Economic Shocks: the Great Depression and Great Recession

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Senior Regional Economist
October 19, 2017

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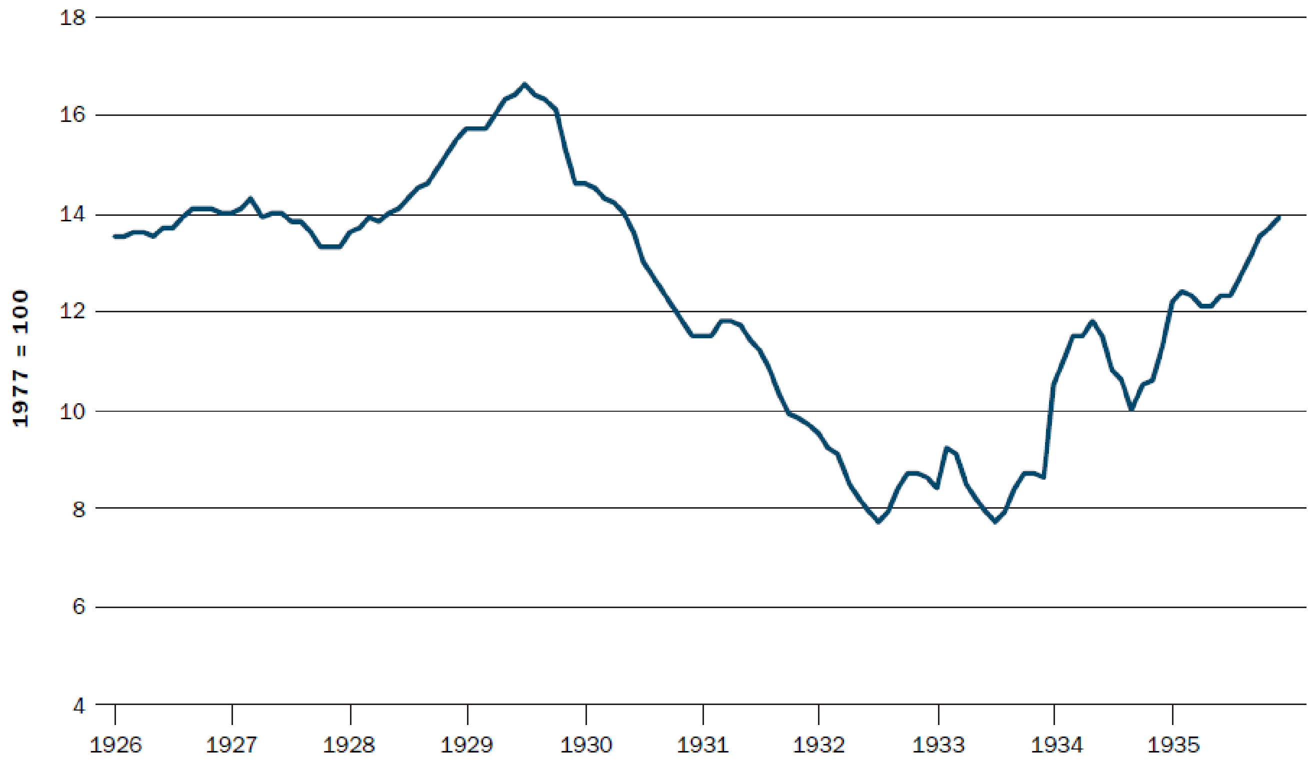
Observations: some similarities & differences

- Very severe impact on the economy
  - Output & employment fall sharply, unemployment rises
  - Bankruptcies and consumer defaults spike
  - Money supply & price level falls in GD, but not GR
- Financial sector
  - Sharp fall in stock market
  - Stress in financial markets
  - Bankruptcies (thousands vs. several hundred)
- Conduct of monetary policy

Production declined by 50%

FIGURE 1

Industrial Production



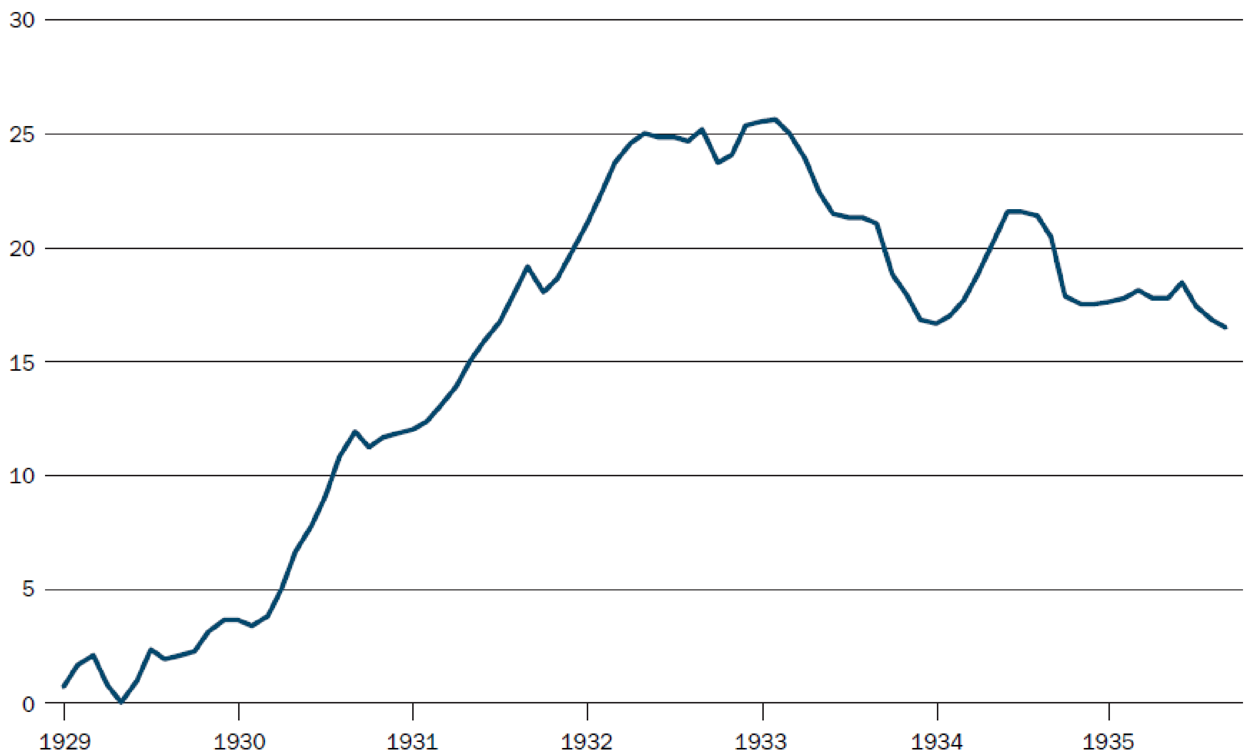
Source: Board of Governors of the Federal Reserve System

Source: Evans, Hasan, and Tallman (2004)

In 1932 1 in 4 workers unemployed

FIGURE 2

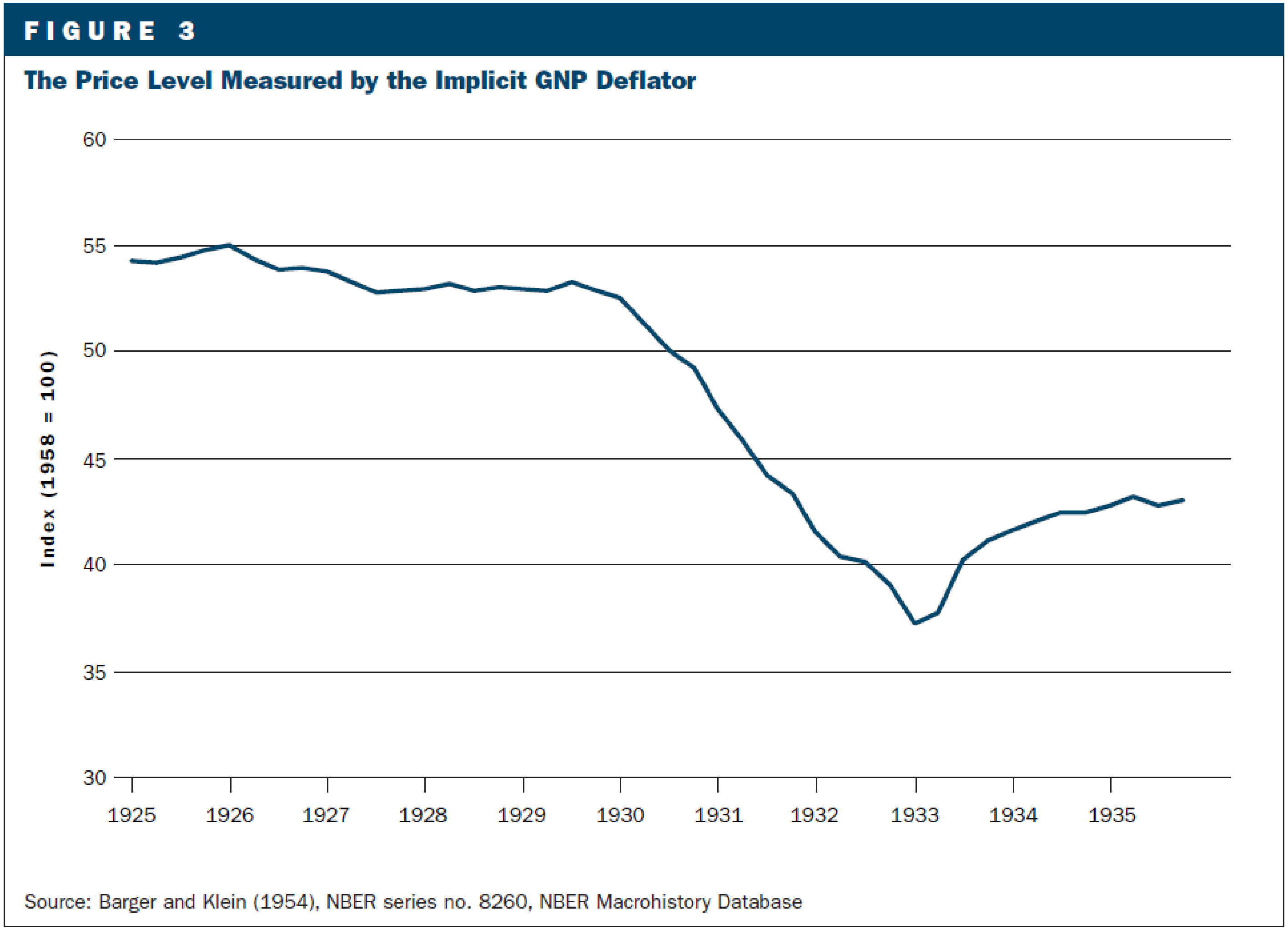
Unemployment Rate



Source: National Industrial Conference Board, *Business Cycle Indicators*, vol. 2 (April 1929–June 1942, pp. 35, 123), NBER series no. 08292, NBER Macrohistory Database

Source: Evans, Hasan, and Tallman (2004)

Price level fell more than 25%



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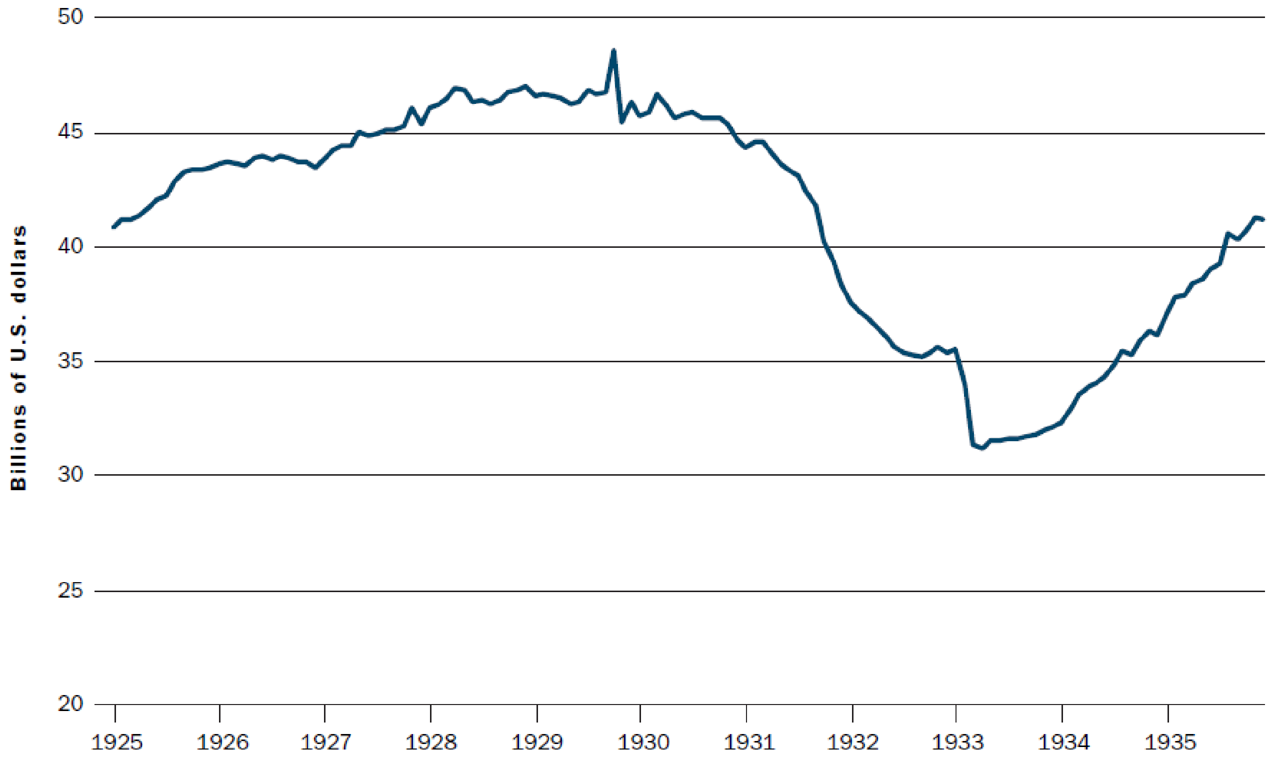
Source: Evans, Hasan, and Tallman (2004)

Money supply contracted

FIGURE 4

M2 Money Supply



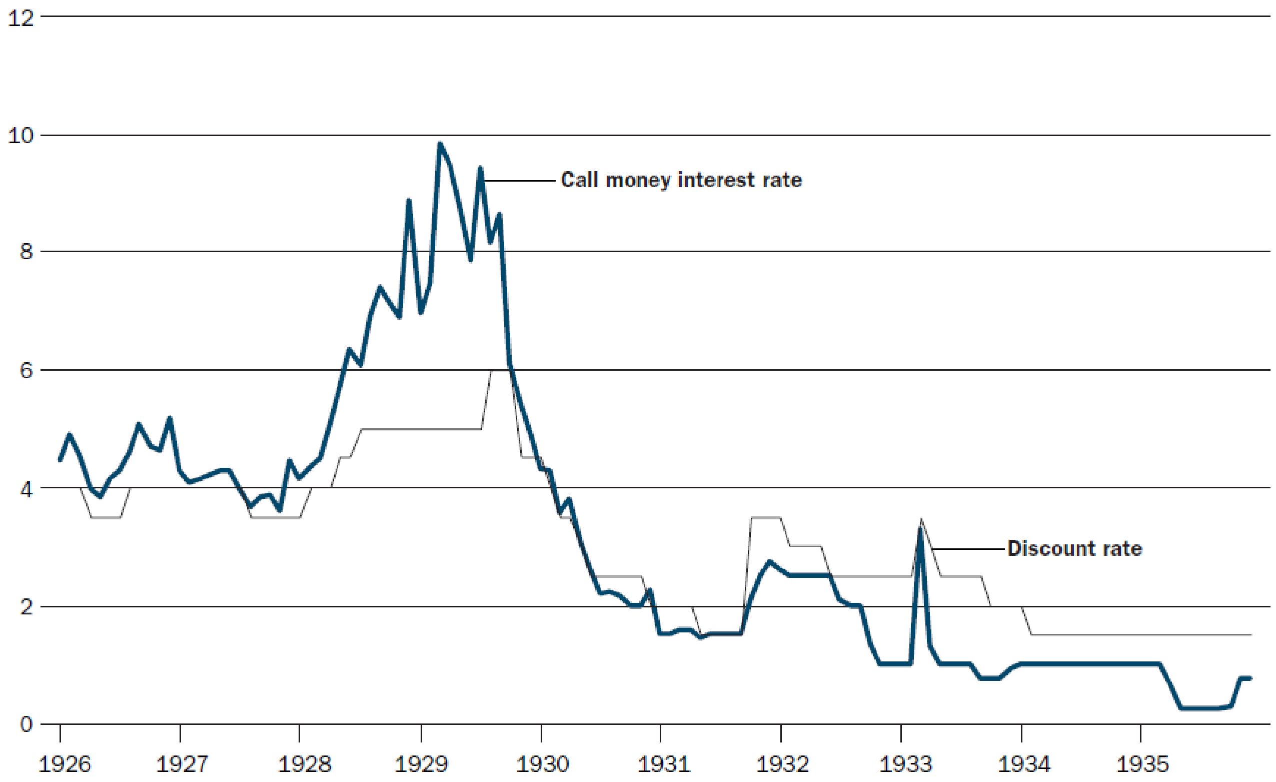
Source: Friedman and Schwartz (1970)

Source: Evans, Hasan, and Tallman (2004)

Mistakes in monetary policy a significant factor

FIGURE 6

Short-Term Nominal Interest Rates



Source: Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics, 1914–1941* (1943). The call money interest rate is the average rate on stock exchange call loans, new (Table 120, 450–51); the discount rate is the rate at the Federal Reserve Bank of New York (Table 115, 440–42).

Source: Evans, Hasan, and Tallman (2004)

The Great Depression

- Stock market crash (roughly -75%)
- Widespread bank failures
  - Thousands of banks failed in 1930s
  - Week-long “bank holiday” instituted by Roosevelt
- Defaults and bankruptcies by businesses and households
- Unemployment remained in the double digits for the rest of the decade
- Economy improved in 1933 but a full recovery arrived only with the advent of World War II
  - By 1939 (10 years after start of the downturn) employment and output were well bell below their 1929 levels
- Depression was international in scope, affecting most countries around the world--not only the United States

The Great Depression

- Historically, much of the debate on the causes has centered on the role of monetary factors
- During the Depression and in several decades following, most economists argued that monetary factors were not an important cause of the Depression
- For example, many concluded that monetary policy was as accommodative as possible as rates were near zero yet produced no tangible benefits to the economy
- Economists looked to developments on the real side of the economy for explanations
  - For example, some pointed to overinvestment and overbuilding had taken place during 1920s
  - Another theory: chronic problem of "under-consumption"

The Great Depression

- Milton Friedman and Anna J. Schwartz (1963) A Monetary History of the United States, 1867-1960
- Examined the relationship between changes in the national money stock & changes in national income and prices
- They argued that "the contraction is in fact a tragic testimonial to the importance of monetary forces“ (p. 300)
- More specifically, they identify a series of policy mistakes led to an undesirable tightening of monetary policy
- Friedman and Schwartz emphasized at least four major errors by U.S. monetary policymakers.
    1. Tightening of monetary policy that began in spring 1928 and continued until the stock market crash of October 1929

The Great Depression

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    1. Tightening of monetary policy that began in spring 1928 and continued until the stock market crash of October 1929
    2. In October 1931 the Fed (once again) raised interest rates sharply to stabilized the dollar.
        - At the same time the Fed did not intervene to support a panic in the banking system leading
    3. After easing in spring1932 Federal Reserve was unconvinced of need to keep rates low & reversed the policy, raising rates in the summer
    4. The Fed's ongoing neglect of problems in the U.S. banking sector

The Great Depression

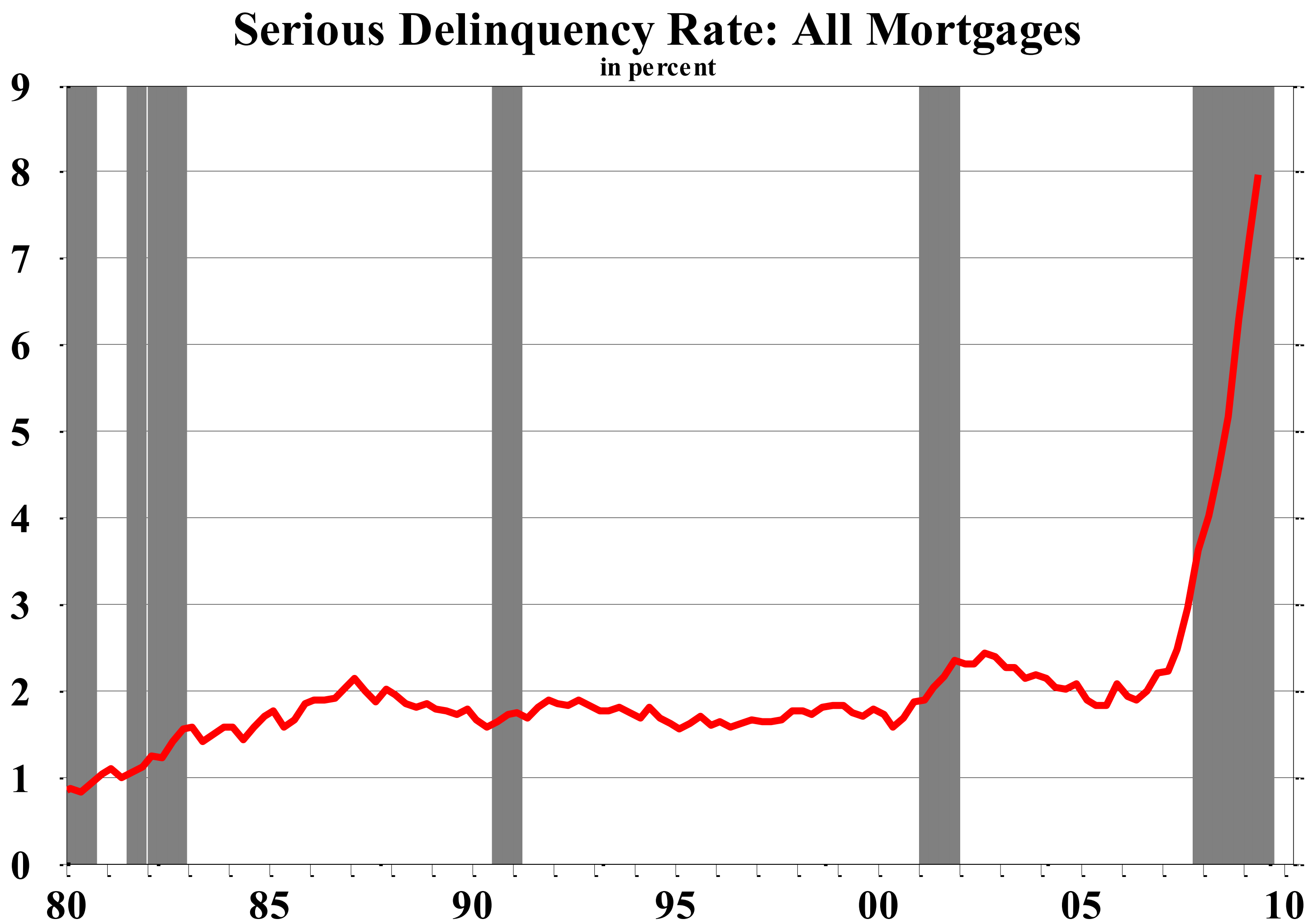
- Bernanke (1983) argued that there was a lot of support for the monetary view but that it wasn't a complete explanation of the link between the financial sector and the decline in output in the 1930s
  - Argued that disruption of financial markets increased the cost of financial intermediation and some borrowers found credit difficult to be expensive and difficult to obtain
- Research continues to look at the cause(s) of the Great Depression as well as those factors that contributed to its severity and length
  - "A very complicated event"

Great Recession

The Great Recession

- In the beginning the Great Recession was mild by historical standards
  - Employment losses were moderate while the decline in real GDP was slight in the first half of 2008
  - Unemployment rate rose but remained low historically
- Factors attributed to onset of the recession:
  - Housing correction
  - Spike in energy prices
  - Tightening of credit markets
- However, severe contraction began in second half of 2008
  - Clearly disruptions in financial markets were considerable factor

The Great Recession



Source: Mortgage Bankers Association/Haver Analytics

The Great Recession

- Large increase in supply to credit to mortgage market
- Short-list of likely factors contributing to increase:
  1) Global savings glut
     - Trading partners reinvest export earnings in US assets
  2) Financial innovation
     - Credit scoring || risk-based lending || new products
  3) Public policy
     - GSEs || Mortgage interest deduction
  4) Securitization
     - Market increases in size || subprime/Alt-A market develops
  5) Regulatory lapses
     - Loan underwriting || GSEs get overextended || SIVs
  6) Loose monetary policy
     - Fed funds rate at 1% in 2003-2004 following 2001 recession

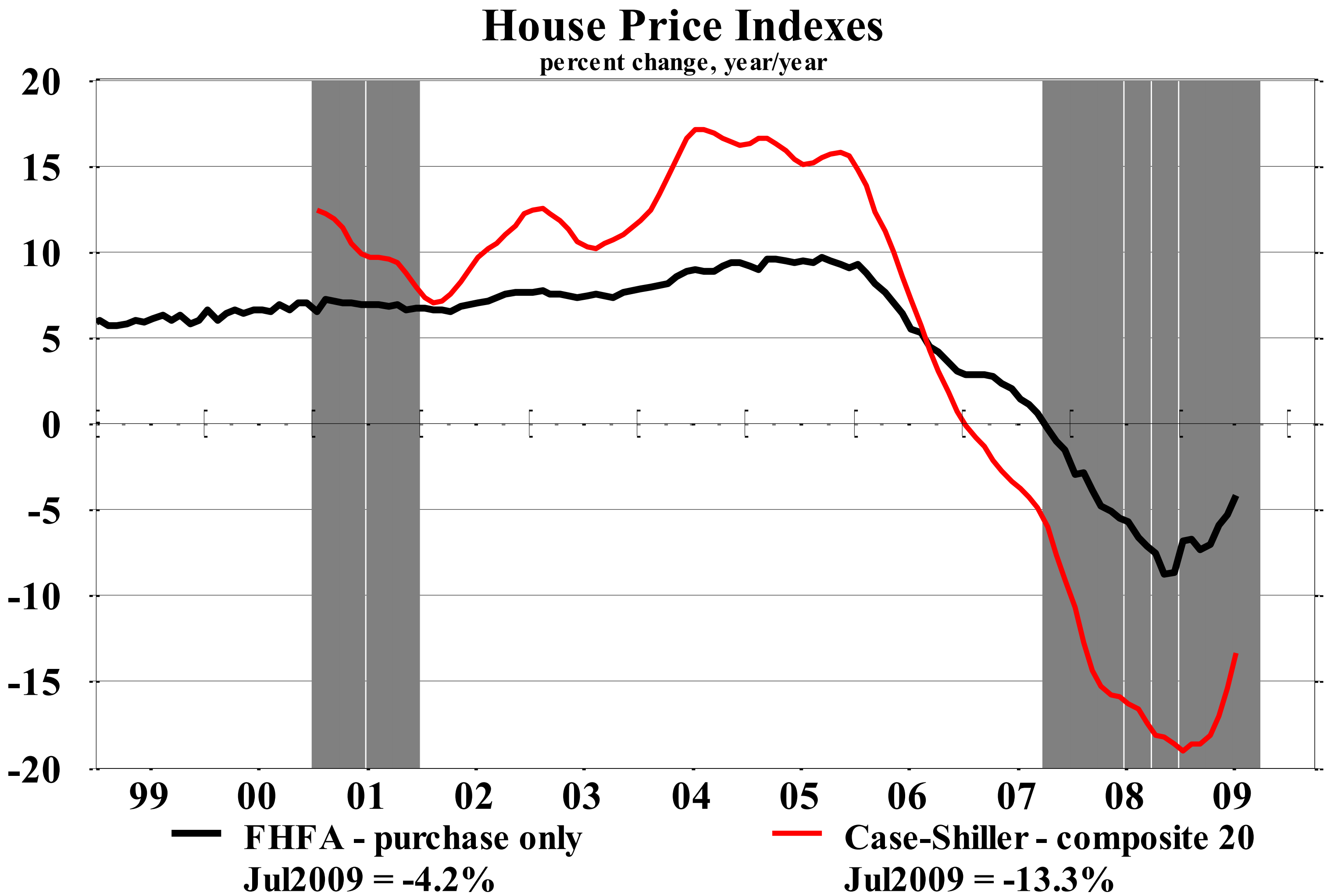
The Great Recession

- Demand response by consumers
  - Home sales rose 42% from 2001 through 2006
- Willingness to take on more risk by consumers
  - Increased use of affordability products to purchase/refinance homes
  - Borrowing more to purchase homes (higher LTVs)
  - Increased use of second mortgages (less money down)
  - Adjustable-rate mortgages (ARMs) || Interest-only mortgages
- Buying strategy depended on continued home price increases to refinance into a more affordable mortgage
  - Effective until home prices peaked in 2006
- Majority of troubled loans are those purchased in 2005-07

From Housing to Financial Markets

- Subprime and Alt-A mortgages of questionable quality were securitized and sold to investors throughout the world
- The big question became: "How much are these securities actually worth given increasing foreclosures?"
- Dramatic increase in uncertainty in credit markets as participants try to assess the extent and ownership of credit losses
- Banks and other financial institutions reluctant to lend as counterparty risk rises sharply
- Many big market participants take big write downs and other losses
- Broad impact on financial markets & credit conditions

Falling home prices drove foreclosures



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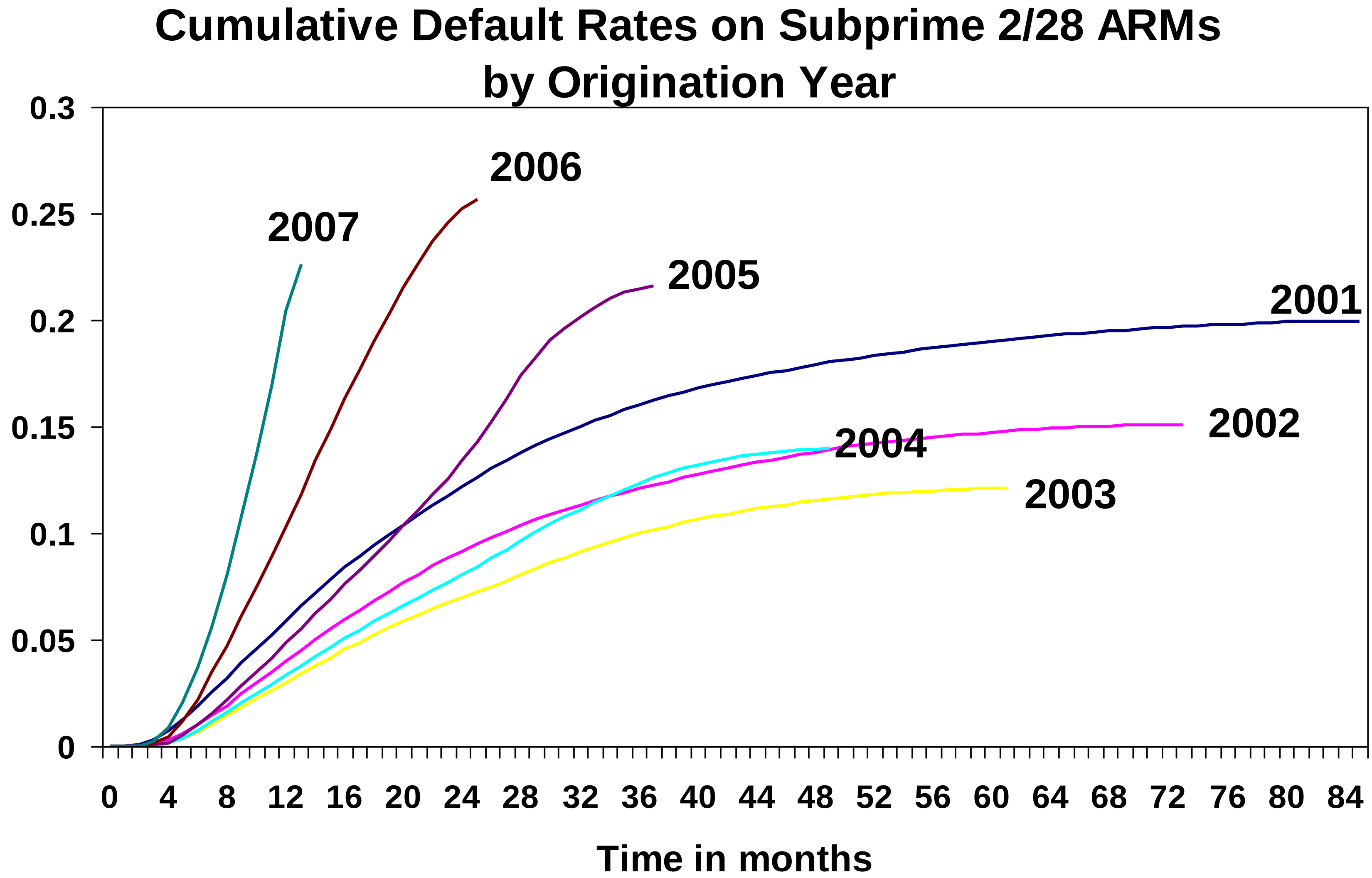
Source: Federal Housing Finance Authority/Case-Shiller

2006-2007 mortgages perform poorly



Source: Federal Reserve Board staff calculations from First American LoanPerfmance data

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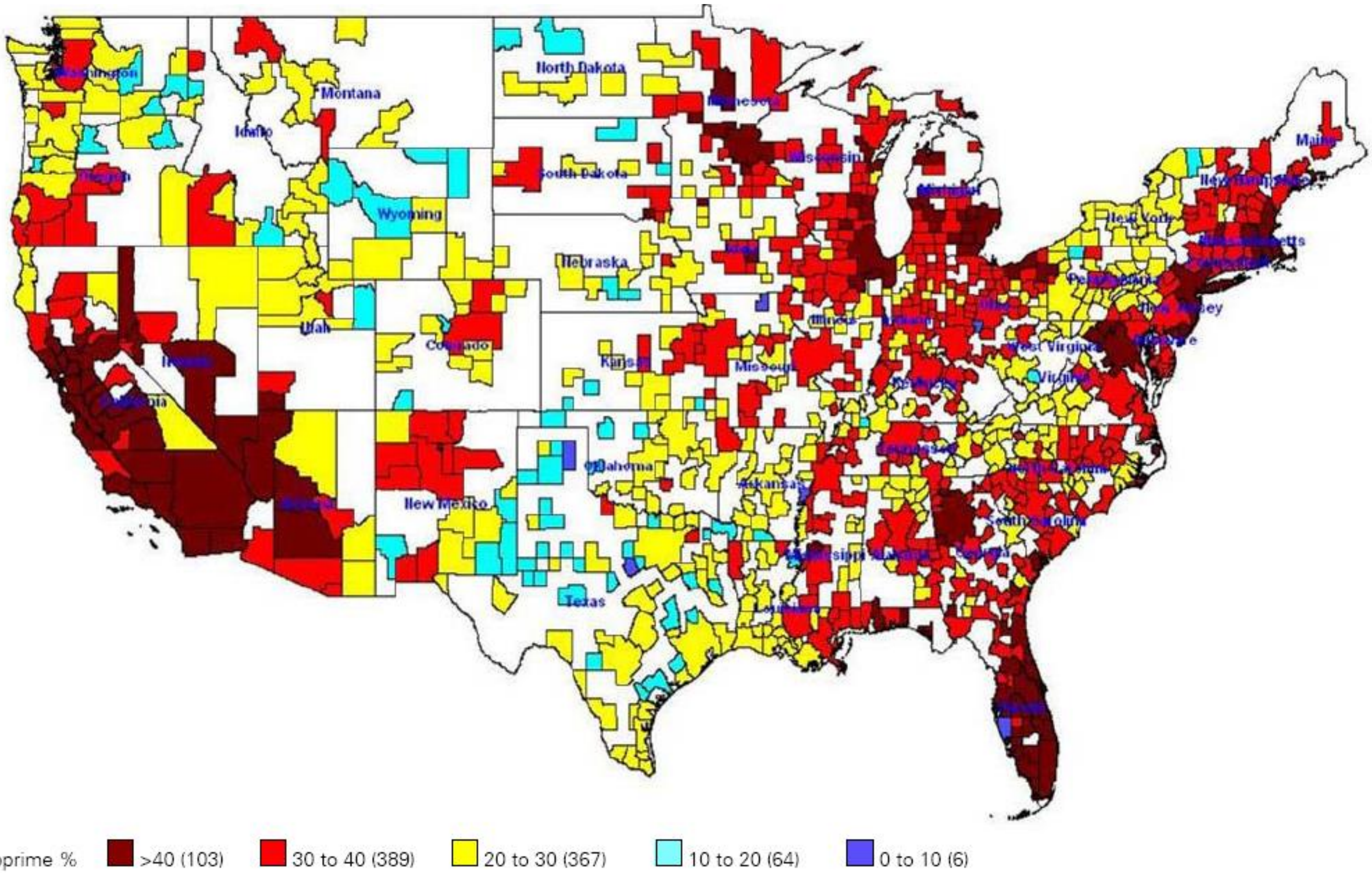
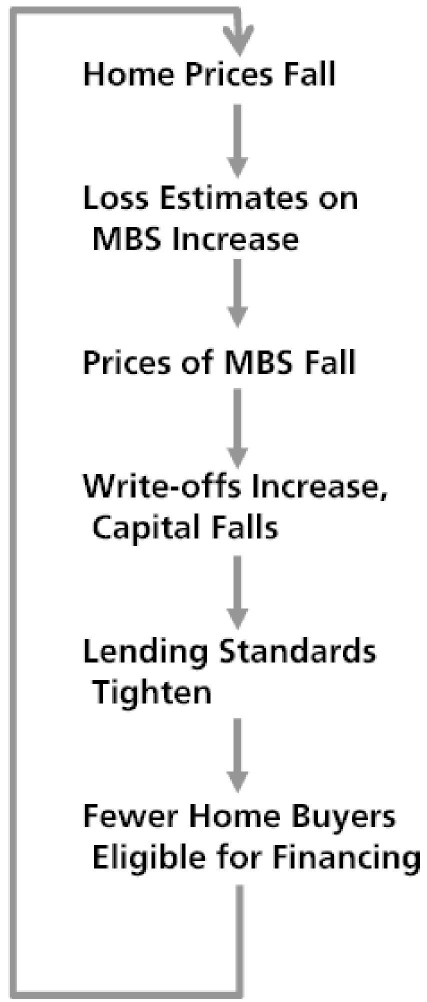
Q4 2008 subprime serious delinquency rate



Source: Loan Performance, Deutsche Bank

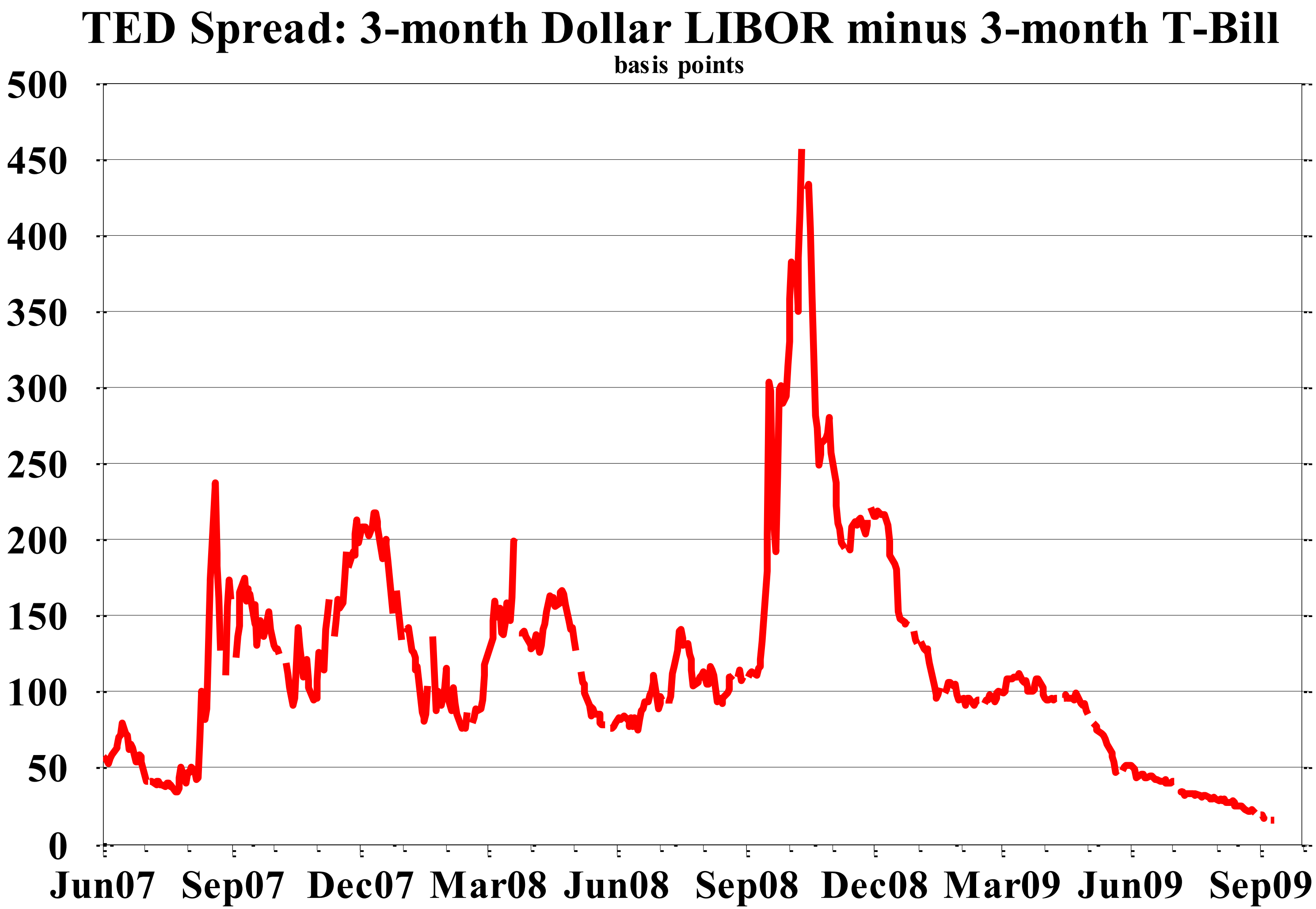
From Housing to Financial Markets

Figure 5. “ Vicious” Housing / Mortgage / Credit Cycle



Source: UBS

Uncertainty about losses roils interbank funding markets



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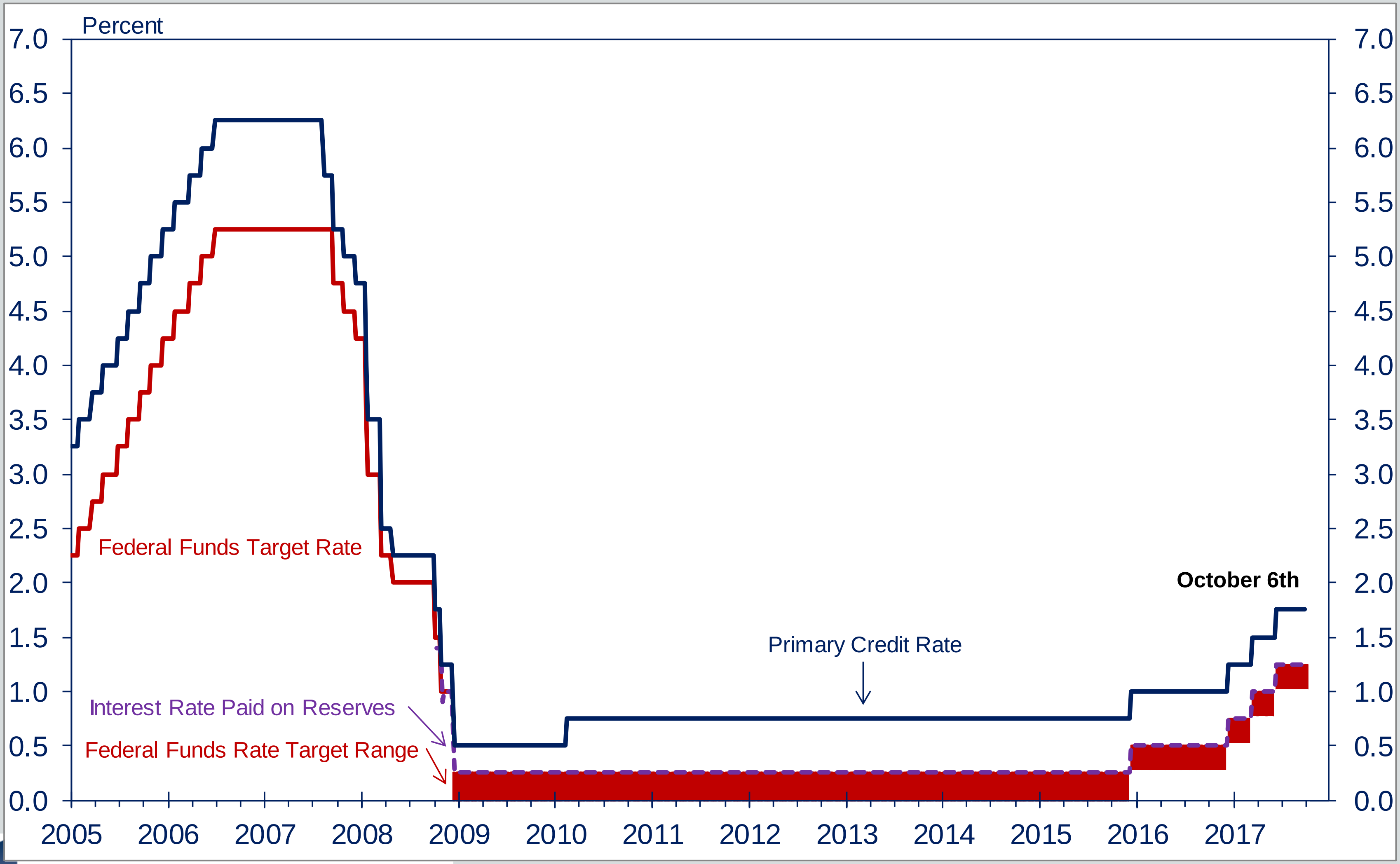
Source: Financial Times/Federal Reserve

Monetary Policy Instruments



Source: Board of Governors via Haver Analytics

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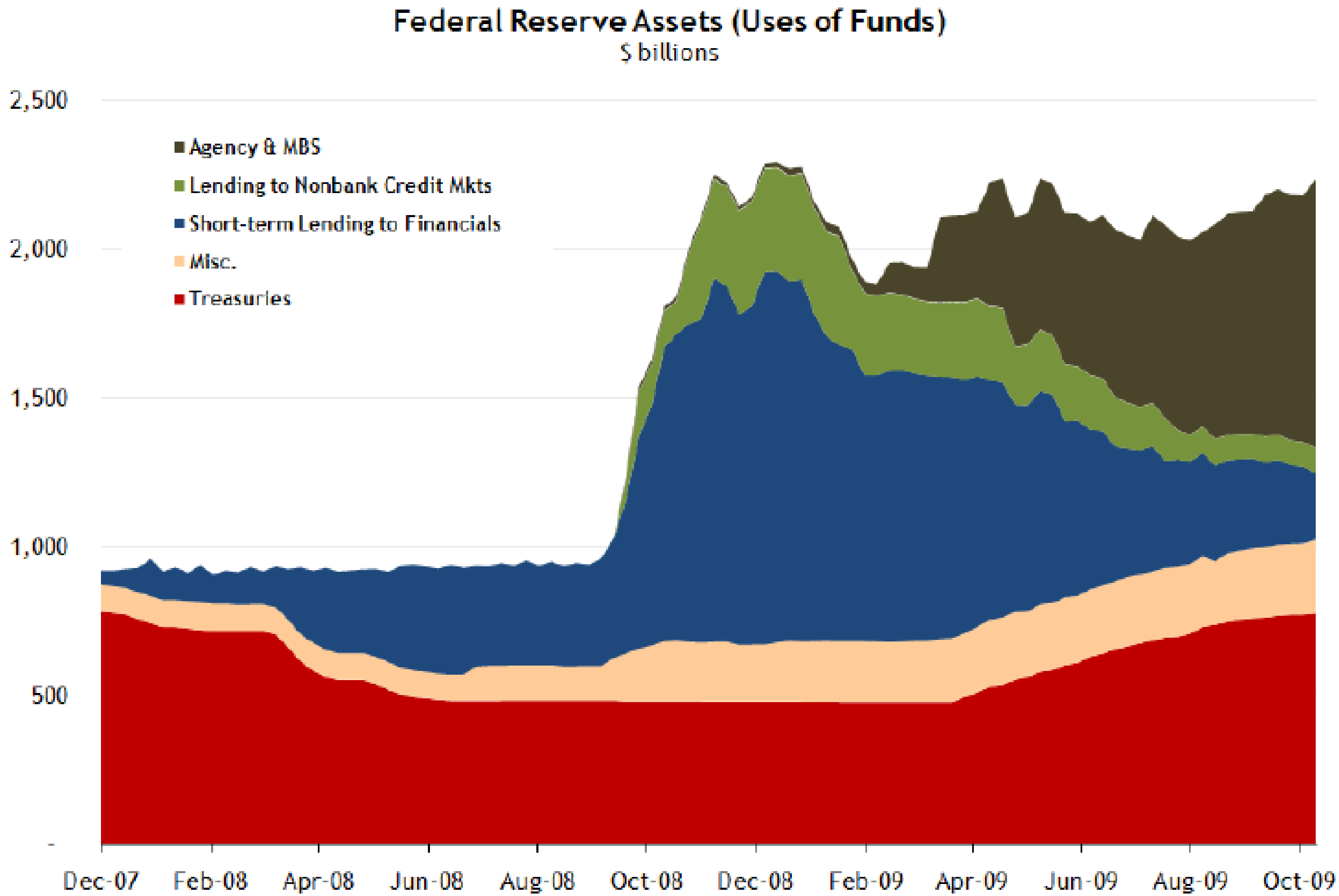
Federal Reserve System Assets



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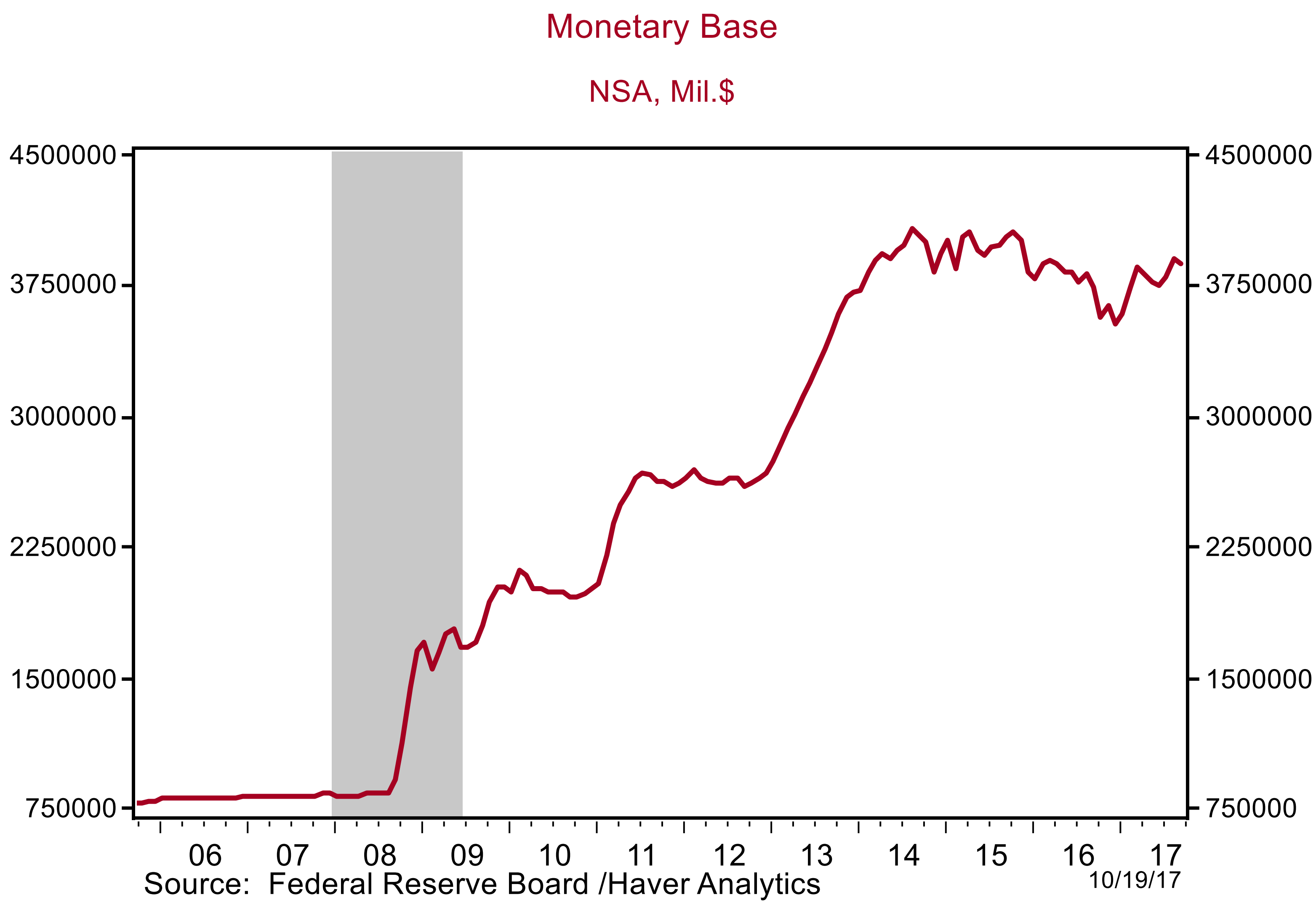
Source: Board of Governors/FRBA/Haver Analytics


Monetary Base
NSA, Mil.$
4500000
3750000
3000000
2250000
1500000
750000
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Source: Federal Reserve Board /Haver Analytics
10/19/17

The views expressed here are those of the author and not necessarily those of the Federal Reserve Bank of Richmond or the Federal Reserve System

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