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# Economic Update & Reaching for Yield

*Presented To*

STATE COMPENSATION INSURANCE FUND

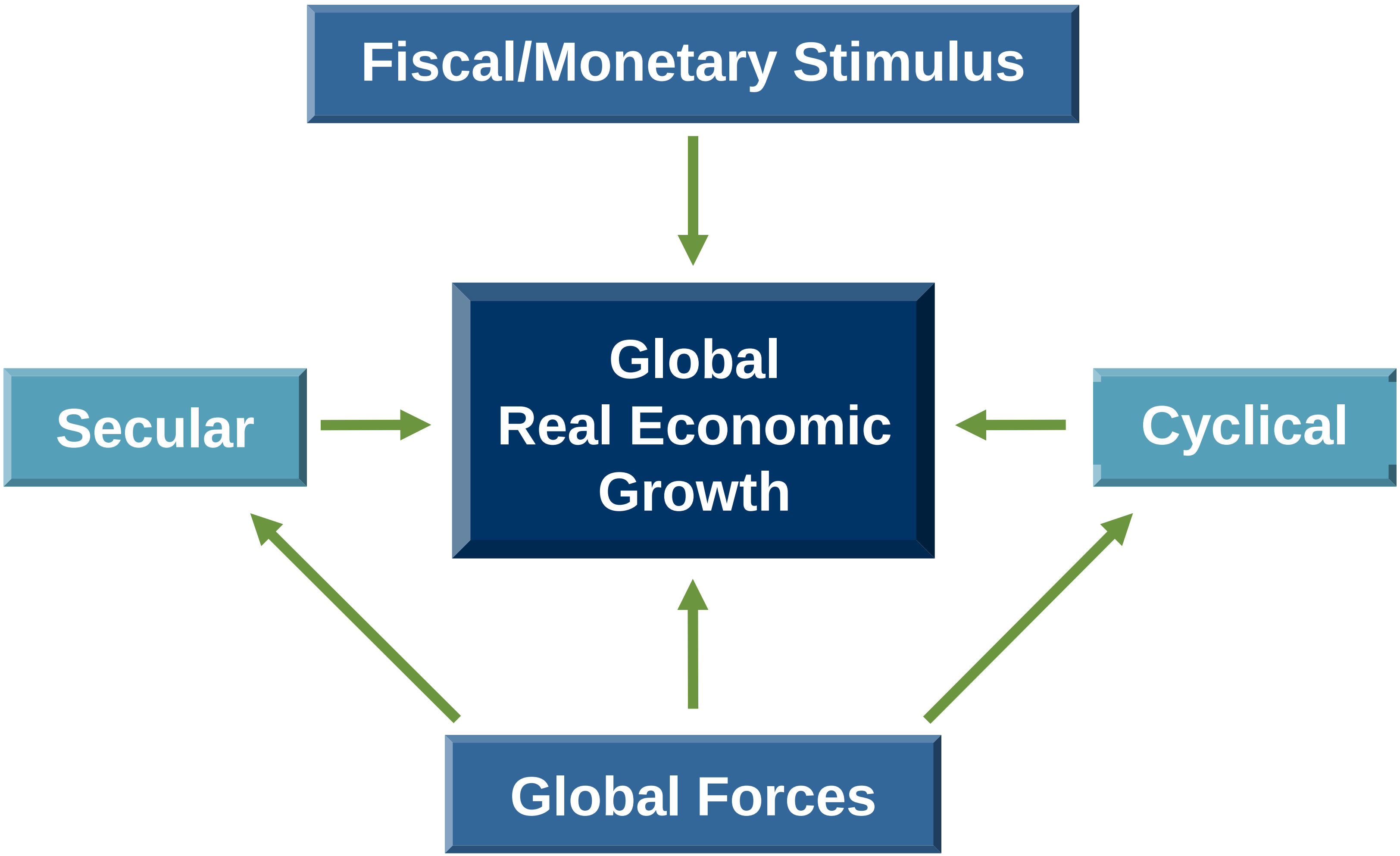
*State Compensation Insurance Fund*

*November 17, 2011*

*Open Session*

General Re–New England Asset Management

# Economic Framework

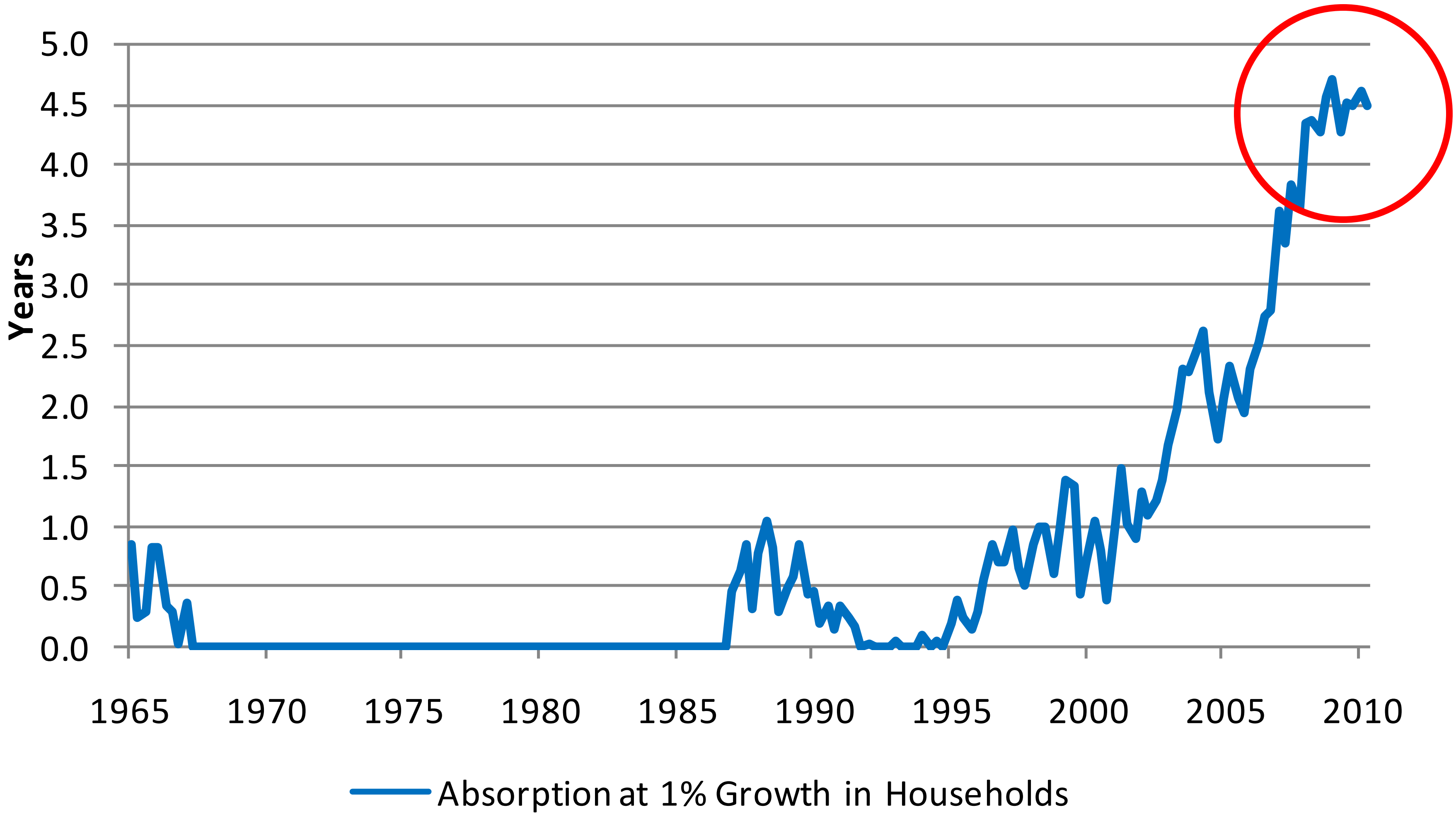


# Secular Forces

# Secular Forces

- ✓ Housing Imbalance
- ✓ Structural Unemployment
- ✓ Deleveraging Process

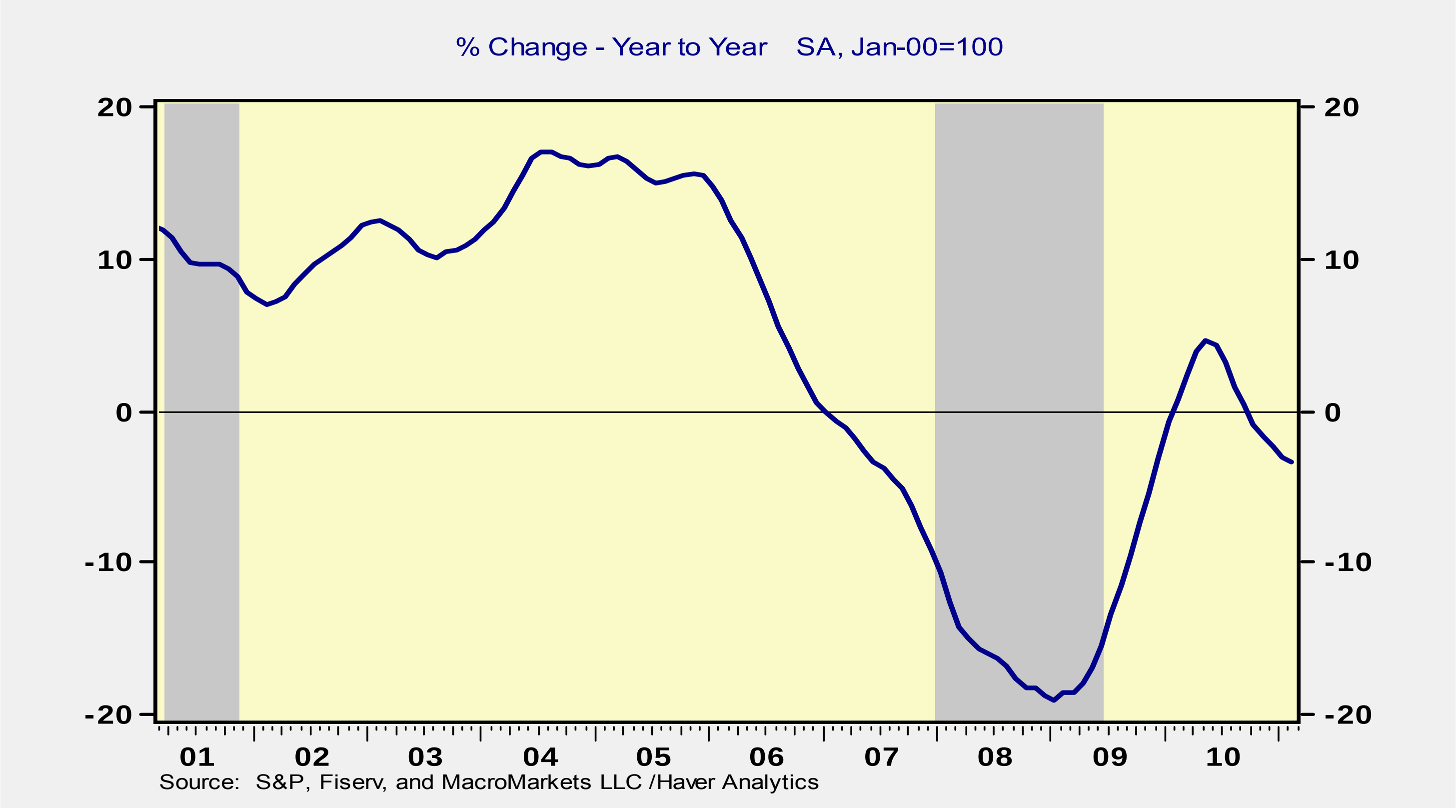
# Years to Absorb Excess Housing




*Source: Census Bureau, GR-NEAM Analytics*

# House Prices

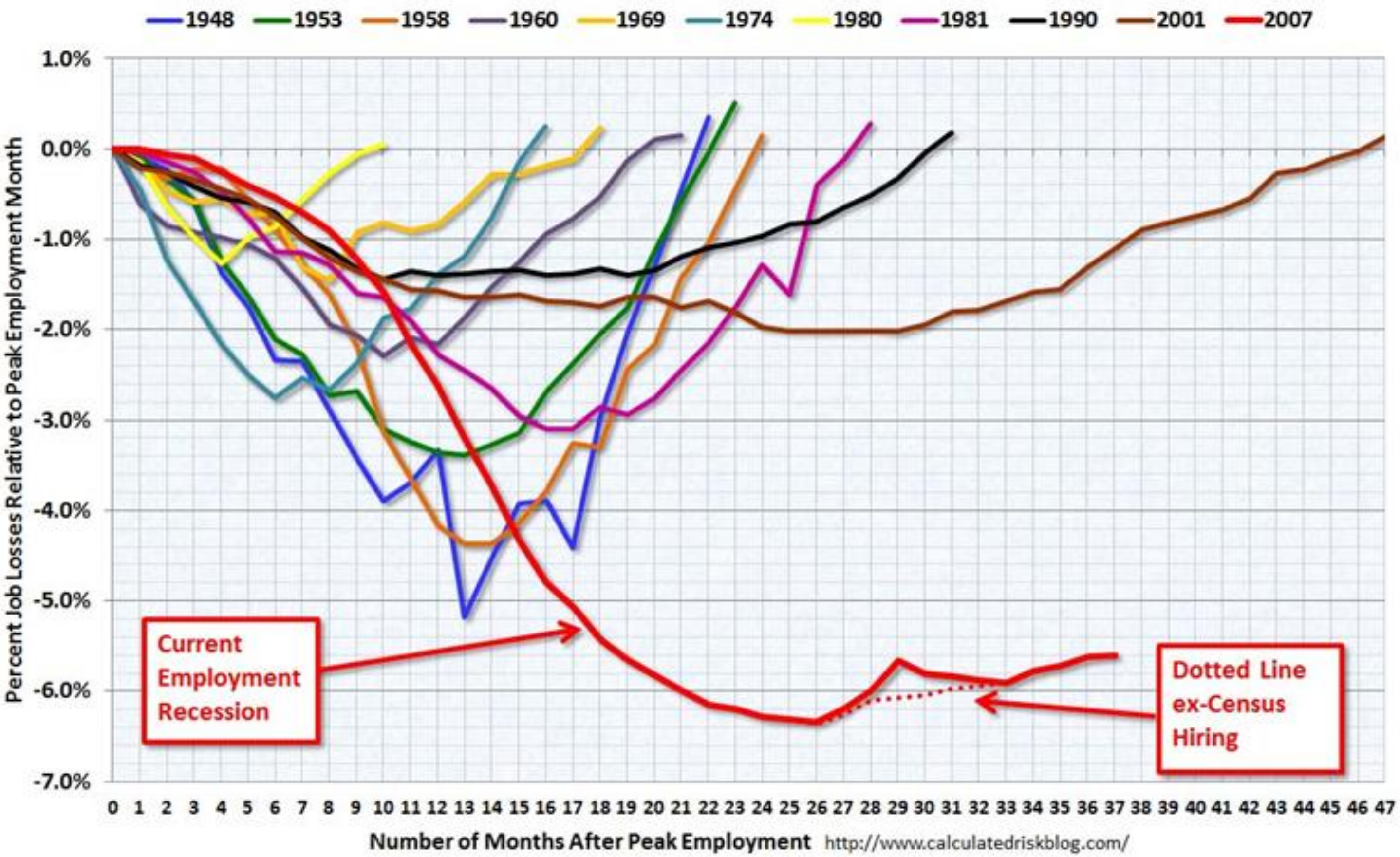
## Case Schiller Home Price Index




*Source: Haver Analytics*

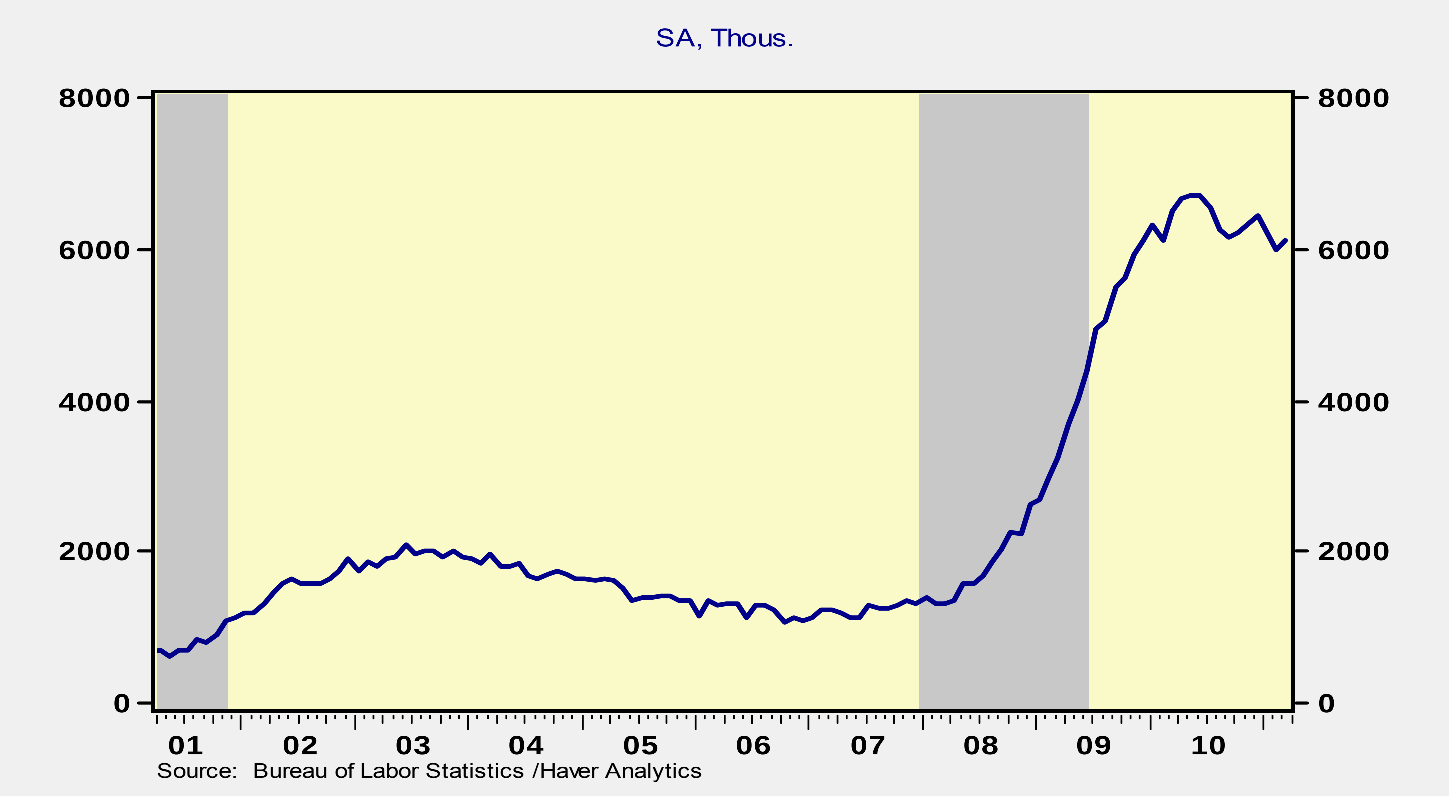
# Unemployment This Cycle

## Percent Job Losses in Post WWII Recessions



# Structurally Unemployed

## Civilians Unemployed for 27 Weeks or More




*Source: Haver Analytics*

# Projected Unemployment Rates

## Projected Unemployment Rate at Various Job Growth Rates

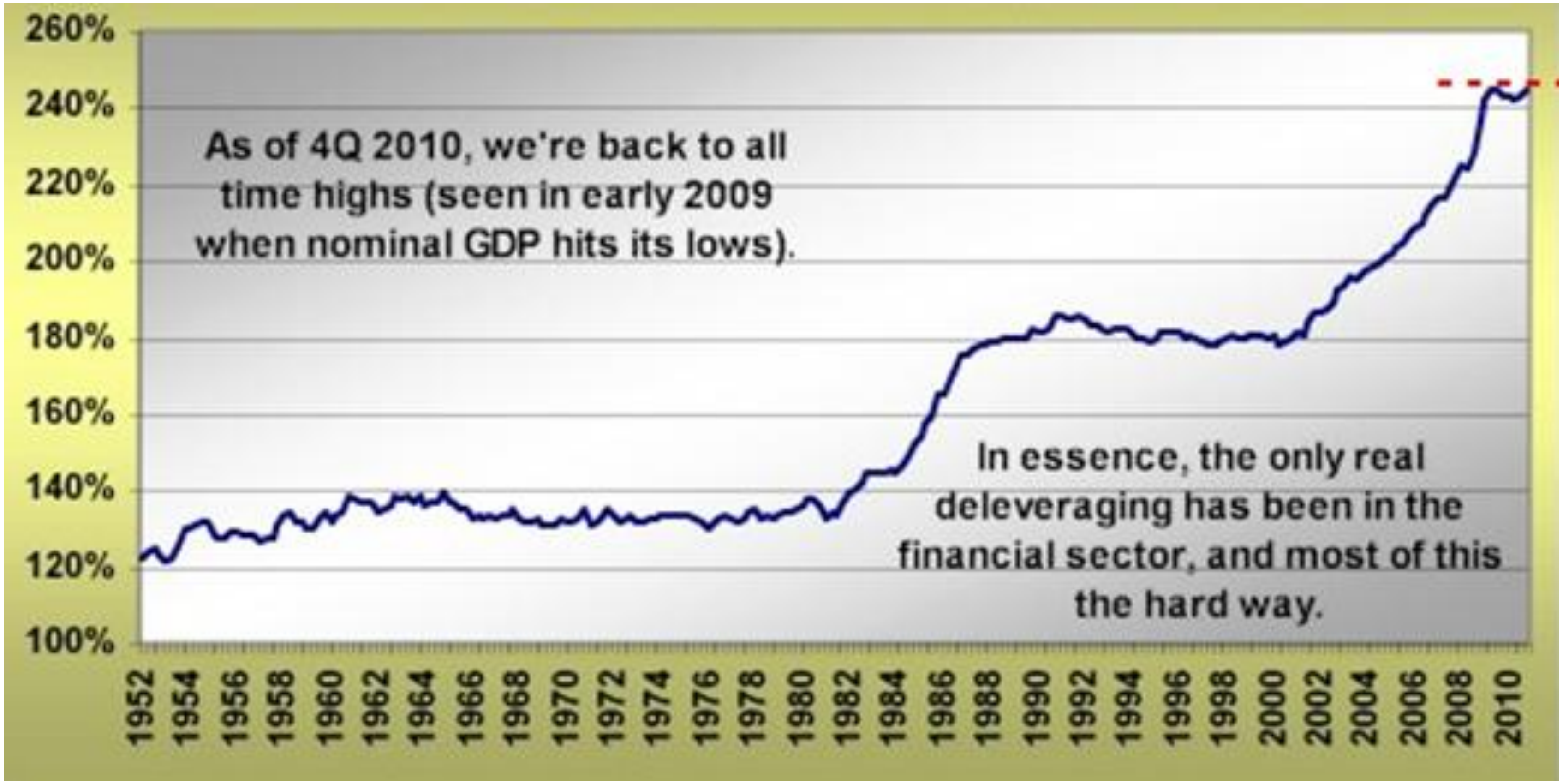
| | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | 2012 | 2013 | 2014 | 2015 | 2016 |
| Assumed Monthly Job Growth | | | | | |
| 100 | 9.4% | 10.0% | 10.4% | 10.8% | 11.5% |
| 150 | 9.0% | 9.2% | 9.3% | 9.3% | 9.7% |
| 200 | 8.6% | 8.5% | 8.1% | 7.8% | 7.8% |
| 250 | 8.2% | 7.7% | 7.0% | 6.4% | 6.0% |
| 300 | 7.8% | 6.9% | 5.9% | 4.9% | 4.2% |

| | |
|---|---|
| Post Recession Monthly Job Growth Average | 12 |
| Latest 12 Months | 112 |
| Last Month (September 2011) | 103 |

*Source: GR-NEAM Analytics*

# Deleveraging Progress ?

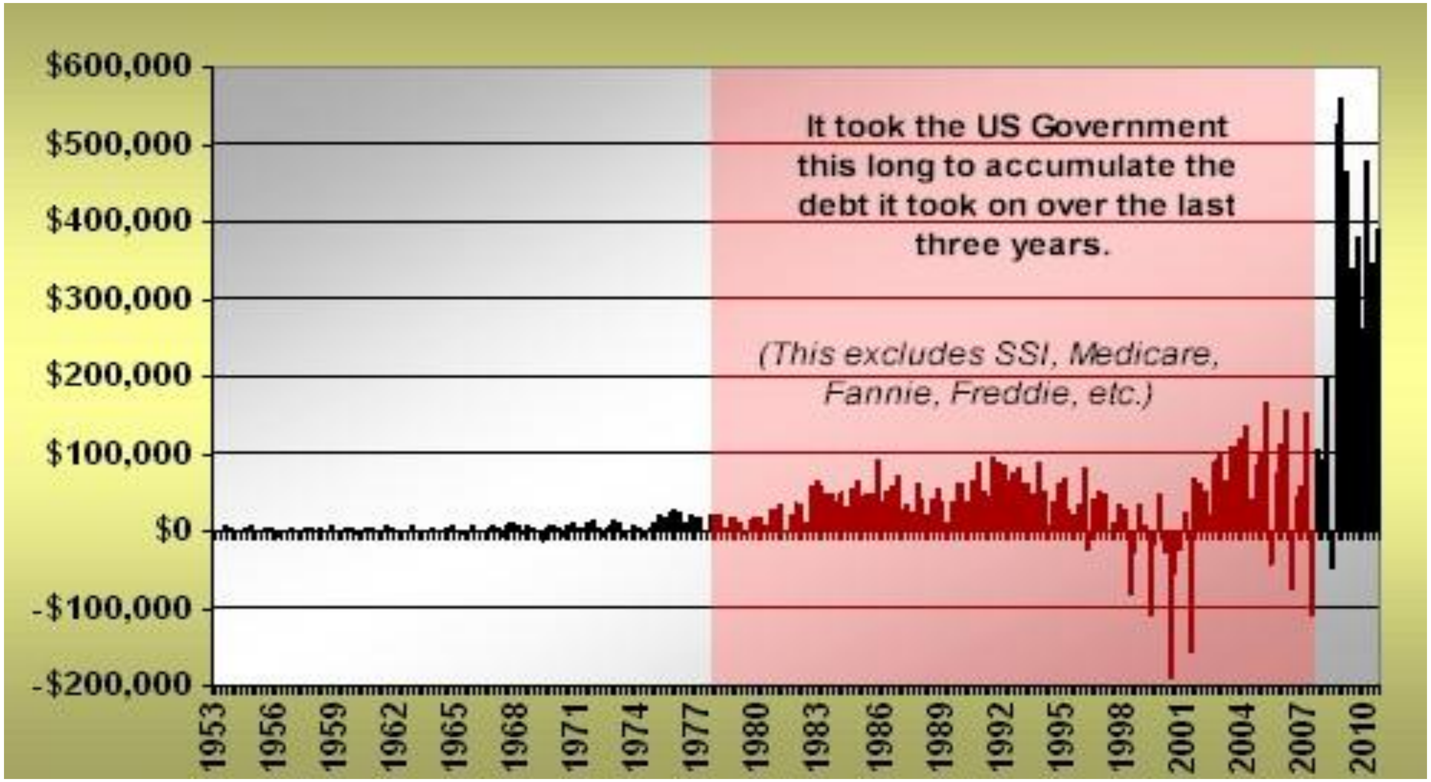
## US Total Debt (ex Financial) to GDP




*Source: Contraryinvestor.com*

# Federal Debt Accumulation

## Qtr/Qtr Growth in Federal Debt Outstanding ($mm)



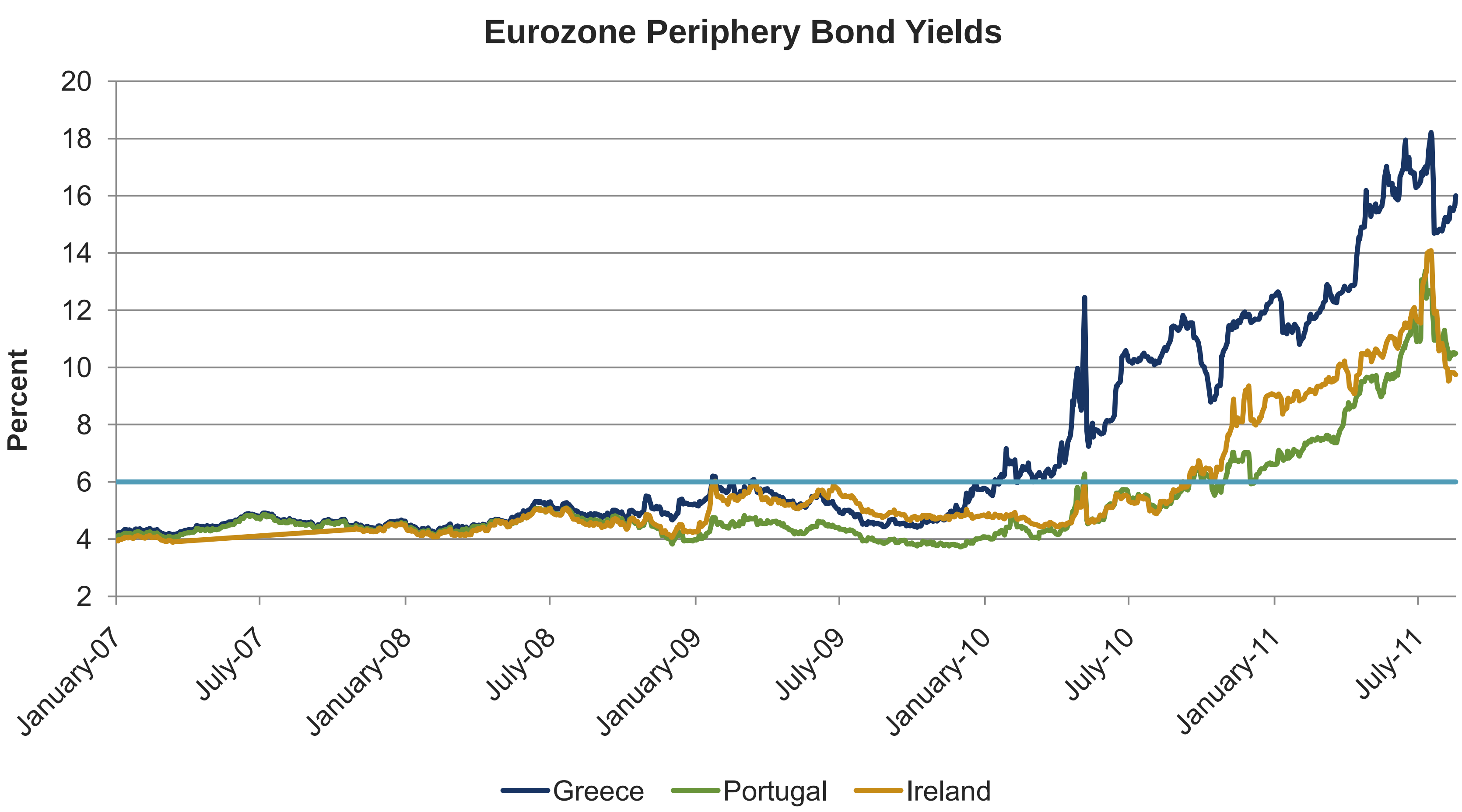

*Source: Contraryinvestor.com*

# Eurozone

# Eurozone Crisis

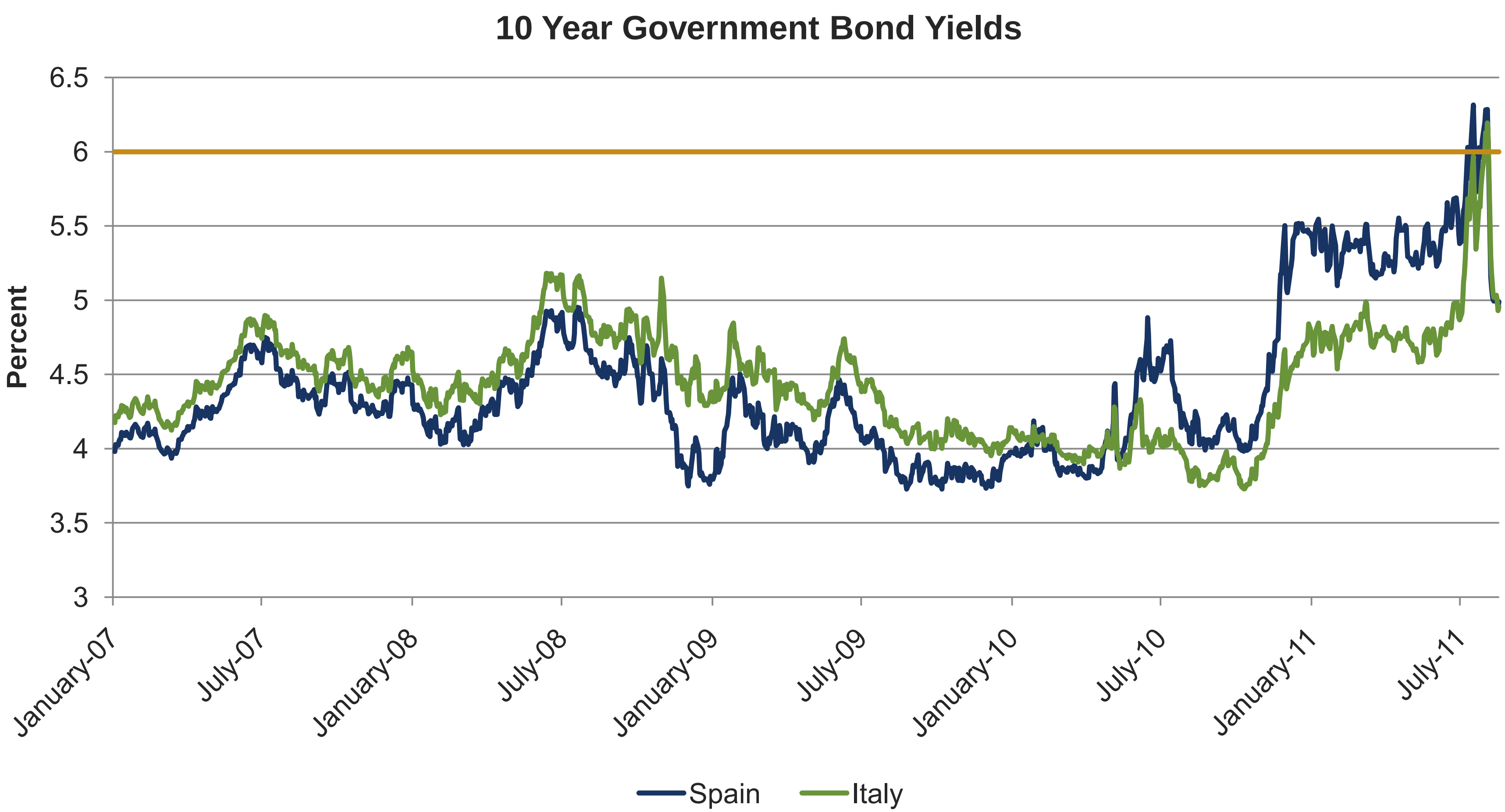
- Eurozone took center stage in the summer as Spain and Italy sovereign spreads moved out
- We continue to hold the view that Eurozone issues will end in a financial crisis involving one or more big countries
- Now approaching the end game with Germany allowing financial market pressure on weaker countries to gain leverage
- Final outcome is unpredictable, but financial market stress is likely

# Periphery Bond Yields



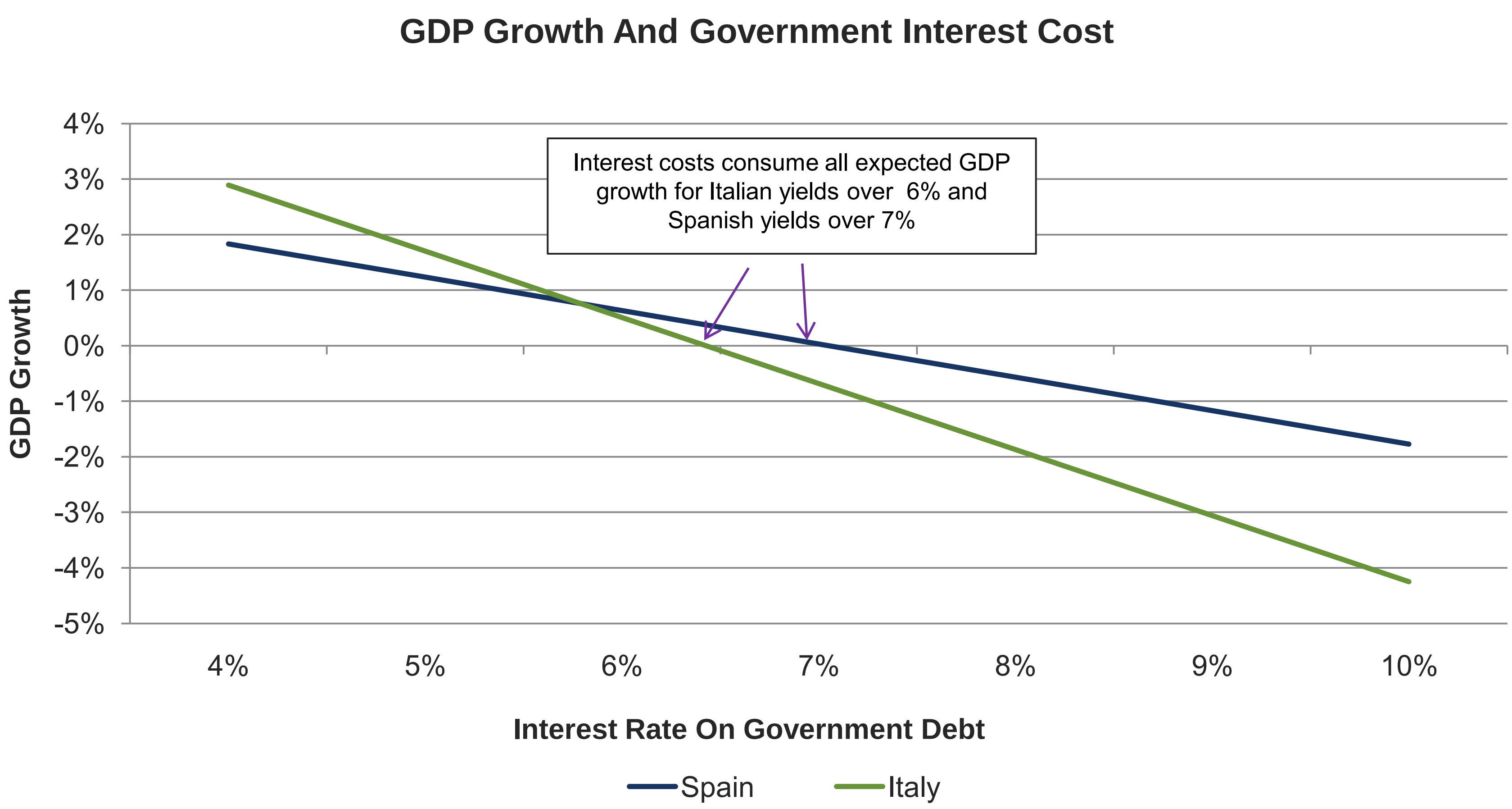

Source: Bloomberg / GR-NEAM Analytics

# Spain and Italy




Source: Bloomberg / GR-NEAM Analytics

# Eurozone Crisis




Source: IMF/ GR-NEAM Analytics





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# Eurozone Conclusions

- Eurozone policymakers' responses so far dangerously slow
- Italy and Spain approaching unsustainable bond yields
- Stress spreading to banking systems – sovereigns and banks are joined at the hip
- Markets may force resolution in a matter of months – or less

# Conclusions

# Investment Policy Conclusions - November 2011

- Latest economic data continue to show a weakening economic environment

- The Euro Zone debt situation will continue to dominate the capital market risk appetite. Another pickup in volatility is likely.

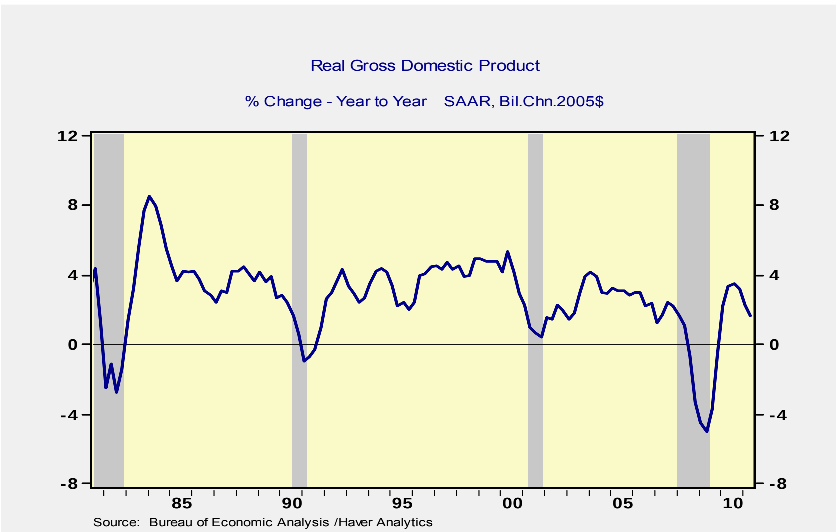
- Risk assets have bounced somewhat, primarily because they were extremely oversold, as the S&P500 shed ~17% in three weeks.

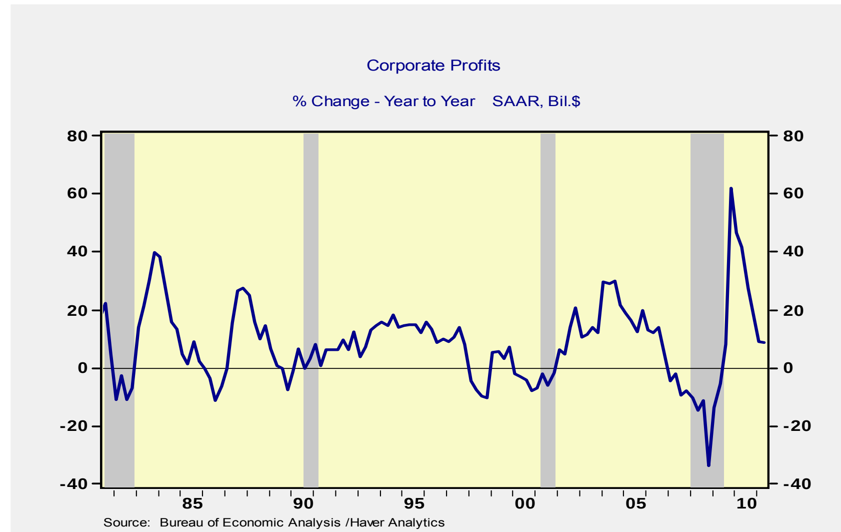
- Despite the weakness in developed economies and tighter credit policies in the EM, oil continues to trade at relatively high levels. This seems at odds with current fundamentals. Further correction in commodities prices seems plausible if not likely.

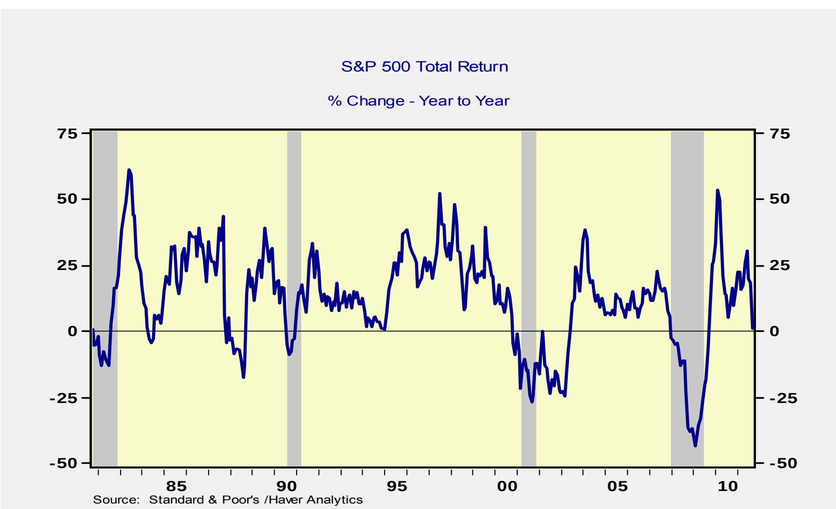
- While not our base case, odds of an economic contraction in the U.S. are rising and is virtually certain in the Euro Zone.

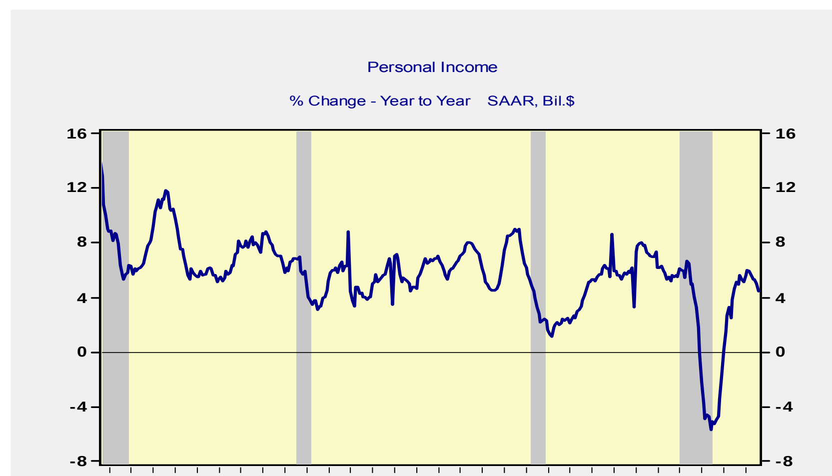
# Appendix

# General Economic Conditions

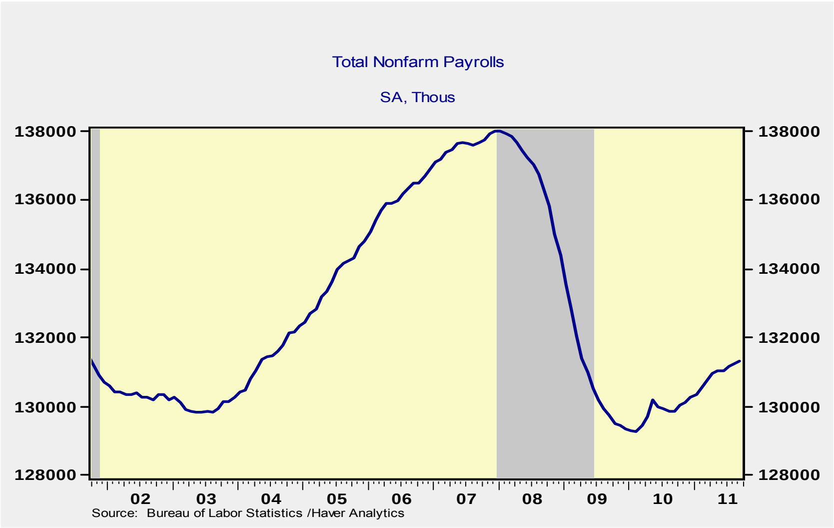


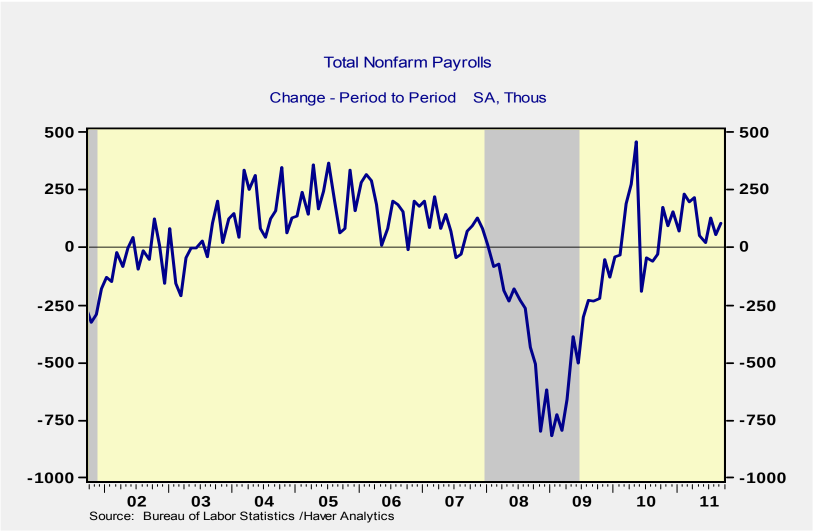



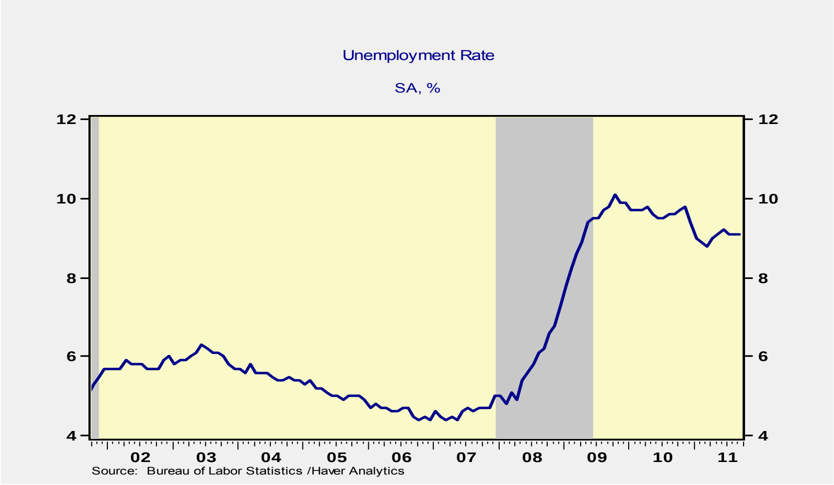



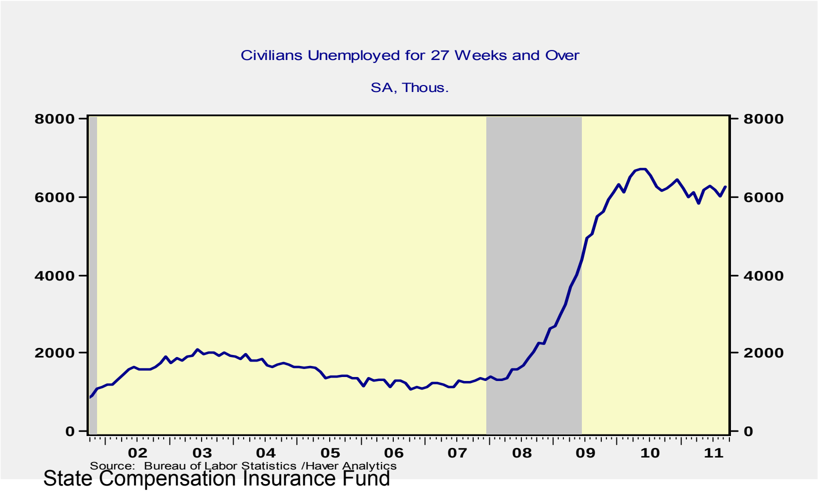



# Employment Conditions

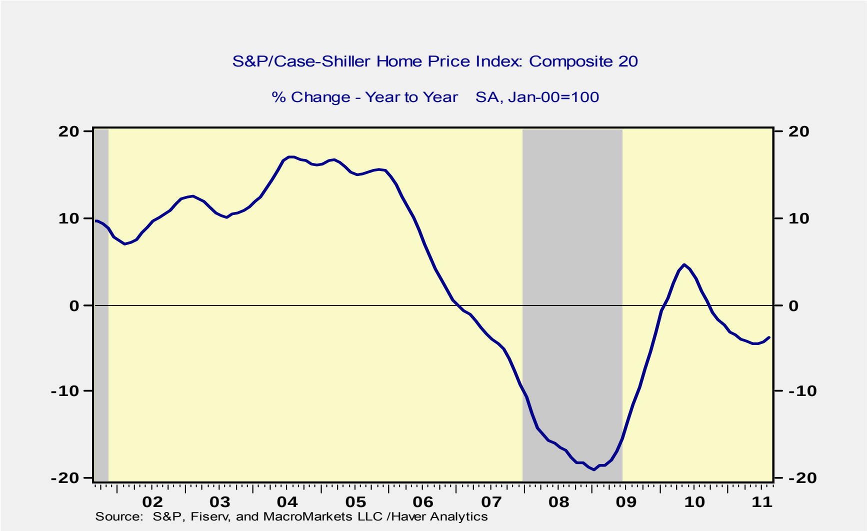


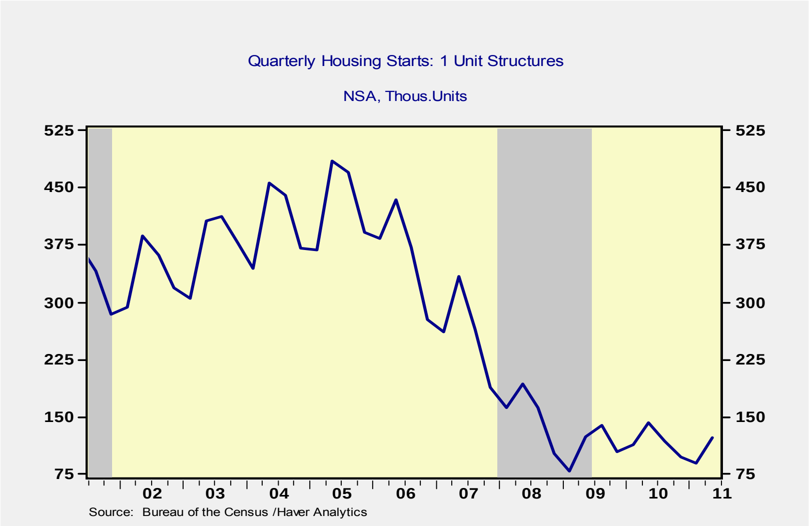



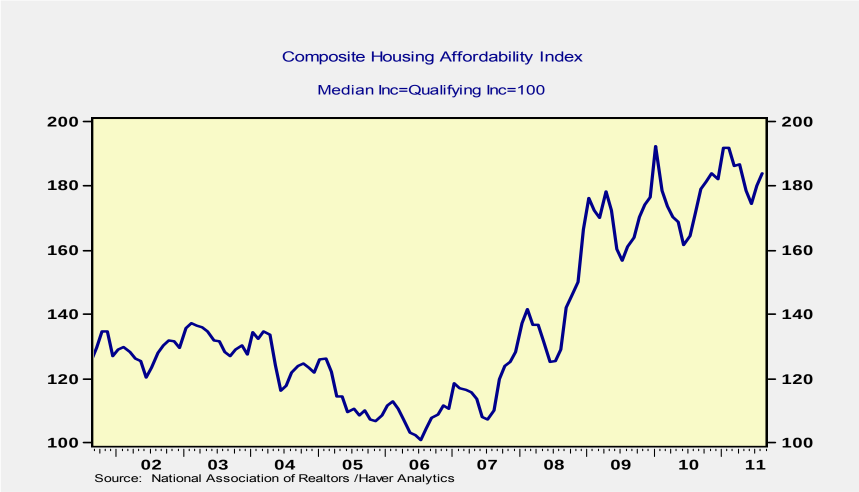



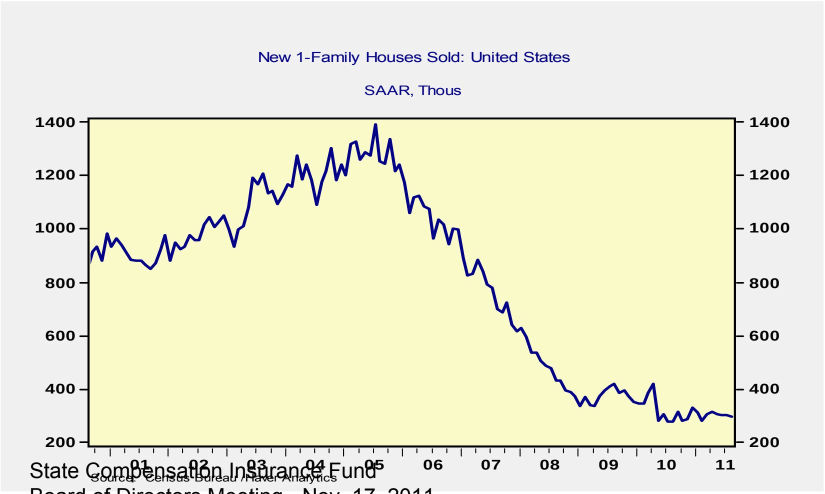



# Housing Market Conditions

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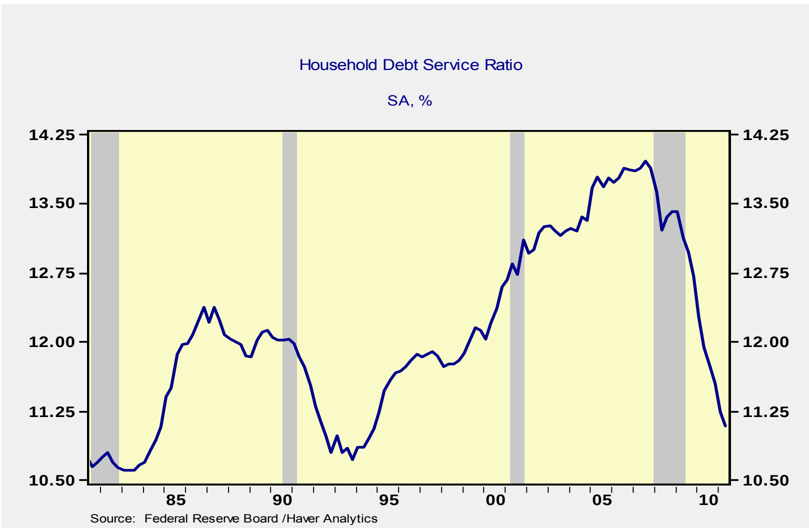
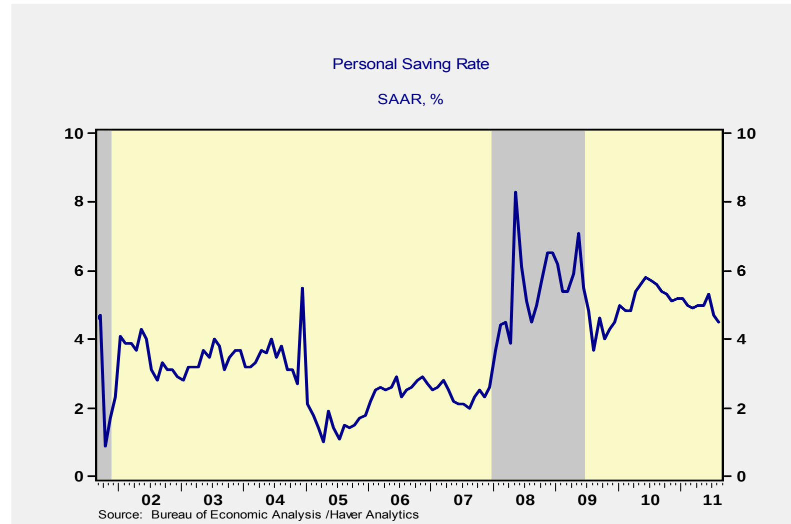
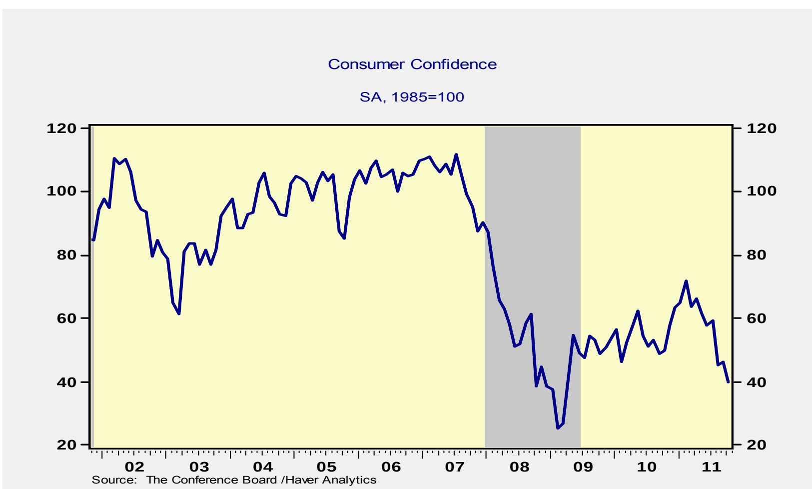
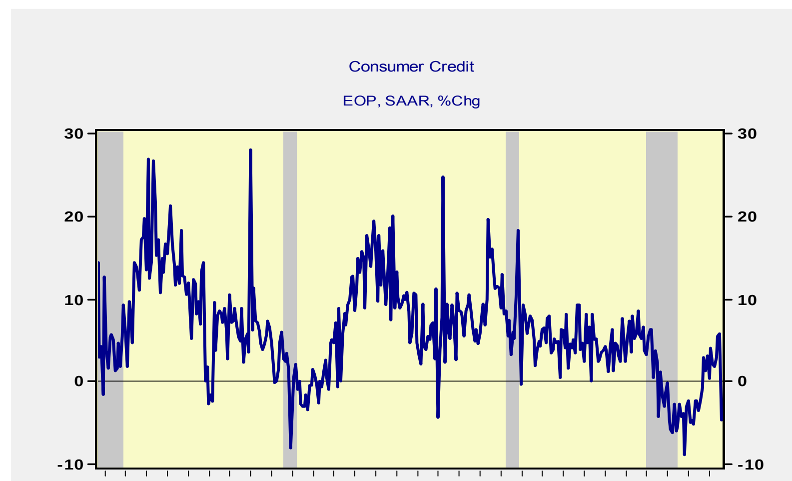
# Consumer

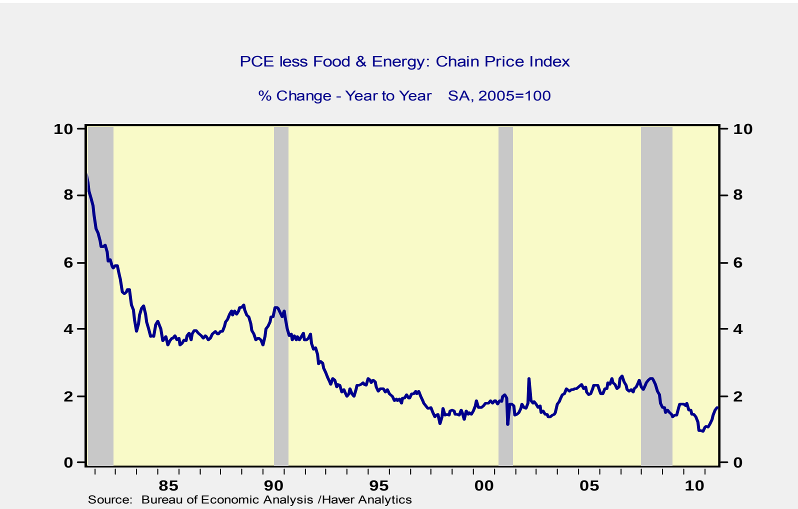

Household Debt Service Ratio
SA, %
14.25
13.50
12.75
12.00
11.25
10.50
85 90 95 00 05 10
Source: Federal Reserve Board /Haver Analytics

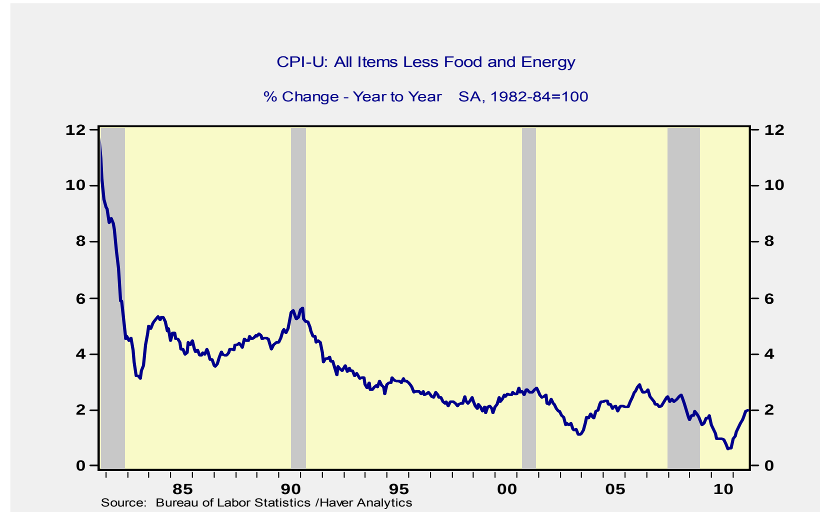

Personal Saving Rate
SAAR, %
10
8
6
4
2
0
02 03 04 05 06 07 08 09 10 11
Source: Bureau of Economic Analysis /Haver Analytics

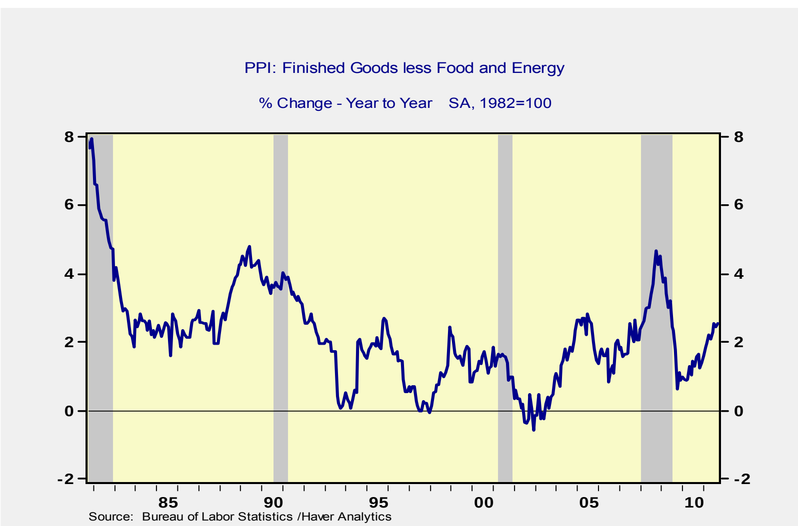

Consumer Confidence
SA, 1985=100
120
100
80
60
40
20
02 03 04 05 06 07 08 09 10 11
Source: The Conference Board /Haver Analytics

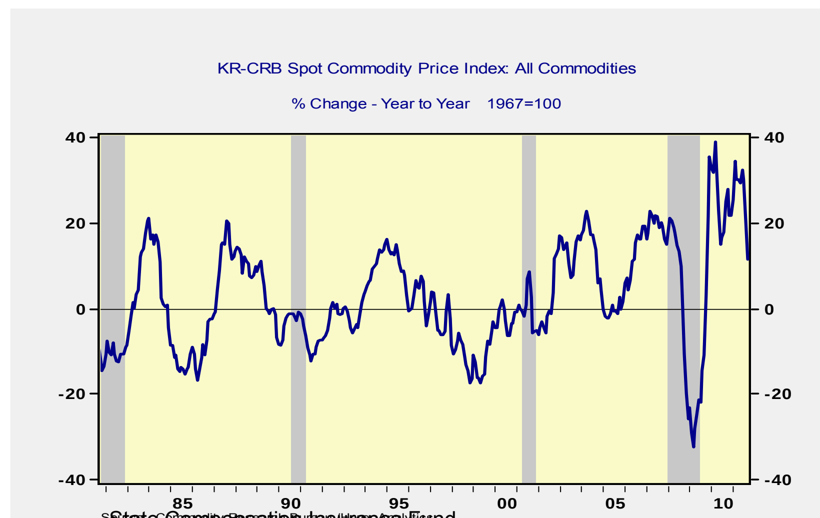

Consumer Credit
EOP, SAAR, %Chg
30
20
10
0
-10
85 90 95 00 05 10

# Inflation Environment



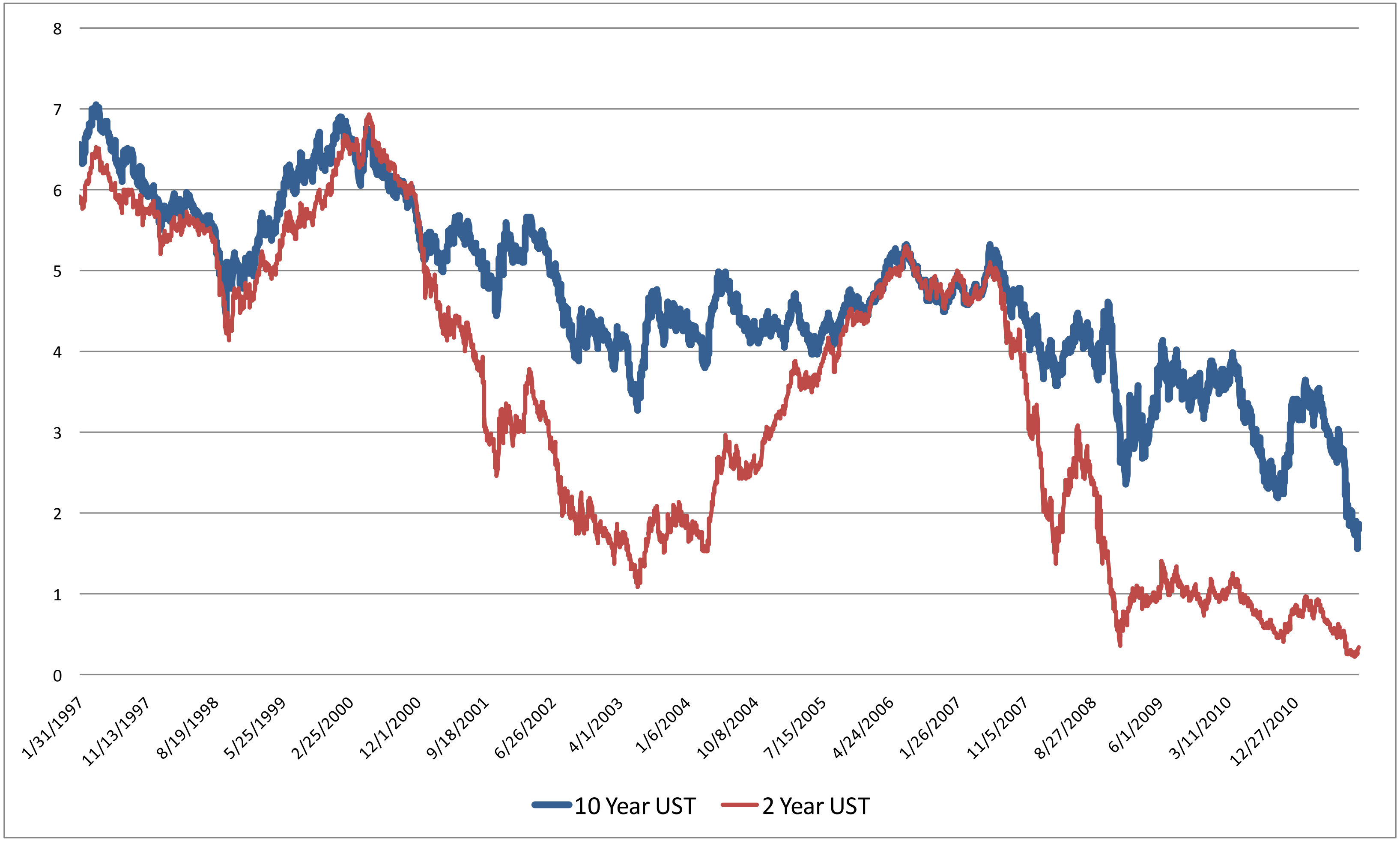



# Reaching for Yield

# US Treasury Yield History



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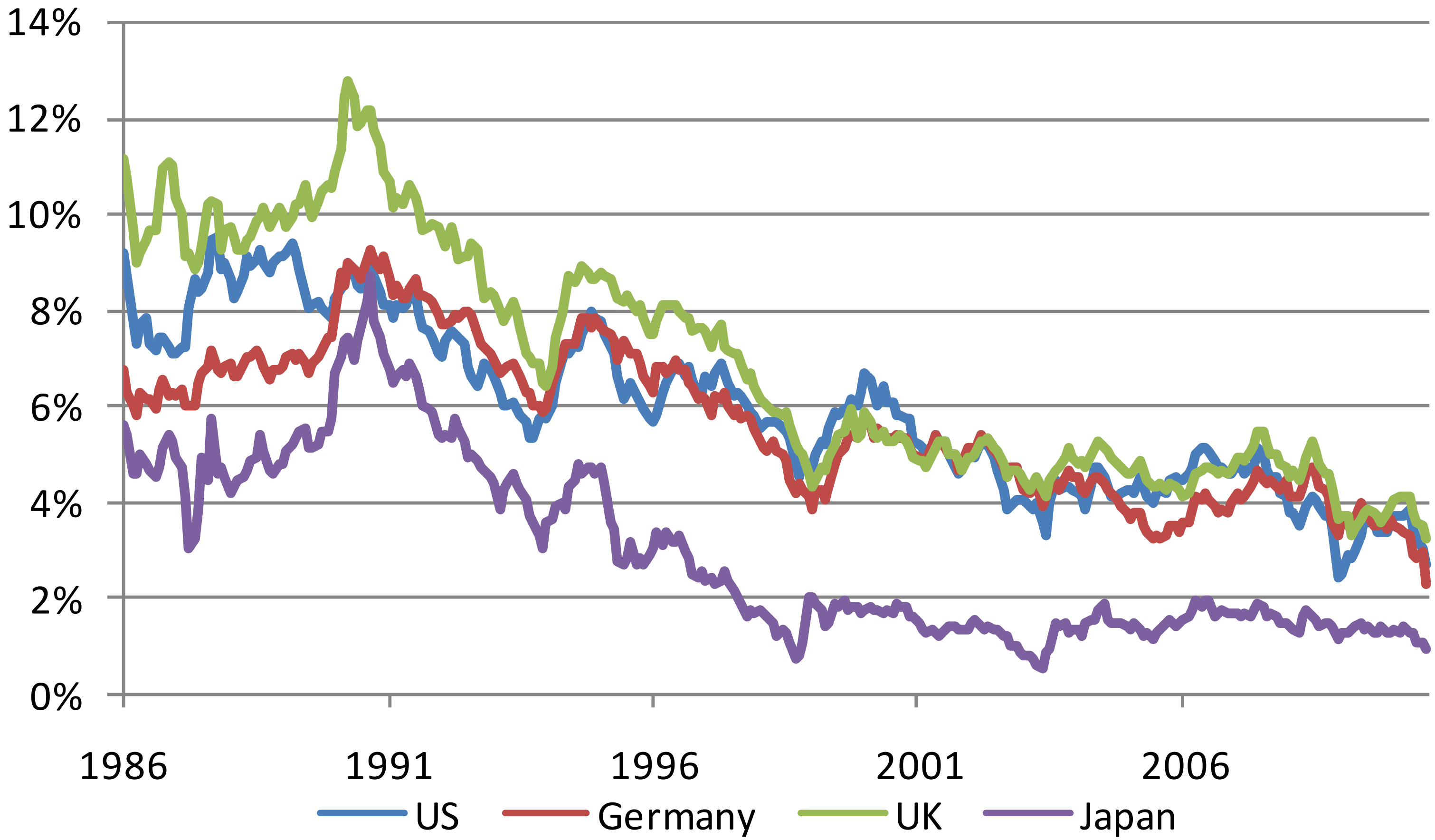
# Sovereign Yield History




Source: *Bloomberg L.P., GR-NEAM Analytics*

# The Issues

- Yields have disappeared in a world of paper money – this was not supposed to happen.

- Very long time series appeared until recently to converge to a clear conclusion – paper money is subject to inflation.

- Excessive use of private borrowing has left developed economies more susceptible to shock.

- Government borrowing now attempting to lessen the shock.

- Implications for investing – Should you be reaching for yield in this environment to maintain/enhance the income your portfolio generates?

    - Increase Credit Risk
    - Extend Duration

# Investing for Insurance Company Balance Sheets

- Duplicating that which competition is doing is the road to mediocrity and even danger.
- Current environment suggests taking more credit risk to maintain yields, but current spreads may not justify the risk.
- Short rates at virtually zero encourage longer duration – eventually this will be a mistake.
- Good investing requires
  - Patience
  - Discipline
  - Opportunism – Waiting for when we are paid for it
  - Maintain Dry Powder in this Environment



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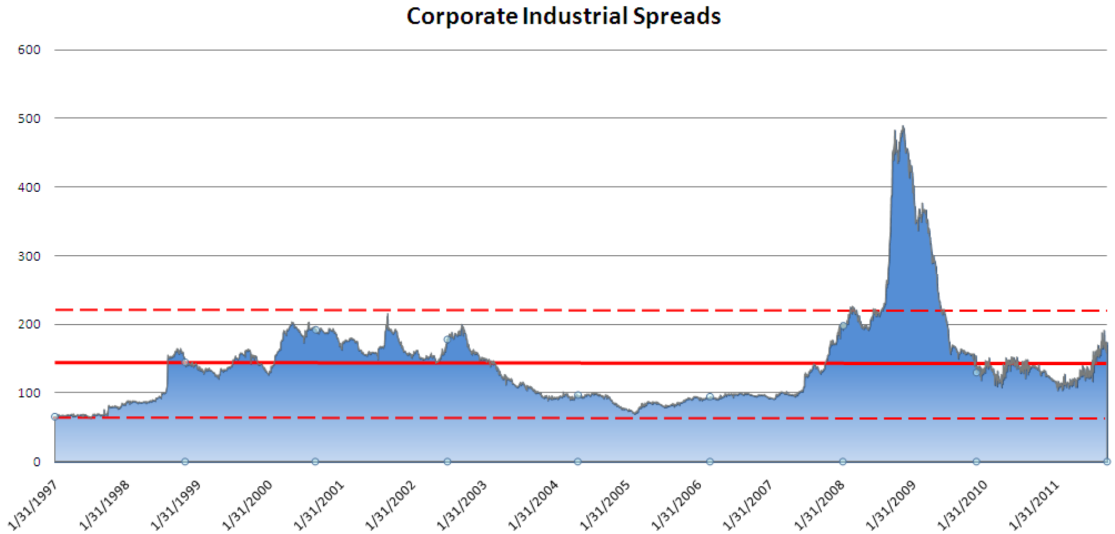
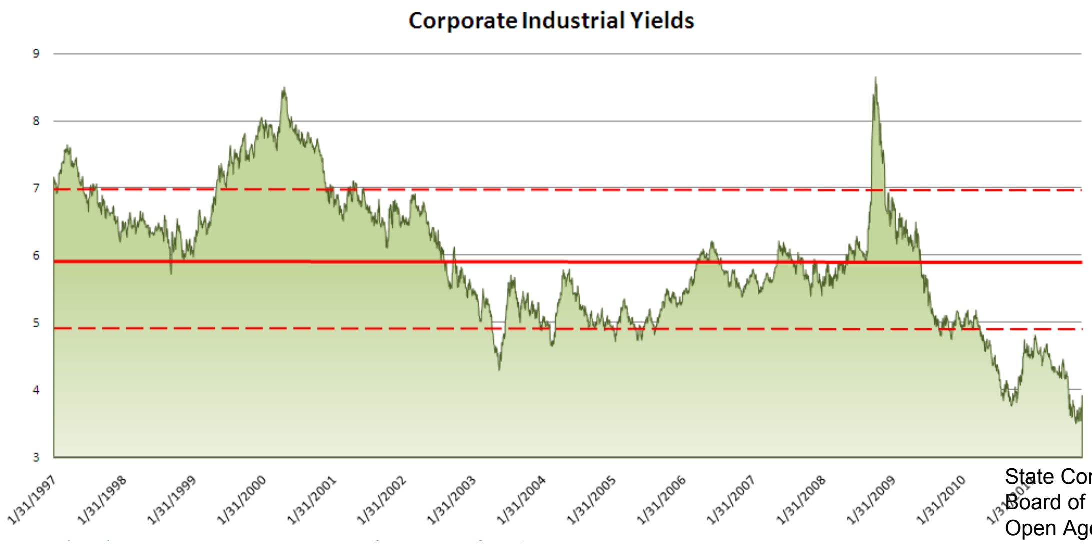
# Increase Credit Risk

# Increase Credit Risk

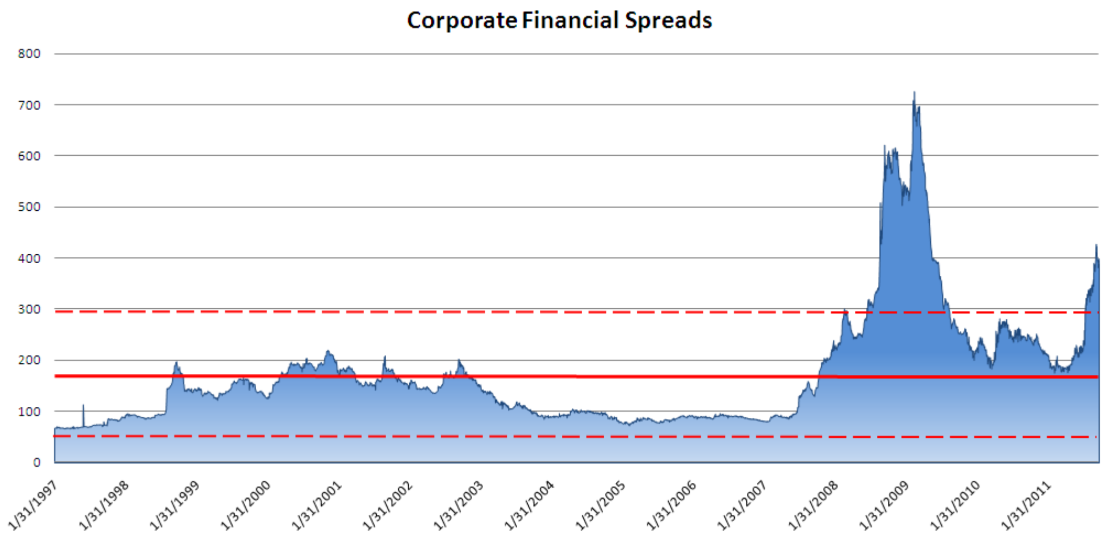



| | |
|---|---|
| Mean | 143 |
| Current | 162 |
| Std Dev | 69 |
| Z-score | 0.3 |

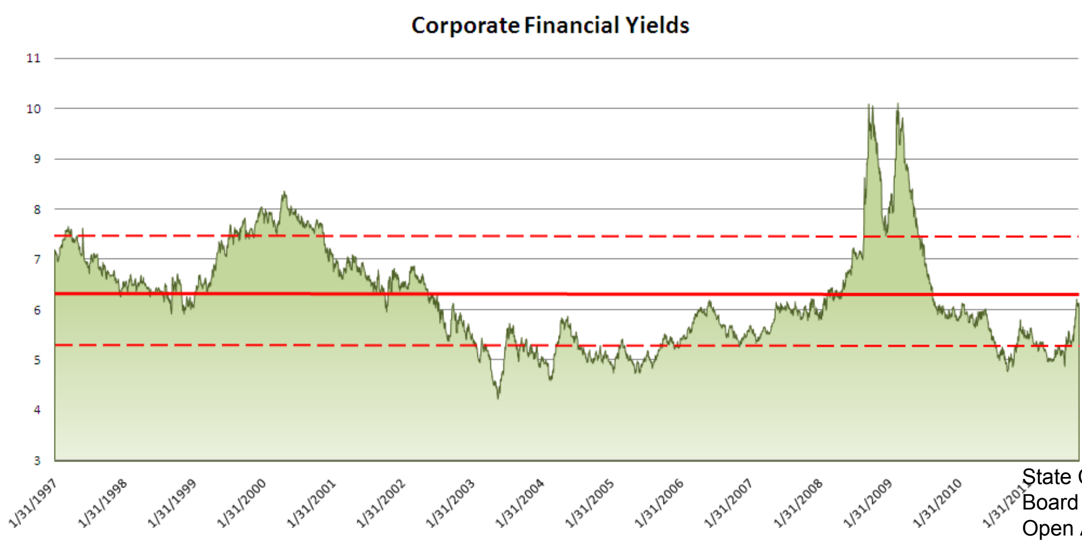



| | |
|---|---|
| Mean | 5.9% |
| Current | 3.8% |
| Std Dev | 1.0 |
| Z-score | -2.2 |

# Increase Credit Risk




| | |
|---|---|
| Mean | 173 |
| Current | 379 |
| Std Dev | 115 |
| Z-score | 1.8 |

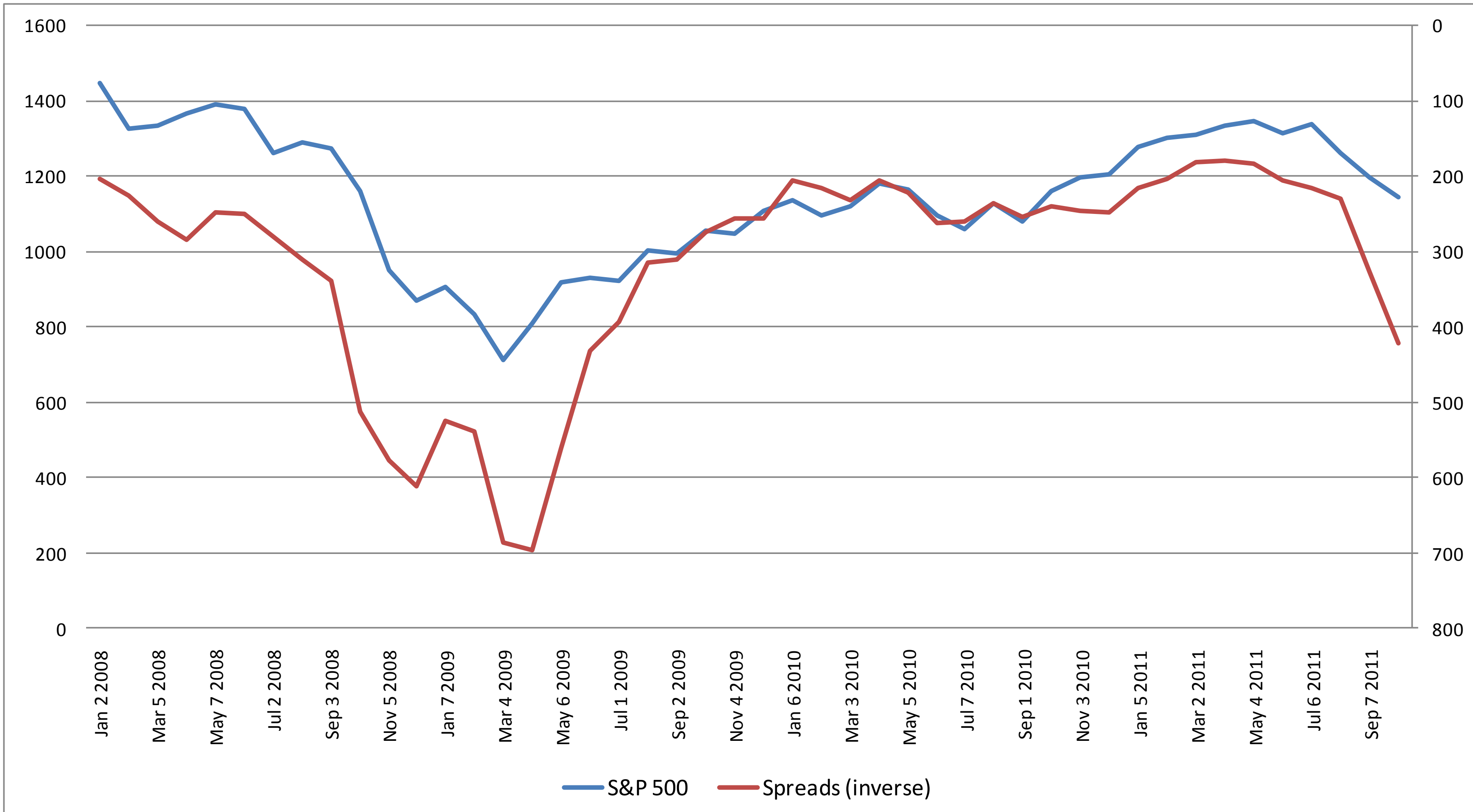



| | |
|---|---|
| Mean | 6.3% |
| Current | 5.9% |
| Std Dev | 1.0 |
| Z-score | -0.4 |

# Effect of QE1 and QE2 on Equity Market

| | |
|---|---|
| Summer 2007 to QE1 commencement | -45% |
| QE1 | +34% |
| Period between QE1 and QE2 | -10% |
| QE2 | +26% |
| Since QE2 ended | -15% |
| S&P Returns since 07 w/o QE | -58% |
| S&P Returns with QE | +68% |

# S&P 500 and Corporate Financial Spreads (inverted)



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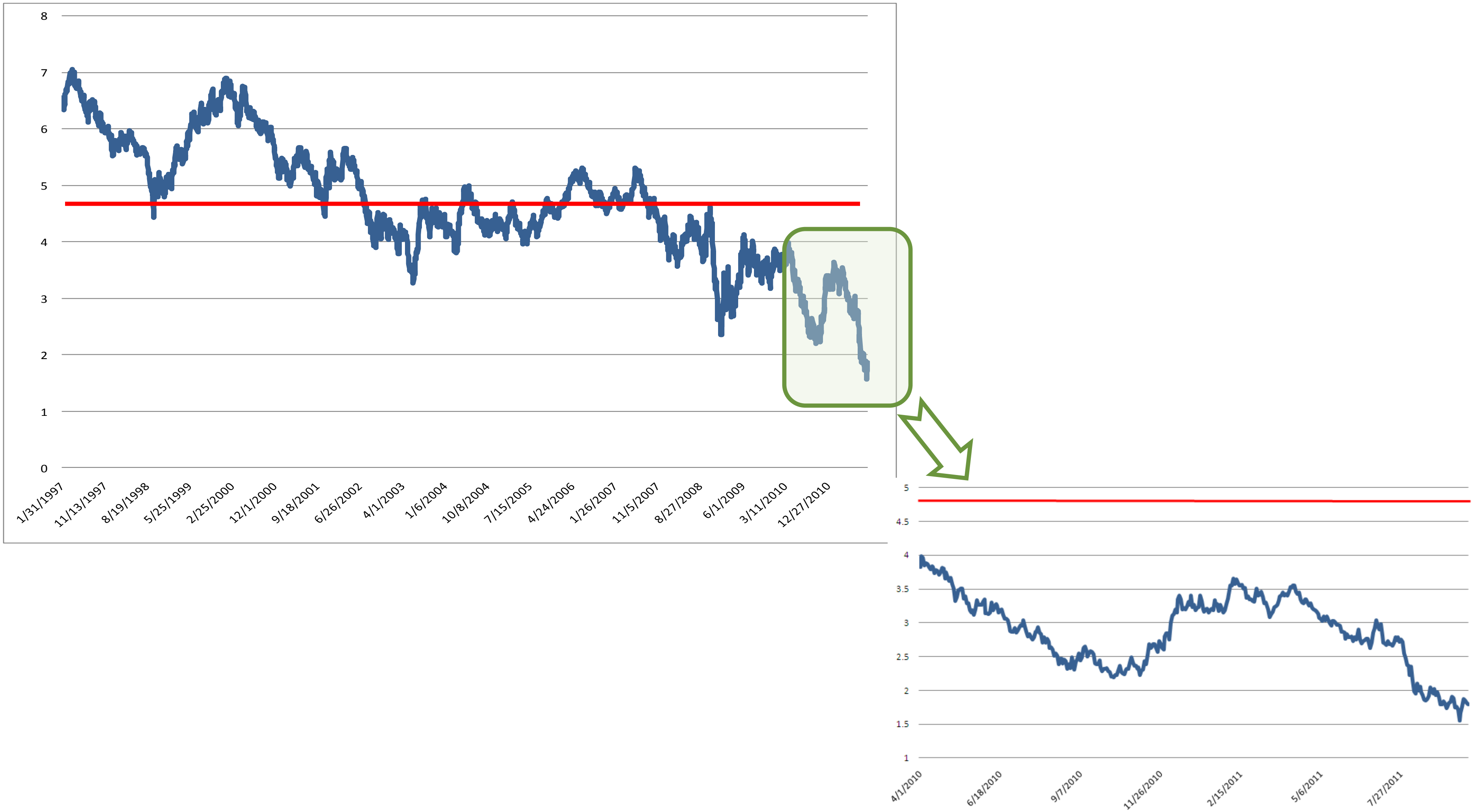
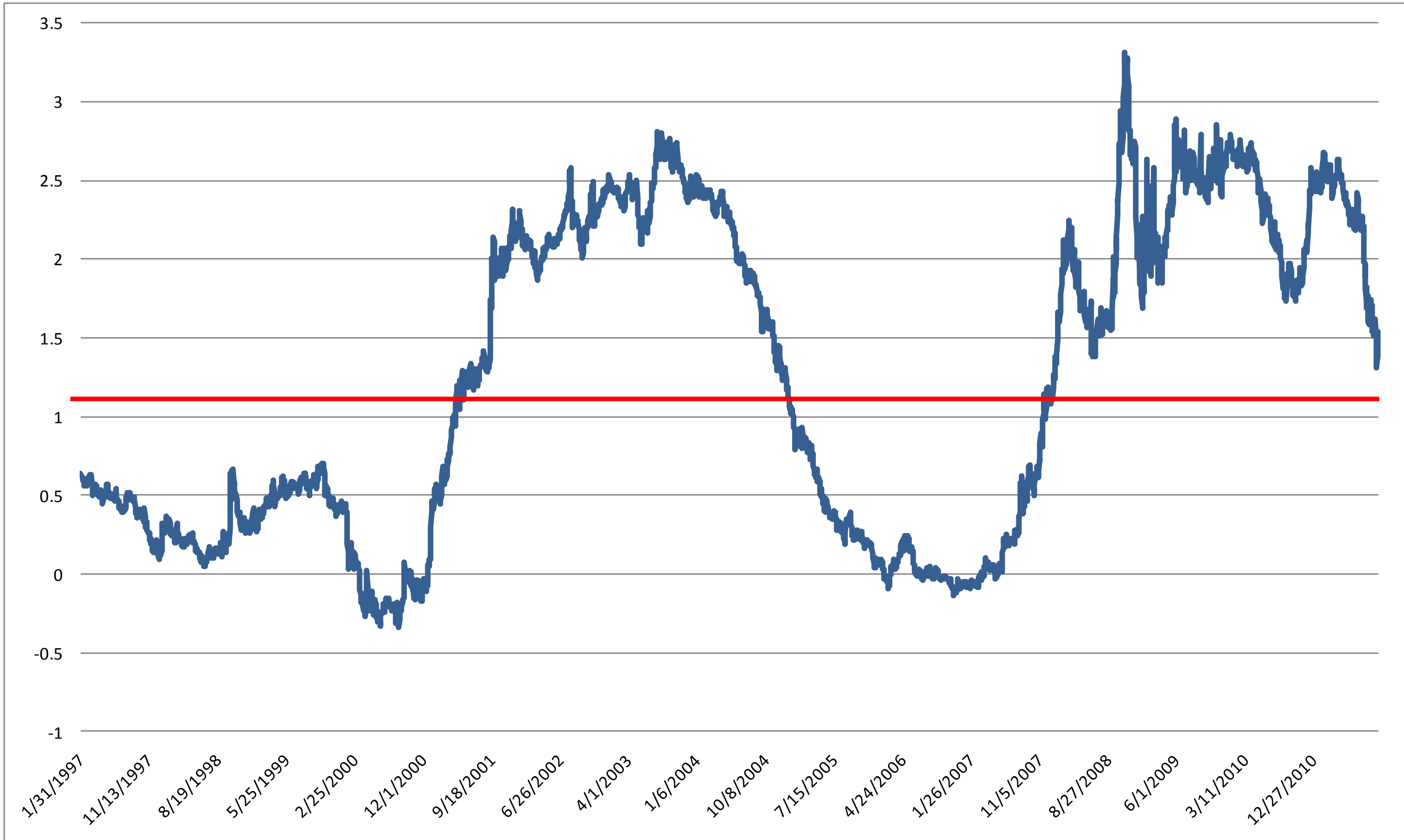
# Extend Duration

# 10yr US Treasury Yield



# 10yr US Treasury Yield minus 2yr US Treasury Yield





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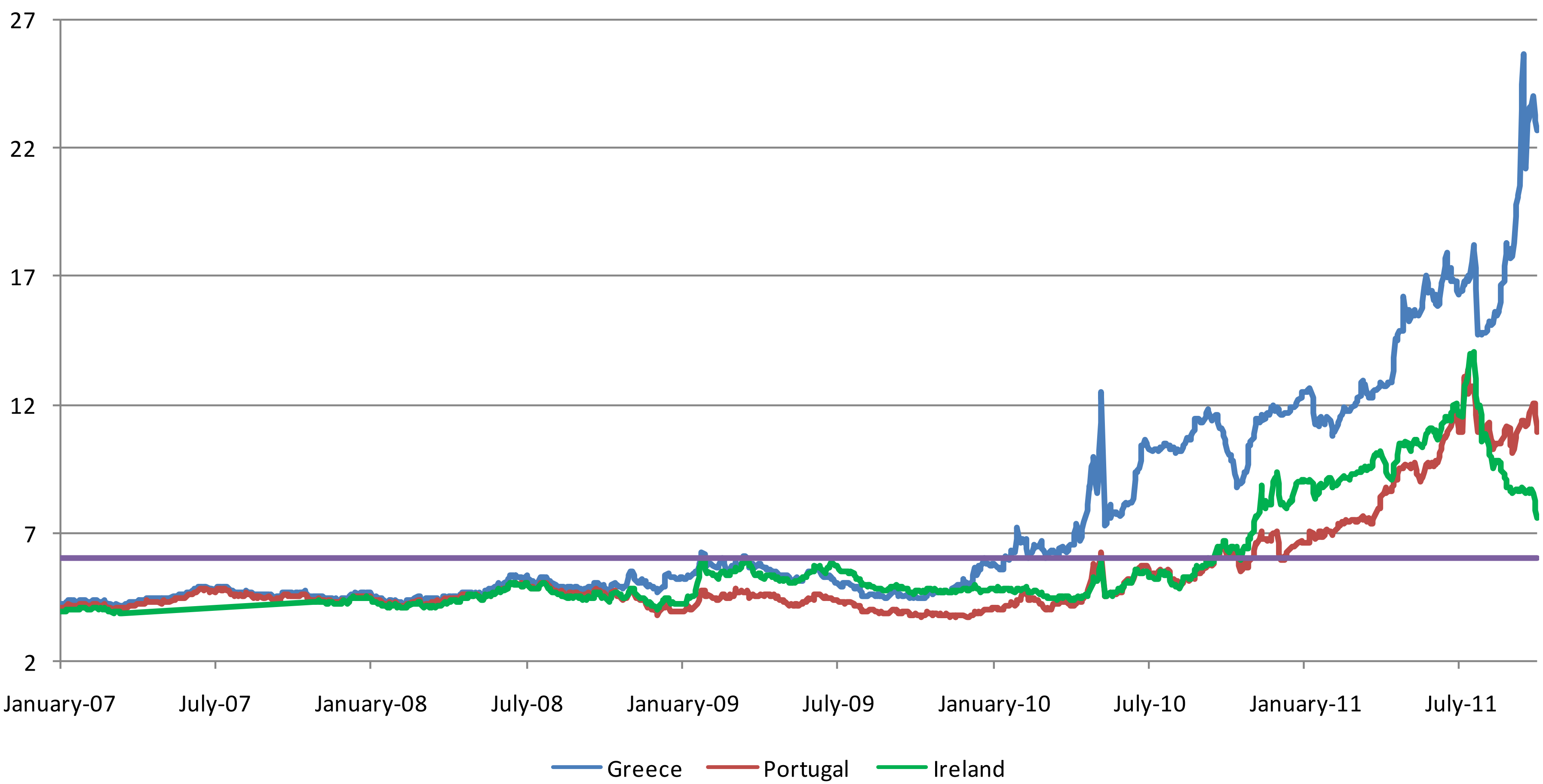
# Greece, Ireland and Portugal Bond Yields




Sources: *Bloomberg L.P. and GR-NEAM Analytics*

# Deficit and Debt to GDP

| | 2011 Deficit * | 2011 Debt * |
|---|---|---|
| Eurozone | 4.3% | 88% |
| UK | 8.6% | 84% |
| US | 10.0% | 98% |

** as a % of GDP*

Source: *European Commission*

# Cash Flow Forecast

| Flat Rate Scenario Period | Principal Returned as % of Total Par | Running Total |
|---|---|---|
| *2011* | 4.9% | 4.9% |
| *2012* | 17.4% | 22.3% |
| *2013* | 13.3% | 35.6% |
| *2014* | 10.2% | 45.8% |
| *2015* | 7.6% | 53.4% |
| *2016* | 8.7% | 62.1% |
| *2017* | 8.1% | 70.2% |
| *2018* | 6.1% | 76.2% |
| *2019* | 4.7% | 81.0% |
| *2020* | 3.9% | 84.8% |
| *2021* | 5.3% | 90.2% |
| ***Total after 10 years*** | **90.2%** | |

*35% of principal is expected back over the next 2+ years affords the portfolio the ability to take advantage of higher rates*