

# The Interest Rate Paradox

John H. Cochrane

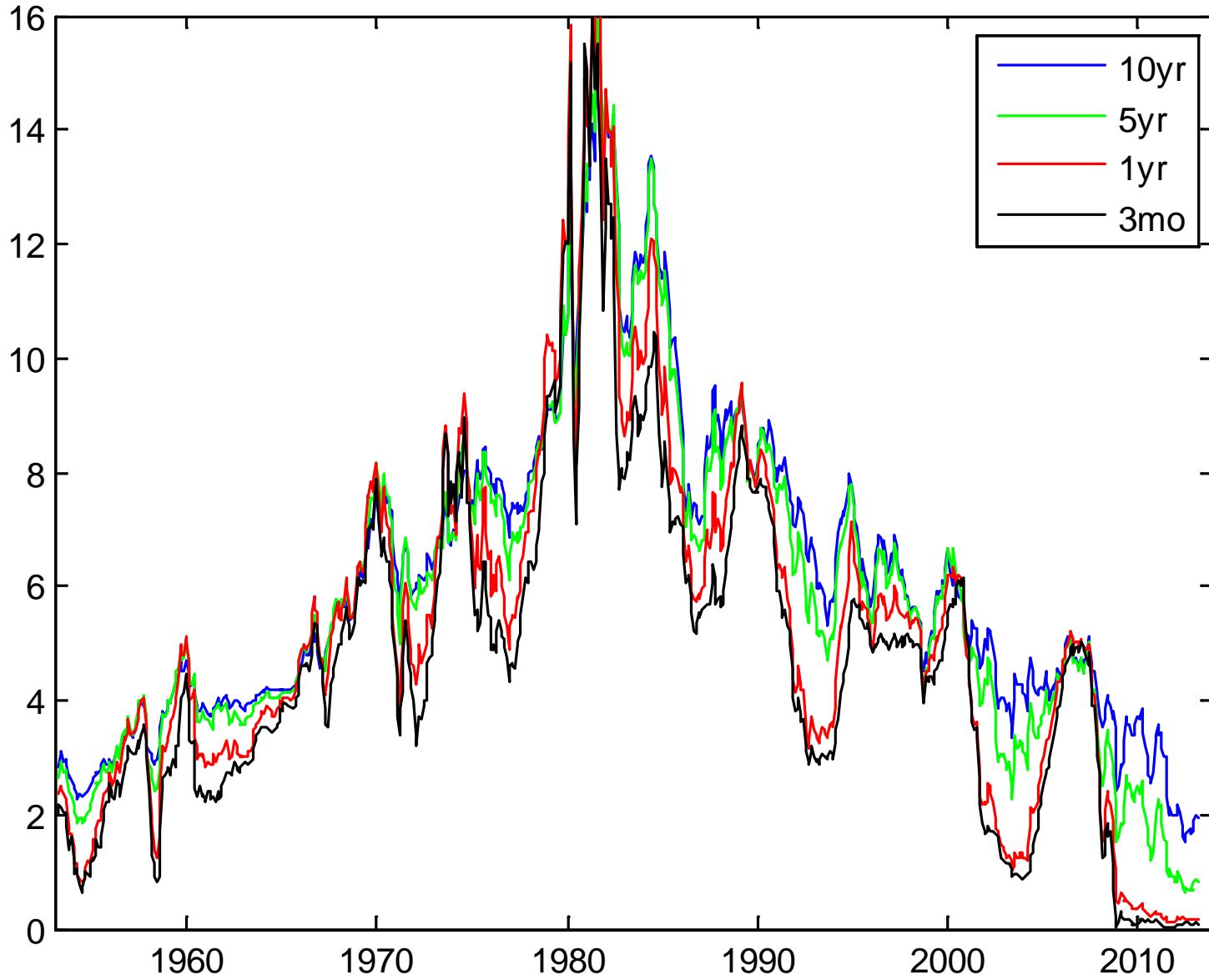
University of Chicago Booth School of Business,  
Hoover institution, Cato institute,

<http://faculty.chicagobooth.edu/john.cochrane>

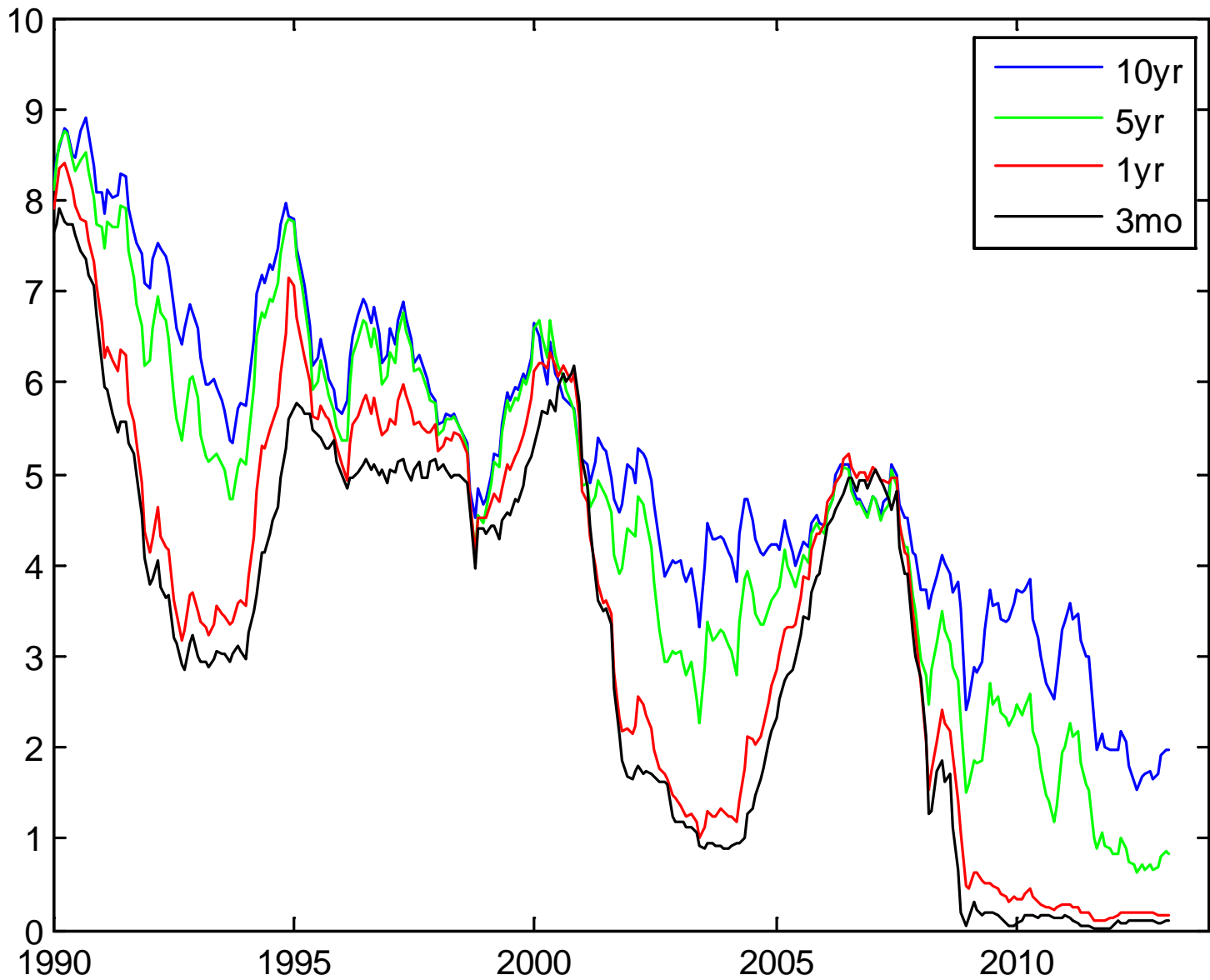
“The Grumpy Economist” blog  
Johnhcochrane.blogspot.com



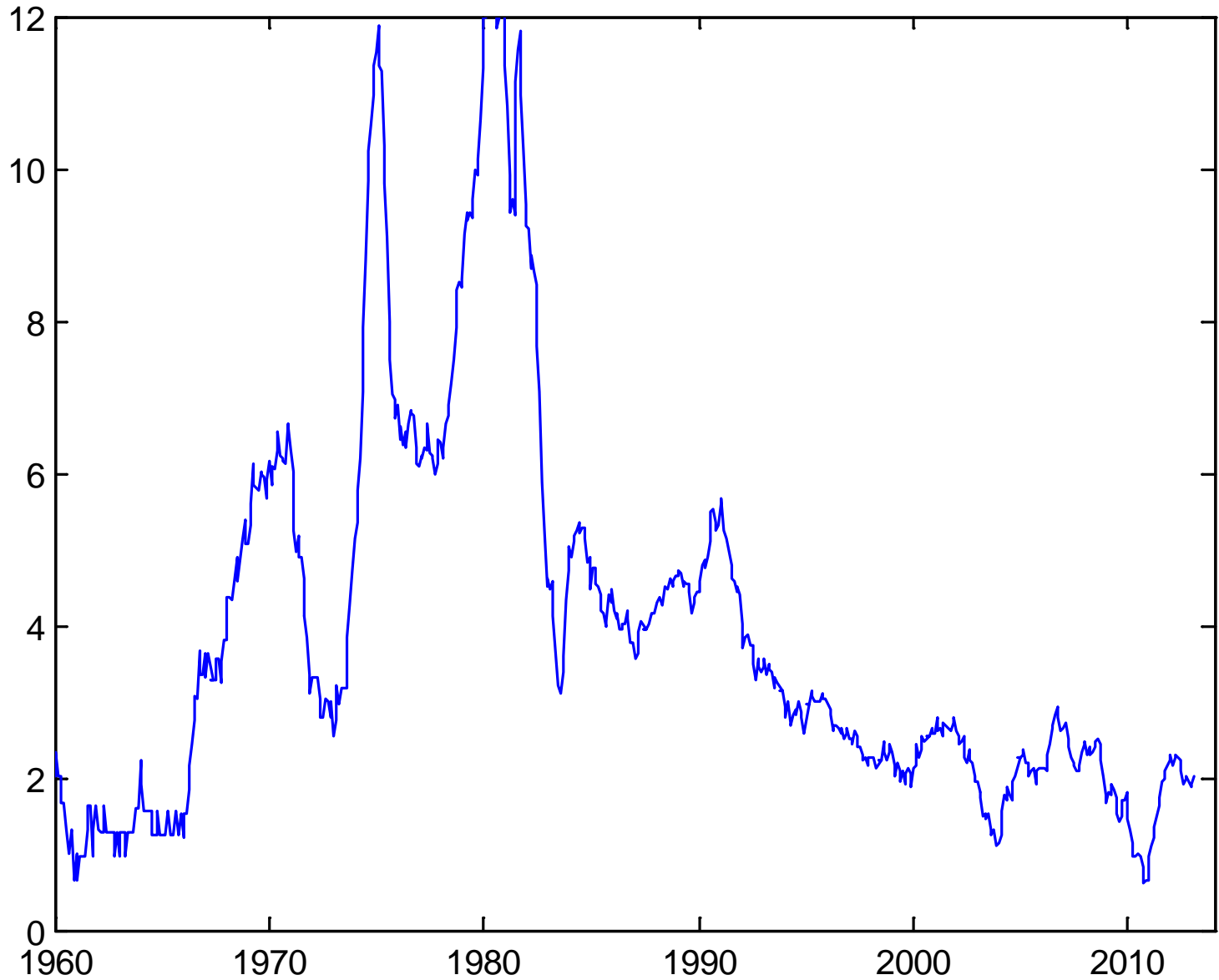
# Treasury yields



Treasury yields



# CPI inflation

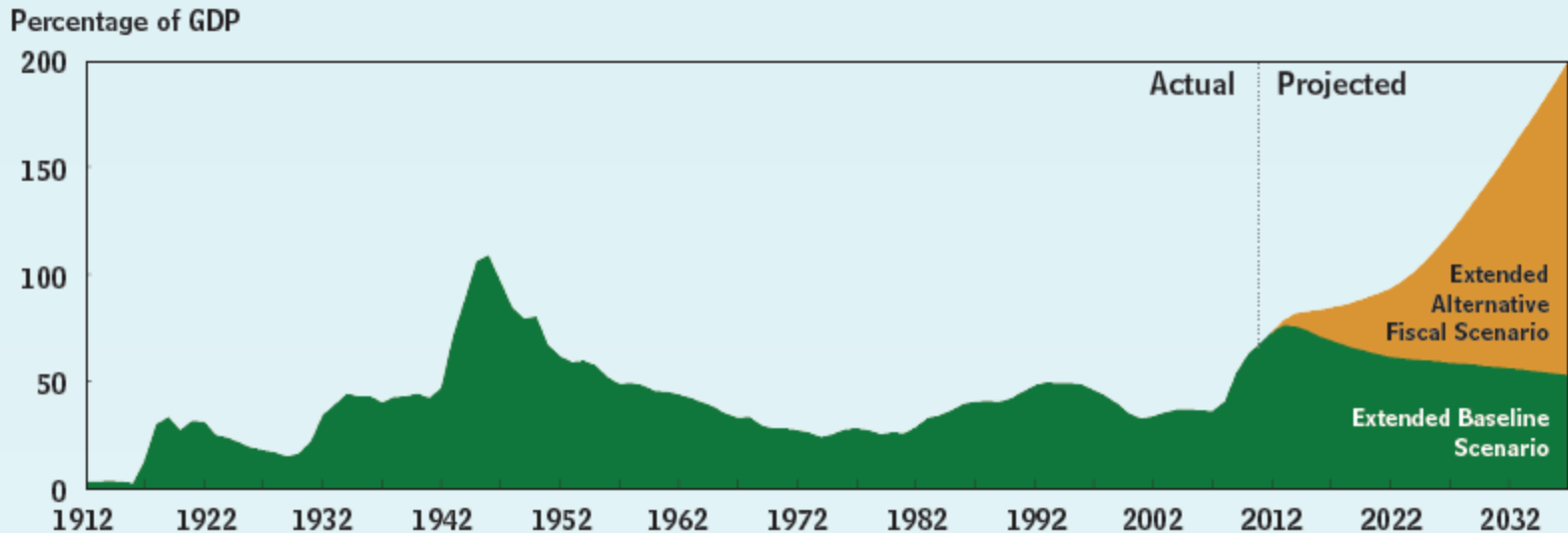


# CBO

Revenue: \$2.5T  
Expense: \$3.5T  
Debt: \$16T  
Promises:Gazillions

## The 2012 Long-Term Budget Outlook

Federal Debt Held by the Public, 1912 to 2037



Choose one of the 5 charts.

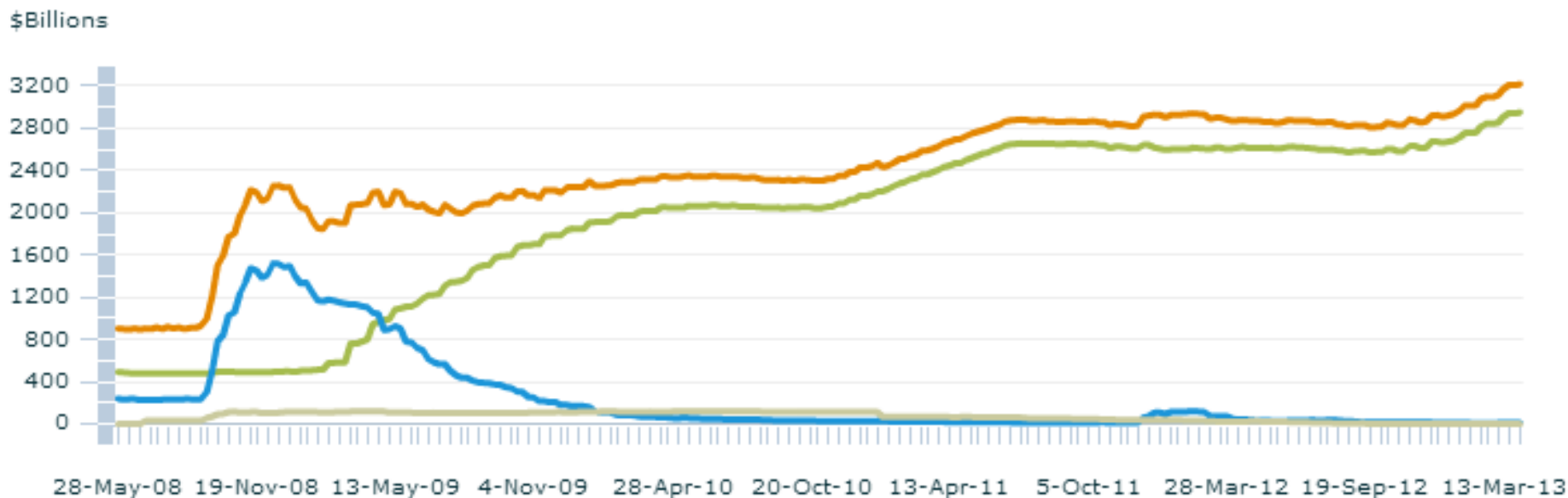
Selected Assets of the Federal Reserve

- Total Assets
- Securities Held Outright
- All Liquidity Facilities\*
- Support for Specific Institutions\*\*

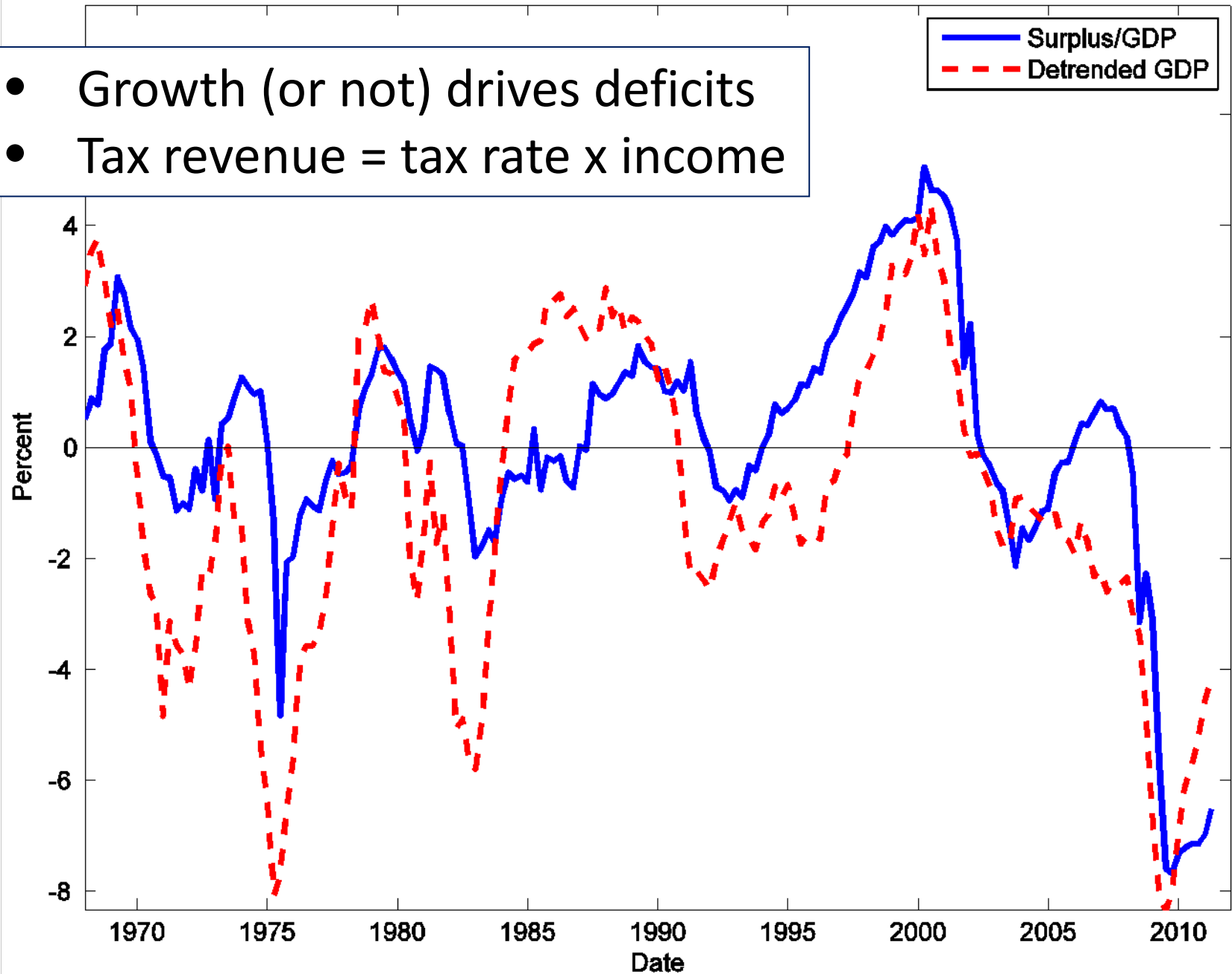
View as table

Fullscreen

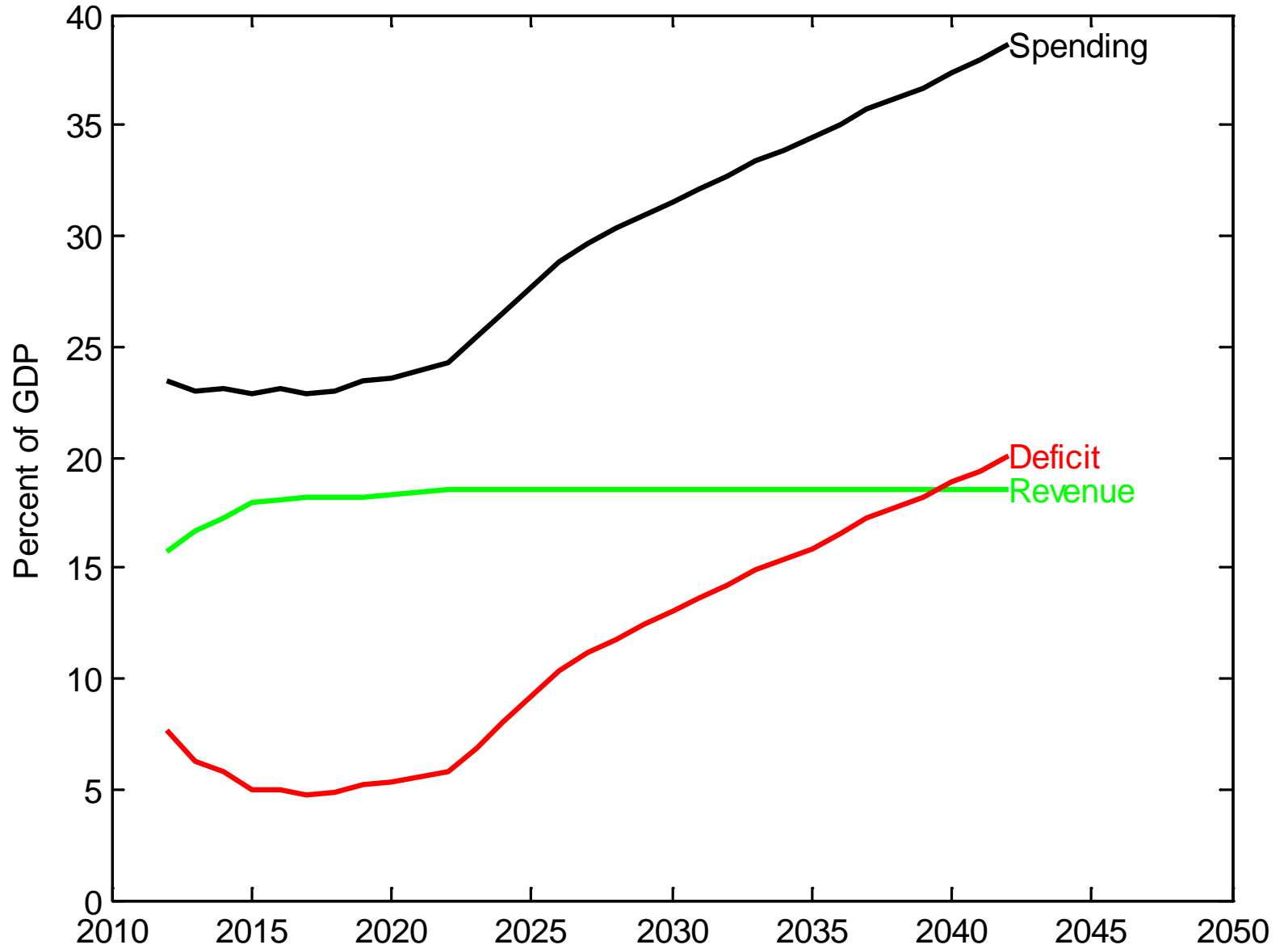
The increase in the size of the Federal Reserve's balance sheet has been accompanied by changes in the composition of the assets held over time. The level of securities held outright declined at the end of 2007 into 2008 as the Federal Reserve sold Treasury securities to accommodate the increase in credit extended through liquidity facilities. The level of securities holdings has risen significantly since 2009, principally reflecting purchases of Treasury, agency, and agency-guaranteed mortgage-backed securities under the large scale asset purchase programs announced by the FOMC. The various liquidity facilities wound down significantly over the course of 2009.



- Growth (or not) drives deficits
- Tax revenue = tax rate x income

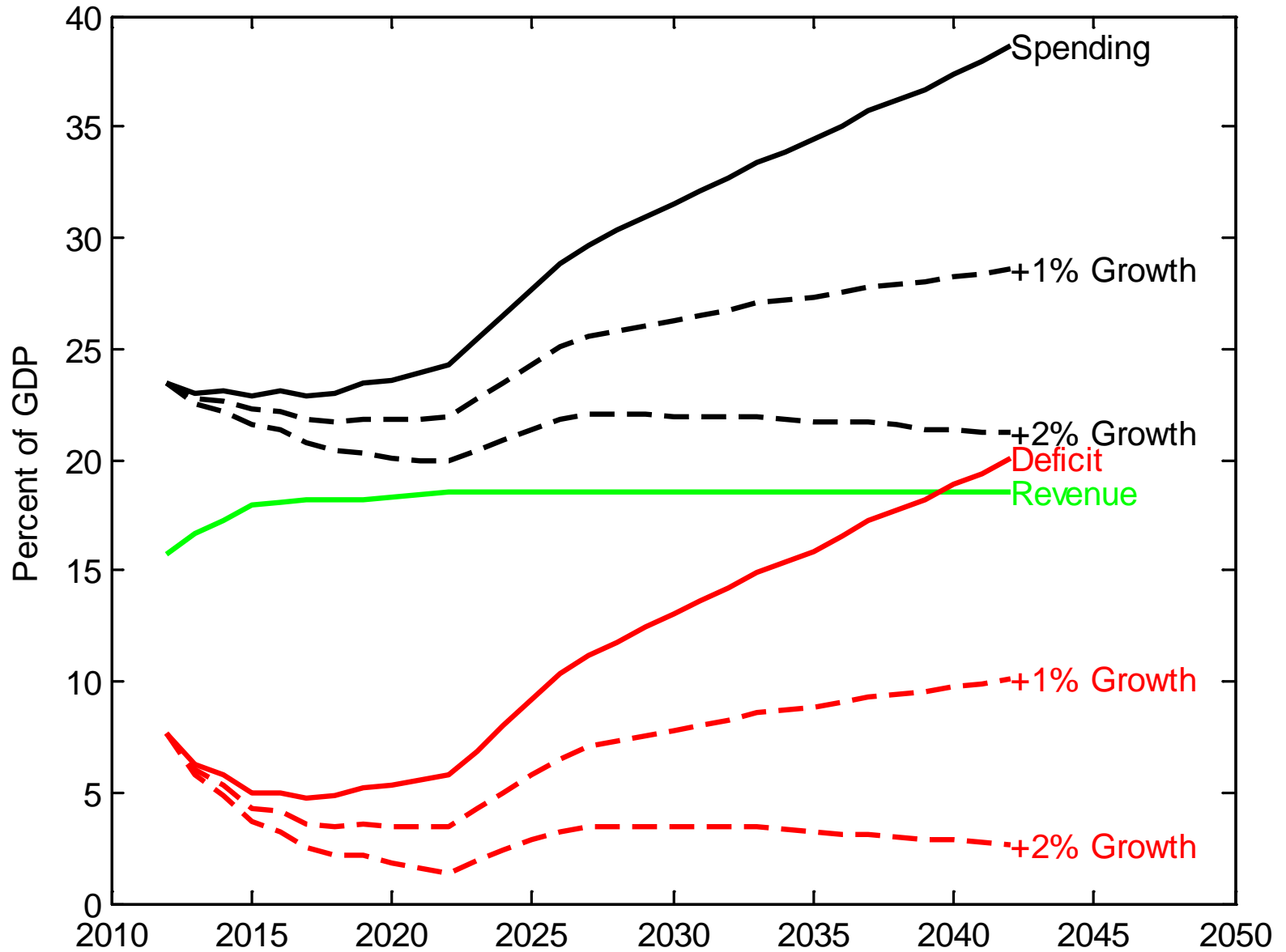


# CBO Long Term Budget Outlook

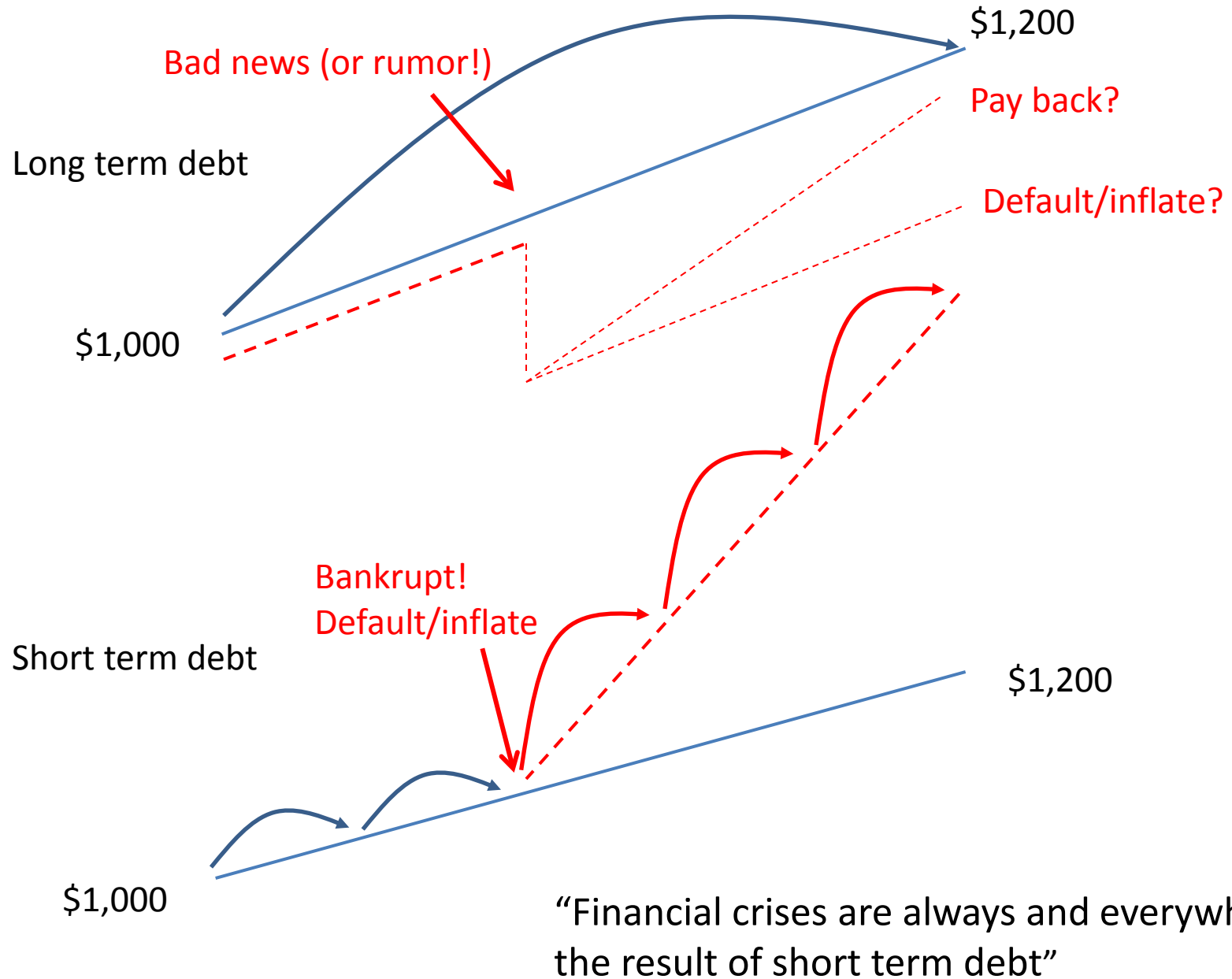




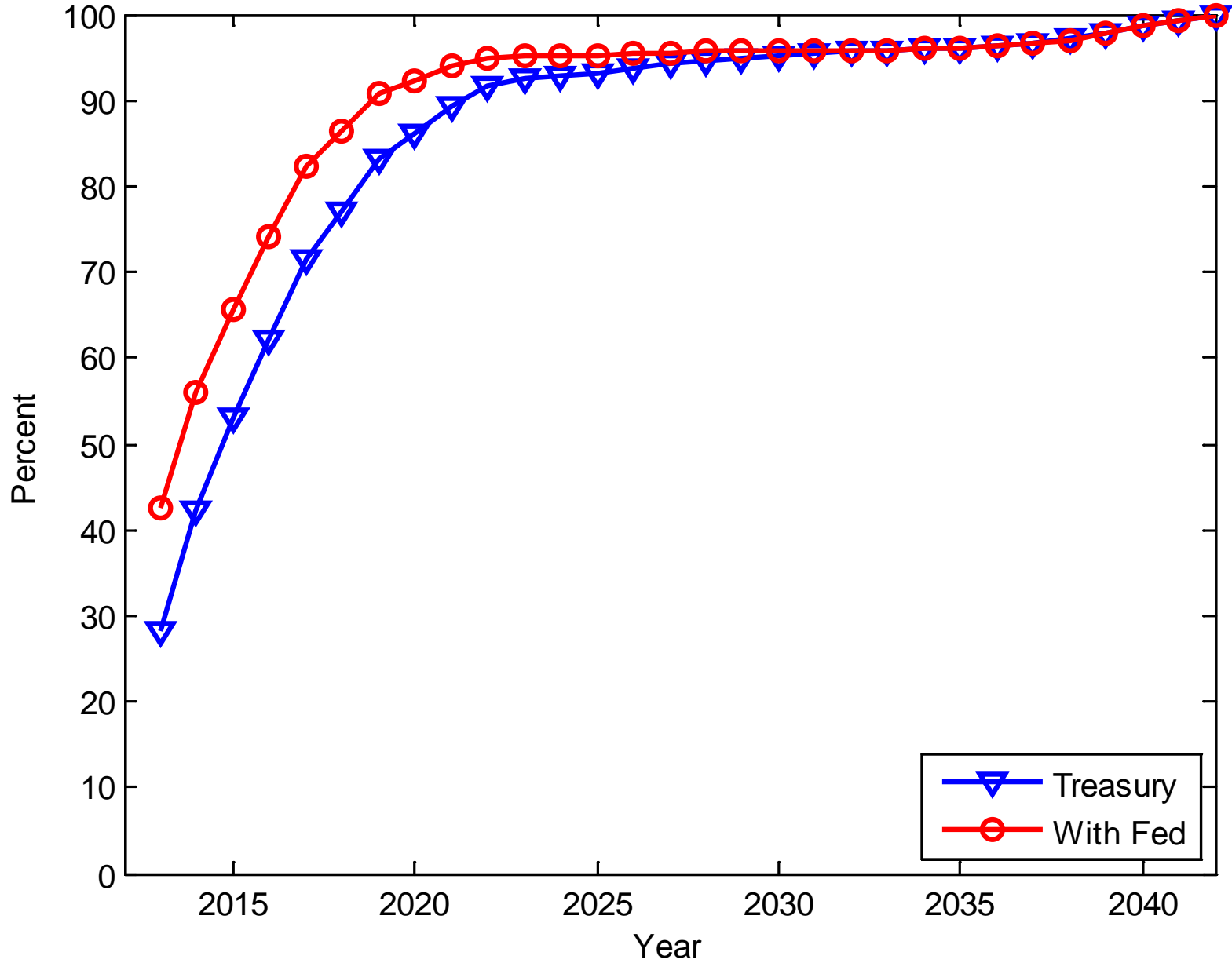
# The Effect of Economic Growth on Deficits



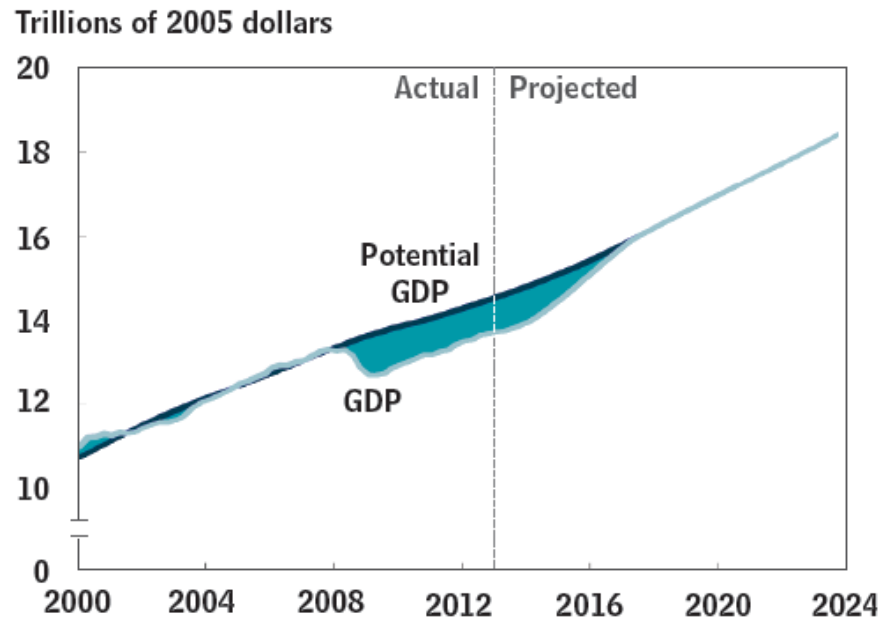
# Short term debt: Future problems cause crisis today



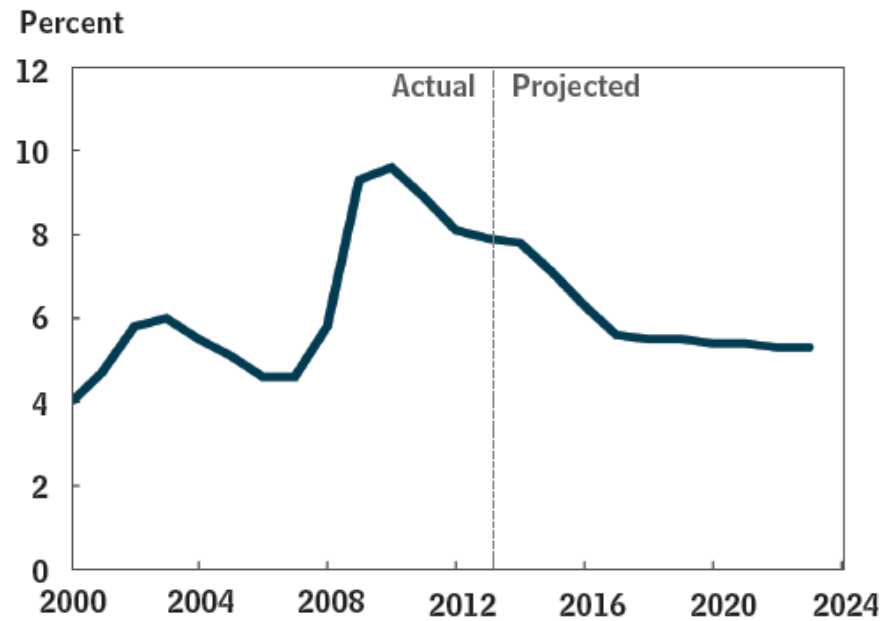
Fraction of debt coming due before each date



- But even the CBO's dire forecast assumes a return to growth! (and magical spending cuts)

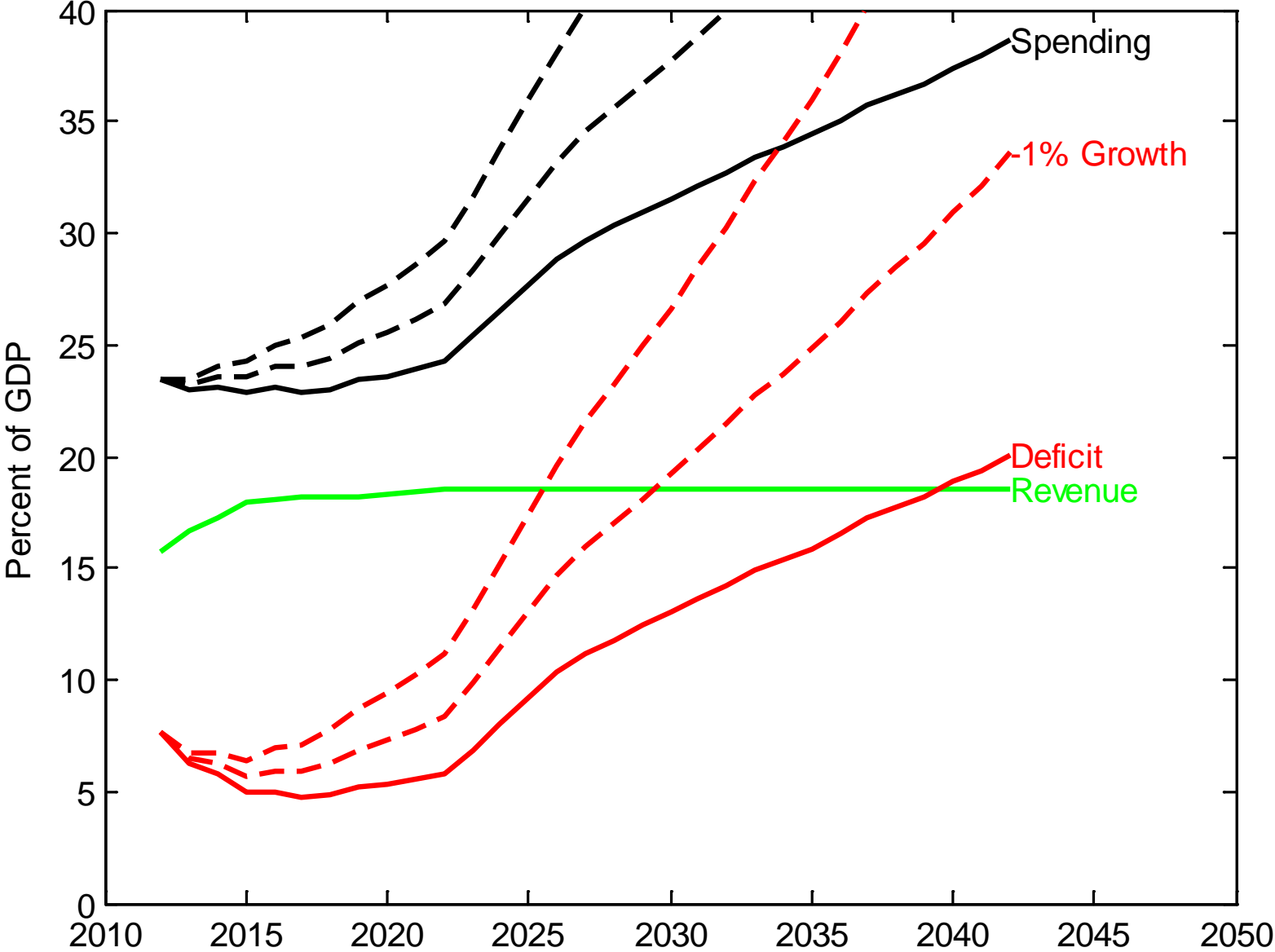


**GDP and Potential GDP**

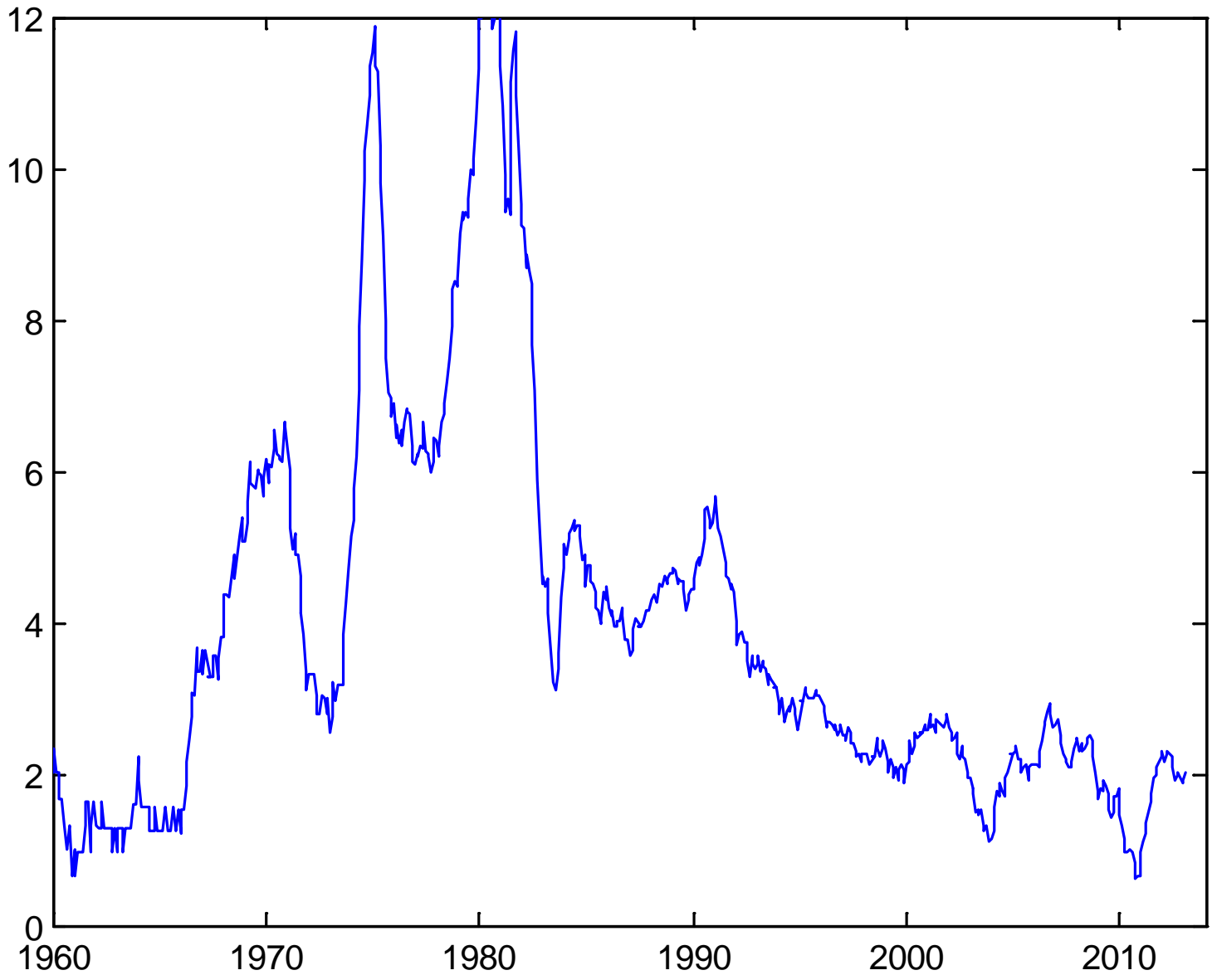


**Unemployment Rate**

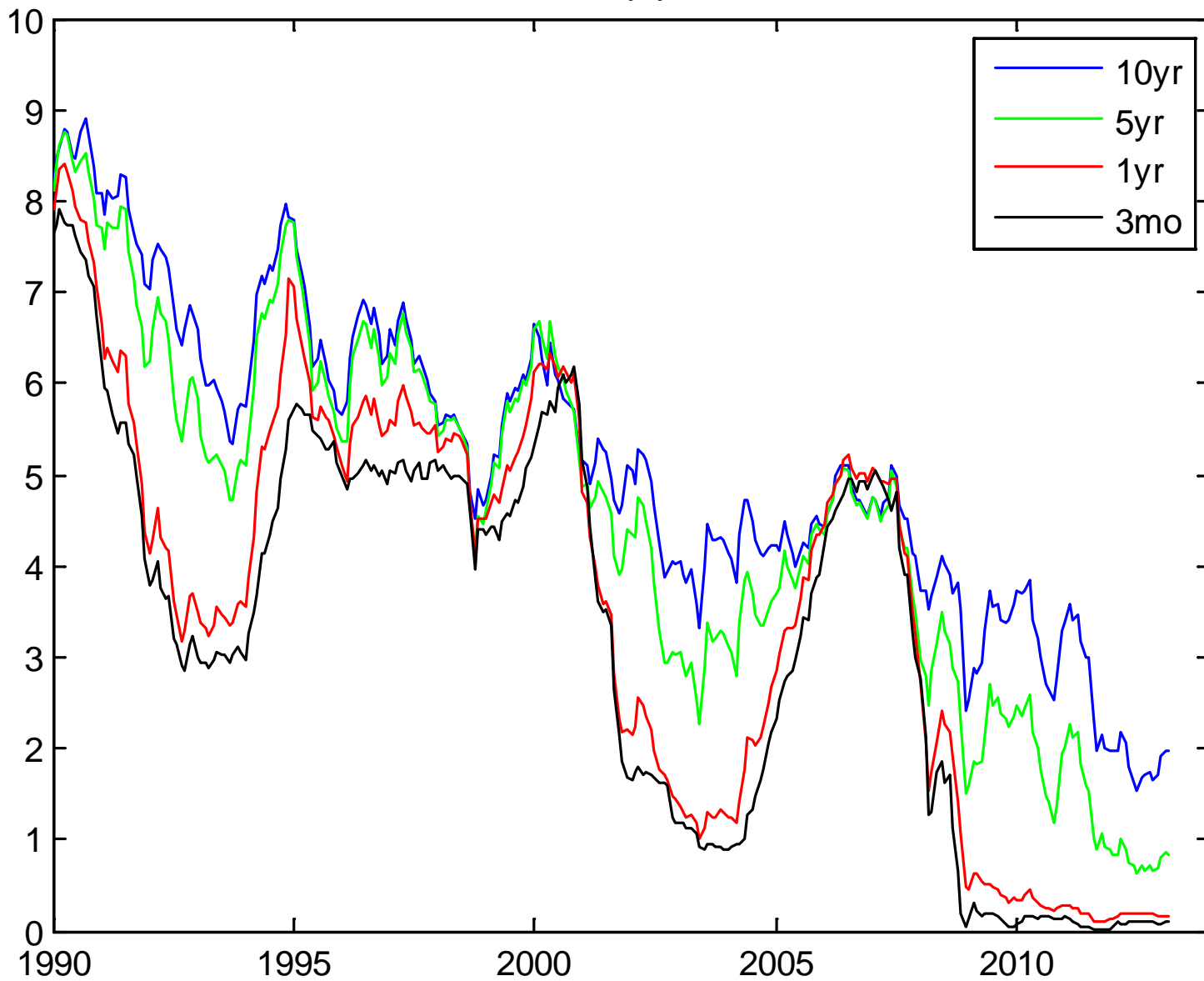
# The Effect of Slower Growth on Deficits



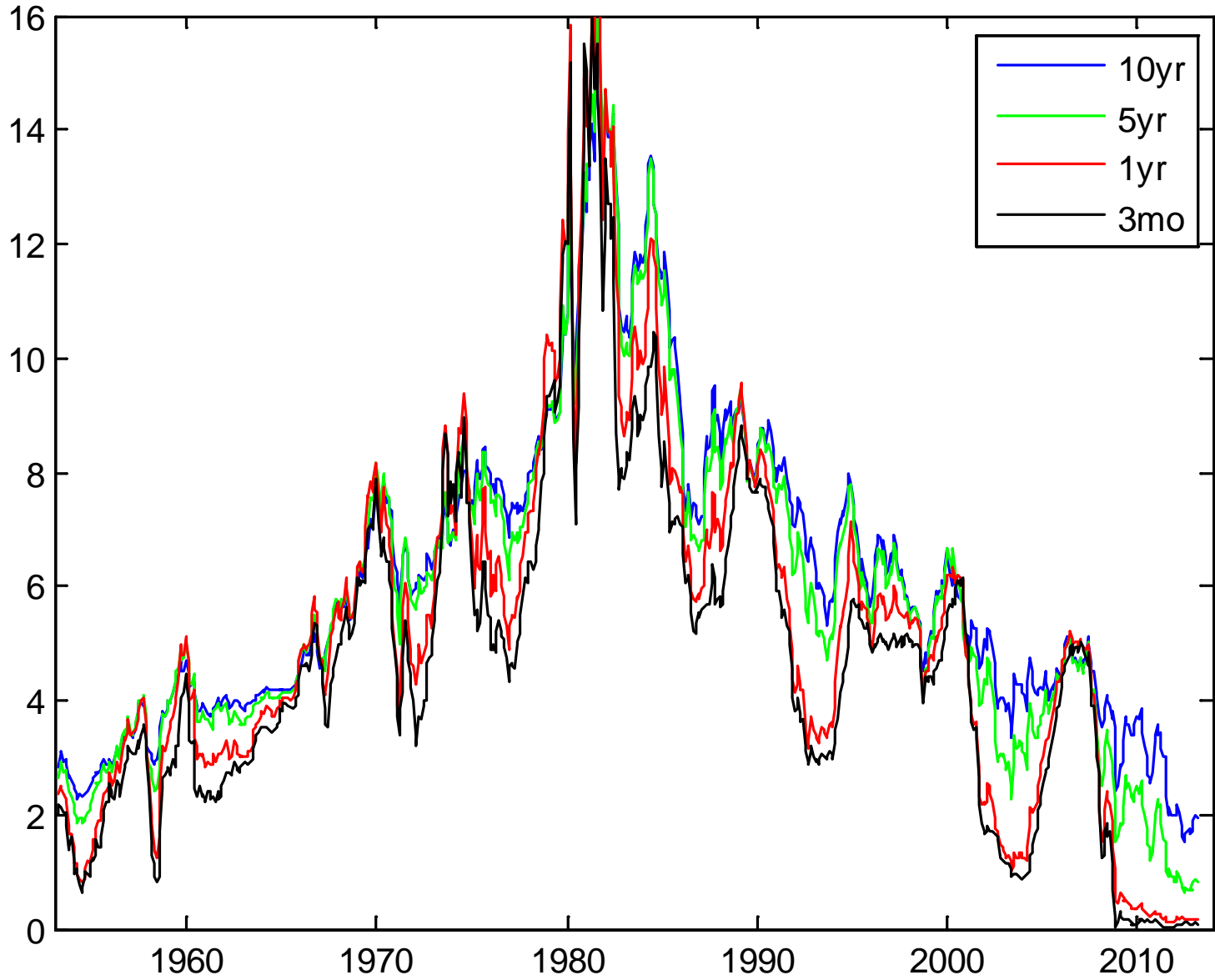
CPI inflation



Treasury yields

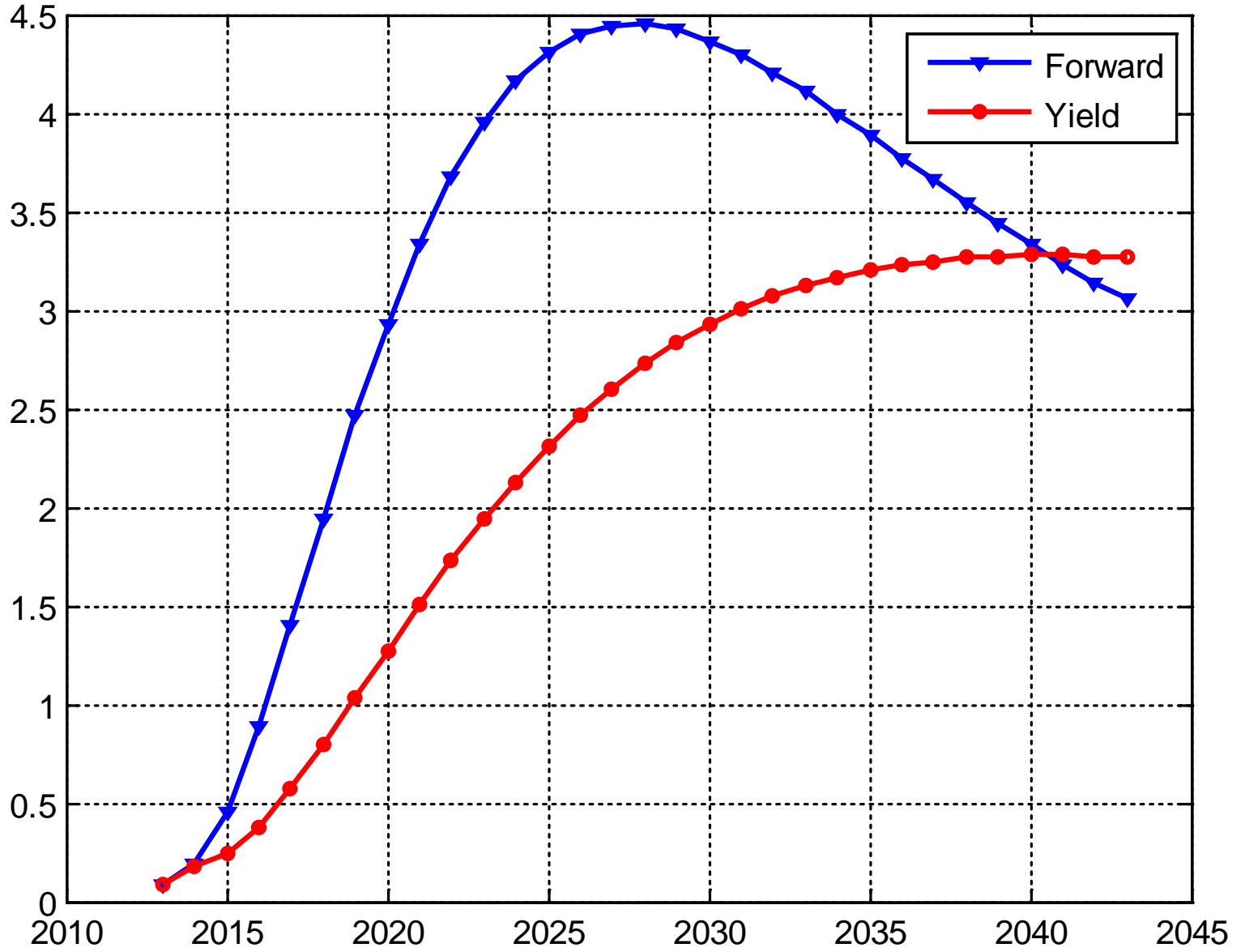


# Treasury yields

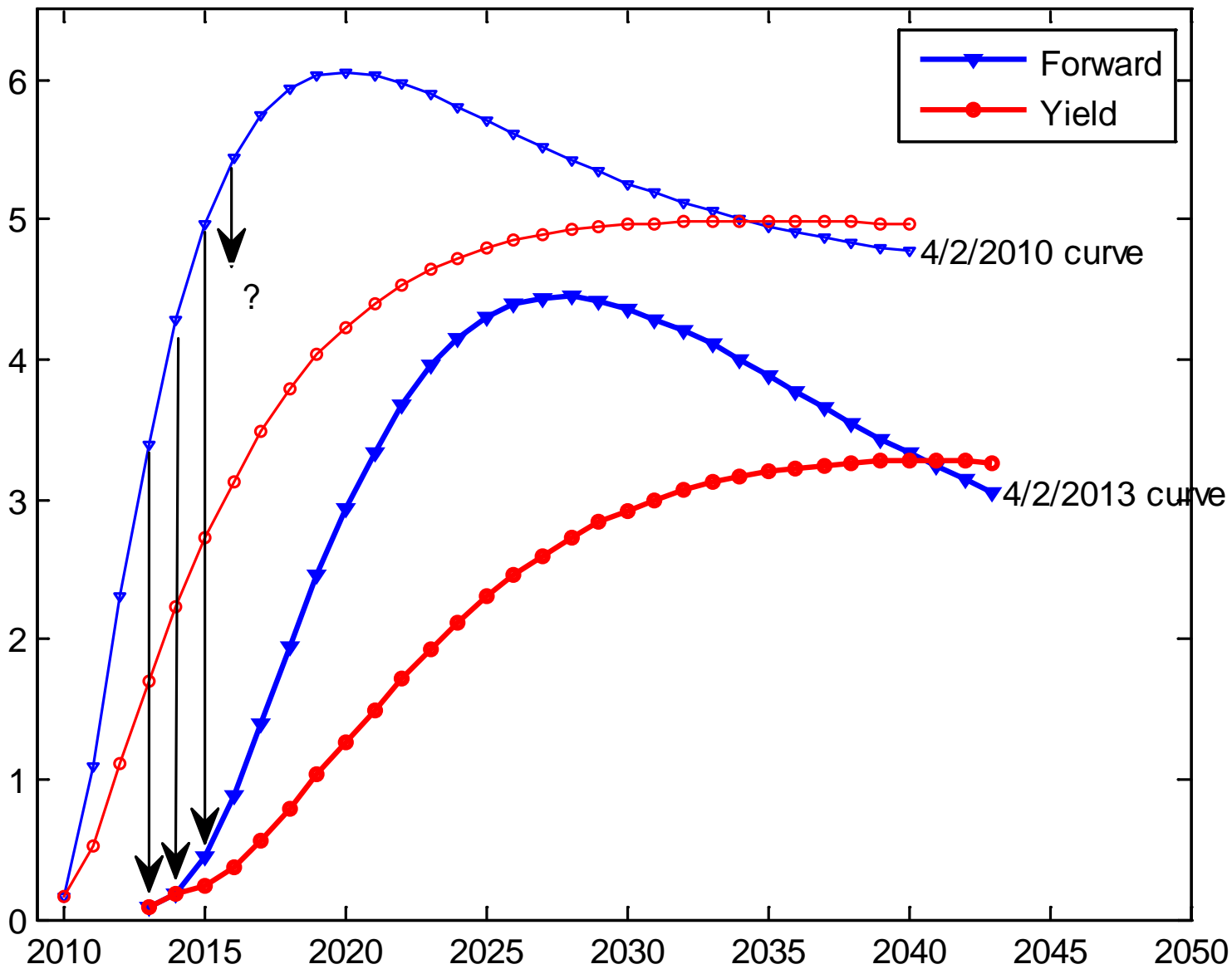




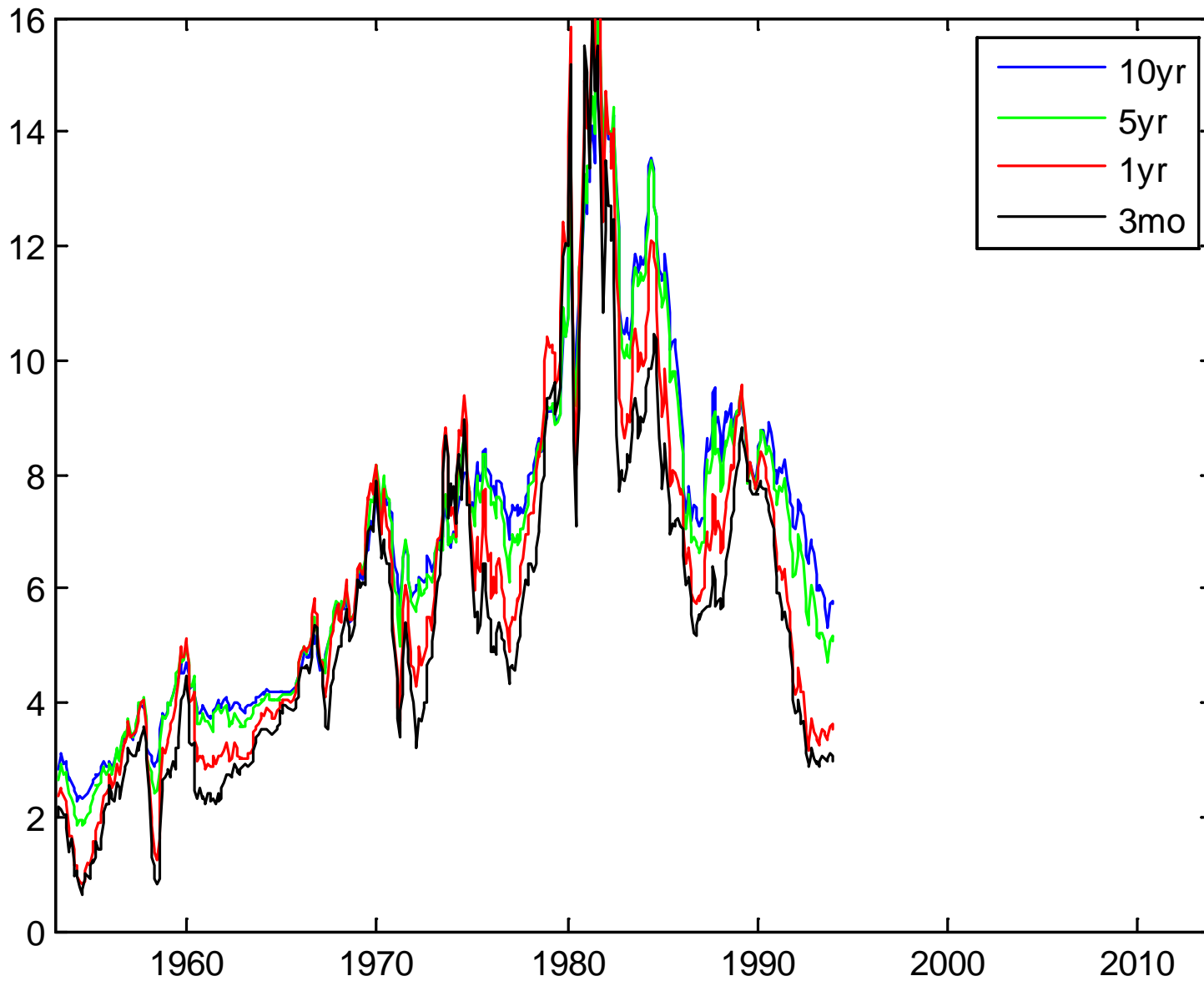
# Treasury Yield Curve



# Treasury Curve



Treasury yields



# Scenarios

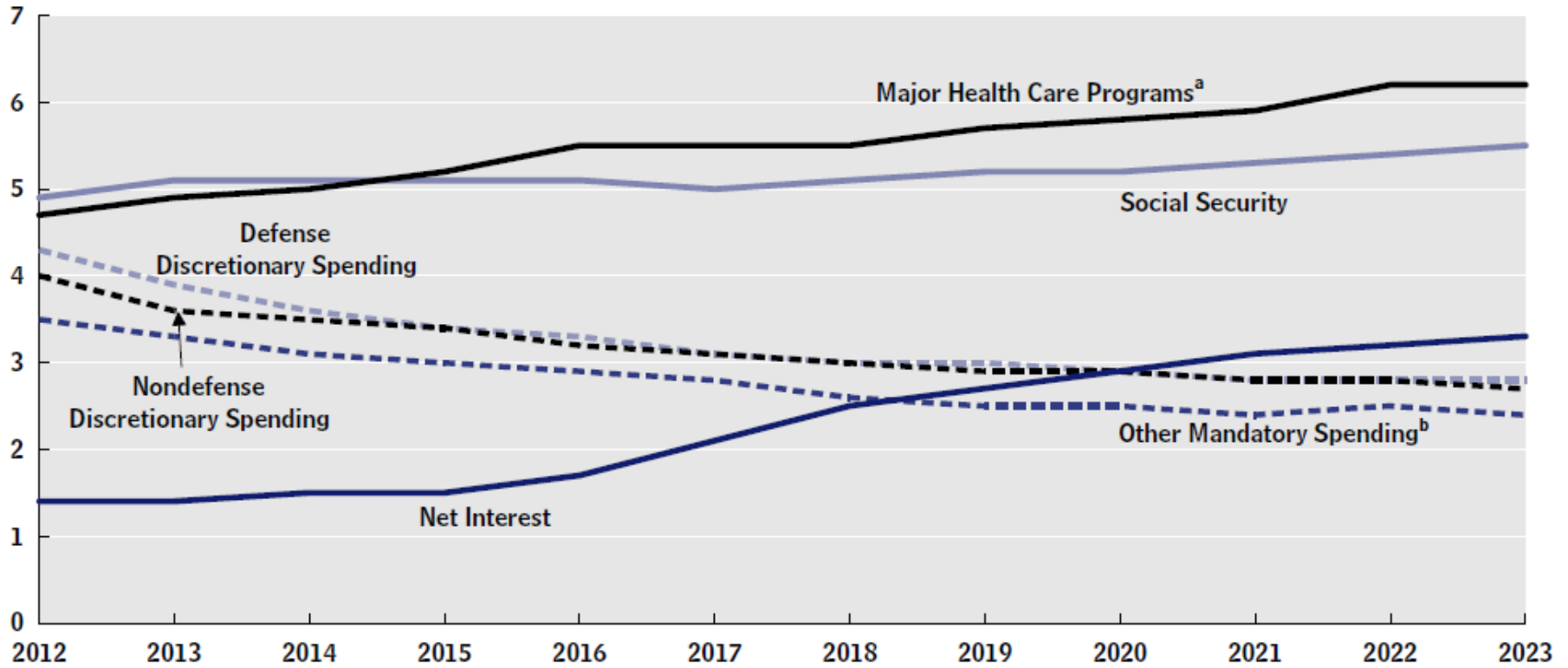
- **Consensus.** Economy improves slowly, slow tightening inflation “anchored.” Enough entitlement reform to stop a crisis.
- **Japan.** 10-20 year stagnation, inflation to zero, rates stay zero, great time to hold long term bonds. Debt builds up to magical levels (200%+ GDP)
- **Mild crisis.** Inflation to 3-4%, Fed tries to tighten, can't from fiscal / bank/ political limits, stagflation breaks out.
- **Severe crisis 1:** Rates rise, debt spiral
- **Severe crisis 2:** Europe, state bankruptcy, etc. trigger “run on long sovereign debt” then “run on dollar.”
- **Miracle of common sense:** Tax reform, entitlement reform, structural reform, return to strong growth, pay off debt, inflation stays low.
- **Forward curve:** Averages all these + risk premiums.
- **What to do:** Wise portfolio allocation starts with *risk management* not alpha.

The End

**Figure 1-3.**

## Projected Spending in Major Budget Categories

(Percentage of gross domestic product)

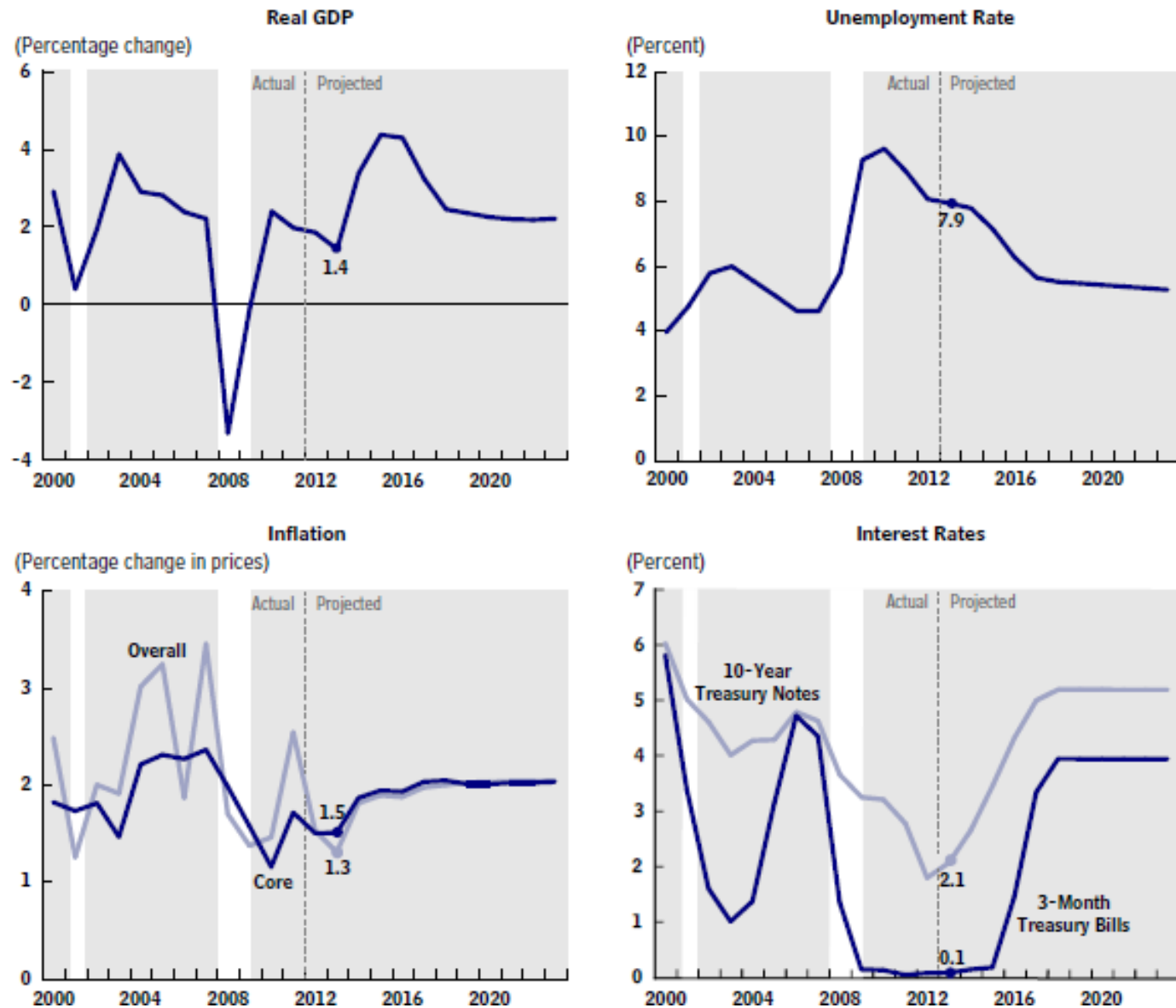


Source: Congressional Budget Office.

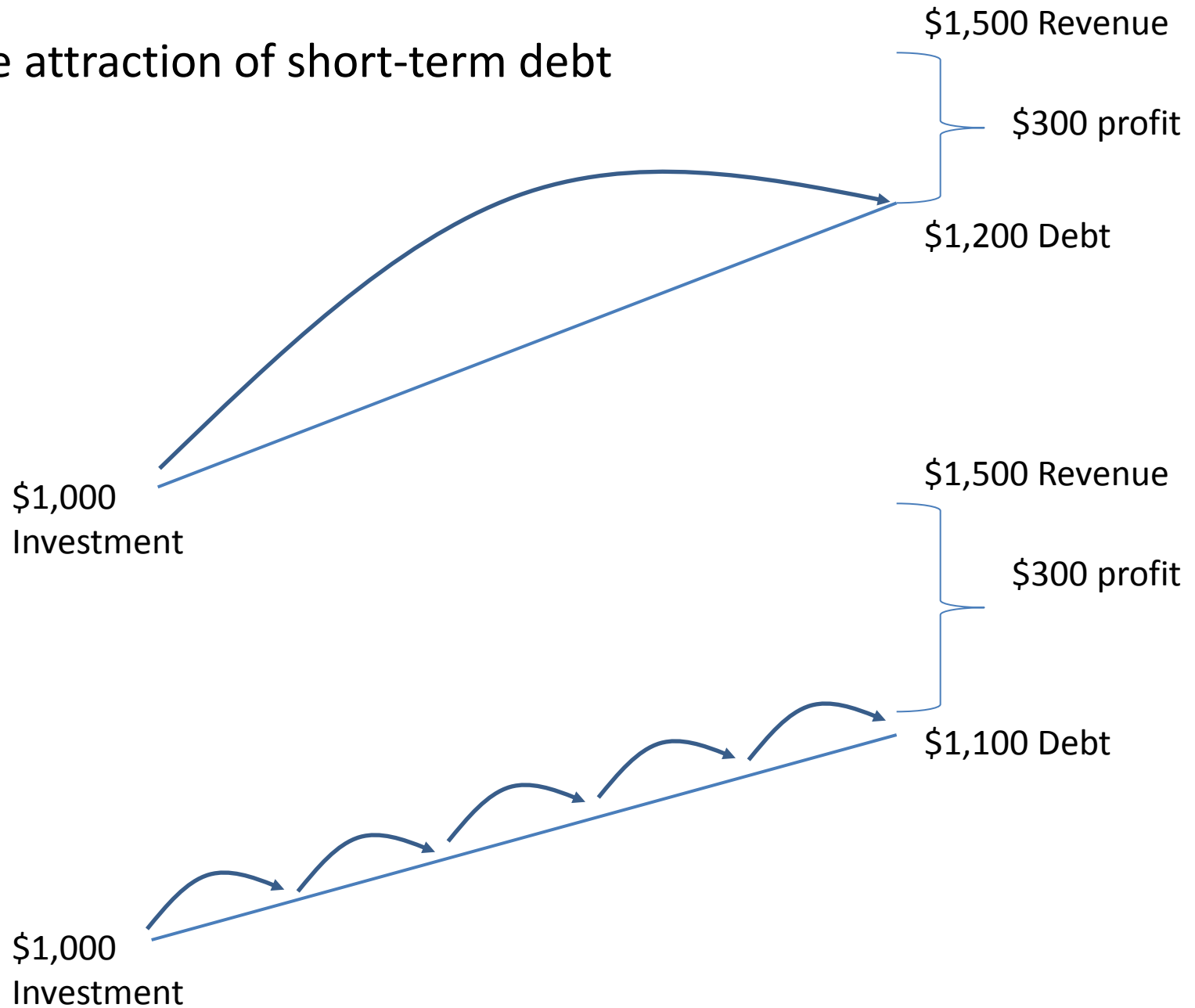
- Includes Medicare (net of receipts from premiums), Medicaid, the Children's Health Insurance Program, and subsidies offered through new health insurance exchanges and related spending.
- Other than mandatory spending for major health care programs and Social Security.

**Figure 2-4.**

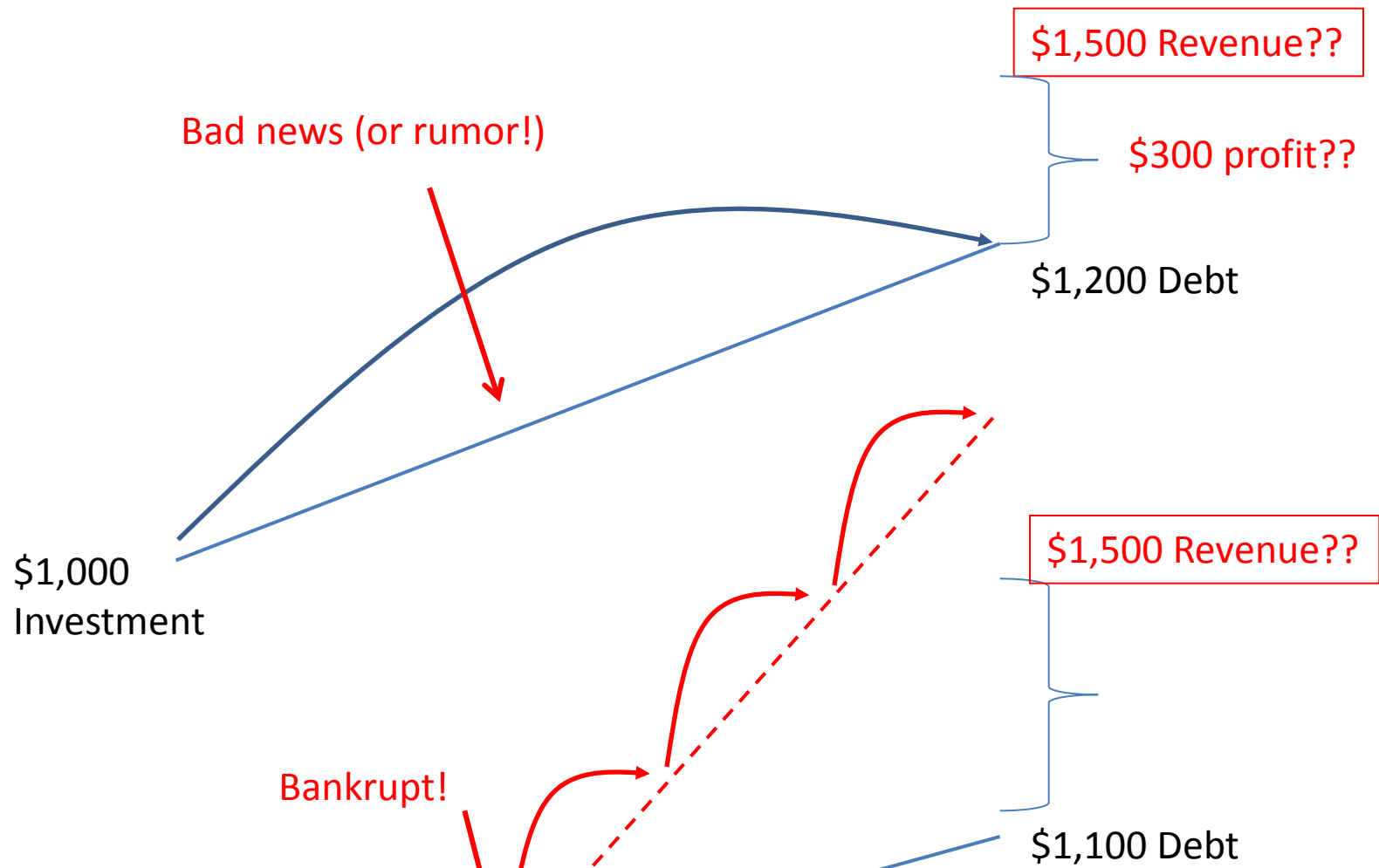
## Actual Values and CBO's Projections of Key Economic Indicators



# The attraction of short-term debt







“Financial crises are always and everywhere the result of short term debt”