

# Reflections on Secular Stagnation

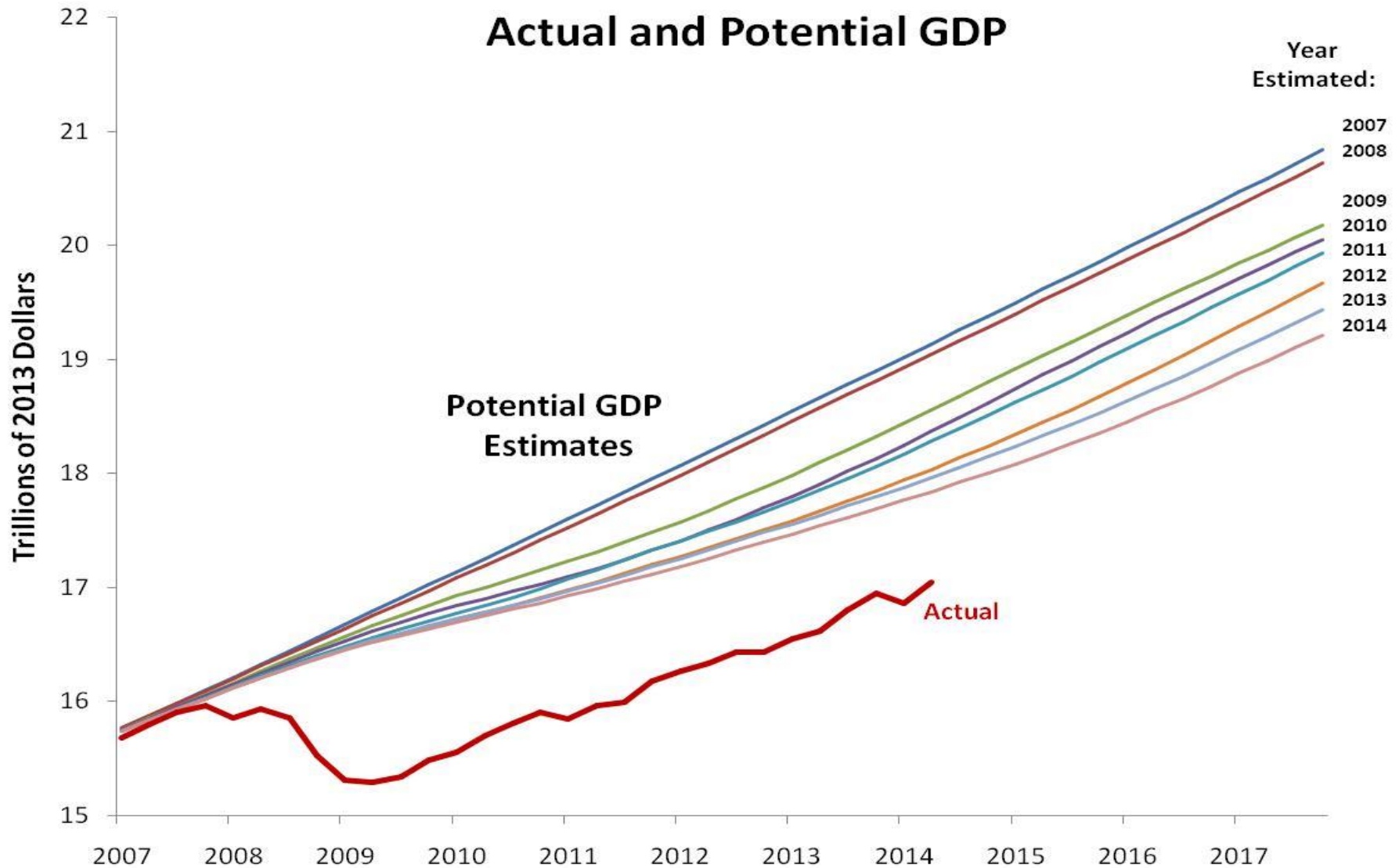
Dr. Lawrence H. Summers

October 31, 2014

# Outline

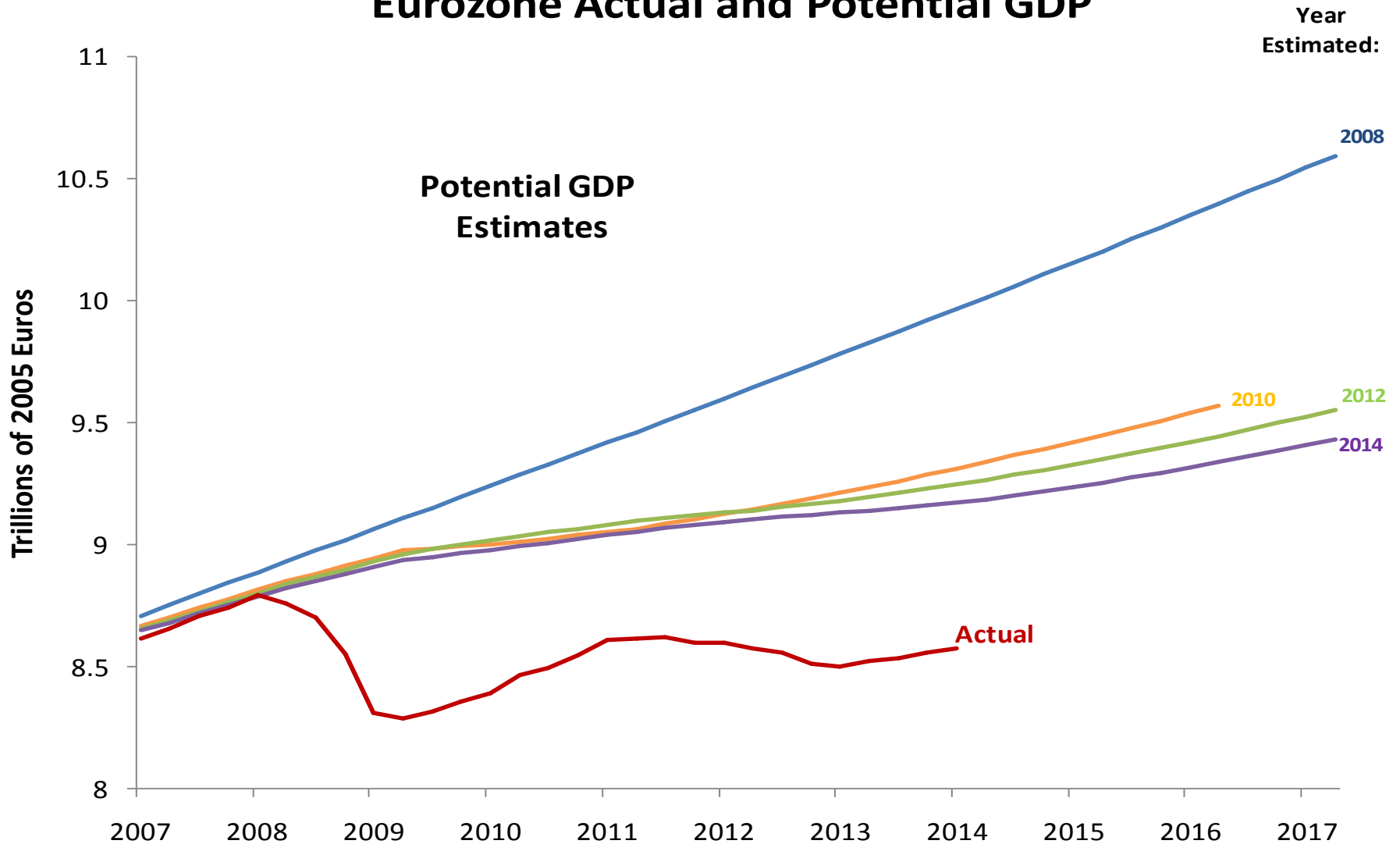
- I. Dismal post-crisis economic performance in the industrial world
- II. The secular stagnation hypothesis
- III. Why have real interest rates fallen?
- IV. Issues raised by secular stagnation hypothesis?
- V. What is to be done?

# Downward Revision in Potential GDP, USA



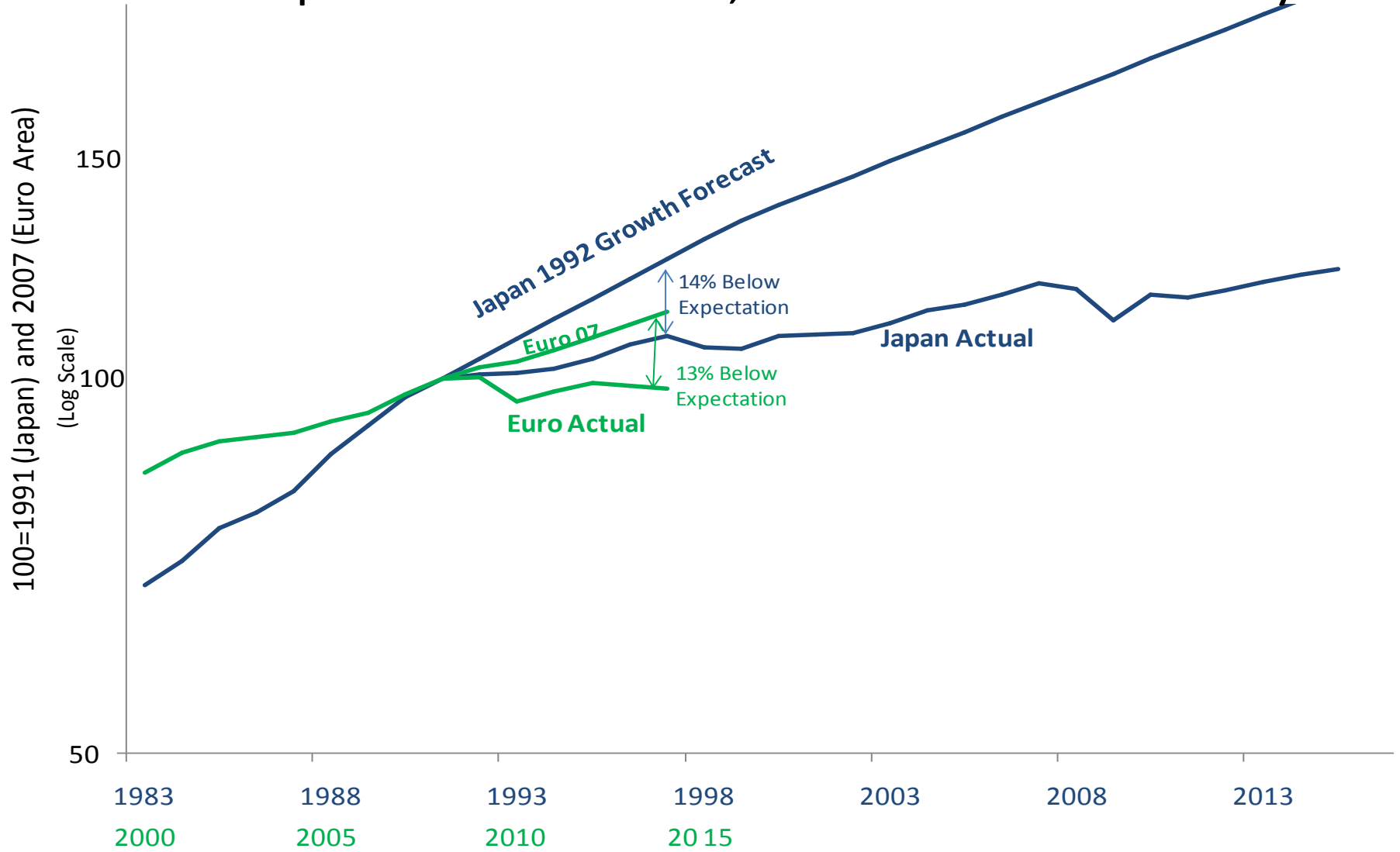
# Downward Revision in Potential GDP, Eurozone

## Eurozone Actual and Potential GDP



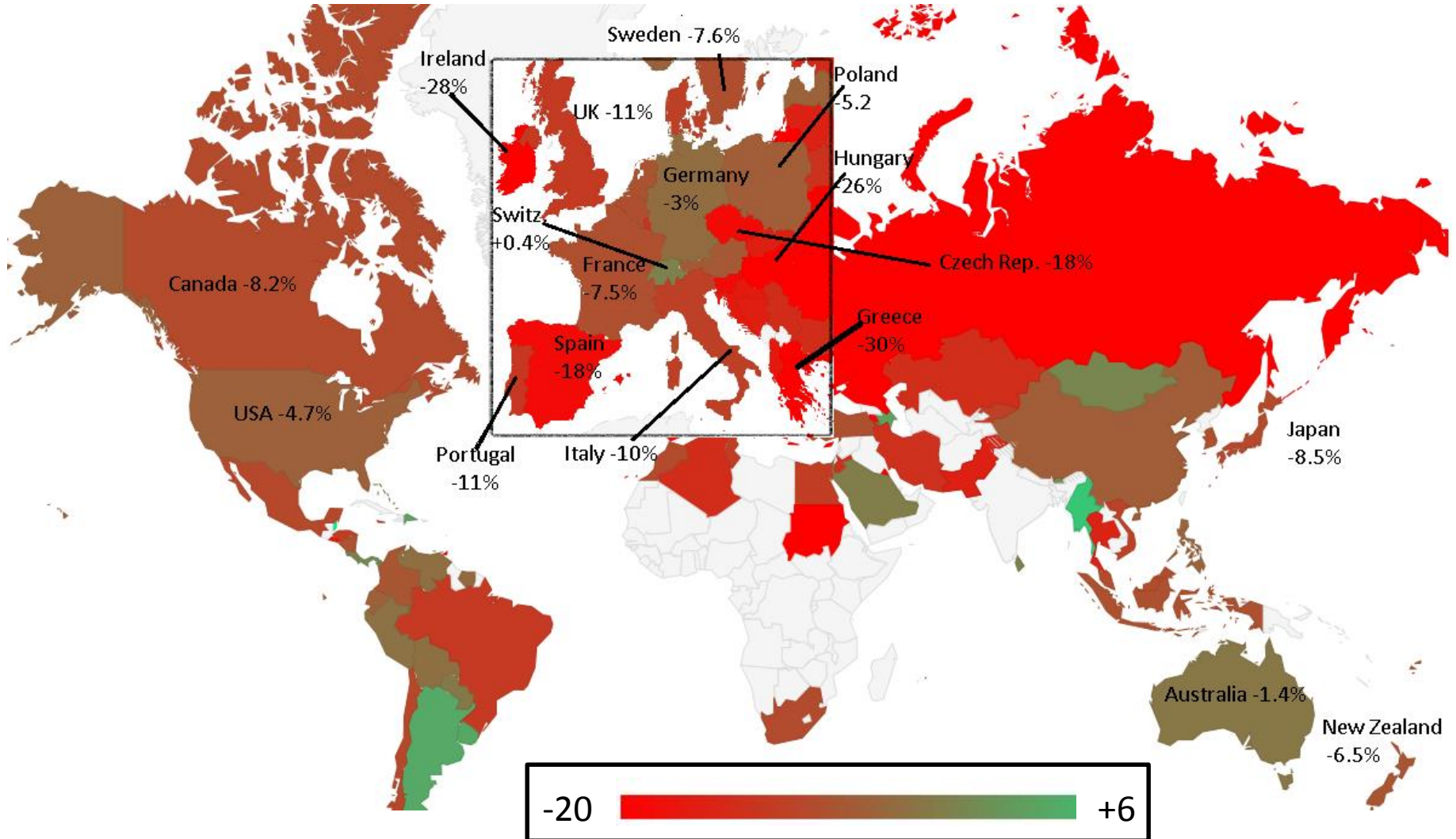
# Europe Mirrors Japan's Experience

## Japan and Euro Area, Forecast Versus Reality



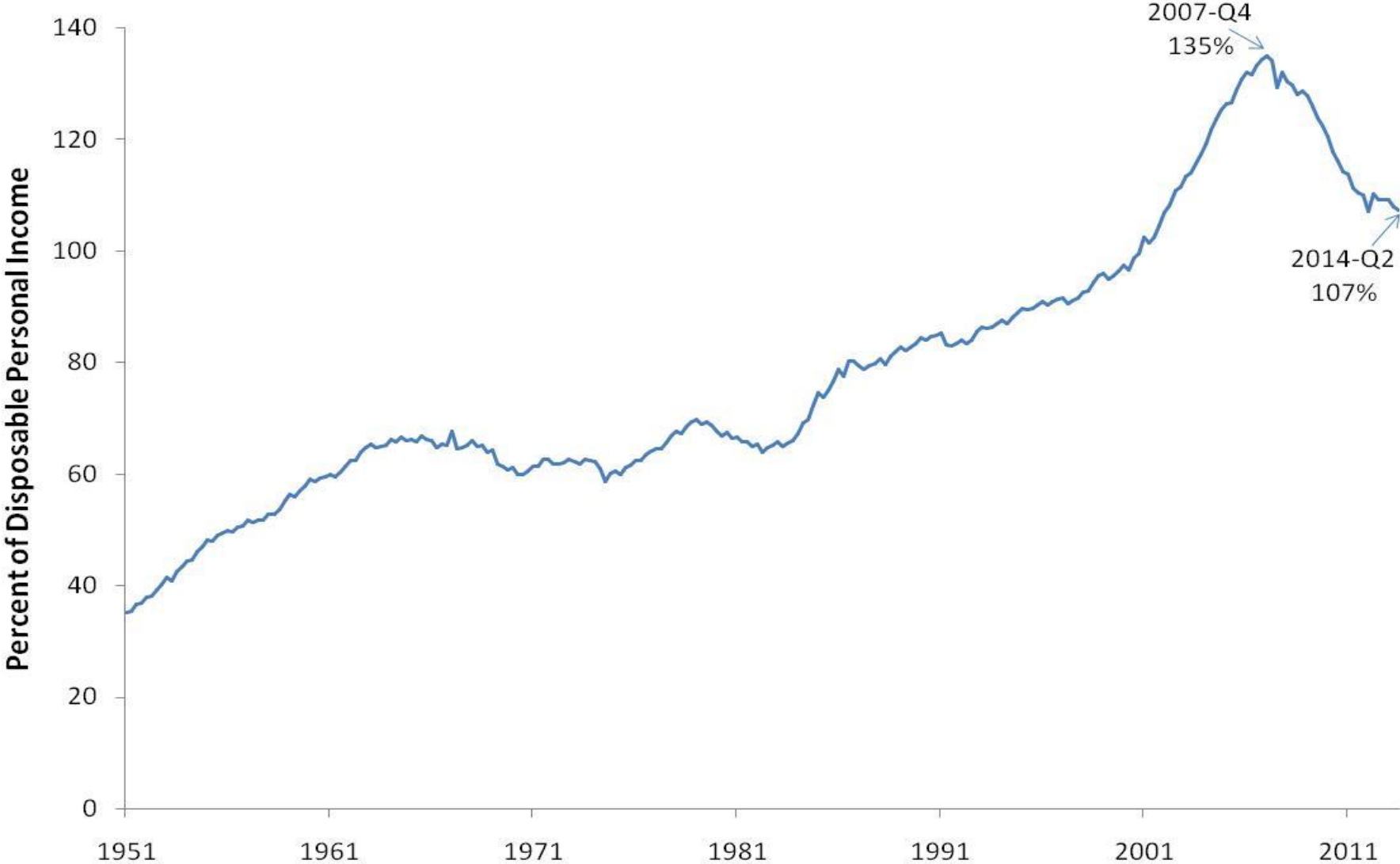
# Falling Potential A Global Phenomenon

## Change in 2013 Potential Output Estimate Since 2007



# Recent U.S. Business Cycles Financially Unsustainable

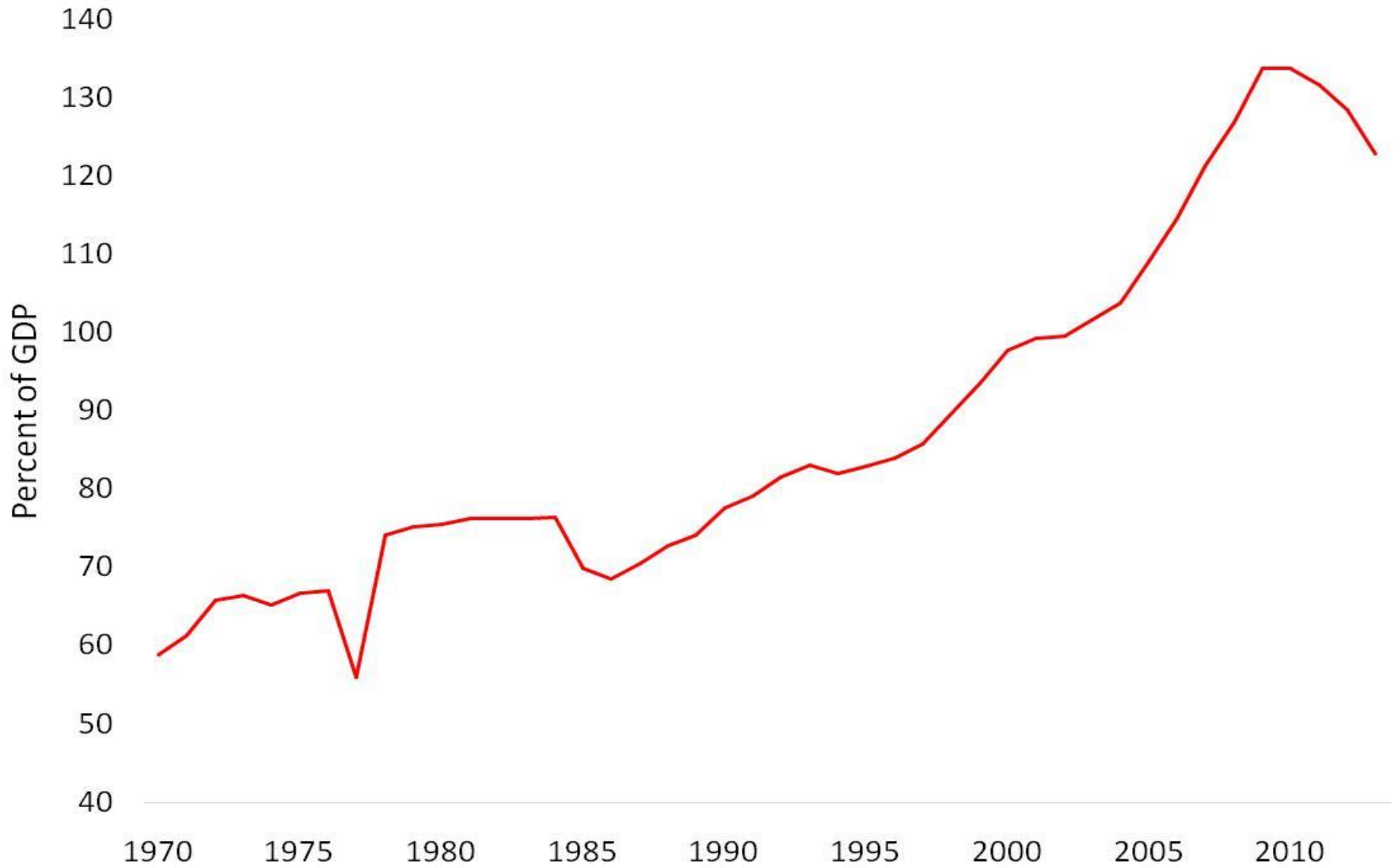
## U.S. Household Debt To Disposable Income



Sources: Federal Reserve, Bureau of Economic Analysis

# European Credit Boom

## Euro Area Private Credit To GDP





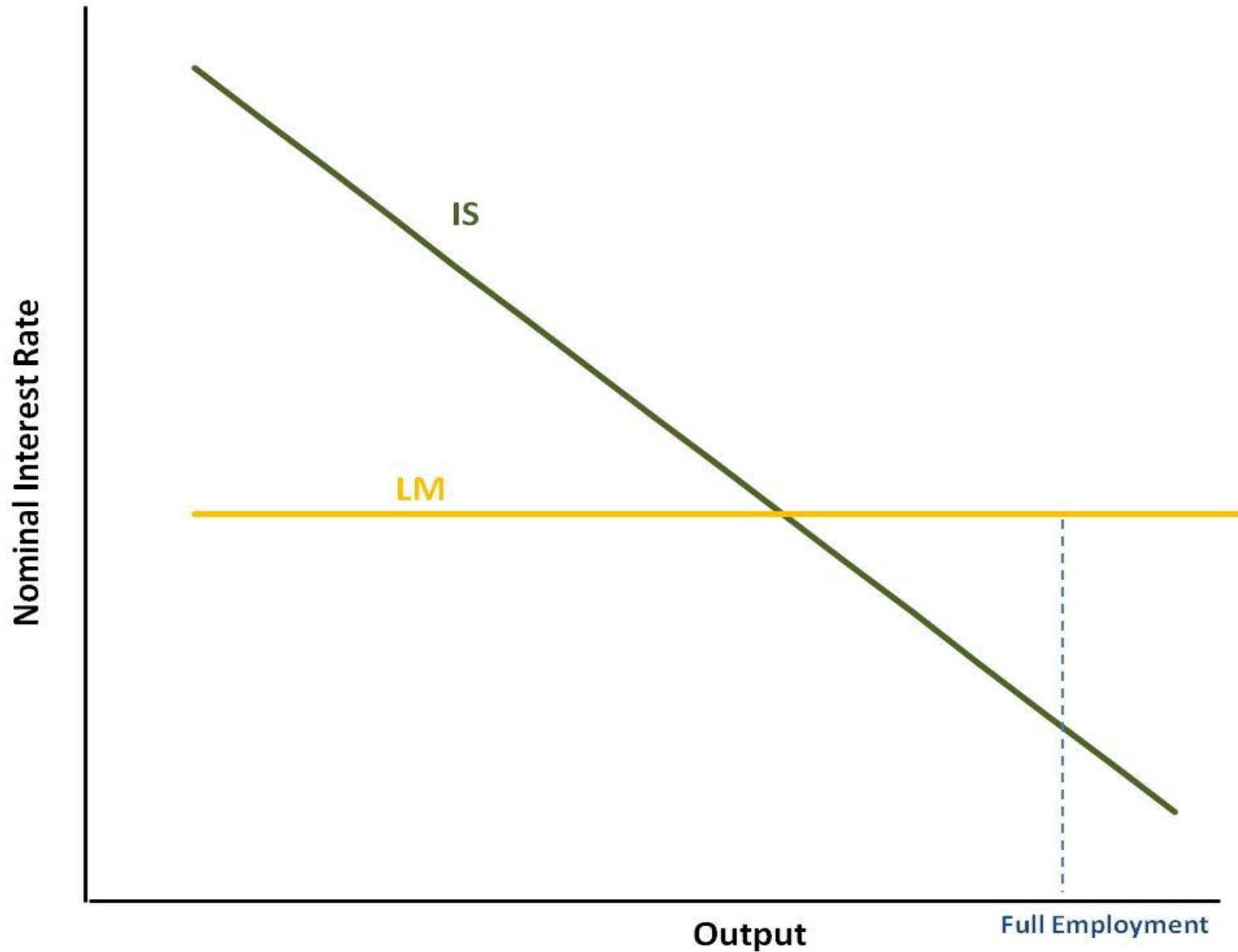
# “Secular Stagnation” Dates To The 1930s



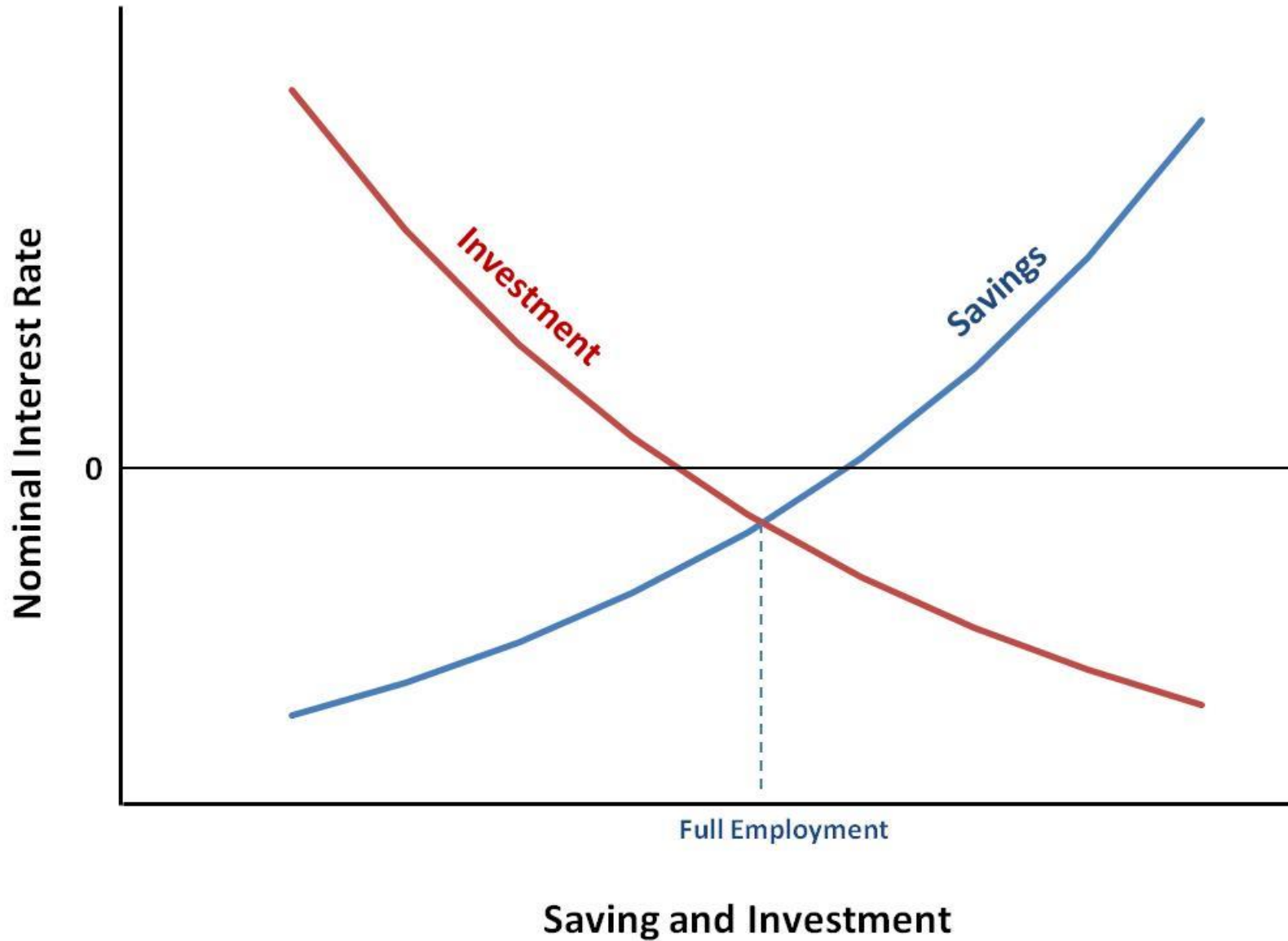
“This is the essence of secular stagnation - sick recoveries which die in their infancy and depressions which feed on themselves and leave a hard and seemingly immovable core of unemployment.”

- Alvin Hansen, 1939

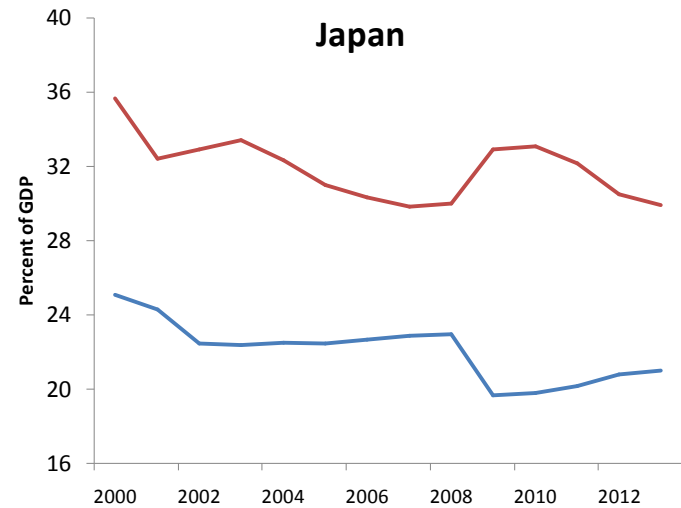
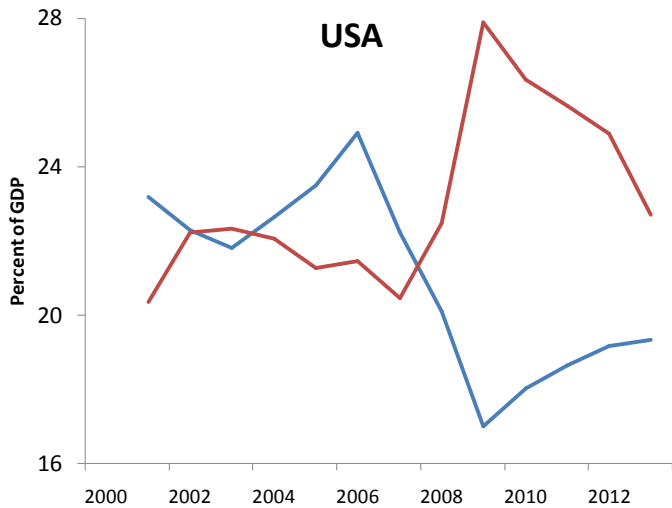
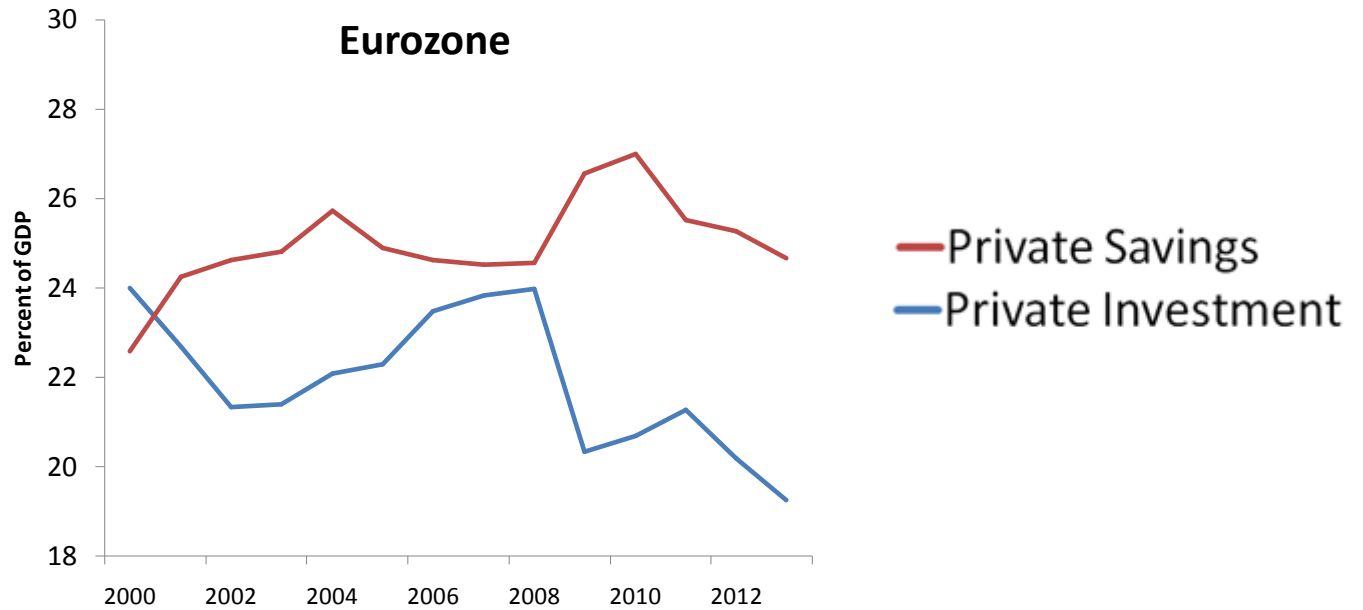
# Liquidity Trap Framework



# Possible Savings/Investment Curves

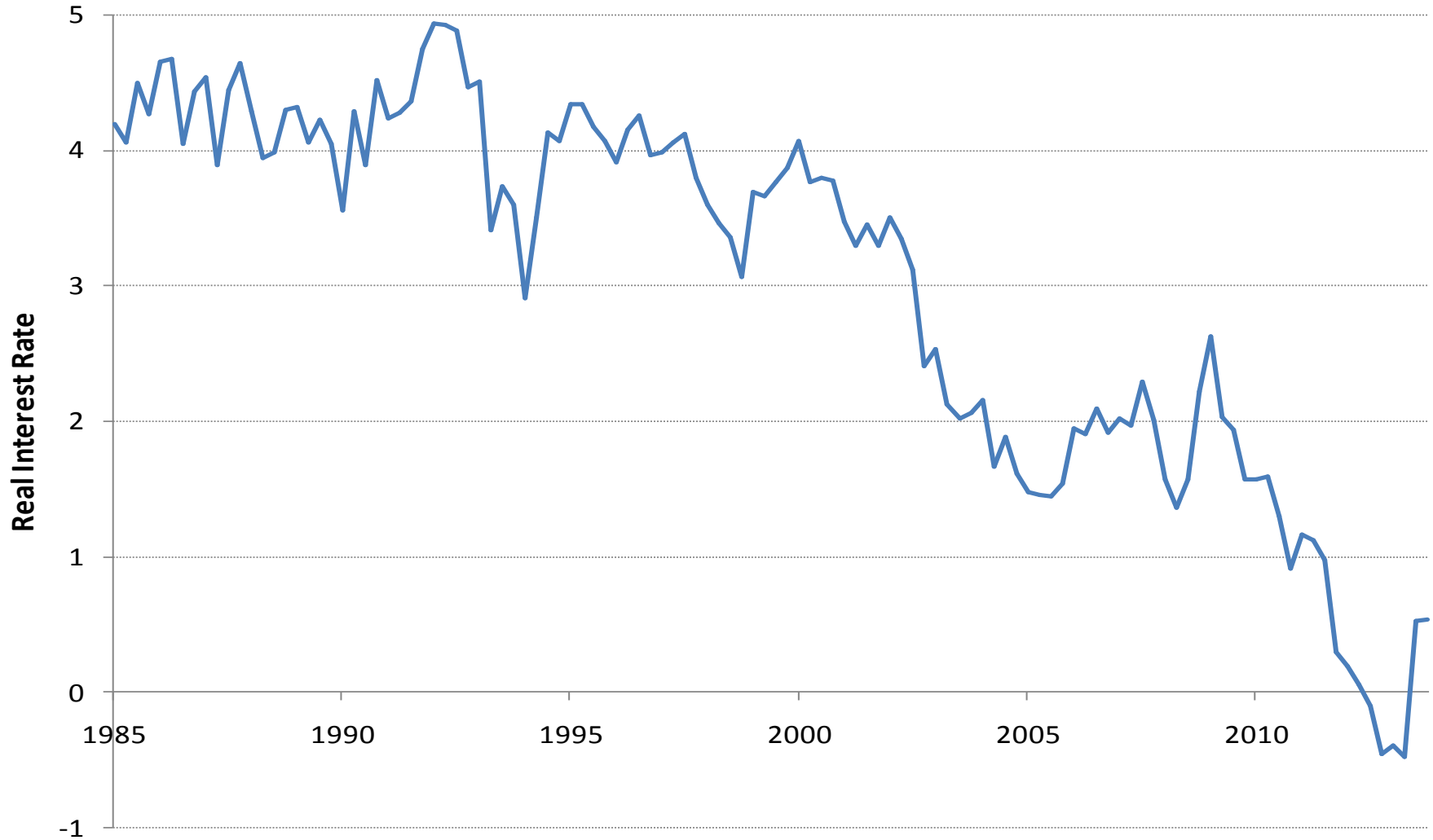


# Private Investment Shortfall



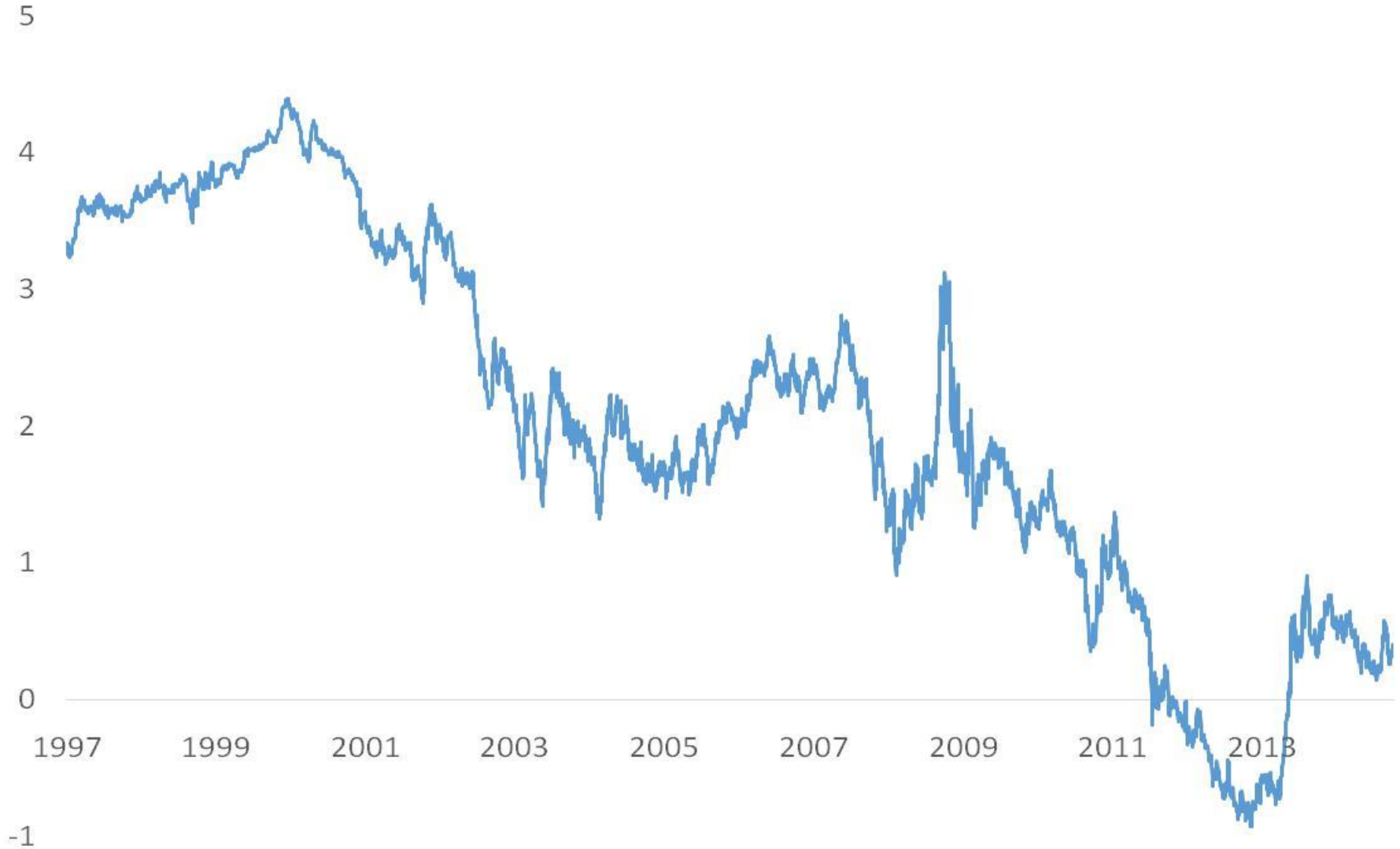
# World Rates Have Fallen Steadily

## World Real Interest Rate



# As Have U.S. TIPS

## U.S. Ten Year TIPS Real Yield



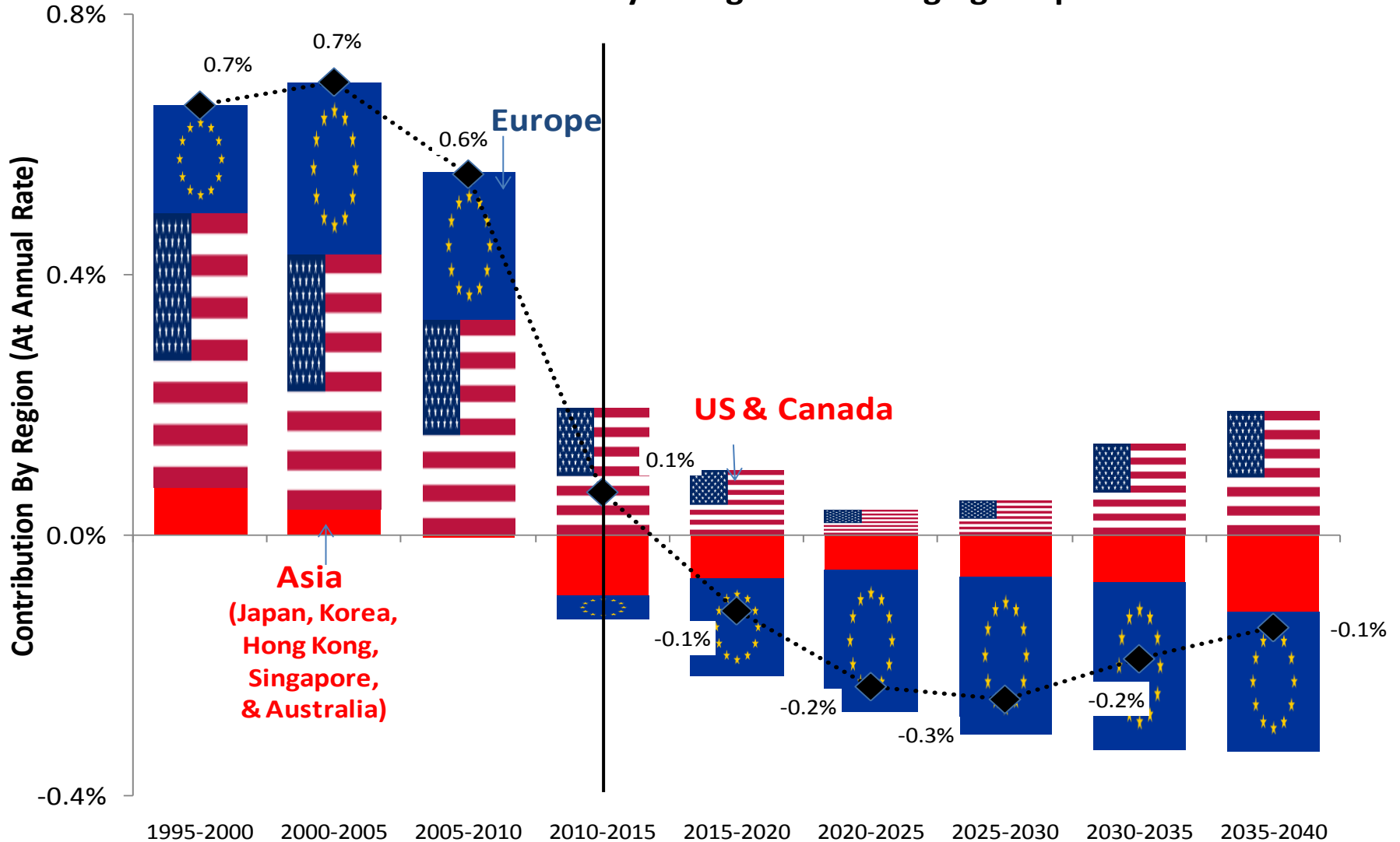
# Large Rate Cuts Are Common

## Fed Easings Since 1954

| <u>Size of Easing</u> | <u>Occurrences</u> | <u>Frequency</u> |
|-----------------------|--------------------|------------------|
| 2 Pct +               | 13                 | 4.6 Yrs          |
| 4 Pct +               | 8                  | 7.5 Yrs          |
| 5 Pct+                | 5                  | 12 Yrs           |

# Demographics Challenging

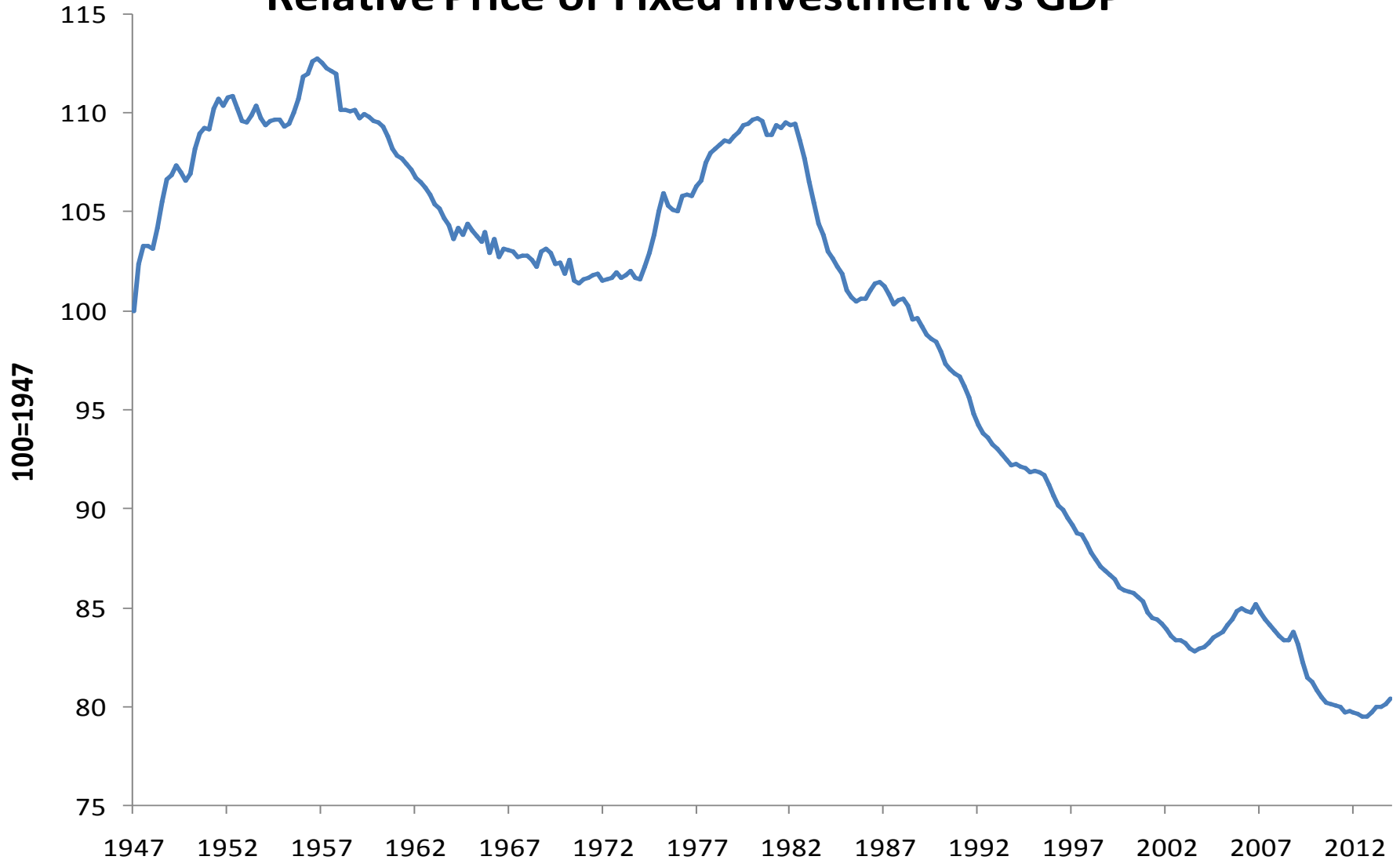
## Advanced Economy Change in Working Age Population





# Capital Investment Has Gotten Cheaper

## Relative Price of Fixed Investment vs GDP



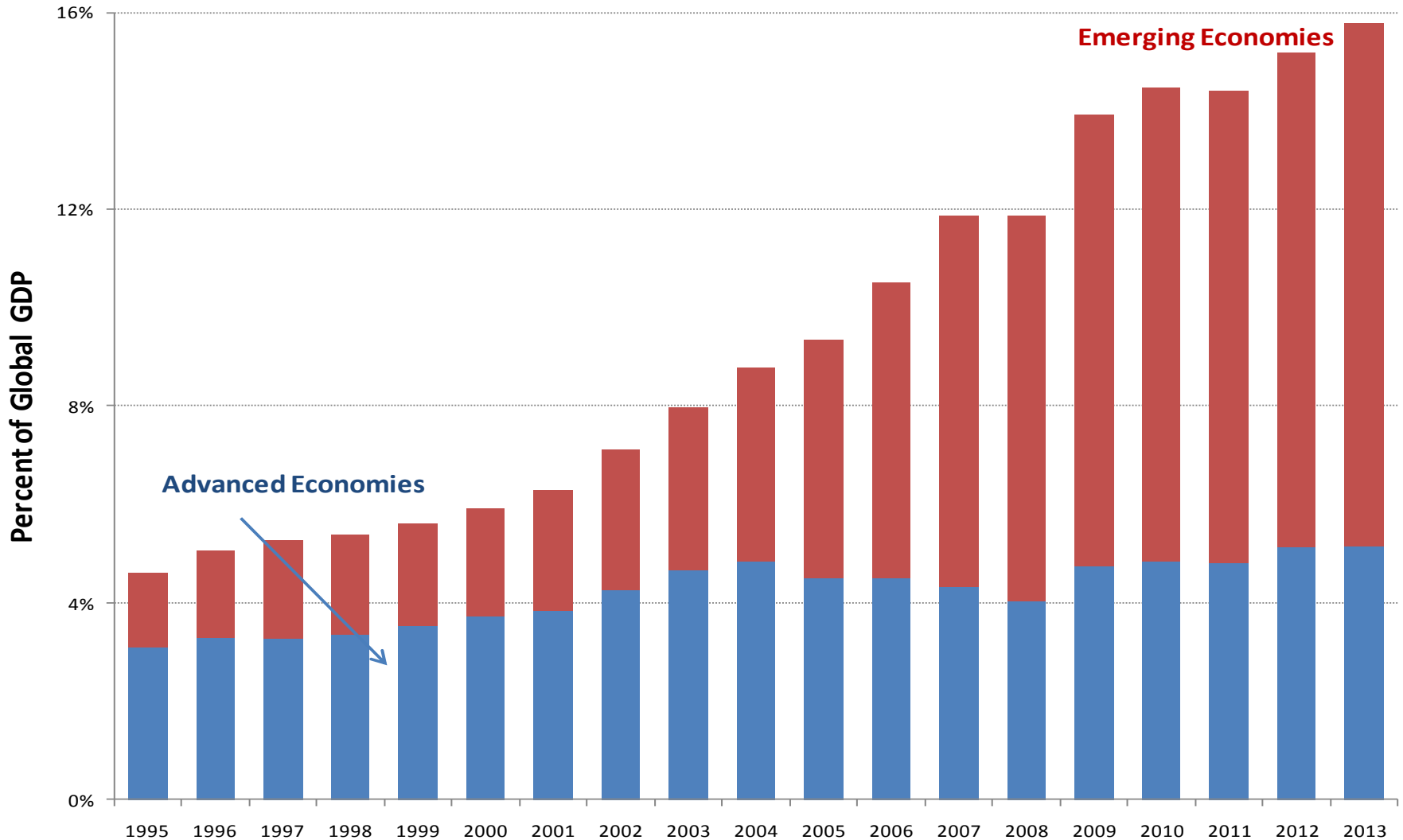
# Corporations Need To Invest Less

| <b>Fastest Growing* Fortune 50 Company</b> |                  |                     |                            |              |                          |
|--|------------------|---------------------|----------------------------|--------------|--------------------------|
| <b>Year</b>                                | <b>Company</b>   | <b>Fortune Rank</b> | <b>Cash<br/>(Millions)</b> | <b>Capex</b> | <b>Cash/Capex Months</b> |
| 1956                                       | Republic Steel   | 21                  | 80                         | 107          | 9                        |
| 1963                                       | ITT              | 41                  | 78                         | 123          | 8                        |
| 1973                                       | Beatrice Foods   | 42                  | 59                         | 90           | 8                        |
| 1983                                       | General Dynamics | 46                  | 159                        | 215          | 9                        |
| 1993                                       | Motorola         | 32                  | 1,244                      | 2,187        | 7                        |
| 2003                                       | Walgreen         | 45                  | 1,017                      | 795          | 15                       |
| 2013                                       | Apple            | 6                   | 40,546                     | 9,572        | <b>51</b>                |

\* Fortune 50 nonfinancial company with the largest one year increase in Fortune ranking without a merger or major acquisition

# Rising Reserve Accumulation

## World Foreign Exchange Reserves



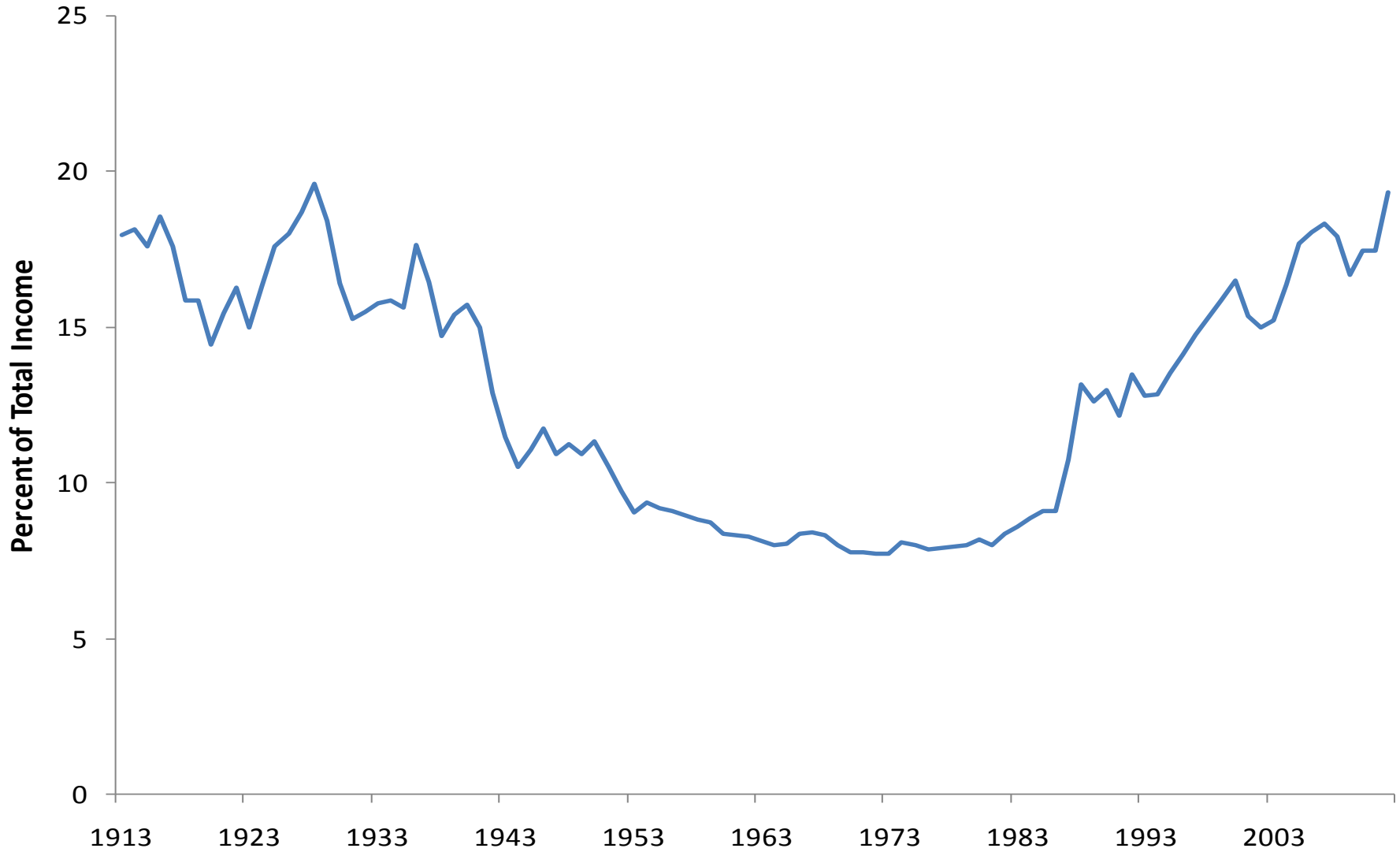
# Increased Demand For Safe Assets

Incremental drivers of demand for high quality collateral include the following:

|   |   |  |  |  |
|---|---|--|--|--|
| <b>Incremental HQC Demand<sup>1</sup></b> | <b>1. Prudential Regulation</b>   | <b>2. Market Regulation (Derivative Clearing)</b>  | <b>3. Market Regulation (Bilateral Margin)</b>   | <b>4. Economic Environment / Uncertainty</b> |
|   | Increased prudential liquidity requirements   | Increased IM requirements for cleared derivatives  | Increased IM requirements for non-cleared derivatives  | Cyclical HQC investment demand (FTQ flows)   |
|   | <b>\$1.0-2.5tt<sup>2</sup></b>  | <ul style="list-style-type: none"> <li>• \$0.8-2.0tt (normal)<sup>3</sup></li> <li>• \$1.8-4.6tt (stressed)<sup>3</sup></li> </ul> | <ul style="list-style-type: none"> <li>• \$0.8-1.2tt (normal)<sup>4</sup></li> <li>• \$1.8-4.1tt (stressed)<sup>4</sup></li> </ul> | <b>Varies (multi-\$trillions)</b>            |
|   | <b>Total "phased-in" potential incremental HQC demand (normal market conditions):</b>   |  |  | <b>\$2.6-5.7tt</b>                           |
|   | <b>Total "phased-in" potential incremental HQC demand (stressed market conditions):</b> |  |  | <b>\$4.6-11.2tt + FTQ Flows</b>              |

# Rising Inequality

## Income Share of Top 1%



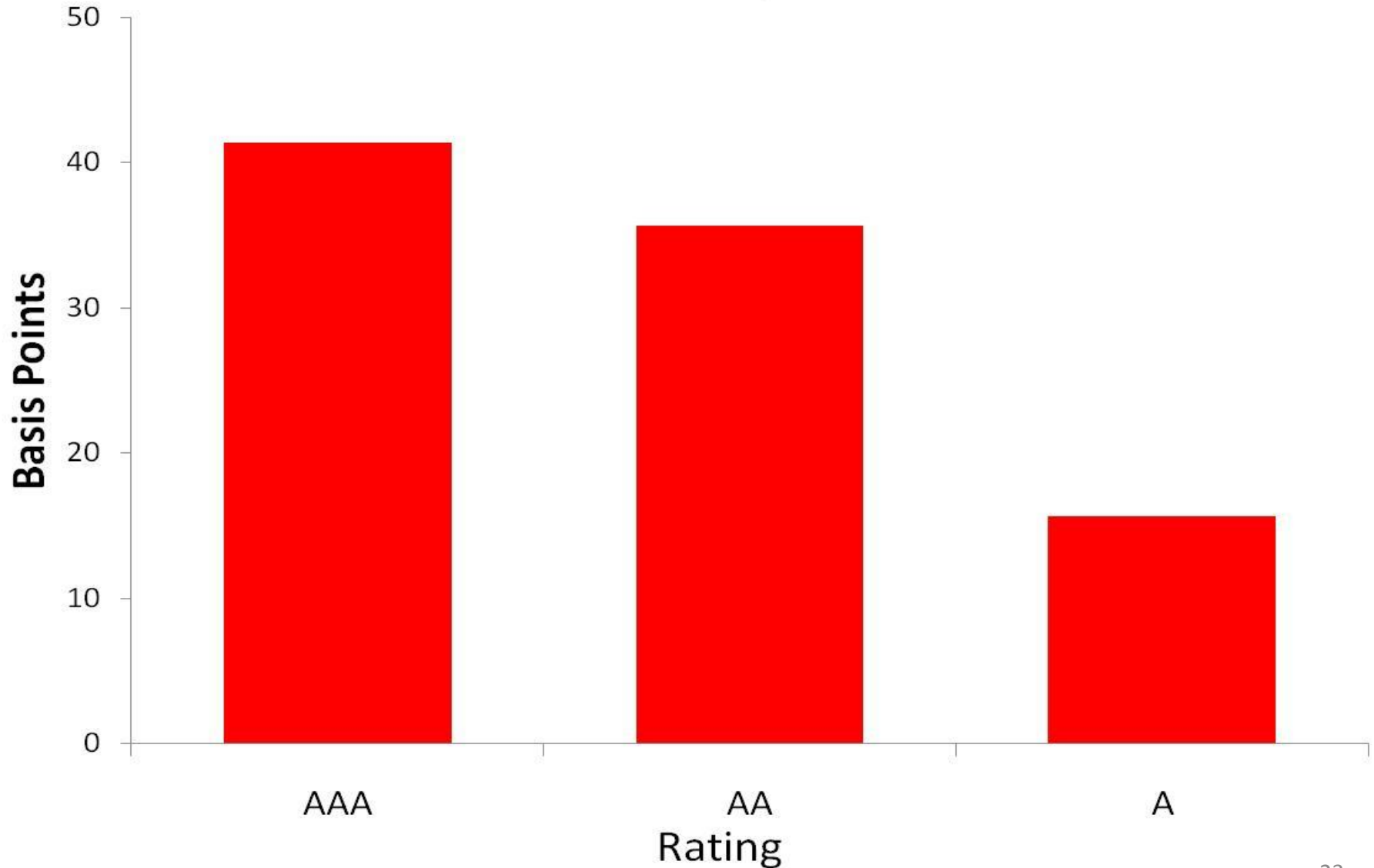
# Lower Inflation and Tax Effects

- Consider investor in 40% tax bracket
- Pre-Tax Real Rate =  $i - \pi$
- Post-Tax Real Rate =  $(i)(1-\tau) - \pi$

|                    | Case 1<br>(inflation = 3%) | Case 2<br>(inflation = 1%) |
|--------------------|----------------------------|----------------------------|
| Nominal Rate       | 5%                         | 1.67%                      |
| Pre-Tax Real Rate  | 2%                         | 0.67%                      |
| Post-Tax Real Rate | 0%                         | 0%                         |

# Rising Financial Intermediation Cost

## Additional Bank Loan Spread From New Rules



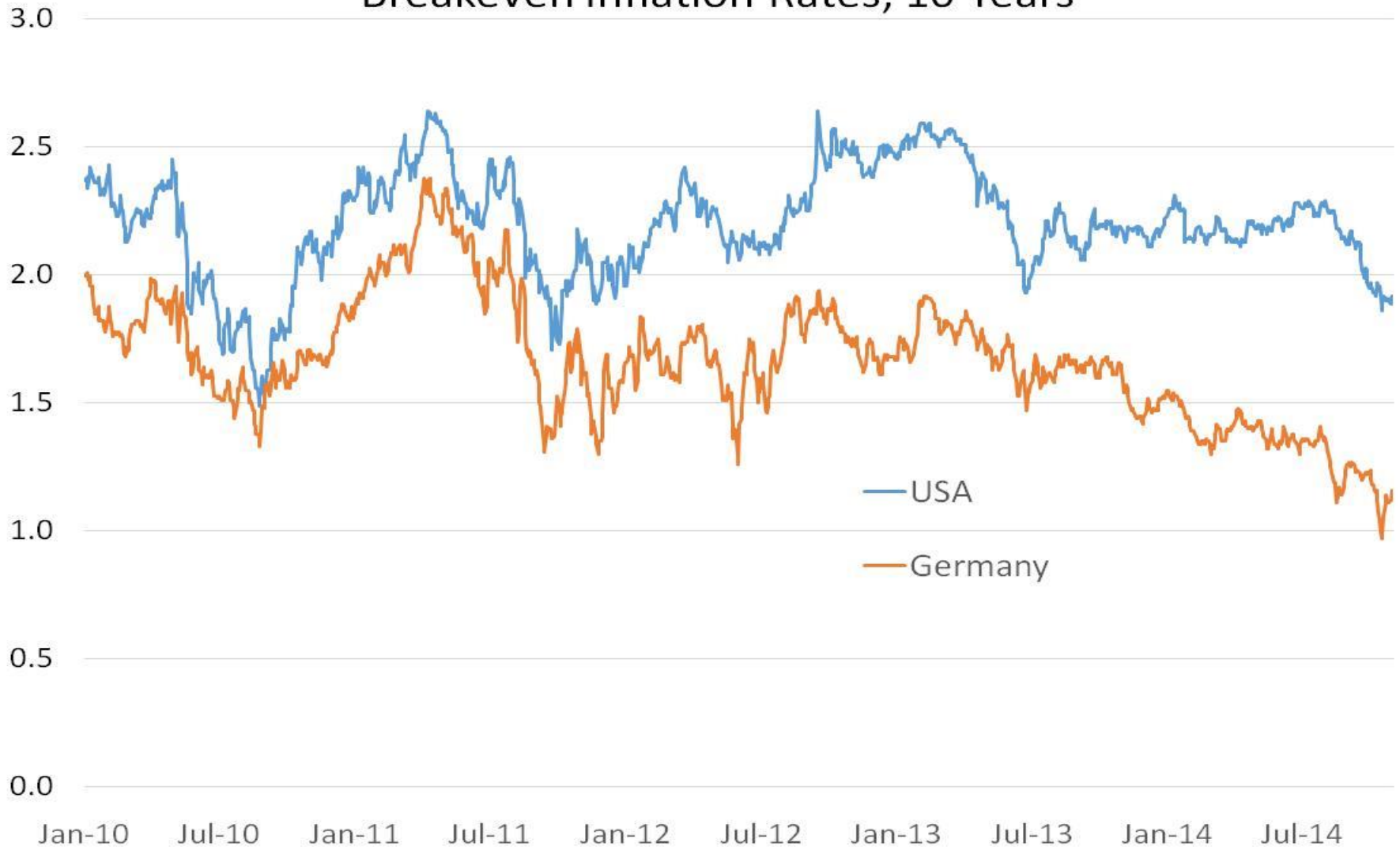
# Issues Raised By The Secular Stagnation Hypothesis

- Can equilibrium real interest rates really be subzero?
- Is the issue on the supply or demand side?
- Past fears of secular stagnation proved unfounded
- Isn't the United States approaching full employment?



# Inflation Expectations

## Breakeven Inflation Rates, 10 Years



# Large Rate Cuts Are Common

## Fed Easings Since 1954

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# Alternative Strategies

- Structural Reform
- Raise Spending
- Reduce Real Rates

# Focus On Structural Reform

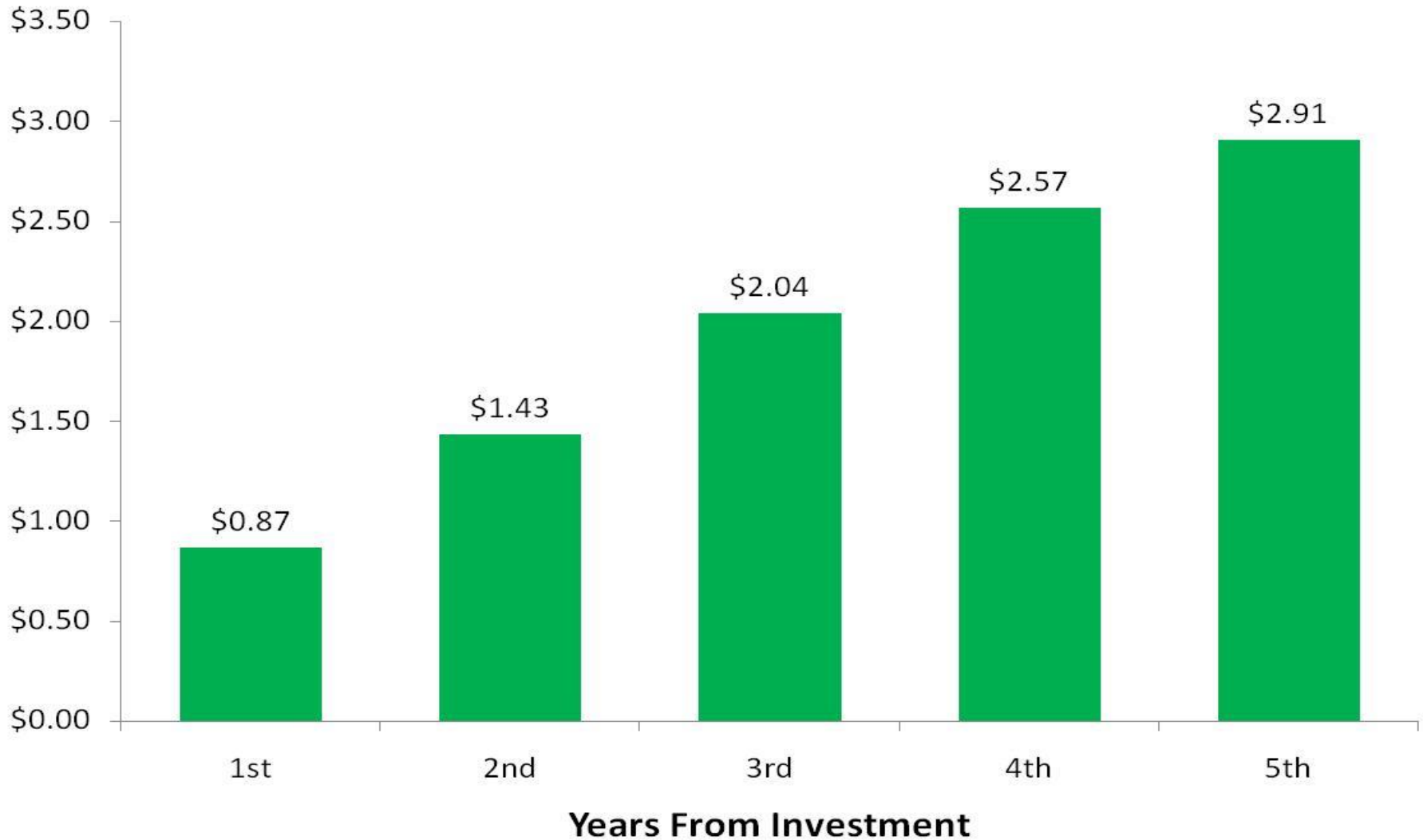
- Has been tried for years
- Risk of destabilizing deflation
- Inverse Say's Law – Lack of demand reduces potential supply
- Political economy issues
- Increased competitiveness is a zero sum game

# Focus On Increases In Spending

- Operates to raise equilibrium real interest rates
- Rational response to low real borrowing costs
- Major public investment gaps
- Investments likely to reduce debt burdens
- Remove barriers to private investment
- Measures to promote consumption and housing investment
- Measures to promote external adjustment in surplus countries

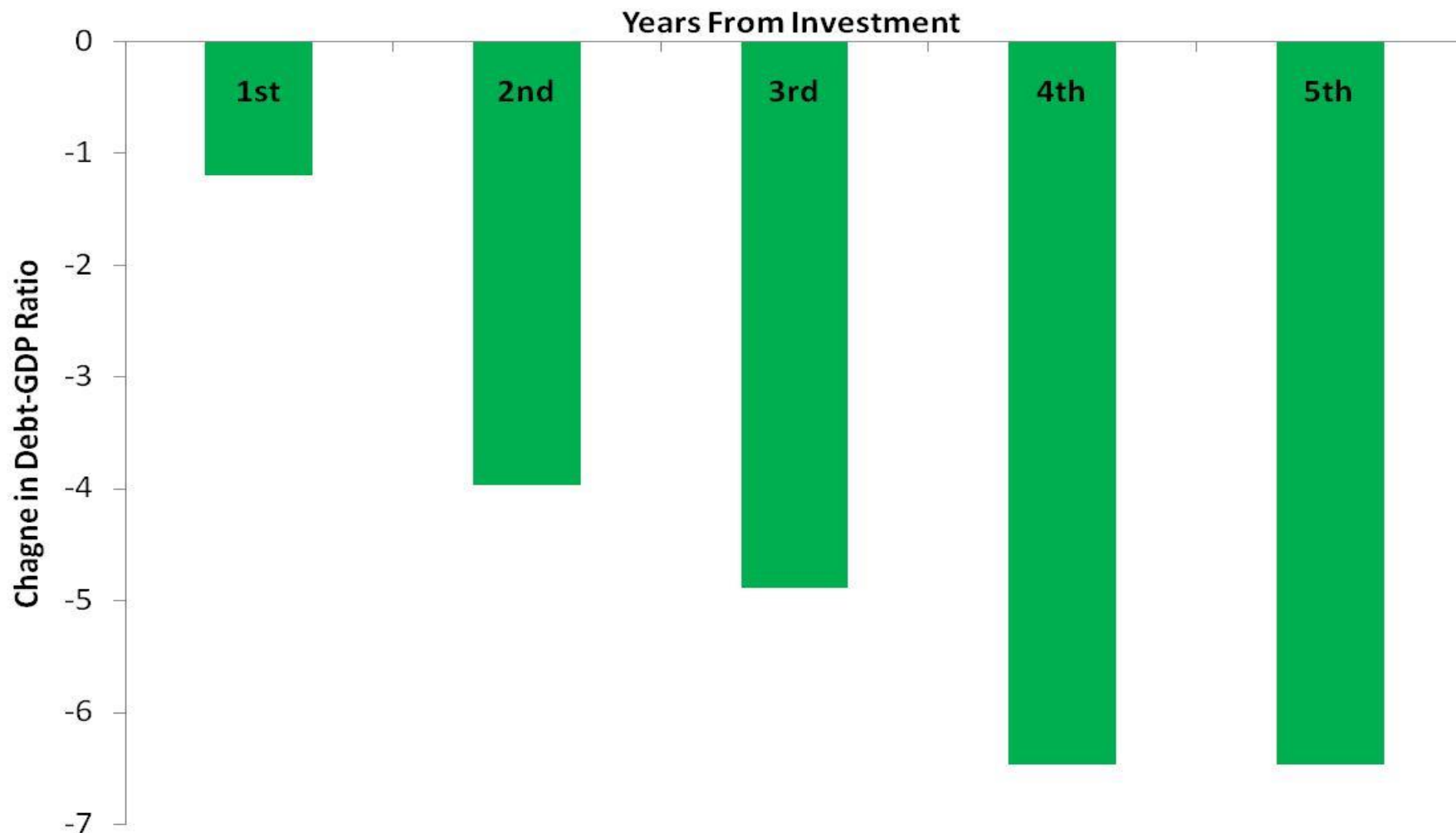
# Infrastructure Investment Can Boost GDP 3 For 1

**Increase In GDP For Each \$1 of Debt-Financed Infrastructure Investment**



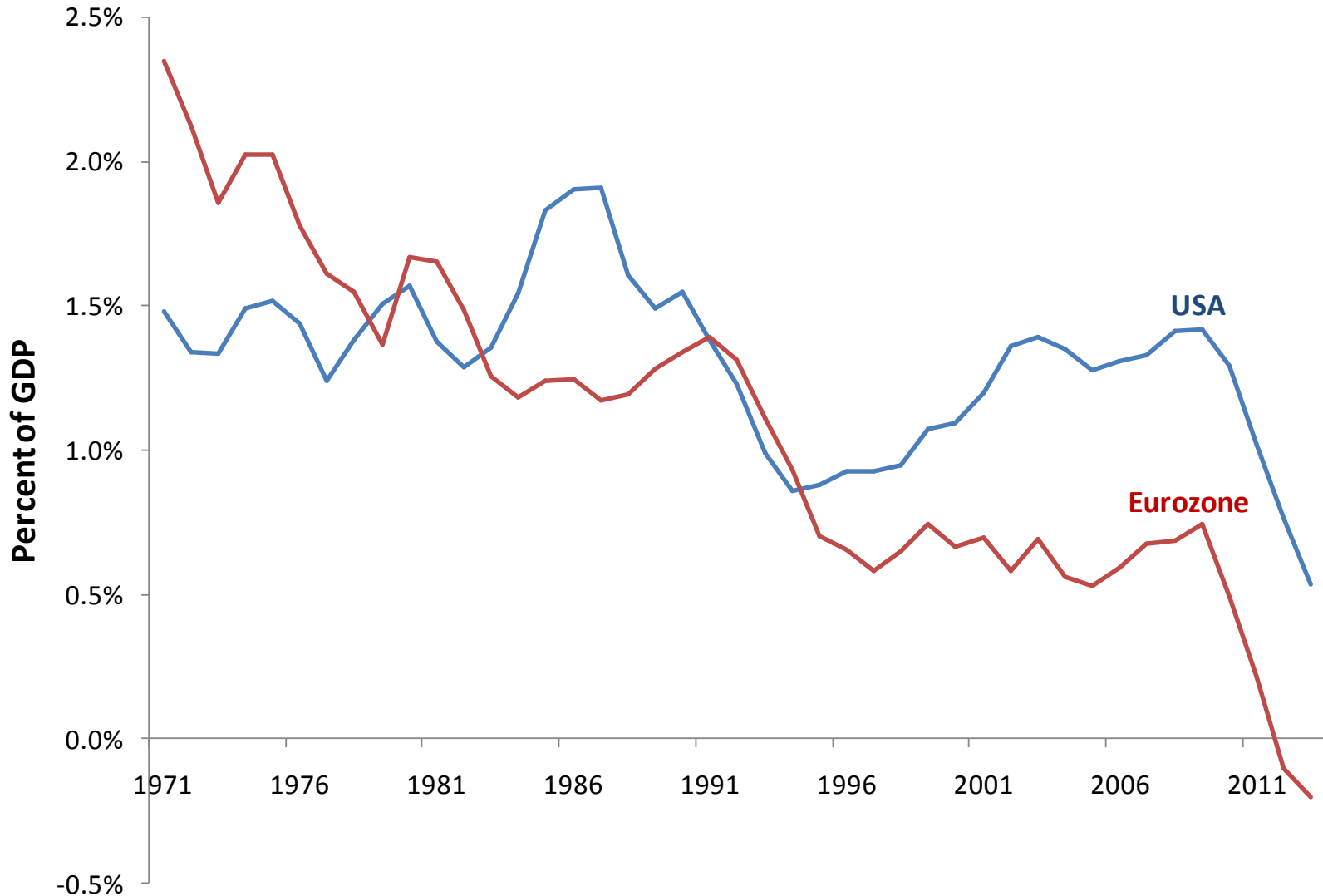
# While Making Debt More Sustainable

## Effect of 1%/GDP Debt-Financed Infrastructure Investment



# But Has Been Hit By Austerity

## Net Public Investment





# Monetary Policy

- How much scope at liquidity trap?
- More effective in conjunction with other measures
- Risks of bubbles and financial instability
- Backward bending supply of saving?
- Need for international coordination

# Other Possible Responses

- Public equity investments
- Work sharing
- Population and immigration policies