Lessons from the Financial Crisis and Slow Recovery for Teaching Economics

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Outline

• Different views of the financial crisis, recession, and recovery
  – Not surprisingly, economists disagree!
• Different implications for teaching
• Examples will be presented throughout talk based on
  – Empirical Research
  – Undergraduate Teaching
    • Economics 1 at Stanford
  – Textbook
    • *Principles of Economics*, 7e, with Weerapana at Wellesley
    • First to incorporate the Financial Crisis,
      – First 2e on the financial crisis
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.
Other Narrative

- US policy was not an issue leading up to the crisis
- Global capital flows were the problem
  - Caused 2007-09 crisis: “global savings glut”
- Or economics failed
  - Too much faith in markets
  - Not enough psychology
- Slow recovery because the interventions were too small; need more
Implication of Two Views for Basic Economics

1. Basically sound, but still a major teaching moment

2. 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”.
   - Paul Krugman blames modern economics (especially macro) for the crisis.
   • But of course need to present both views
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
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- Federal Funds Rate

Illustrative monetary policy chart from St Louis Fed
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Chart from The Economist (Now in Economics in Action box)
The Boom-Bust in Housing
(now in Economics in Action box)
Housing Boom and Bust

Median house price in the United States

Dollars

Temporary stimulus meets permanent income hypothesis
Stock Prices During the Panic

- Friday 9/19: TARP announced (S&P 500 = 1,255)
- Tuesday 9/23: Bernanke/Paulson testimony
- Monday 9/15: Lehman bankruptcy
- "Panic of 2008": Stock prices fell 28% in three weeks.
- Monday 10/13: TARP equity plan announced
- Friday 10/10: S&P 500 = 899
Teaching About Regulatory Capture: Explains failure to enforce regulatory rules

• Cozy connections between government and the financial industry.
• This book shows government helping well-connected individuals, who in turn helped the government officials.
• Result: Reckless policy
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.”
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.
Income and Consumption during the Two Discretionary Stimulus Programs
Cash for clunkers: incentives really matter
(Now in Economics in Action box)
Compare with textbook discussion:
Sharp drop in I causes expenditure line to shift down

INCOME OR REAL GDP

SPENDING

Original point of spending balance

New point of spending balance

Original E line

New E line

45-degree line

Income or real GDP falls by this amount (more than by amount I falls).

I falls by this amount

New income level

Original income level
Offset by Countercyclical fiscal policy

Increase in G raises GDP depending on size of the multiplier and amount of crowding out
Two-Year Effect of ARRA on Major Federal Budget Categories
(Source: Bureau of Economic Analysis)
Billions of dollars, annual rates

- Total receipts of state and local governments
- Receipts less ARRA grants
- Purchases by state and local governments
A Legacy: Exploding Federal Debt
(Chart now in Fiscal Policy Chapter)
Toward the Zero Interest Rate

- **Billions of Dollars**
- **Effective federal funds rate (right scale)**
- **Reserve balances (left scale)**

The chart shows the decline in the effective federal funds rate and the increase in reserve balances over time, leading toward the zero interest rate.
The Liquidity Trap

Increases in the money supply eventually lead to a zero interest rate.
The Monetary Base and the Size of the Fed’s Balance Sheet
International Economics Issues
Illustrative Chart from the OECD, March 2008

The chart illustrates the relationship between the change in housing investment (in percent of GDP) and the sum of differences between interest rate and Taylor rule (in percentage points) for several countries.

Countries included: Ireland, Spain, Greece, Finland, France, Belgium, Austria, Netherlands, Germany.
Illustrative Chart from the OECD, March 2008
China’s purchases of foreign reserves
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* 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
  – Basic role of government
• 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

**The Wrong Financial Adviser** 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.

**Unmasking Interest Rates, Honky Tonk Style**

**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”