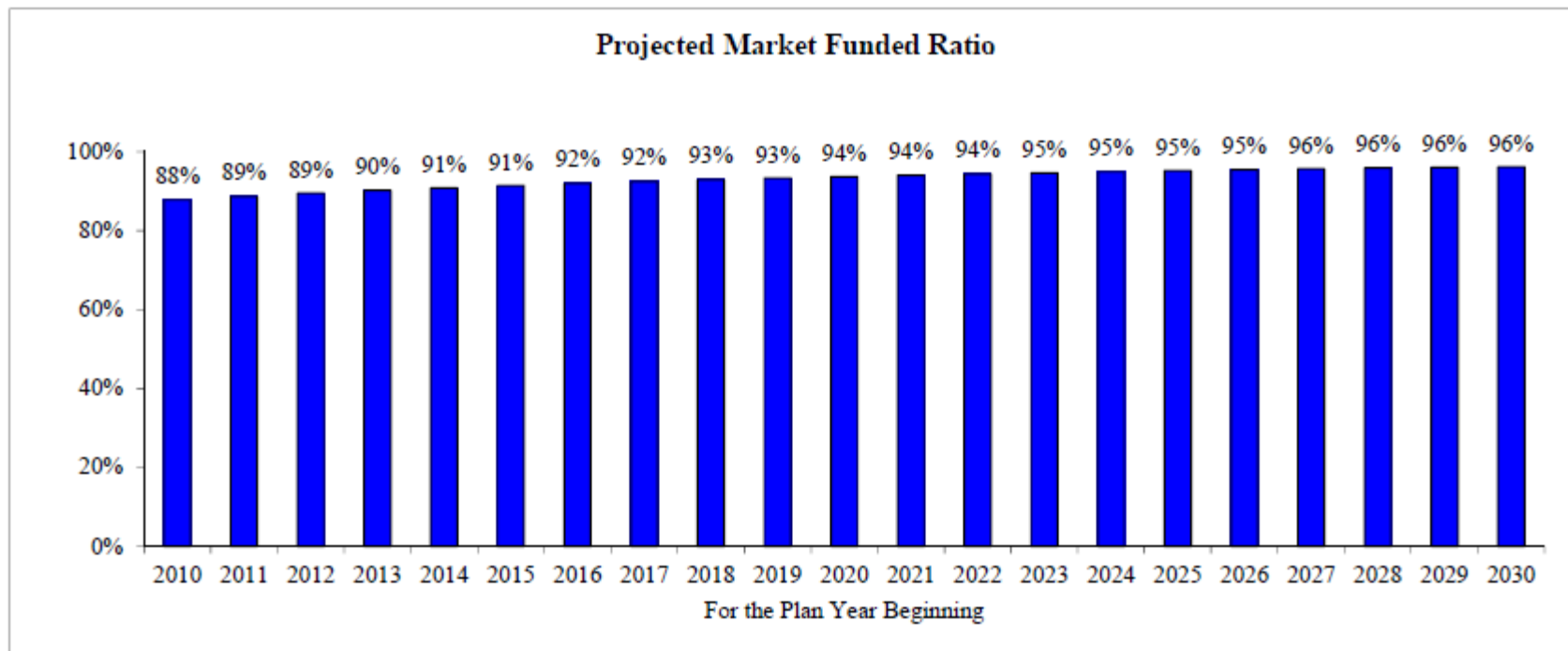


So Where Do Institutional Investors Stand?

Rising Pension Benefits Well Into the Future

- ▶ **Don't Lose Heart!**

- ▶ A consistent (if sometimes admittedly painful) contribution policy and a plan that can achieve reasonably and realistic long-term investment returns can make a well managed pension plan viable now and into the future.





What Is an Institutional Investor to Do -- Now?

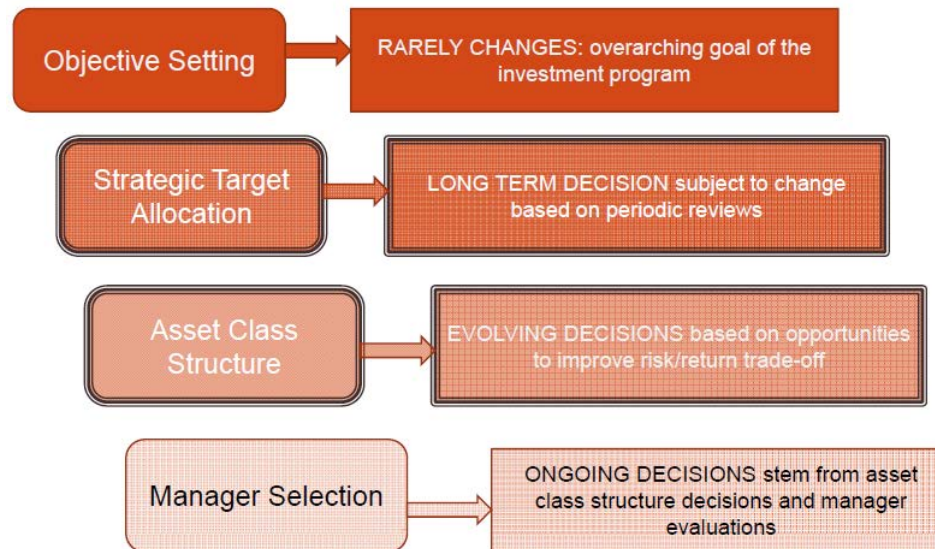
Actions and Considerations

- ▶ **Balance volatility risk against actuarial risk**
 - ▶ It does no good to reduce actuarial benchmark risk at the price of uncomfortably high volatility risk
- ▶ **Reduce risk across the board via broad diversification; allocations to traditional and alternative asset classes**
 - ▶ Still the #1 risk mitigator
- ▶ **Be sensitive to valuation and adjust the strategic allocation accordingly**
 - ▶ Review asset allocation each time RVK changes capital markets assumptions in any material way or the valuation of any major asset class shift dramatically – or both (since we hope a valuation change would trigger an assumption change in most instances)
- ▶ **Be sensitive to valuation by considering managers with some tactical latitude**
 - ▶ This doesn't mean total fund tactical asset allocation, but can mean allocations to Global Fixed Income managers, Liquid Alternatives, Global Tactical Asset Allocation managers, and Absolute Return Strategies, etc.
- ▶ **Plan now for the potential of higher inflation 3 to 5 years down the road**
 - ▶ That may mean a small strategic allocation now, but certainly means building a strong familiarity with inflation mitigating investment exposures and the products that implement them

Texas Municipal Retirement System

TMRS Asset Allocation Philosophy

- ▶ **Current policy assists to ensure that the risk tolerance remains appropriate**
 - ▶ *The Strategic Target Allocation will be reviewed at least annually to ensure that the long-term return objective and risk tolerance continues to be appropriate considering significant economic and market changes or changes in the Board's long-term goals*
 - ▶ *A formal asset allocation study will be conducted at least every three years to verify or amend the targets*
 - ▶ *A formal pension financial (asset-liability) study will be conducted at least every five years*
- ▶ **TMRS Asset Management Decision Flow Process:**

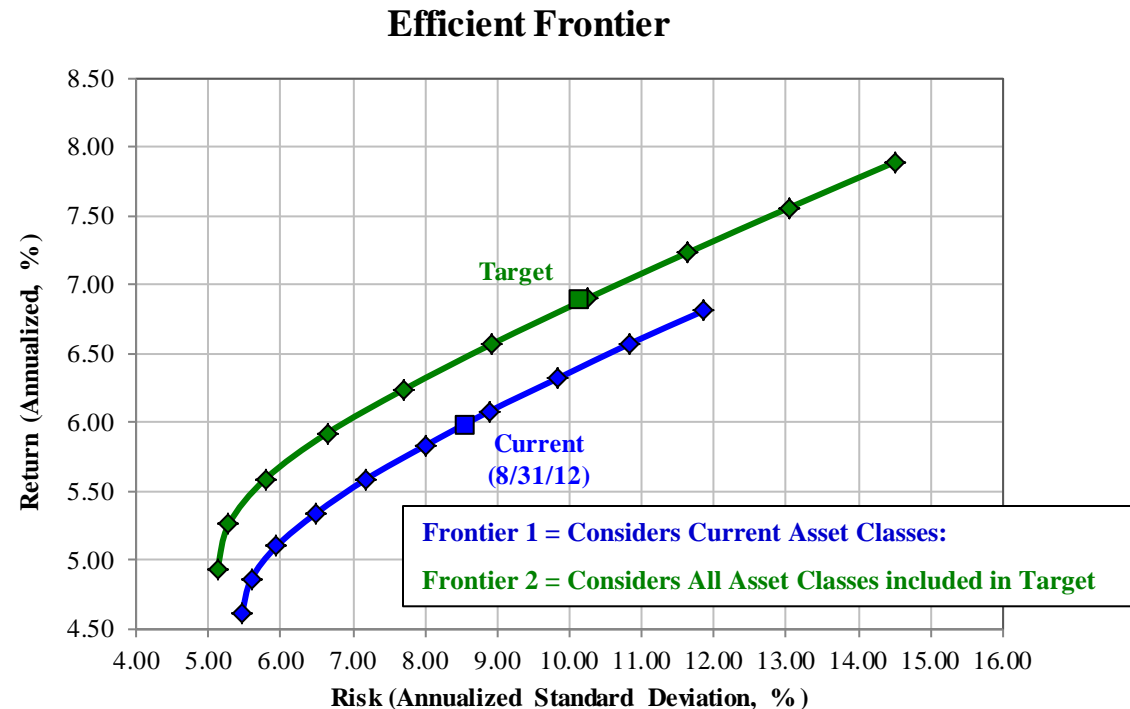


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Review of Target Allocation

- ▶ Many steps along the way, with a slow and methodical pace

	Min	Max	Current (8/31/12)	Target
50/50 Equity	0	60	41.5	35
Int. Duration Fixed Income	0	100	52.3	30
Non-Core Fixed Income	0	10	0	10
Custom Real Return	0	5	0	5
Global Linkers	0	0	4.8	0
Custom Real Estate	0	10	1.4	10
ARS	0	5	0	5
Private Equity	0	5	0	5
Total			100	100
Capital Appreciation			41.5	50
Capital Preservation			52.3	30
Alpha			0	5
Inflation			6.3	15
Expected Return			5.97	6.88
Risk (Standard Deviation)			8.57	10.14
Return (Compound)			5.63	6.40
Return/Risk Ratio			0.70	0.68
RVK Expected Eq Beta (LC USEq = 1)			0.45	0.51
RVK Liquidity Metric (T-Bills = 100)			86	69





Texas Municipal Retirement System

Why Add Alternative Asset Classes

▶ **Real Estate**

- ▶ Real estate-oriented investments have generated attractive long-term returns with low correlations to traditional asset classes and can provide an inflationary hedge

▶ **Absolute Return**

- ▶ Absolute Return Strategies can have a significant impact on the expected risk/return profile of a portfolio, even with a relatively small allocation
 - ▶ Attractive correlations and risk adjusted returns over the long-term
 - ▶ Important piece of the total fund allocation (alpha)
 - ▶ Management fees and costs to be considered in selecting an implementation approach
 - ▶ Generally fees in this asset class are coming down

▶ **Private Equity**

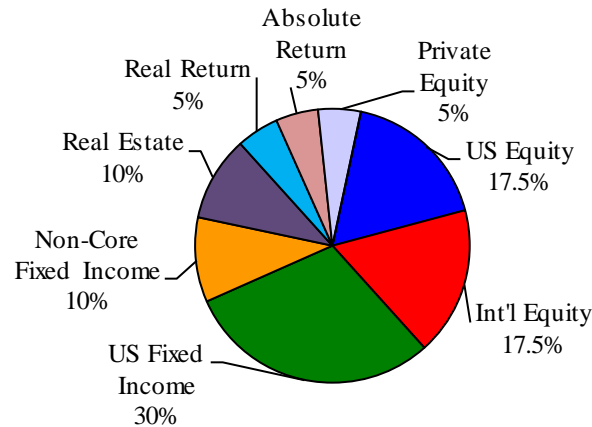
- ▶ Unique cash flow structure requiring paced cash funding and distributions
 - ▶ Investments are long-term, typically 10 years or more, with limited ability to liquidate before the termination of a partnership
 - ▶ Capital is called “as needed,” slowly over a period of years, and distributions occur irregularly as investments are sold
- ▶ Additional costs, fees, and staffing needs to be considered

Texas Municipal Retirement System

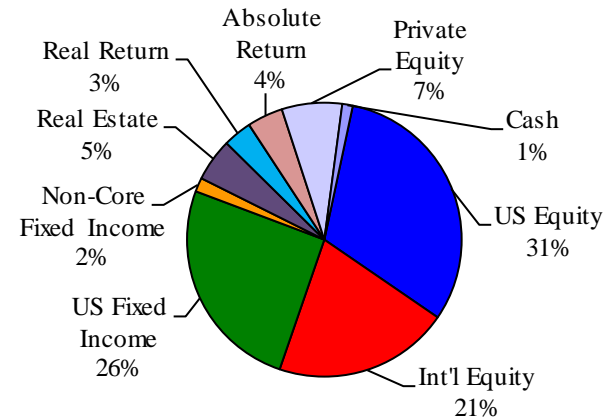
Peer Comparison

- ▶ The long-term portfolio will be diversified, and similar to peers, yet unique to TMRS' risk tolerance and return objectives

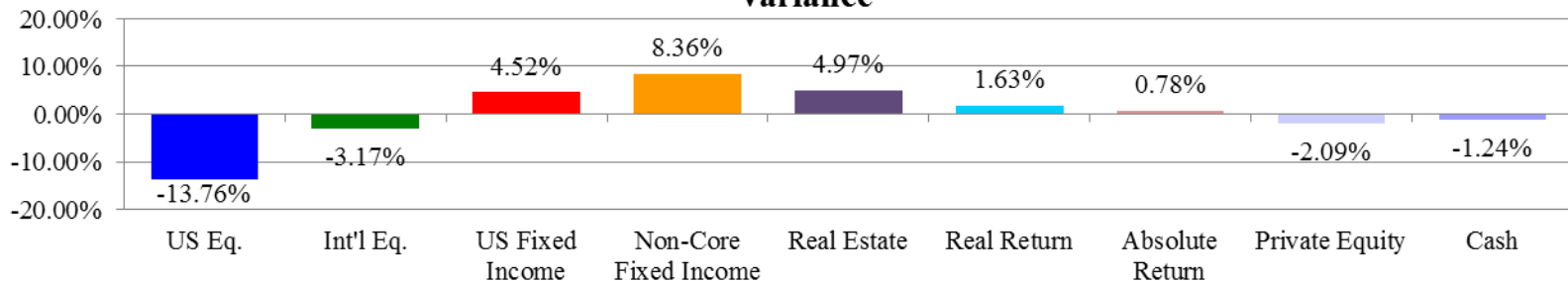
TMRS Strategic Target



Average Public Fund (\$10-\$20 Billion) as of December 31, 2011



TMRS Strategic Allocation vs. Average Public Fund Variance



Texas Municipal Retirement System

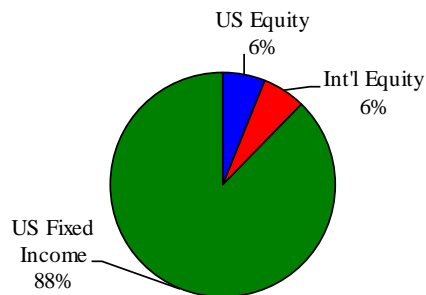
How is TMRS Positioned?

- ▶ **TMRS was invested in 100% bonds due to plan design...**
 - ▶ Lacked diversification and potentially insufficient return given long-term market dynamics
- ▶ **...but, a different way to structure the portfolio was considered**
 - ▶ Broad diversification and a long-term perspective can lead to higher returns without undue risk

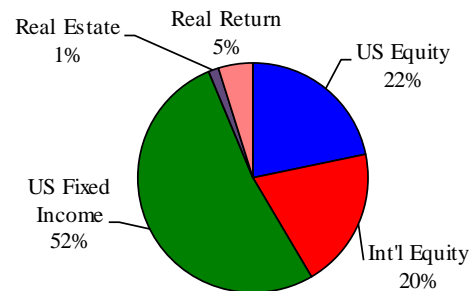
Timeline:

- ▶ *Adopted Interim Target with 12% equity allocation in December 2007*
- ▶ *Adopted current Strategic Target Allocation in June 2009*
 - ▶ *Legislation in 2009 allowed for diversification and management to total return objectives*
 - ▶ *Plan objectives, risk tolerance, and viable structures guided the analysis*
- ▶ *TMRS has continued to methodically move towards the Strategic Target (revisions adopted in Aug 2012)*
 - ▶ *Interest rate risk was reduced and the portfolio has become more diversified*
 - ▶ *Continued need for implementation changes along the way*

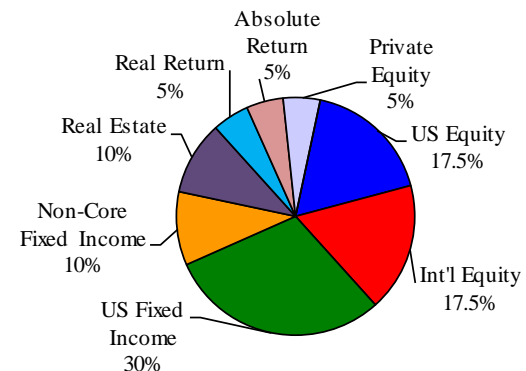
**TMRS Allocation
as of June 30, 2009**



**TMRS Current Allocation
as of August 31, 2012**



TMRS Strategic Target





Texas Municipal Retirement System

Next Steps

- ▶ **Continue progress toward diversification in an incremental manner**
 - ▶ Continue to diversify equity allocation with alternative indexing approaches in 2012-13 (passively managed rules-based strategies)
 - ▶ Consideration for further fixed income diversification
 - ▶ 2012-13 fixed income structure study
 - ▶ 2012-13 non-core fixed income education and structure study
 - ▶ Continue to build real estate allocation by conducting additional manager/fund searches in 2012-13
 - ▶ Continue absolute return strategies education with Board
 - ▶ Real Return education in 2013 on Commodities, followed by implementation
 - ▶ Private Equity education in 2013
 - ▶ Leave 5% overweight to equities in passive core index funds as a placeholder for private equity allocation pending implementation of the 5% private equity allocation



Conclusion

- ▶ **Government debt loads around the world are continuing to increase**

- ▶ **Monetary policy is showing signs of suffering from the Law of Diminishing Marginal Returns**

- ▶ **Bond yields are low and equity valuations are high, yet economic growth has been low**

- ▶ **TMRS is creating a portfolio that will better withstand different market environments (interest rate changes, inflation, etc.)**
 - ▶ Diversification has continued in a methodical manner across divergent asset classes
 - ▶ Timing and execution have been beneficial to performance and are keeping us on track
 - ▶ Significant work and change still ahead

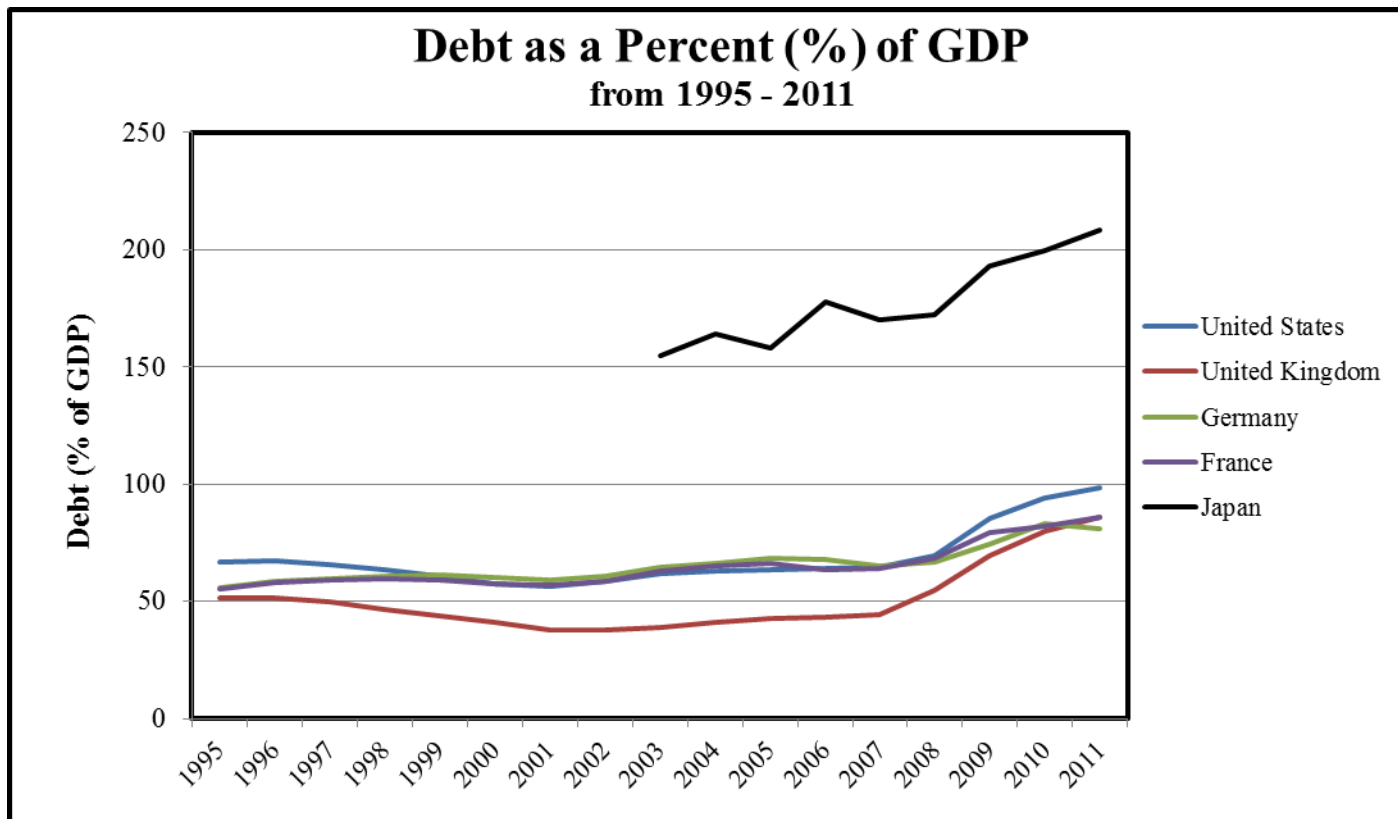


Appendix

Challenge #1 – Debt

We Mean Too Much Debt --- Everywhere

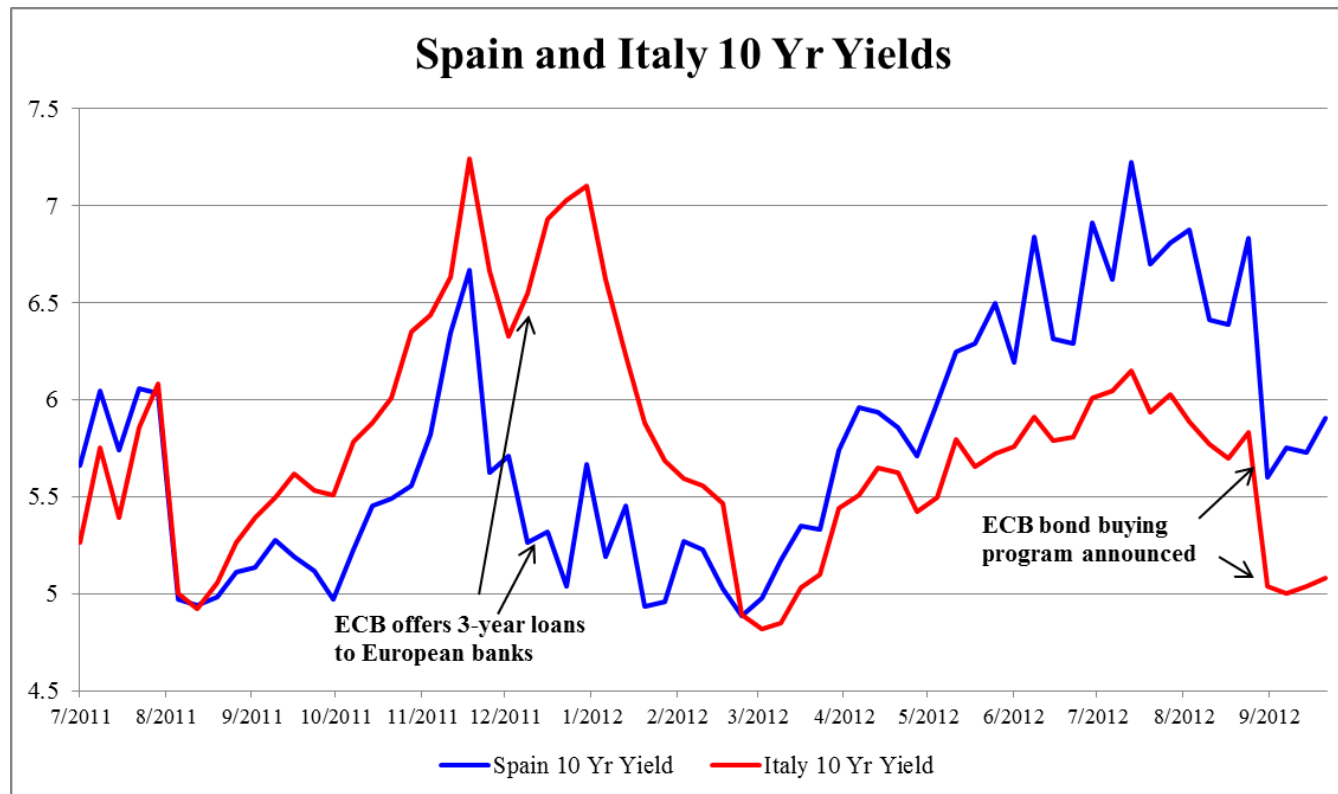
- ▶ **Japan is in a debt world of its own**



Challenge #2 – Monetary Policy

Why is Excessive and Prolonged Reliance on Monetary Policy a Challenge for Institutional Investors?

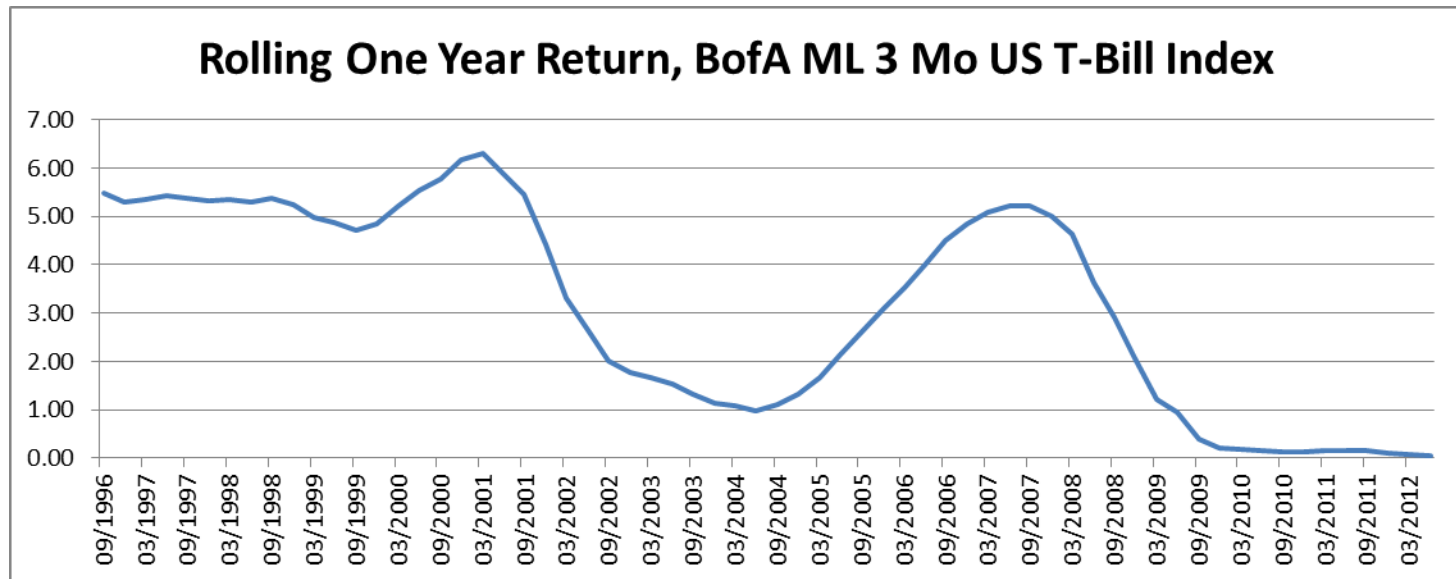
- ▶ Because The Law of Diminishing Marginal Returns is eroding the efficacy of monetary policy



So Where Do Institutional Investors Stand?

Cash

- ▶ **No Return at All on Liquidity Assets (Cash)**



Returns

	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	15 Years
BofA ML 3 Mo US T-Bill Index	0.05	0.11	0.12	0.33	0.98	1.87	2.85