

Reflections on Secular Stagnation

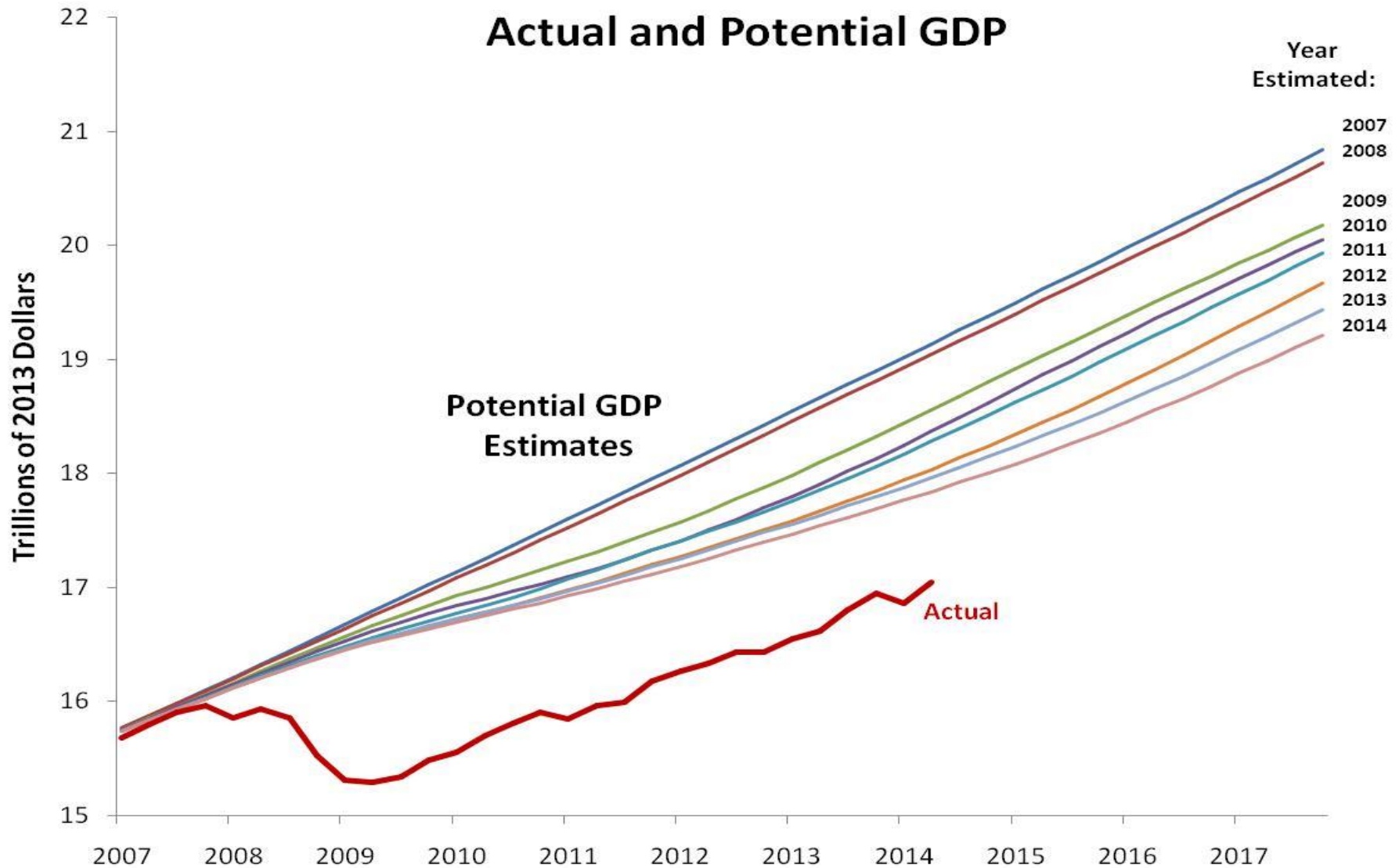
Dr. Lawrence H. Summers

October 31, 2014

Outline

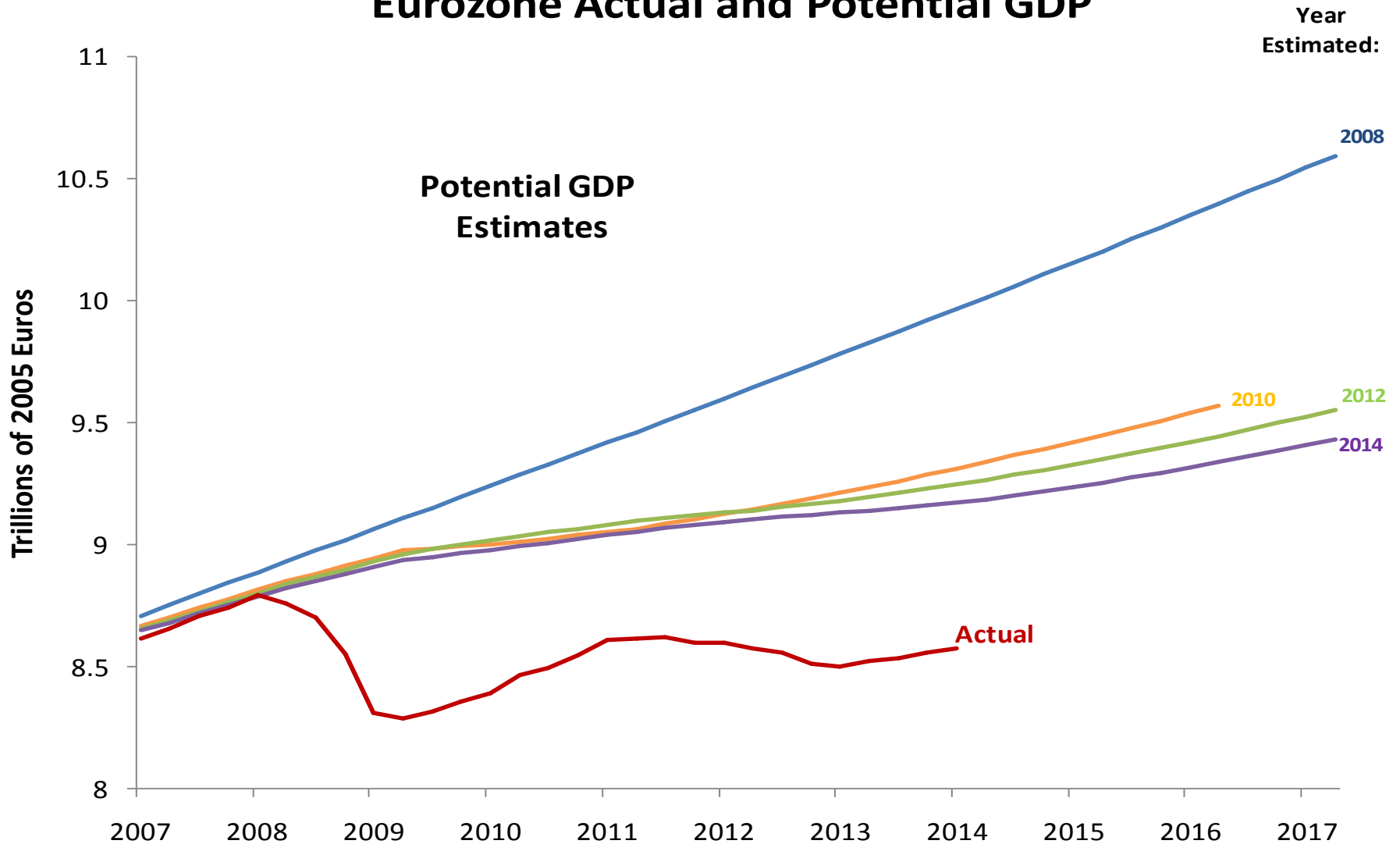
- I. Dismal post-crisis economic performance in the industrial world
- II. The secular stagnation hypothesis
- III. Why have real interest rates fallen?
- IV. Issues raised by secular stagnation hypothesis?
- V. What is to be done?

Downward Revision in Potential GDP, USA



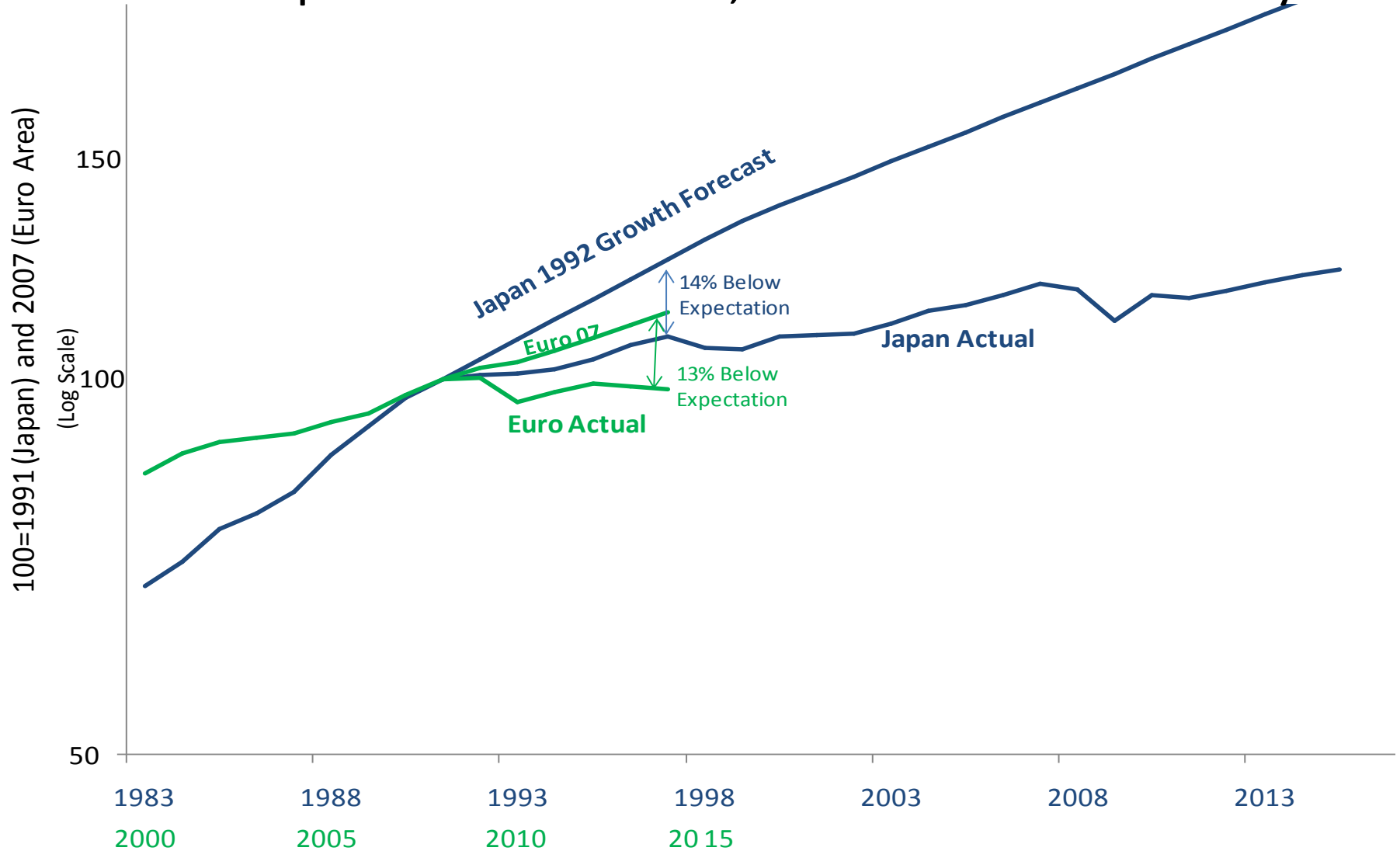
Downward Revision in Potential GDP, Eurozone

Eurozone Actual and Potential GDP



Europe Mirrors Japan's Experience

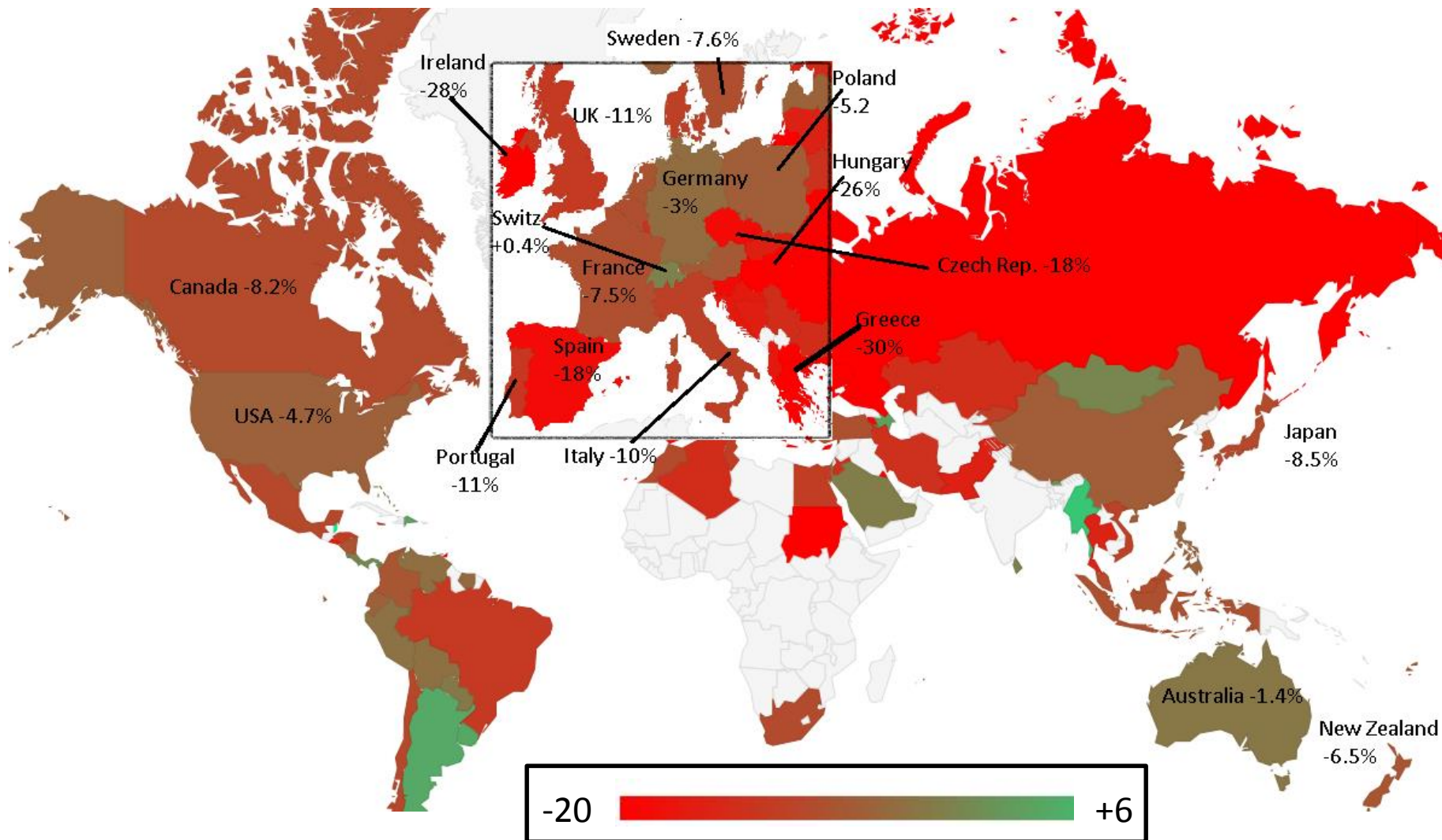
Japan and Euro Area, Forecast Versus Reality



Sources: OECD 1992 "Long Term Prospects For The World Economy", IMF 2007, 2007 & 2014 WEO Database

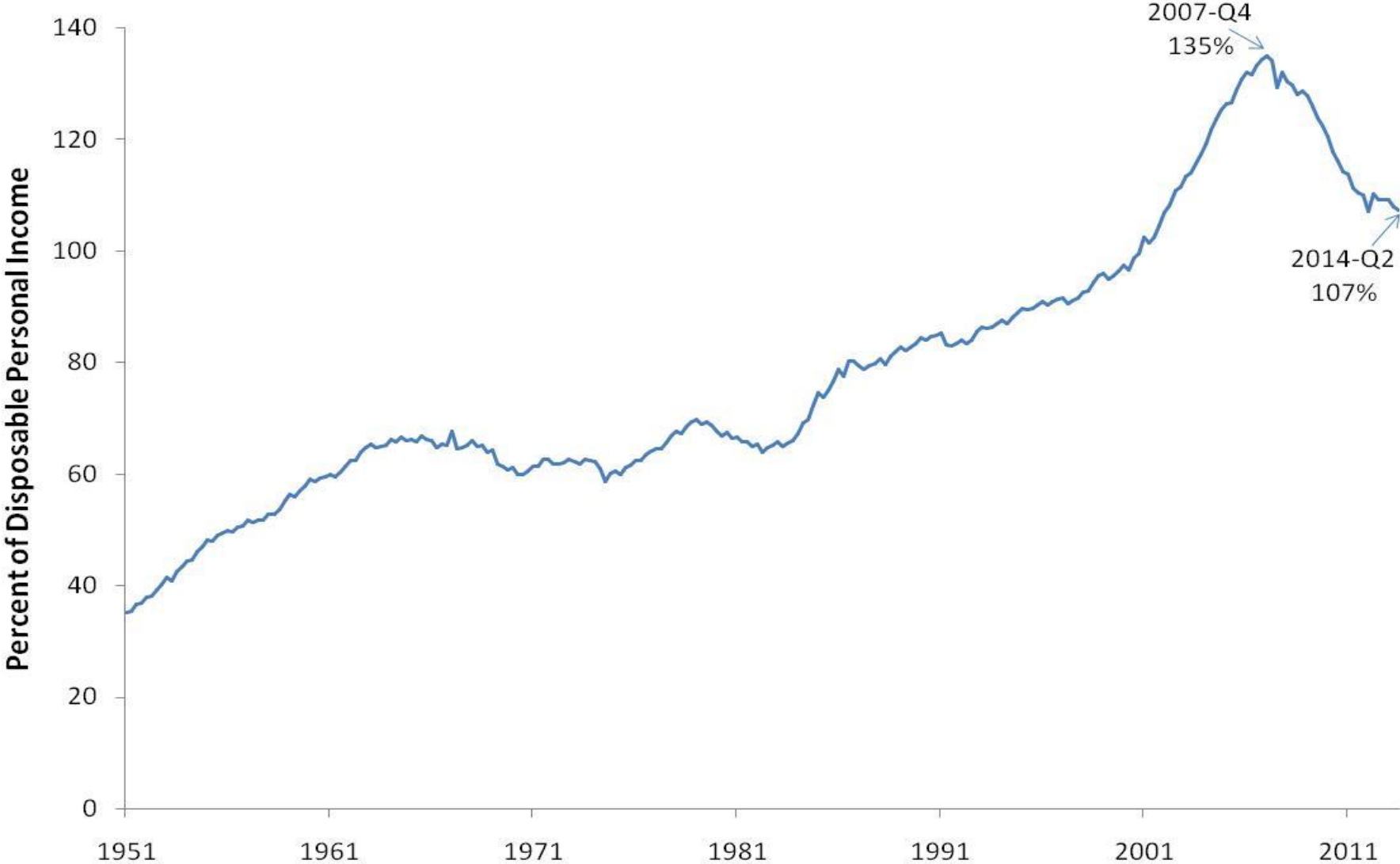
Falling Potential A Global Phenomenon

Change in 2013 Potential Output Estimate Since 2007



Recent U.S. Business Cycles Financially Unsustainable

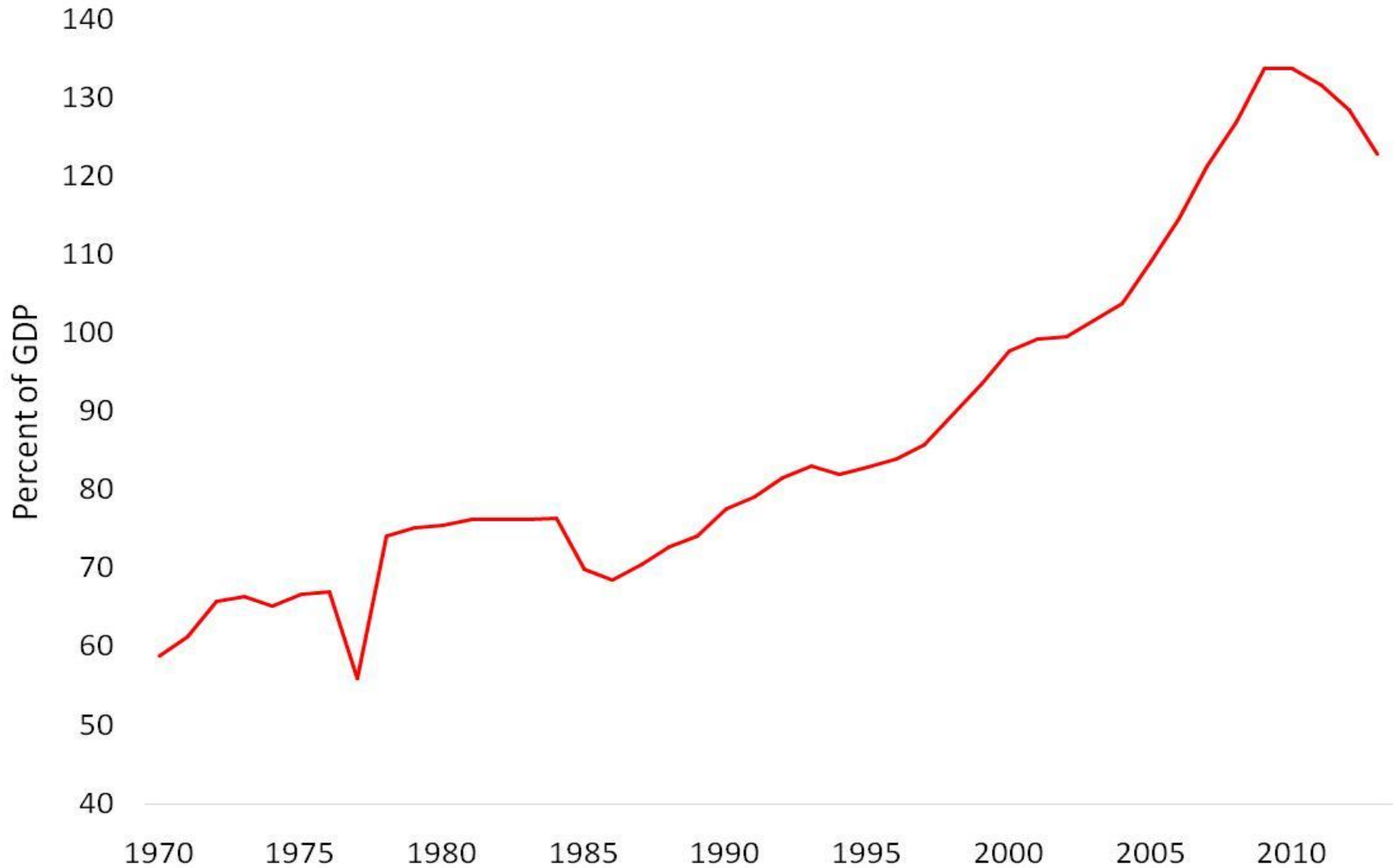
U.S. Household Debt To Disposable Income



Sources: Federal Reserve, Bureau of Economic Analysis

European Credit Boom

Euro Area Private Credit To GDP



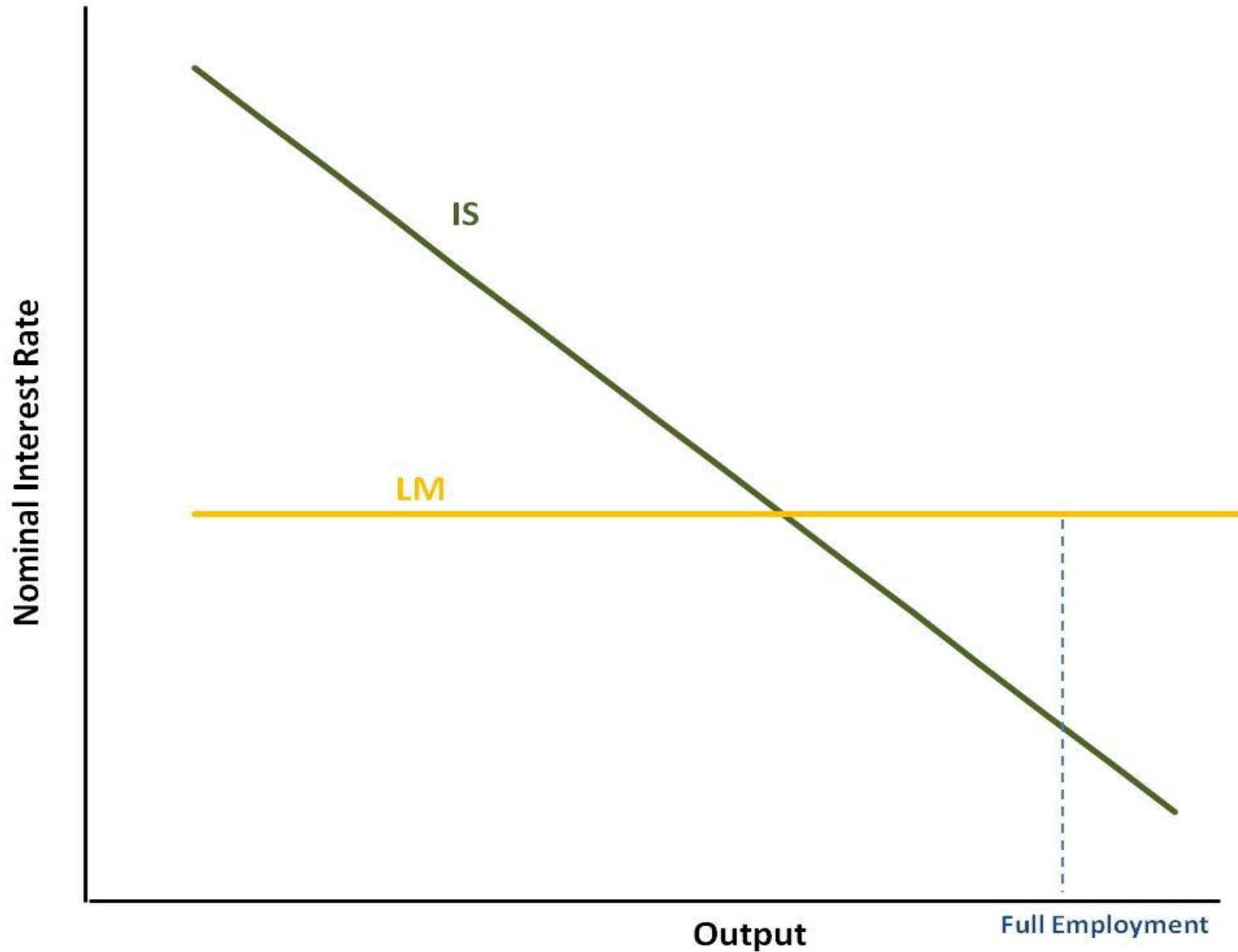
“Secular Stagnation” Dates To The 1930s



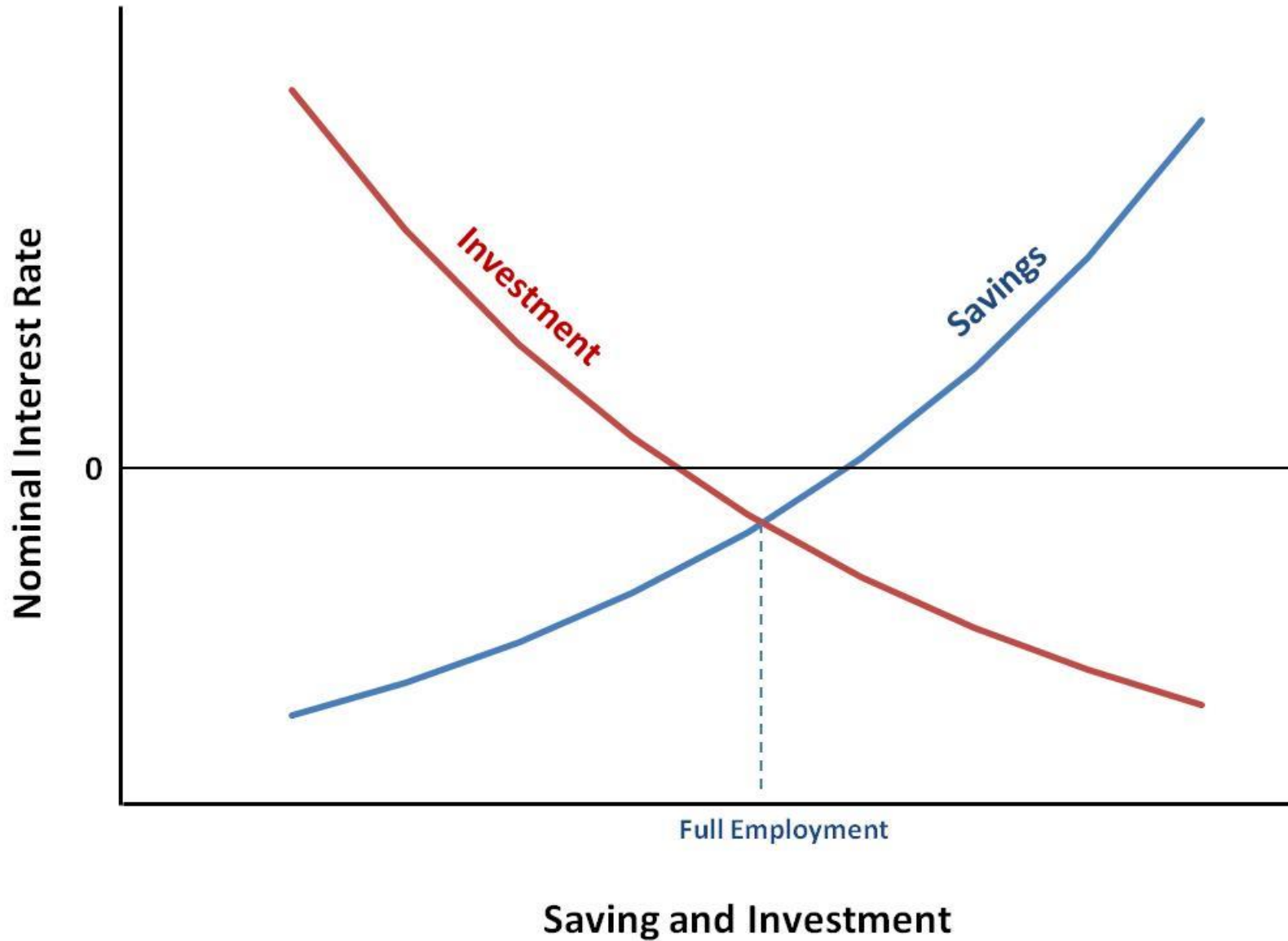
“This is the essence of secular stagnation - sick recoveries which die in their infancy and depressions which feed on themselves and leave a hard and seemingly immovable core of unemployment.”

- Alvin Hansen, 1939

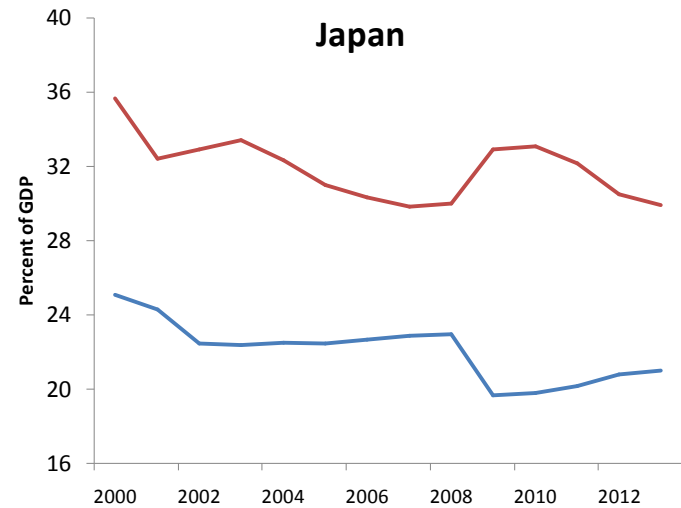
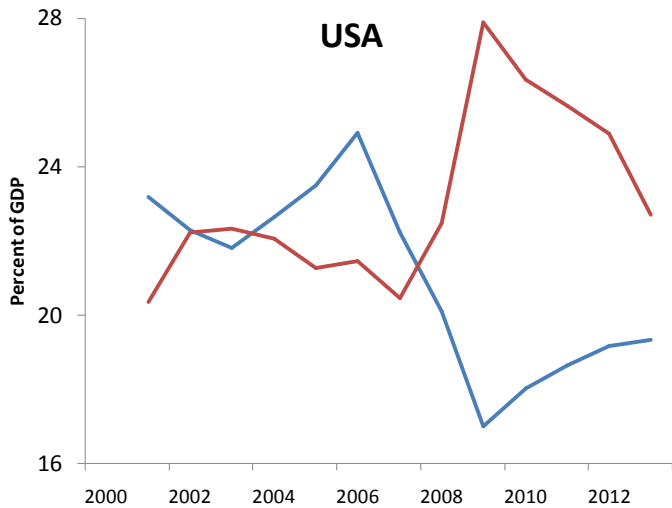
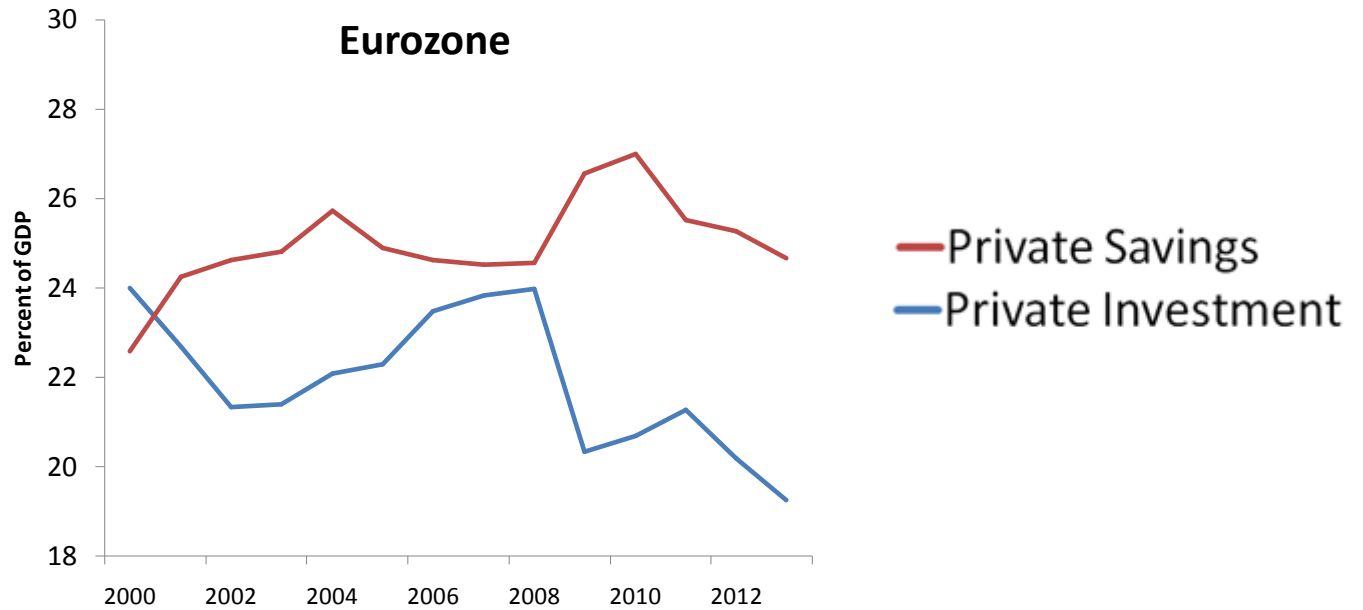
Liquidity Trap Framework



Possible Savings/Investment Curves

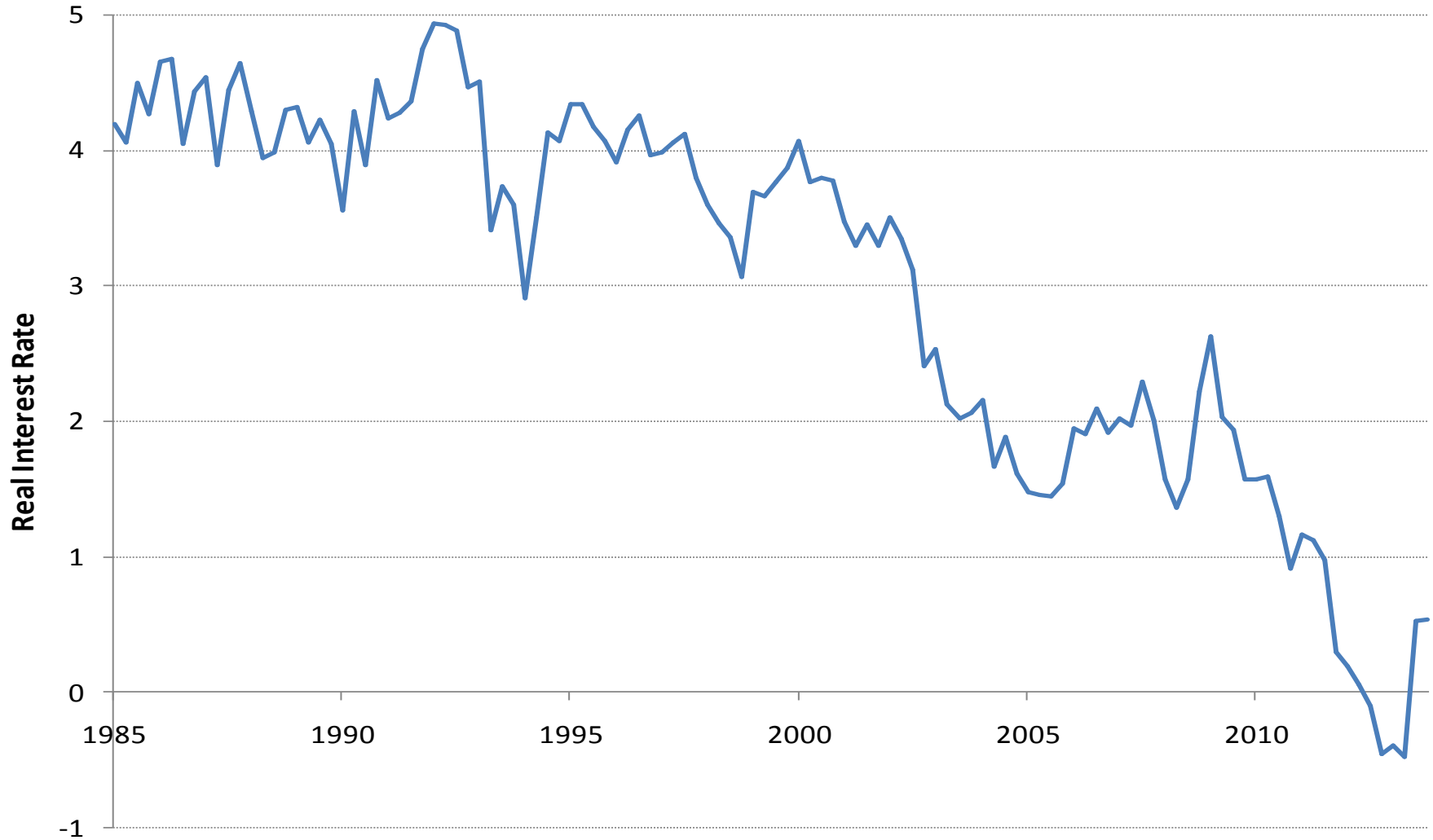


Private Investment Shortfall



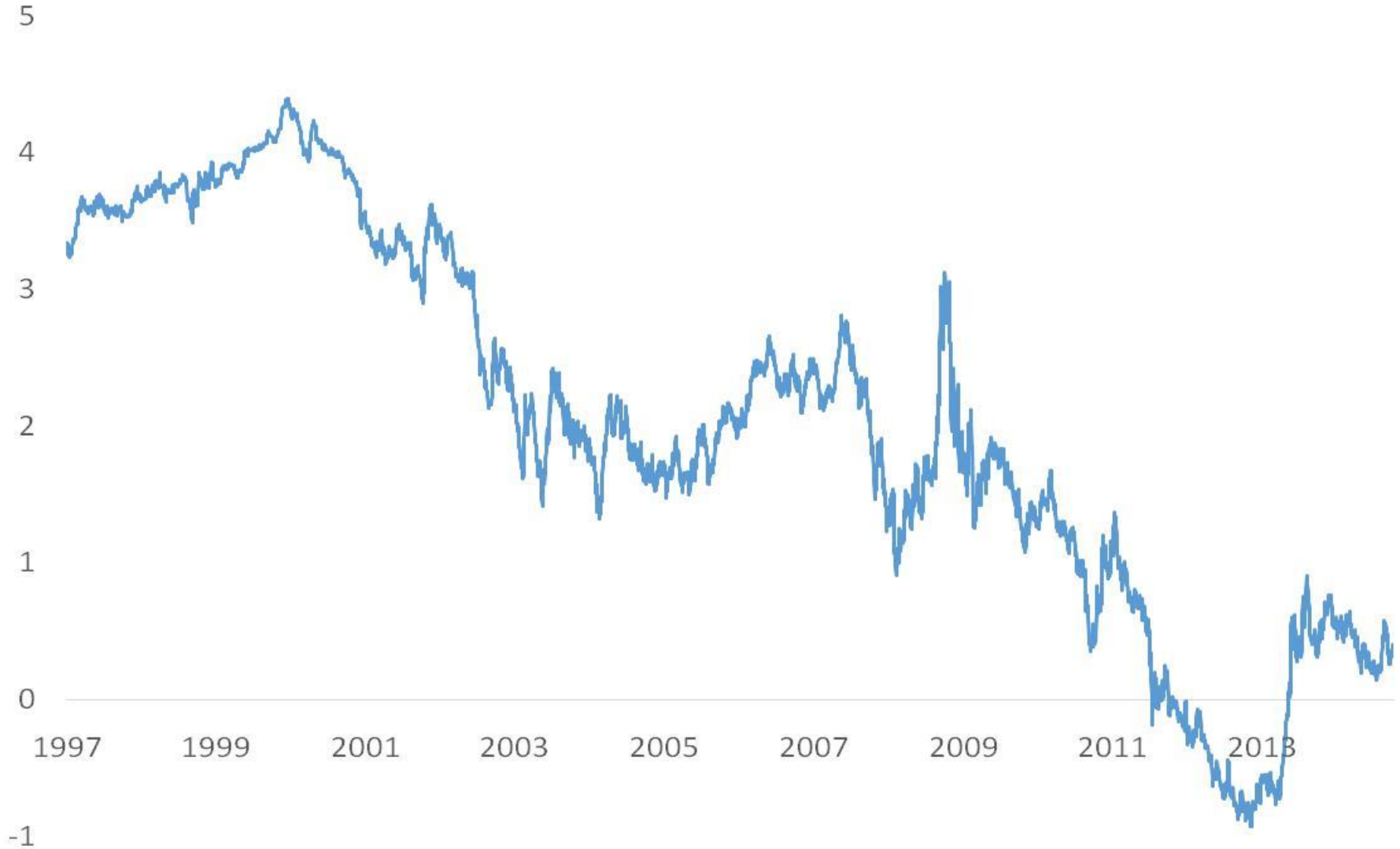
World Rates Have Fallen Steadily

World Real Interest Rate



As Have U.S. TIPS

U.S. Ten Year TIPS Real Yield



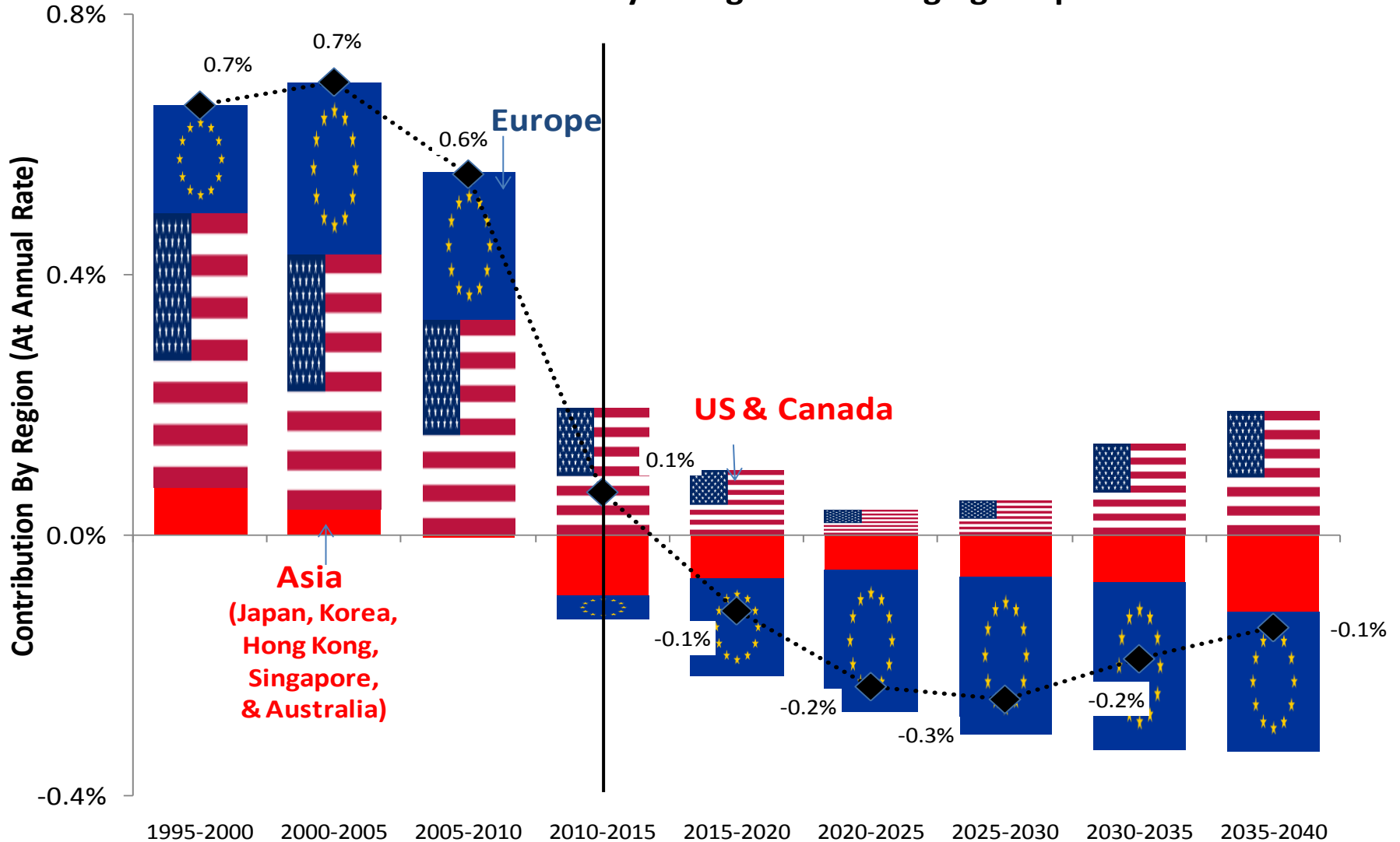
Large Rate Cuts Are Common

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

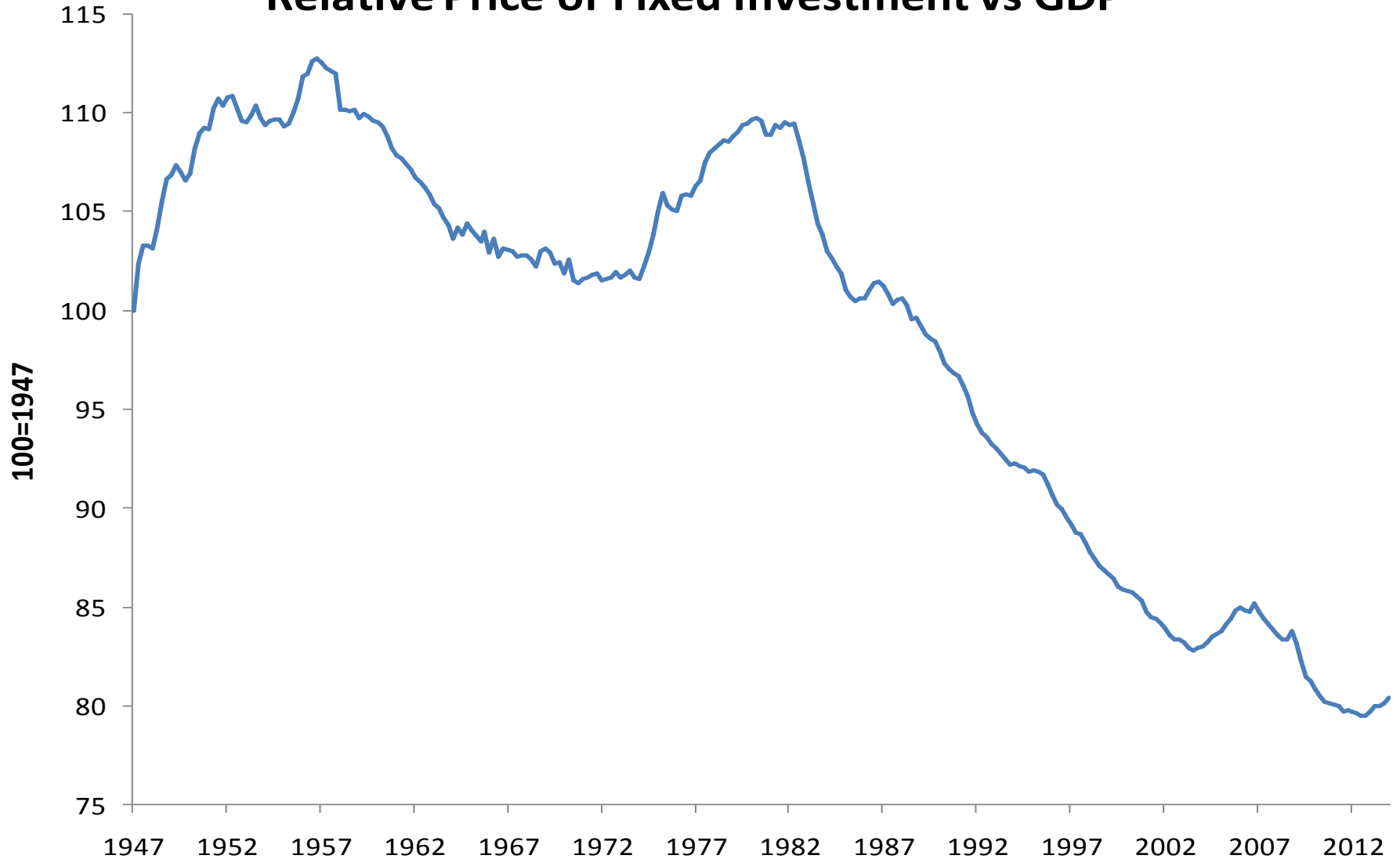
Demographics Challenging

Advanced Economy Change in Working Age Population



Capital Investment Has Gotten Cheaper

Relative Price of Fixed Investment vs GDP



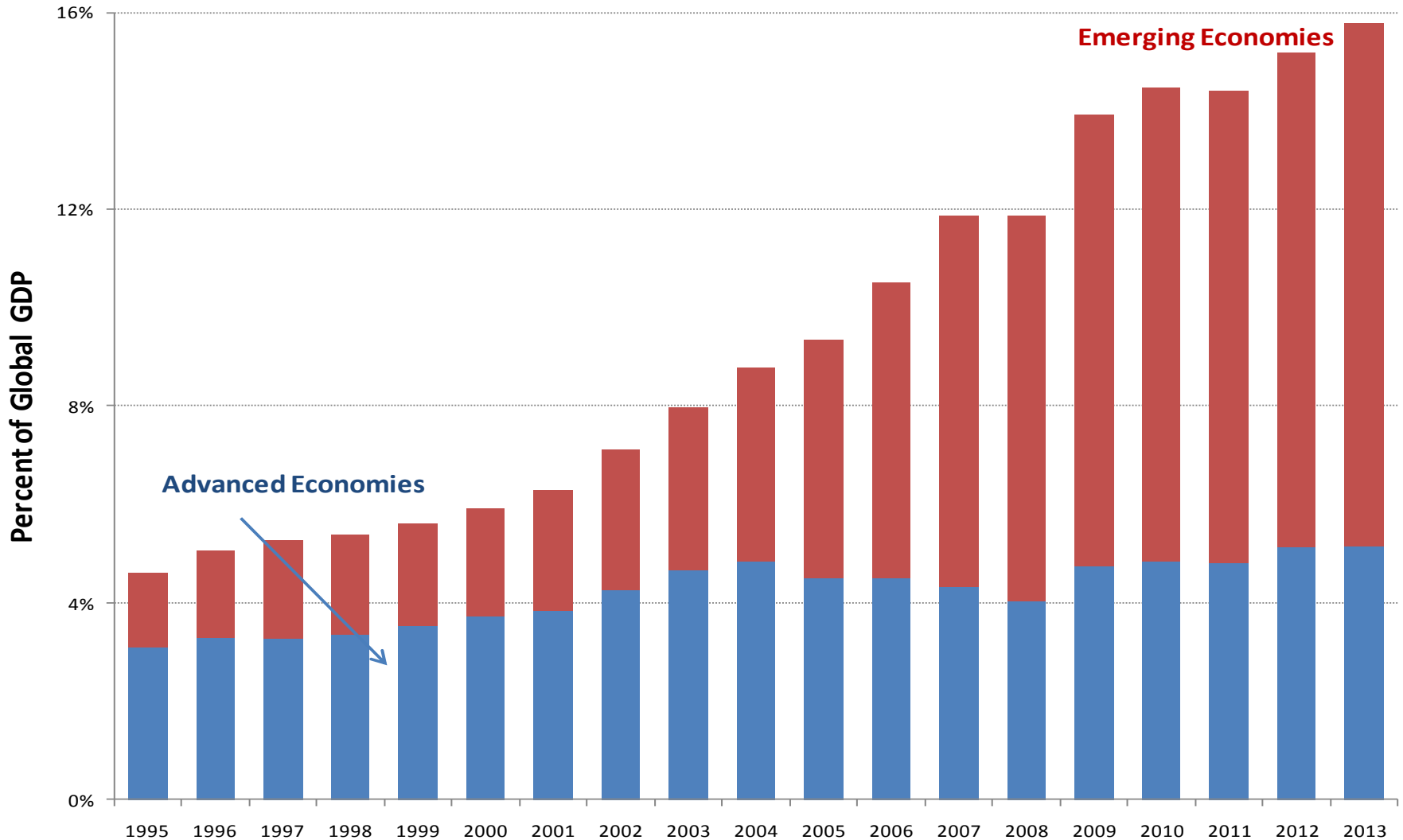
Corporations Need To Invest Less

Fastest Growing* Fortune 50 Company					
Year	Company	Fortune Rank	Cash (Millions)	Capex	Cash/Capex Months
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	51

* 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



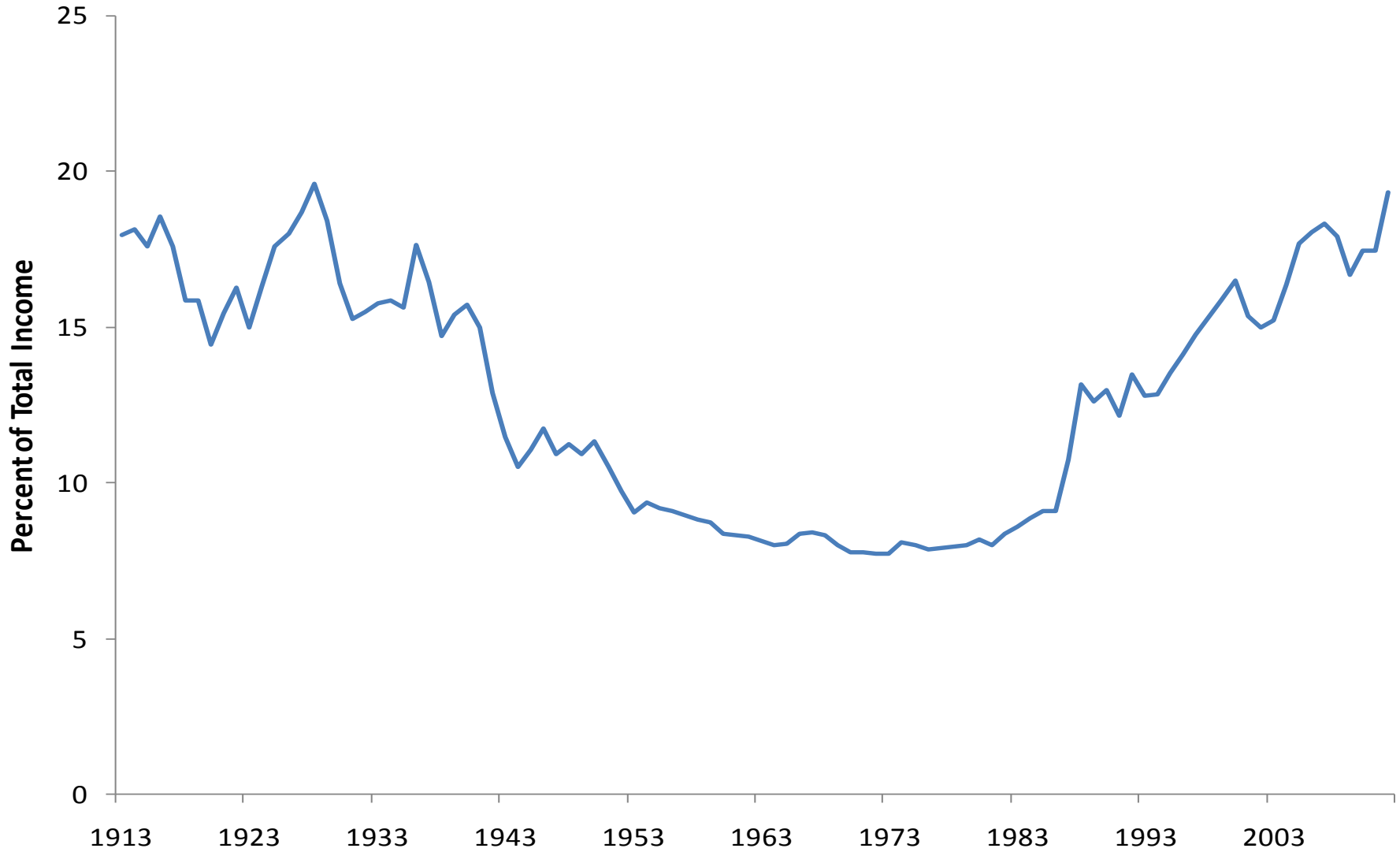
Increased Demand For Safe Assets

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

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

Rising Inequality

Income Share of Top 1%



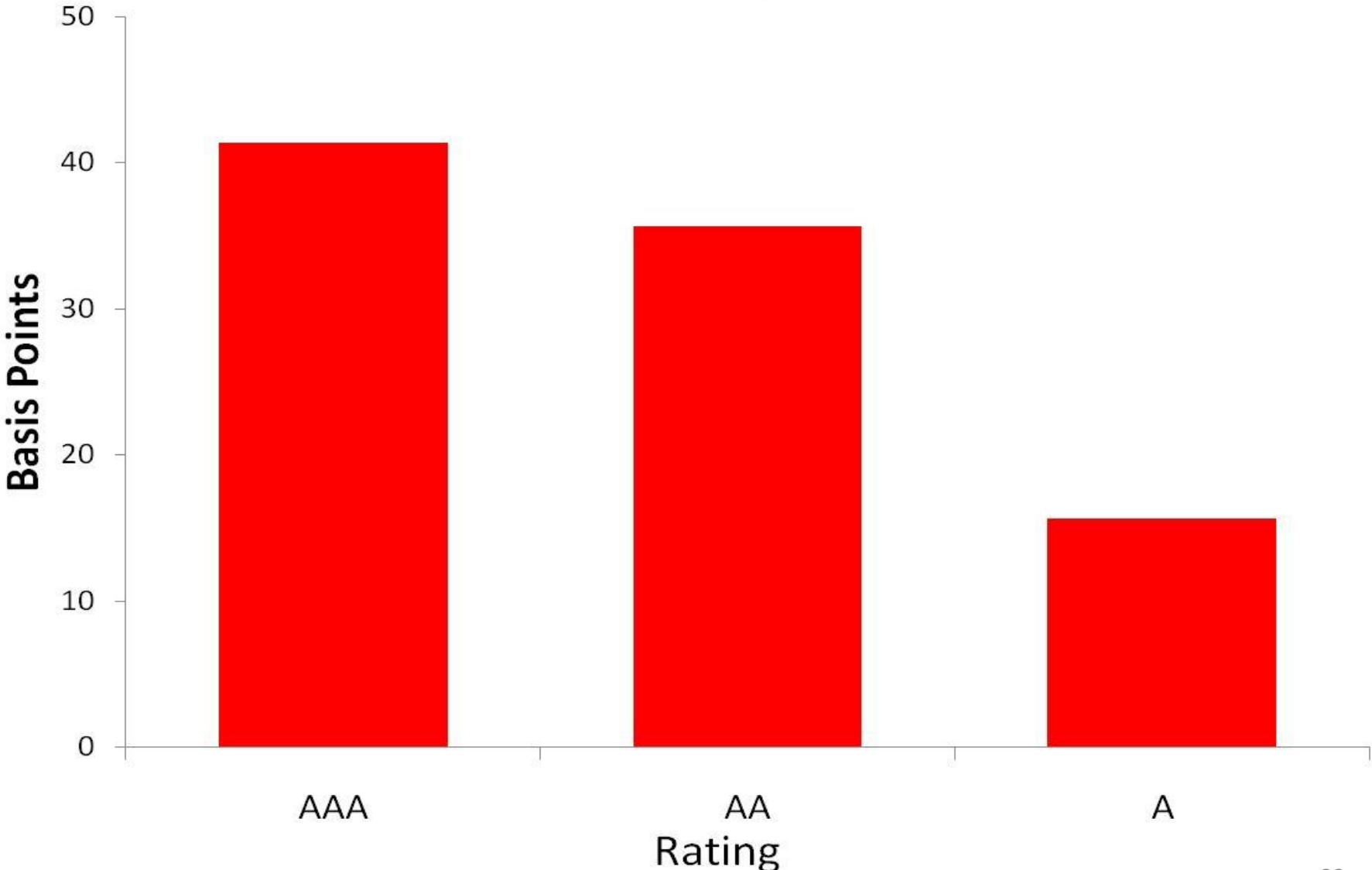
Lower Inflation and Tax Effects

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

	Case 1 (inflation = 3%)	Case 2 (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



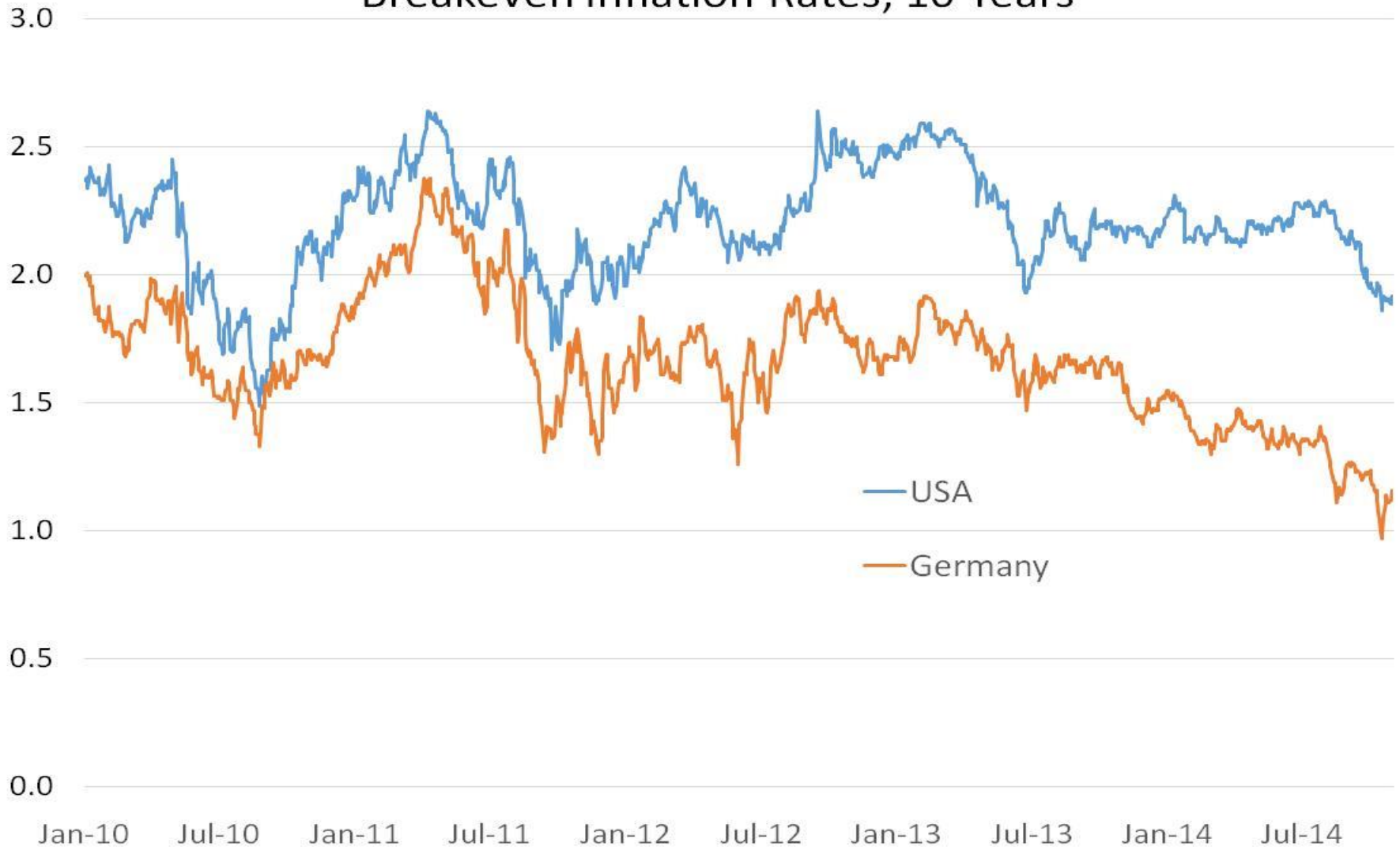
Sources IMF October 2014 Global Financial Stability Report

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

<u>Size of Easing</u>	<u>Occurrences</u>	<u>Frequency</u>
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Alternative Strategies

- Structural Reform
- Raise Spending
- Reduce Real Rates

Focus On Structural Reform

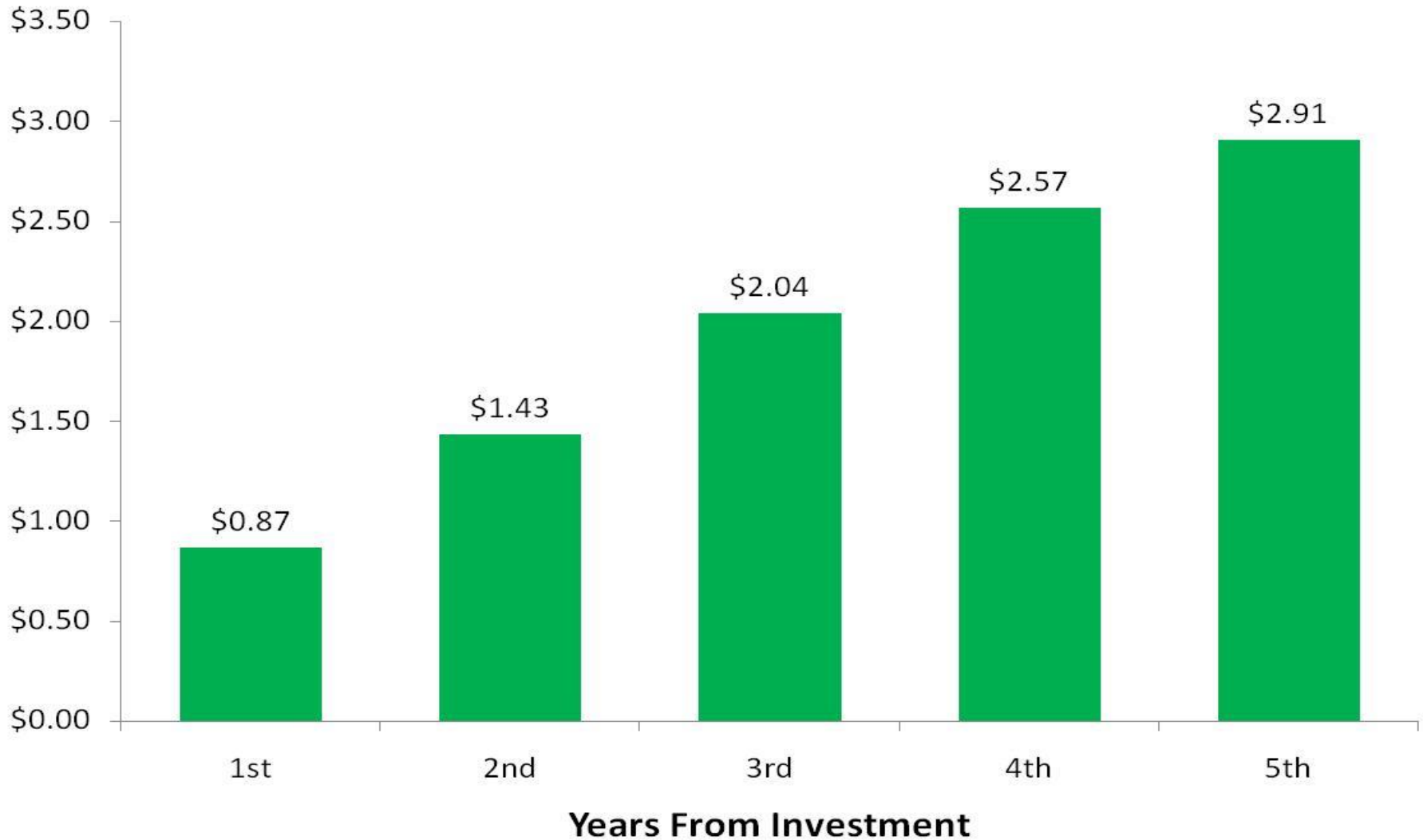
- Has been tried for years
- Risk of destabilizing deflation
- Inverse Say's Law – Lack of demand reduces potential supply
- Political economy issues
- Increased competitiveness is a zero sum game

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

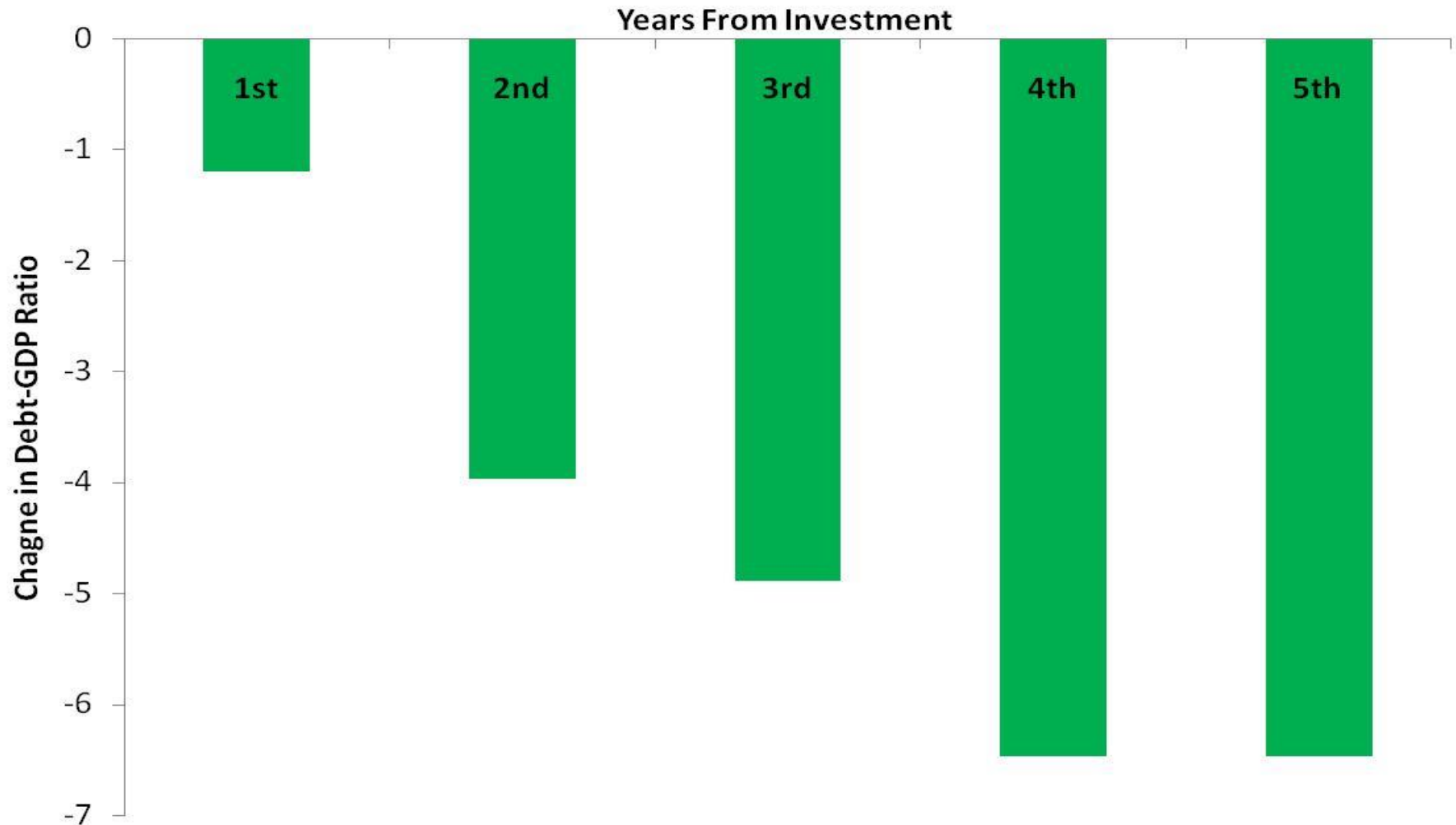
Infrastructure Investment Can Boost GDP 3 For 1

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



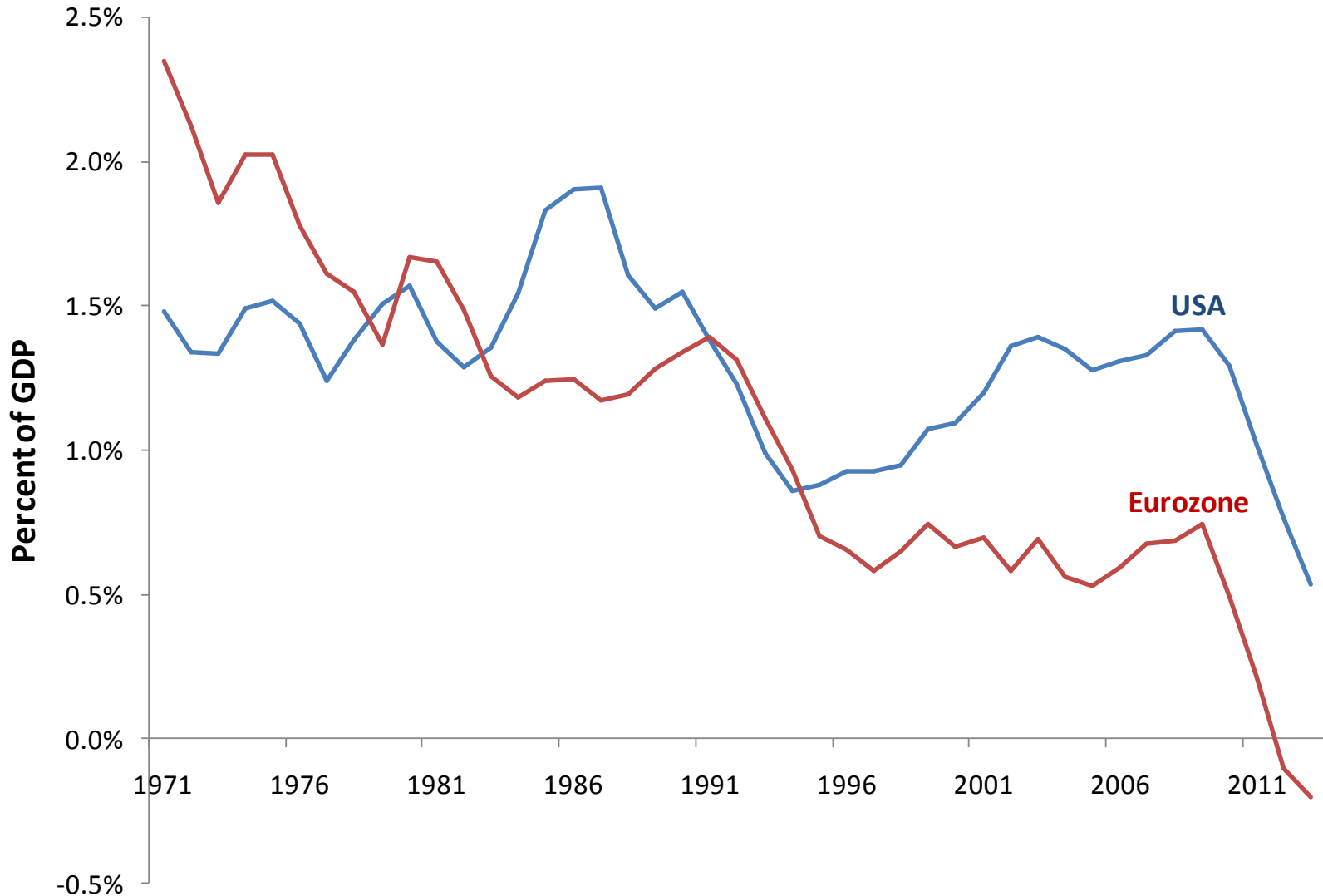
While Making Debt More Sustainable

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