Lessons from the Financial Crisis for Teaching Economics

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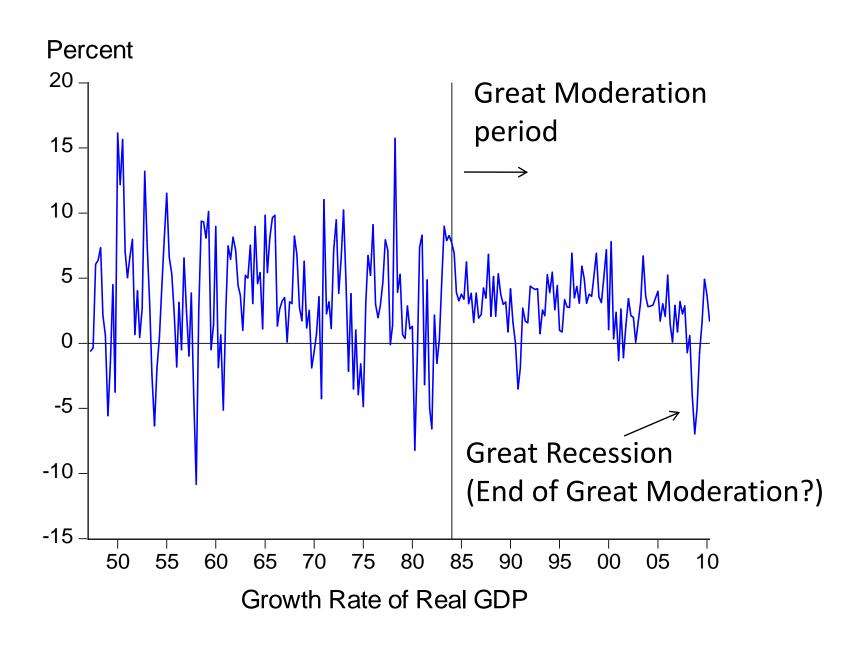
Outline

- Narrative of the Financial Crisis
 - Informs one's views about lessons for teaching
- Alternative Narratives
 - Not surprisingly, economists disagree
- Implications for Teaching
 - Examples will be presented throughout talk based on experience
 - Graduate (1st year Ph.D. course at Stanford)
 - Undergraduate (Economics 1 at Stanford)
 - Textbook (Principles Book with Weerapana)

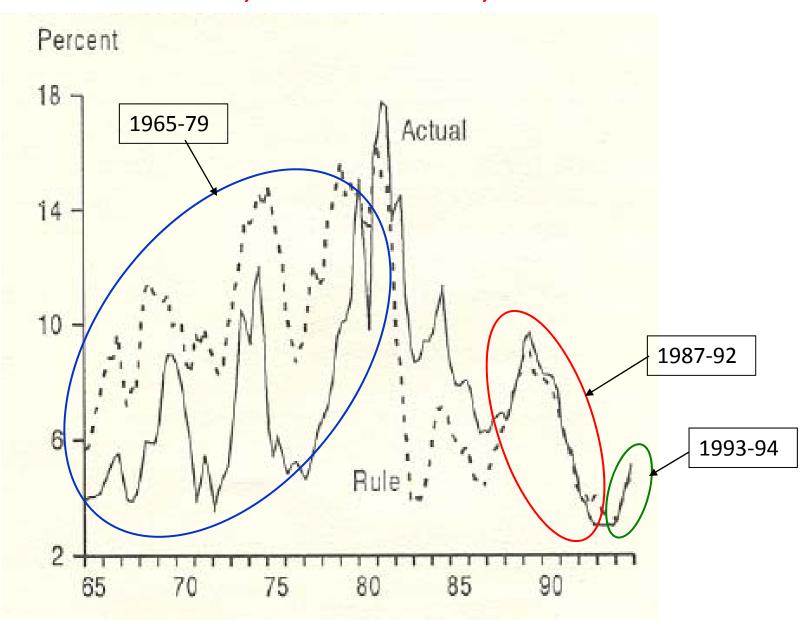
Narrative

- Economic policy deviated from basic economic principles which had worked well
- Result? A great recession, a financial panic, and a very weak, nearly nonexistent, recovery.
- The deviations began with policies such as
 - a monetary policy with interest rates too low for too long
 - a regulatory policy which failed to enforce existing rules
- The deviations from sound principles continued when government responded with an ad hoc bailout process and temporary stimulus programs
- The good news: economic growth and stability can be restored by adopting policies consistent with basic economic principles.

An illustration that basic principles work well, when followed

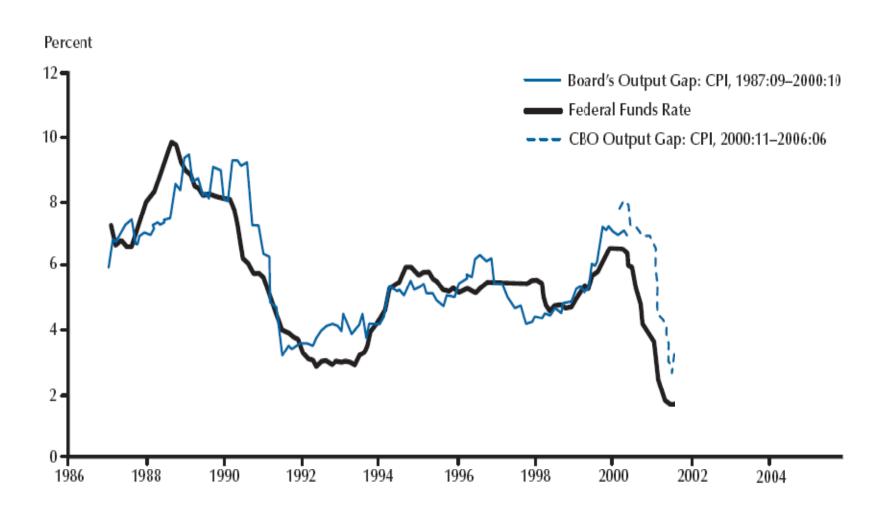


Illustrative monetary policy chart from San Francisco Fed, March 1995, Judd and Trehan



Illustrative monetary policy chart from St Louis Fed February 2007, Bill Poole

Greenspan Years: Federal Funds Rate and Taylor Rule (CPI $p^* = 2.0$, $r^* = 2.0$) a = 1.5, b = 0.5

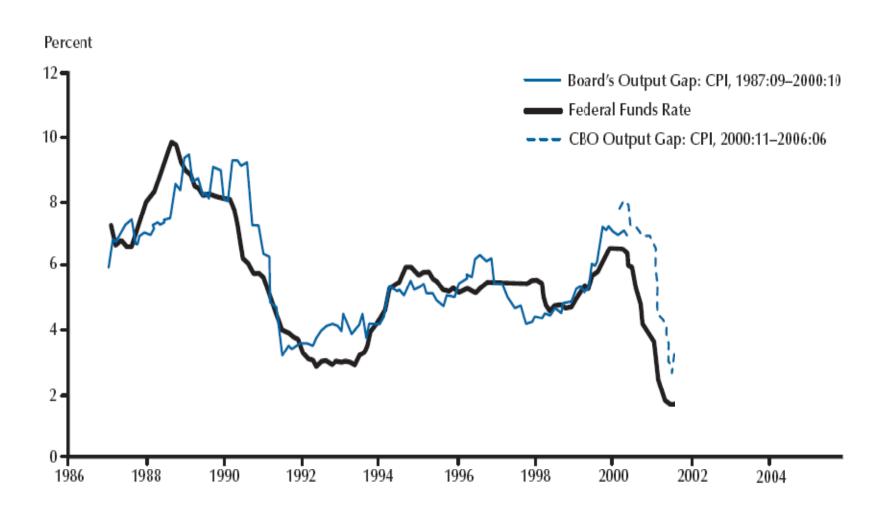


Policy Deviations Leading up to the Crisis and the Panic in Fall 2008

- Interest rates too low for too long
- Discretionary fiscal stimulus of Feb '08 (\$152B)
- On-again, off-again bailouts financed by central bank's balance sheet
 - on for BSC creditors' bailout, off for Lehman creditors'
 bailout, on for AIG creditors' bailout, off for TARP role out
- Government regulators and supervisors deviated from sound regulatory rules, especially at large banks

Illustrative monetary policy chart from St Louis Fed February 2007, Bill Poole

Greenspan Years: Federal Funds Rate and Taylor Rule (CPI $p^* = 2.0$, $r^* = 2.0$) a = 1.5, b = 0.5



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Greenspan Years: Federal Funds Rate and Taylor Rule

(CPI
$$p^* = 2.0$$
, $r^* = 2.0$) $a = 1.5$, $b = 0.5$

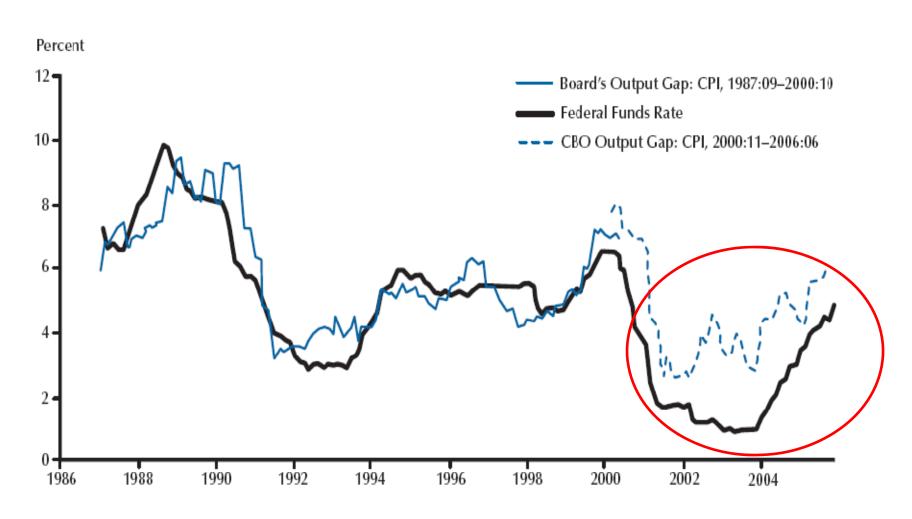
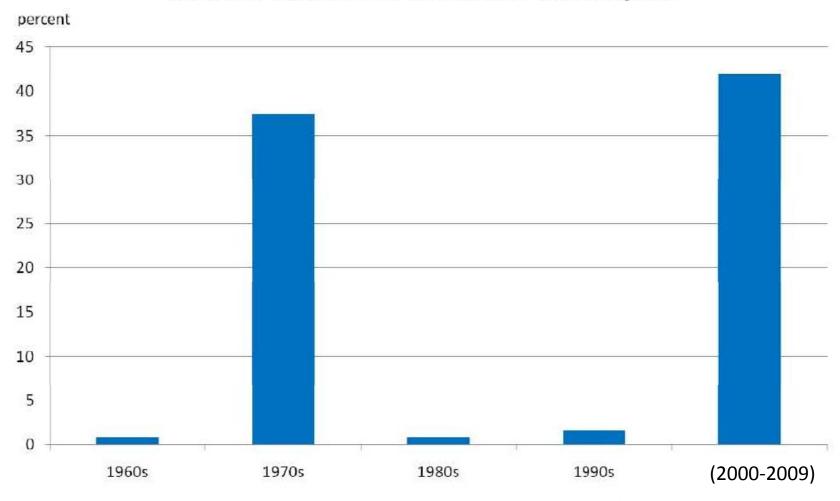


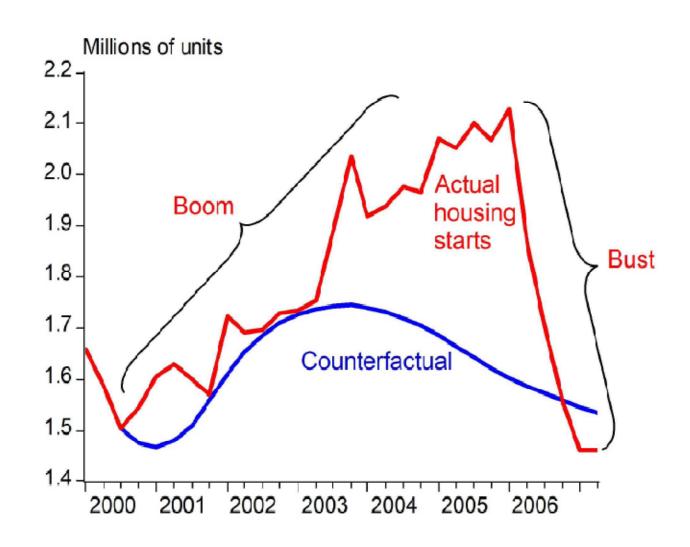
Chart from Kansas City Fed, 2009, Tom Hoenig

Fraction of Time the Real Federal Funds Rate is Negative

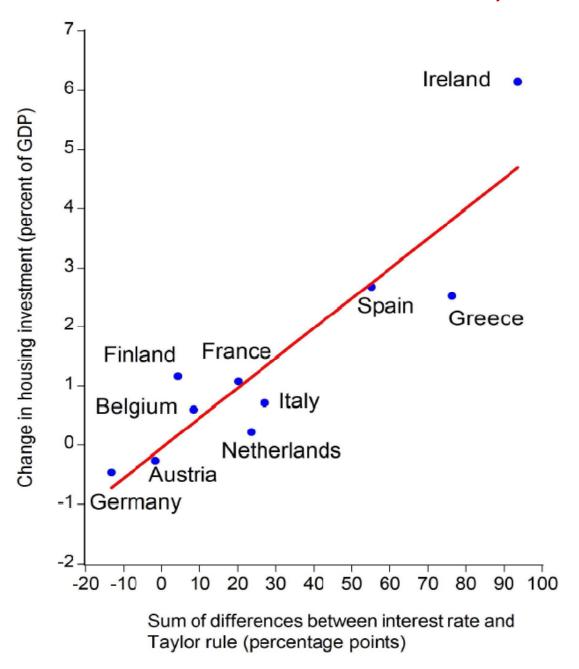


Note: The real federal funds rate equals the nominal federal funds rate minus the core PCE inflation rate (measured from a year ago).

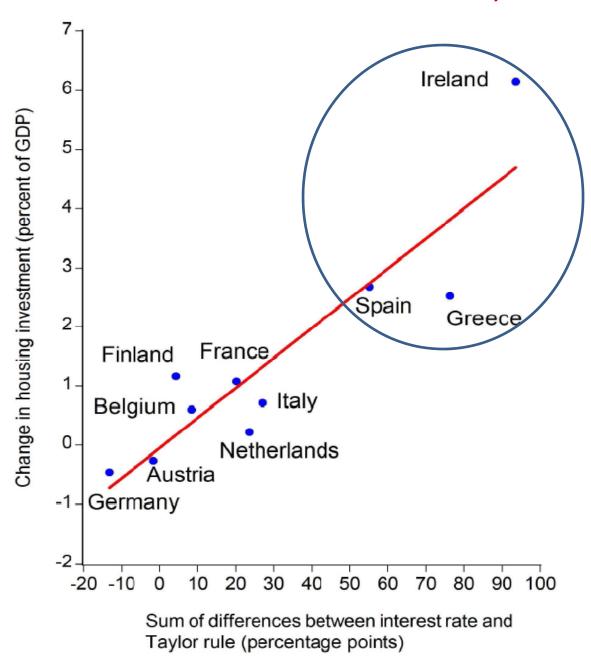
The Boom-Bust in Housing Starts Compared with the Counterfactual



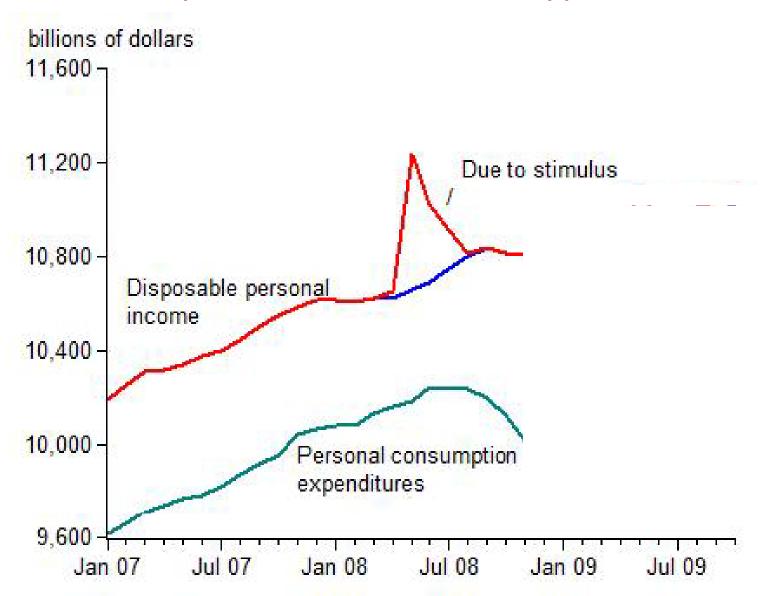
Illustrative Chart from the OECD, March 2008



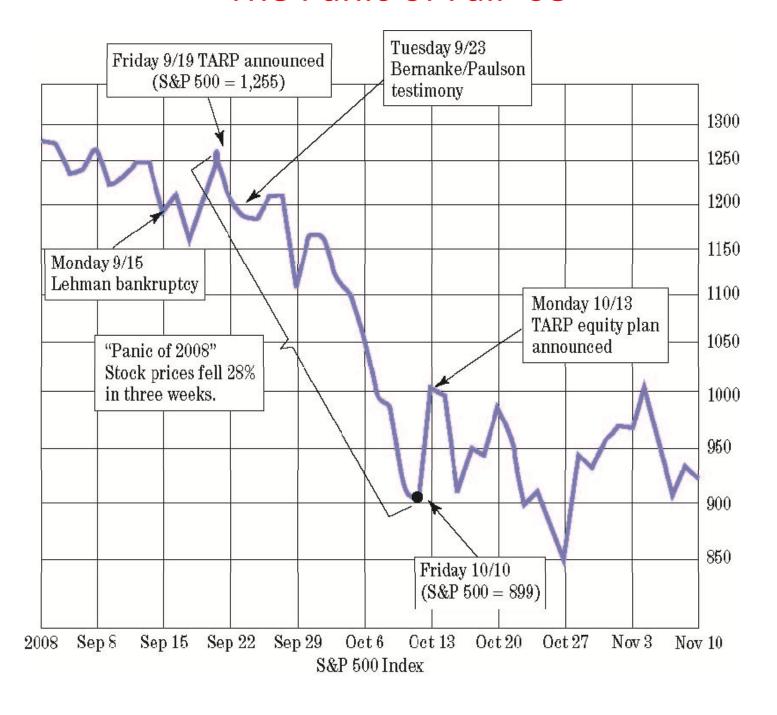
Illustrative Chart from the OECD, March 2008



Temporary stimulus meets permanent income hypothesis



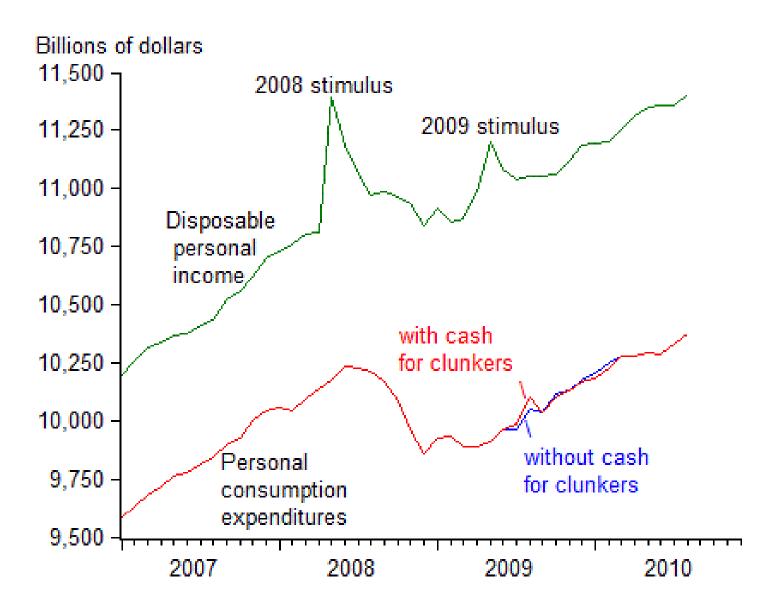
The Panic of Fall '08



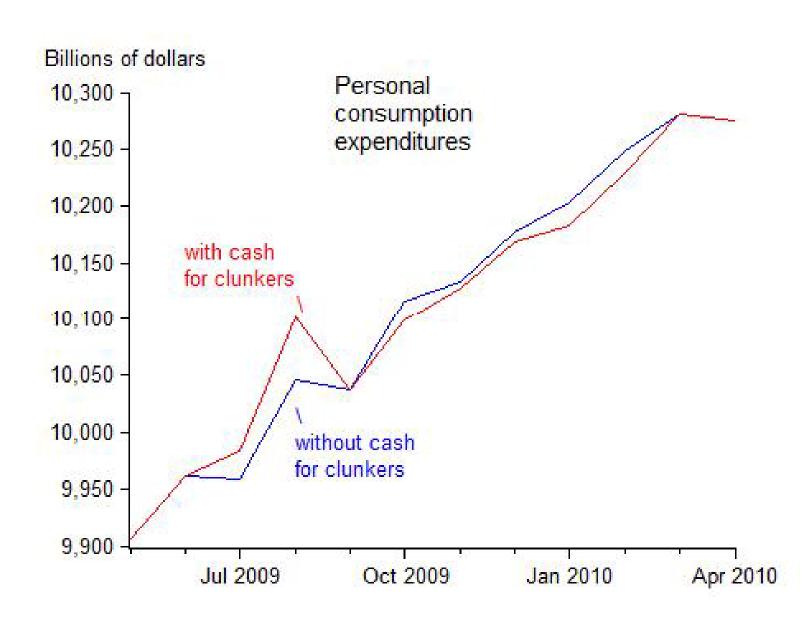
Policy makers then doubled-down

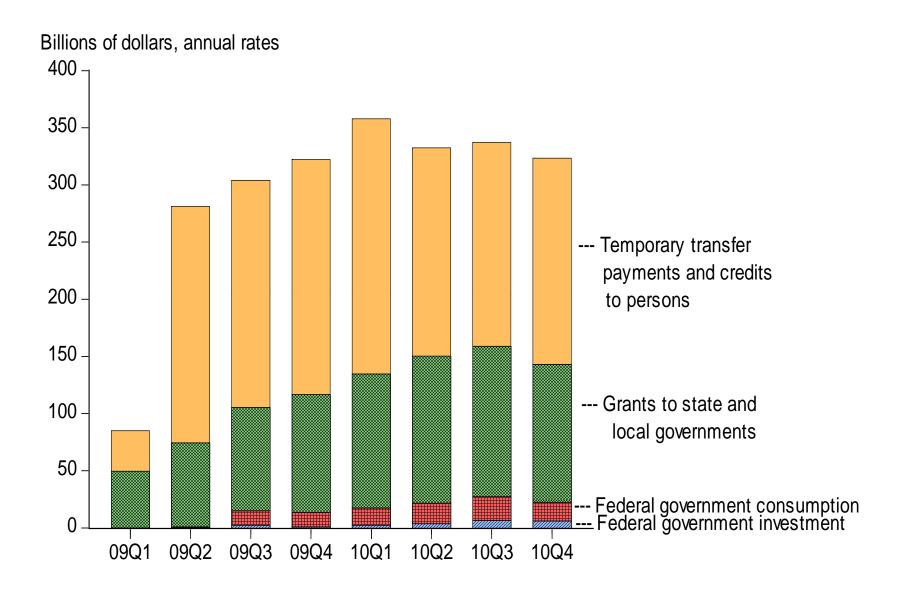
- Discretionary fiscal stimulus of 2009 (\$862 billion)
 - One-time payments again
 - More government spending too
- Cash for clunkers program
- Quantitative easing in 2009, now called QE1
 - Purchases of \$1.25 trillion of mortgage backed securities, \$300 billion of longer term Treasury bonds
- QE2 in 2010 and 2011
 - purchases of \$600 billion of longer term Treasury bonds.

Temporary stimulus meets permanent income hypothesis again



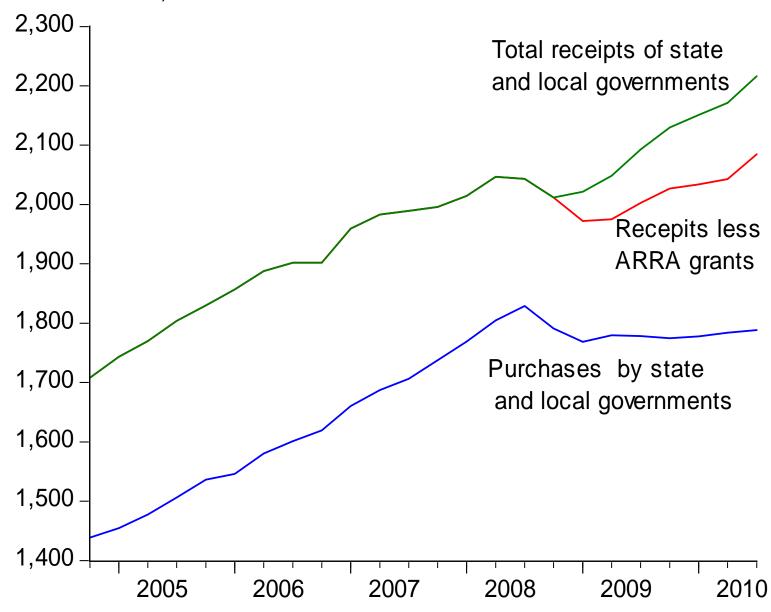
Cash for clunkers: incentives really matter



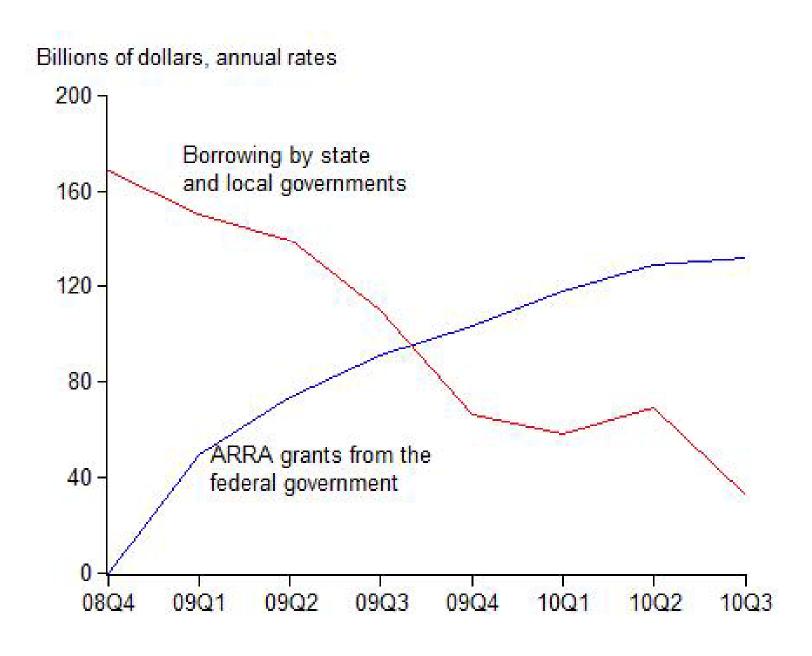


Two-Year Effect of ARRA on Major Federal Budget Categories (Source: Bureau of Economic Analysis)

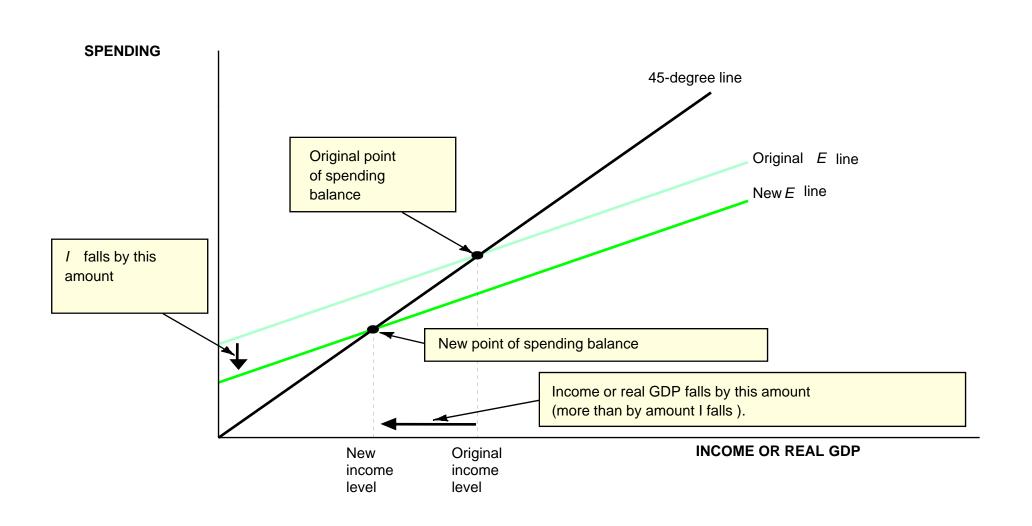




State and local governments also consider permanent income

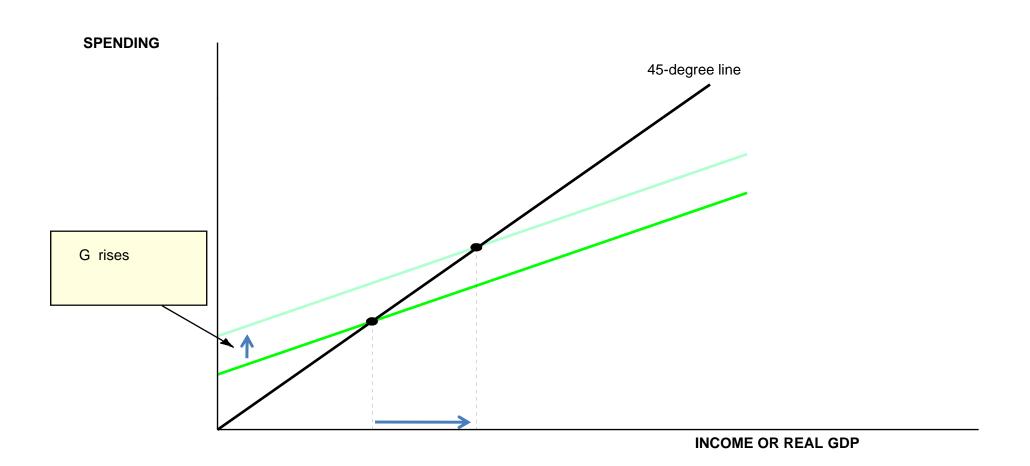


Compare with textbook discussion: Sharp drop in I causes expenditure line to shift down

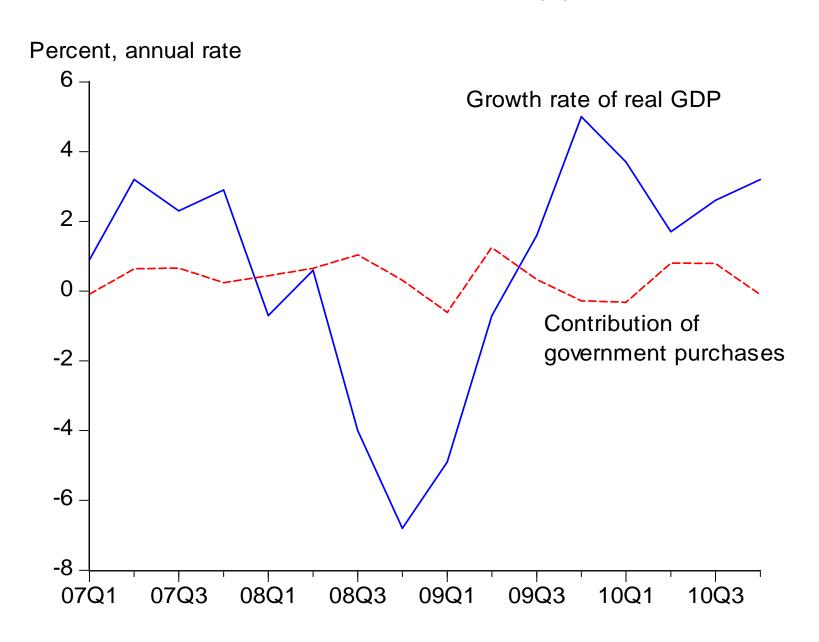


Offset by Countercyclical fiscal policy

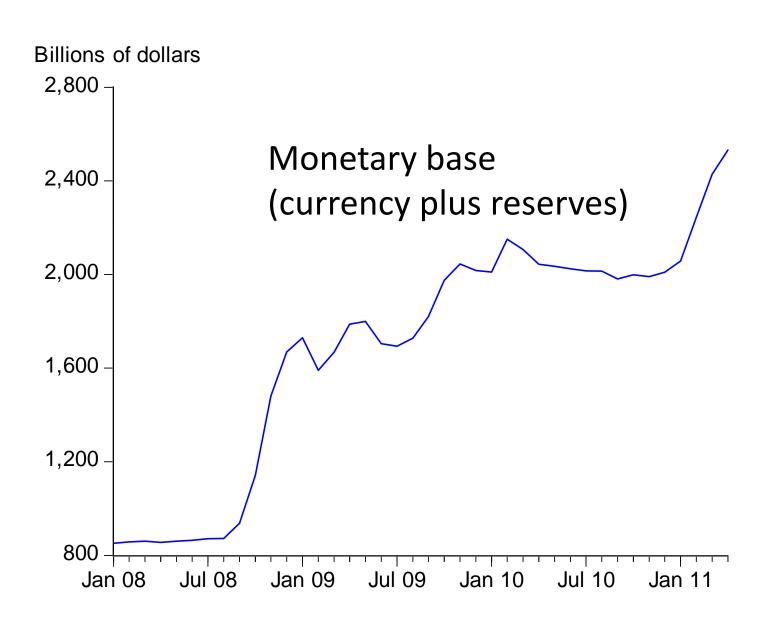
Increase in G raises GDP depending on size of the multiplier and amount of crowding out



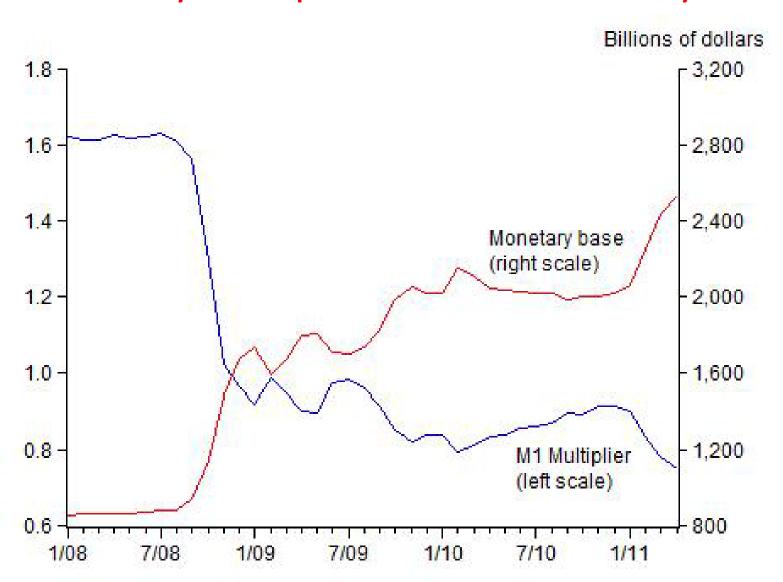
But look what happened

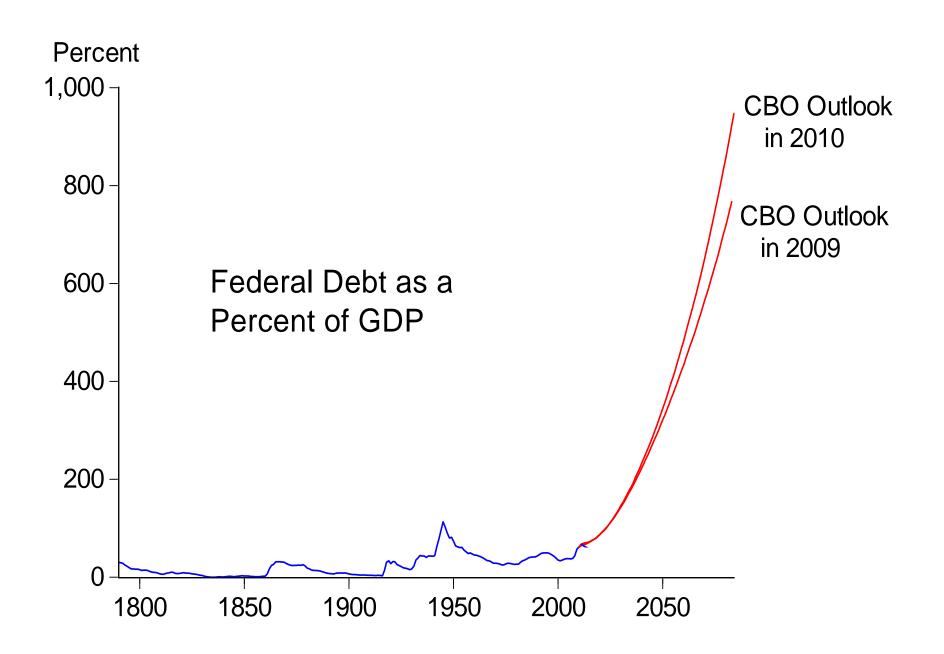


Quantitative Easing Financed by Monetary Base



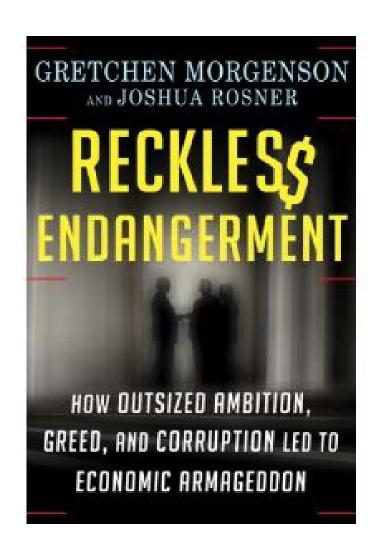
A Wonderful Teaching Moment: The Money Multiplier and the Monetary Base





Teaching About Regulatory Capture: Explains failure to enforce regulatory rules

- Cozy connections between government and the financial industry.
- Book shows government helping well-connected individuals, who in turn helped the government officials.
- Result: Reckless policy



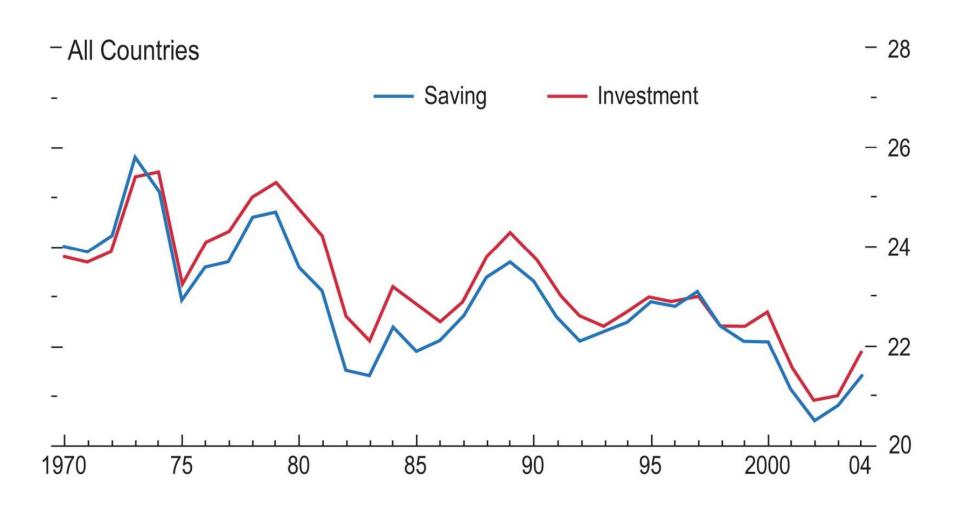
Implication of Narrative for Basic Economics

- Needs a reformulation?
 - Paul Samuelson (January 2009)
 - "today we see how utterly mistaken was the Milton Friedman notion that a market system can regulate itself... This prevailing ideology of the last few decades has now been reversed...! wish Friedman were still alive so he could witness how his extremism led to the defeat of his own ideas".
 - Paul Krugman blames modern economics (especially macro) for the crisis.
- But narrative here implies basic economics works
 - The crisis was caused by a deviation from principles
- But of course there is much research to do

Another Narrative

- US policy was not an issue leading up to the crisis and is not an issue now
- Global capital flows were and are the problem
 - Caused emerging market crises in 1990s
 - Caused 2007-09 crisis: Saving Glut
 - Cause of future crises: focus on global rebalancing
- Much different policy implication

But chart from the IMF in 2005 Shows No Global Saving Glut

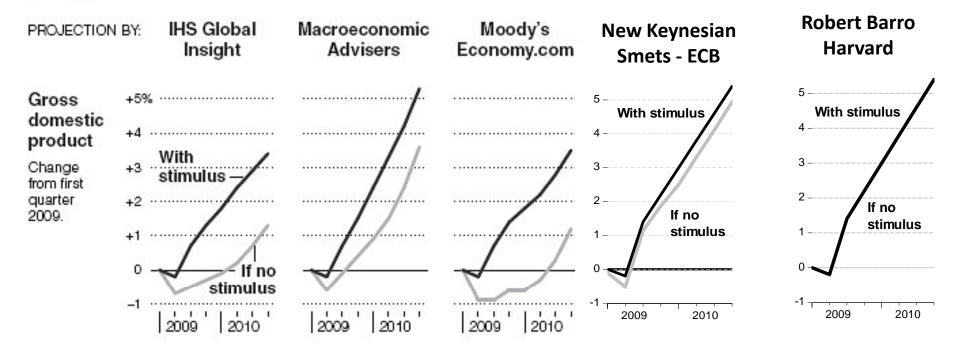


So Why Do Economists Disagree?

- Students and everyone else really want to know the answer
- One reason is that the details of their models are different, even though there is agreement about the basic principles
- The next three charts from the *New York Times* and two others illustrate this well.

Projections Show It Could Have Been Worse

Projections of economic indicators by three companies that specialize in macroeconomic forecasting show similar trends when comparing how each indicator would do with and without the federal stimulus package.



"The accumulation of hard data and real-life experience has allowed more dispassionate analysts to reach a consensus that the stimulus package, messy as it is, is working"

New York Times November 12, 2009

Implications for Teaching

- Many new illustrations of basic economics
- Interesting debates between economists
 - Rules versus discretion
 - But raise more questions about discretionary policy
- More integration of micro and macro
 - interest rates too low for too long (macro)
 - housing markets including bubbles (micro)
 - stimulus package (macro)
 - regulatory capture and moral hazard (micro)
 - new instruments of monetary policy (macro)
 - risk premia in interest rates(micro)
 - debate over size of multipliers (macro)
 - cash for clunkers, first time home-buyer (micro)

Many New YouTube Videos

Quantitative Easing Explained. 5 million downloads. Doesn't get it all right and brutal in places, but good for discussion

<u>The Wrong Financial Adviser</u> Created by Nobel prize winner Bill Sharpe

Fed Chairman on the Daily Show with Jon Stewart. From two different episodes of 60 Minutes, focus on whether quantitative easing is printing money.

<u>Unmasking Interest Rates, Honky Tonk Style</u>

Merle Hazard sings "Inflation or Deflation"

Inside Job Trailer

Christine Lagarde in clip from *Inside Job*

Hayek-Keynes rap videos "Fear the Boom and Bust" and "Fight of the Century"

Lines from "Fight of the Century"

Keynes: "Even you must admit that the lesson we've learned is that more oversight's needed or else we'll get burned"

Hayek: "Oversight? The government 's long been in bed with those Wall Street execs and the firms that they've led."