The Federal Reserve and the Financial Crisis

Lecture 4:
The Aftermath of the Crisis

The Fed's Efforts to Restore Financial Stability

- A financial panic in fall 2008 threatened the stability of the global financial system.
- In its lender-of-last-resort role, the Federal Reserve provided liquidity (short-term collateralized loans) to help stabilize key financial institutions and markets.

The Fed's Efforts to Restore Financial Stability

- The Fed worked closely with the Treasury, other regulatory agencies (such as the FDIC and SEC).
- Coordination with foreign central banks included the creation of foreign currency swaps.
  - The Fed provided dollars to other central banks in exchange for foreign currencies.
  - The swaps enabled foreign central banks to meet the dollar funding needs of their own financial institutions.

The Fed's Continuing Efforts to Strengthen the Banking System

- The Fed led stress tests of the 19 largest U.S. banks in the spring of 2009, which helped restore investor confidence and allowed banks to raise about $140 billion in private capital.

- Recent stress tests conducted by the Fed showed substantial further improvements in bank capital and banks' resilience to shocks.

Evaluation of the Special Lender-of-Last-Resort Programs

- Results: The programs
  - arrested runs on various types of financial institutions
  - restored financial market functioning, restarted flow of credit, and supported resumption of economic growth
- Programs were largely phased out by March 2010.

Evaluation of the Special Lender-of-Last-Resort Programs

- Financial risks to the Federal Reserve were minimal:
  - Lending was mostly short-term and backed by collateral; thousands of loans were made, none defaulted.
  - Although the objective of these programs was stabilization, not profit, taxpayers came out ahead.

Monetary Policy during the Crisis

- The Fed used lender-of-last-resort policy to help stabilize the financial system. To stabilize the economy and promote economic recovery, the Fed turned to monetary policy.

Monetary Policy during the Crisis

- *Conventional* monetary policy involves management of a target short-term interest rate (the federal funds rate). Because longer-term rates tend to fall when the Fed lowers the short-term rate, and because lower longer-term rates tend to encourage purchases of long-lasting consumer goods, houses, and capital goods, cutting the federal funds rate helps stimulate the economy.

Monetary Policy during the Crisis

- Monetary policy is conducted by the Federal Open Market Committee (FOMC).
- The FOMC meets in Washington, D.C. eight times a year. During the crisis, it sometimes also held unscheduled videoconferences.

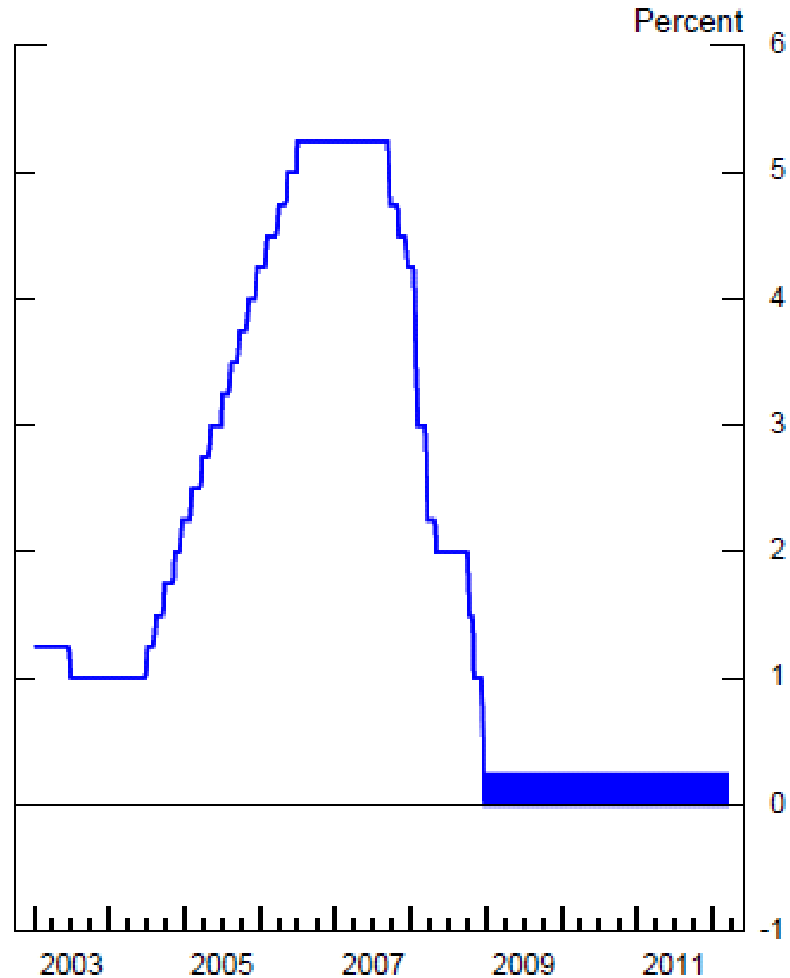
Monetary Policy during the Crisis

- The FOMC consists of 12 members:
  - the 7 members of the Board of Governors of the Federal Reserve System
  - the president of the New York Federal Reserve Bank
  - 4 of the remaining 11 Reserve Bank presidents, who serve one-year terms on a rotating basis
- Other Reserve Bank presidents participate in deliberations but do not vote.

Federal Funds Rate

- To support the recovery, the Fed reduced the federal funds rate from 5¼ percent in September 2007 to nearly zero in December 2008, where it has remained since.

Federal Funds Rate*



*Target rate.
Source: Federal Reserve Board.

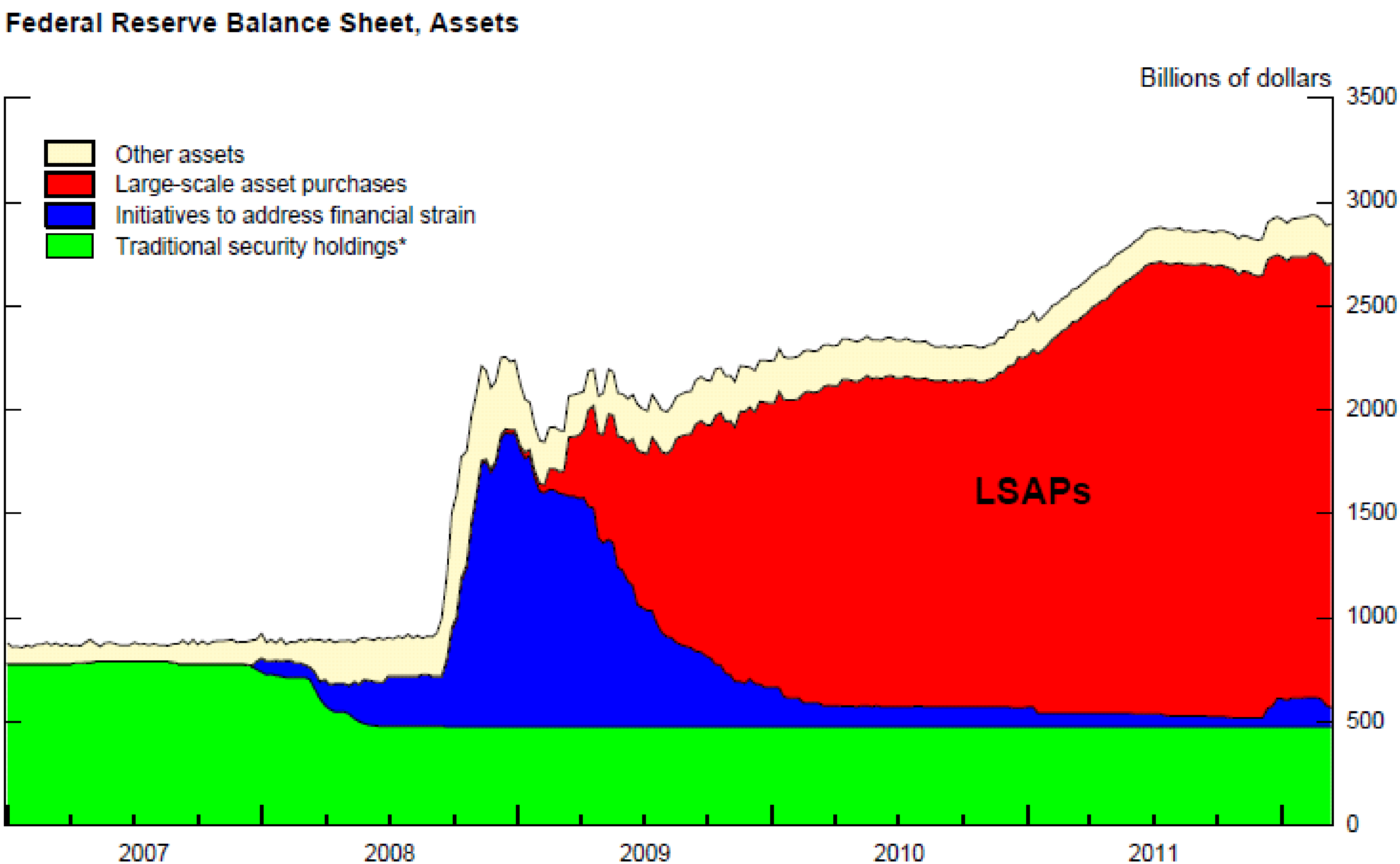
Large-Scale Asset Purchases

- With the federal funds rate near zero, the scope for conventional monetary policy was exhausted. But the economy remained weak and some worried about the risk of deflation (falling wages and prices).

Large-Scale Asset Purchases

- To influence longer-term rates directly, the Fed undertook large-scale purchases of Treasury and government-sponsored enterprise (GSE) mortgage-related securities.
- Large purchase programs were announced in March 2009 and November 2010.
- These actions boosted the Fed's balance sheet by more than $2 trillion.

Large-Scale Asset Purchases



*Traditional security holdings reflect Treasury holdings through November 28, 2008; they are held constant after November 28.
Source: Federal Reserve Board.

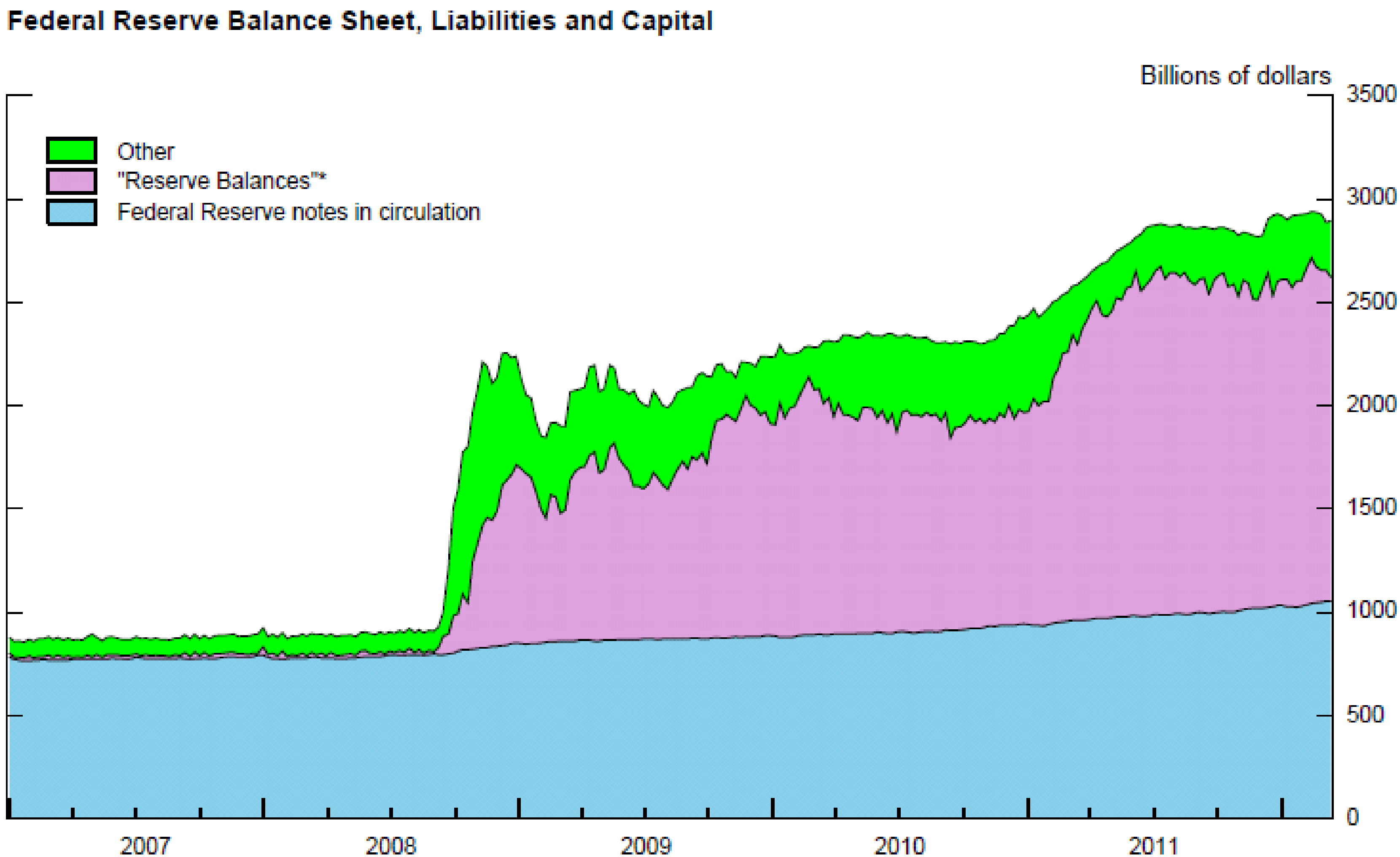
Large-Scale Asset Purchases

- With the available supply of Treasury and GSE securities reduced by Fed purchases, investors were willing to accept lower yields. Lower longer-term rates helped stimulate the economy, just as they do under conventional policies.
- Reduced availability of Treasury and GSE securities led investors to purchase other assets, such as corporate bonds, lowering the yields on those assets as well.

Large-Scale Asset Purchases

- These securities purchases were financed by adding to the reserves held by banks at the Fed; they did not significantly affect the amount of money in circulation. The Fed has multiple ways to unwind the large-scale asset purchases (LSAPs), including selling the securities back into the market.

Large-Scale Asset Purchases



* Term deposits and other deposits held by depository institutions.
Source: Federal Reserve Board.

Effects of Large-Scale Asset Purchases

- LSAPs (also known as quantitative easing) lowered longer-term interest rates.
  - 30-year mortgage rates fell below 4 percent.
  - Corporate credit became more available, and stock prices rose.
- Lower longer-term interest rates helped promote recovery, though the effect on housing was weaker than hoped.

Effects of Large-Scale Asset Purchases

- The Fed's credibility and long-standing commitment to price stability has helped anchor inflation and inflation expectations, which have remained low.

- At the same time, LSAPs guarded against the risk of deflation (falling wages and prices).

Effects of Large-Scale Asset Purchases

- The Fed's asset purchases are not government spending, because the assets the Fed acquired will ultimately be sold back into the market. Indeed, the Fed has made money on its purchases so far, transferring about $200 billion to the Treasury from 2009 through 2011, money that benefited taxpayers by reducing the federal deficit.

Monetary Policy Communication

- Clear communication from the central bank can help make monetary policy more effective by helping investors better understand policy goals and better anticipate future policy actions.

Monetary Policy Communication

- The Fed has become more transparent about monetary policy. For example, the Chairman began holding news conferences in 2011.

Monetary Policy Communication

- The Fed also has recently provided more information about its goals and policy approach (for example, by defining price stability as inflation of 2 percent in the medium term).

Monetary Policy Communication

- The Fed has also begun providing guidance to investors and the public about how it expects to adjust the federal funds rate in the future, given current information about the economic outlook.

- This guidance helps the public better understand the FOMC's views and policy.

Economic Recovery

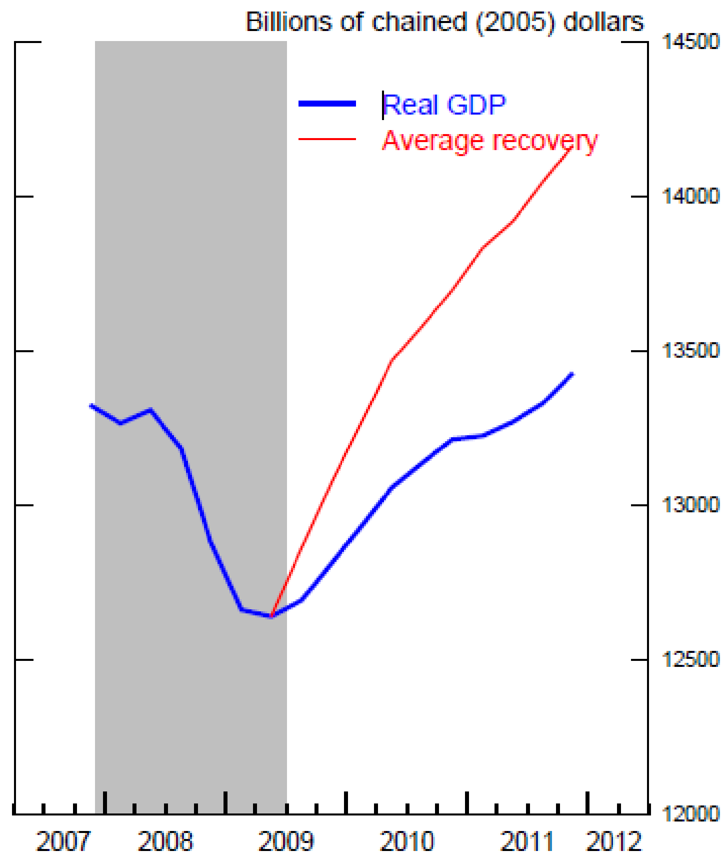
- Aided by the effects of monetary and fiscal policy as well as the economy's natural recuperative powers, economic activity began to recover in mid-2009.

- Since then, real GDP has increased at an average annual rate of about 2½ percent.

Sluggish Economic Recovery

- But the pace of recovery has been extremely sluggish compared with previous post–World War II cyclical recoveries.

Real GDP

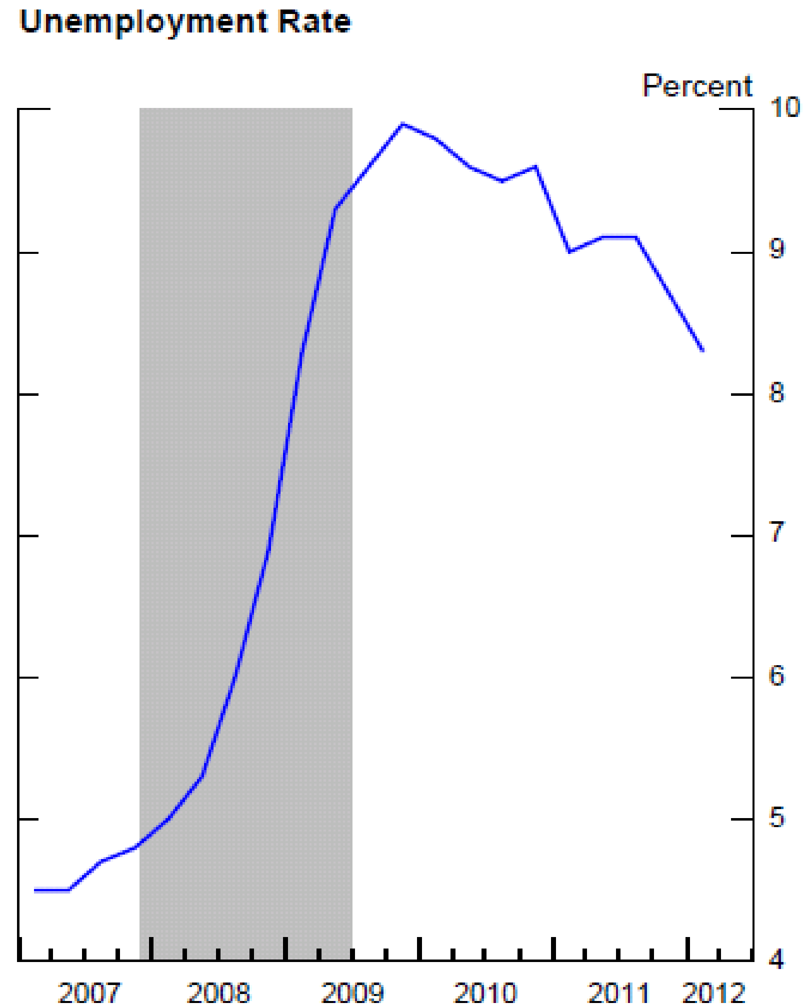


Note: Vertical shading represents NBER recession dates. The average recovery is calculated using the average growth rate in quarters following NBER troughs since 1949.
Source: Bureau of Economic Analysis.

Note: On June 21, 2012, the above Real GDP chart was revised to correct the calculation of GDP during the average of previous recoveries.

Sluggish Economic Recovery

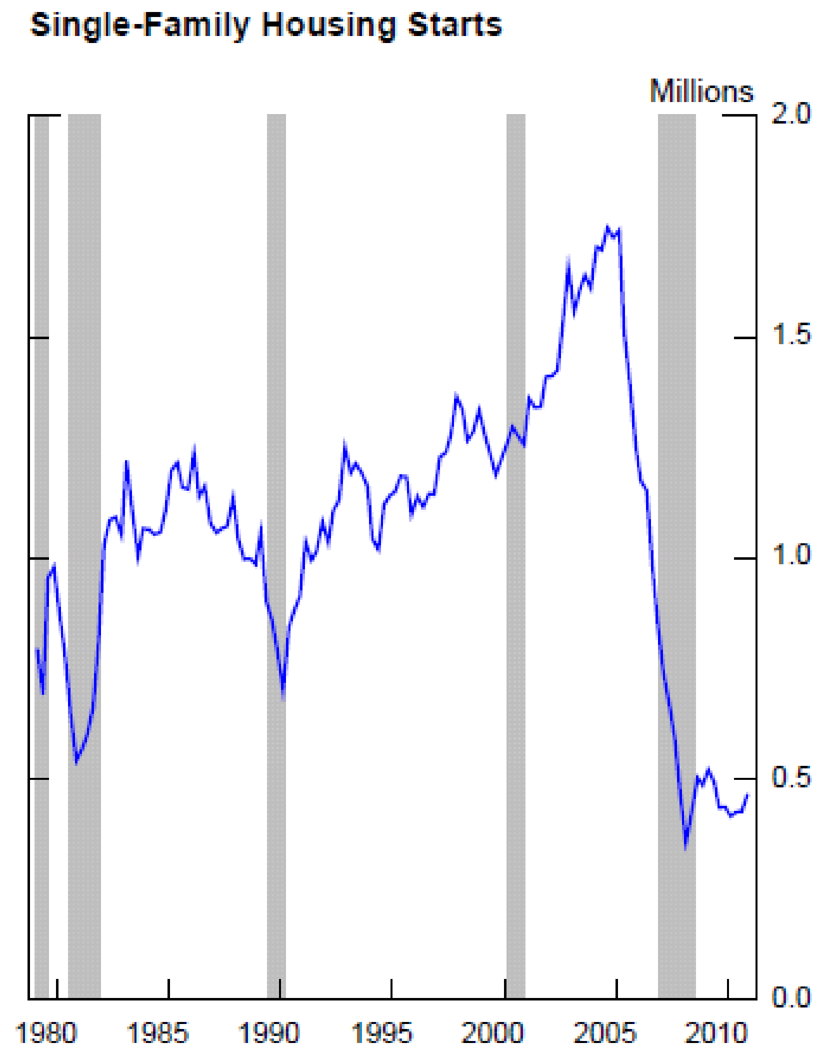
- As a result, job prospects have improved only gradually and the unemployment rate remains painfully high.



Note: Vertical shading represents NBER recession dates. Value for the first quarter of 2012 is the February reading.
Source: Bureau of Labor Statistics.

Slowing the Recovery: Housing

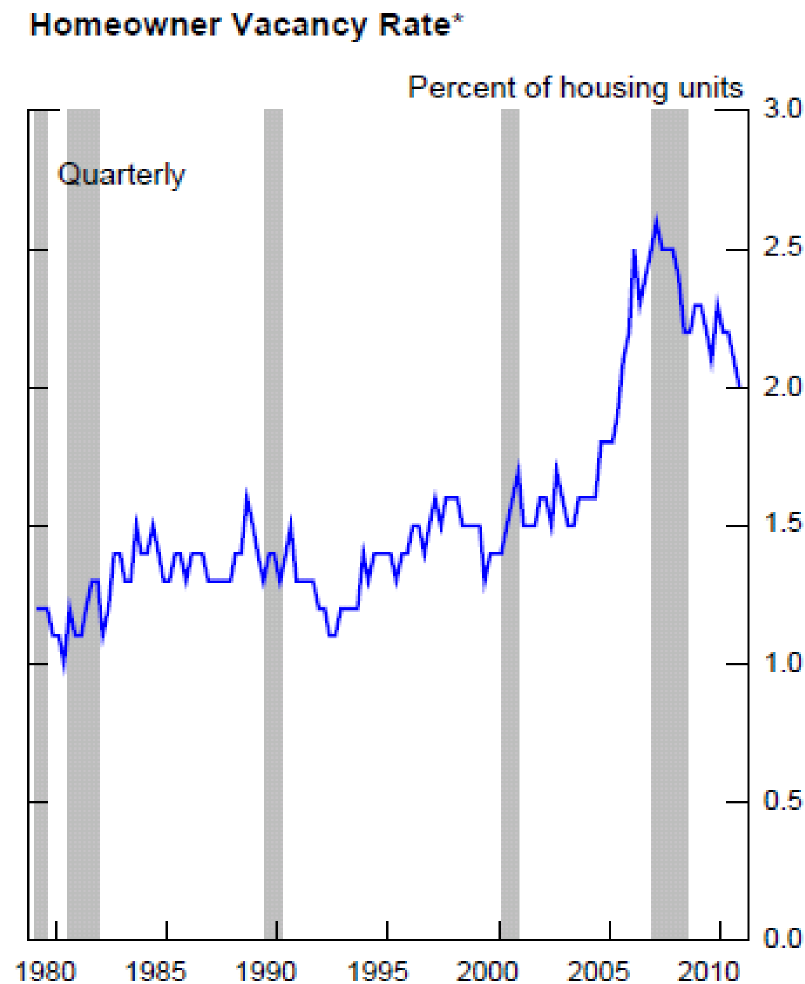
- Why has the recovery been slower than hoped?
- A resurgent housing market normally helps power economic recoveries, but not this time.



Note: Vertical shading represents NBER recession dates.
Source: Census Bureau.

Slowing the Recovery: Housing

- Factors weighing on the housing market include
  - a continuing high foreclosure rate
  - an overhang of unsold homes
  - falling house prices

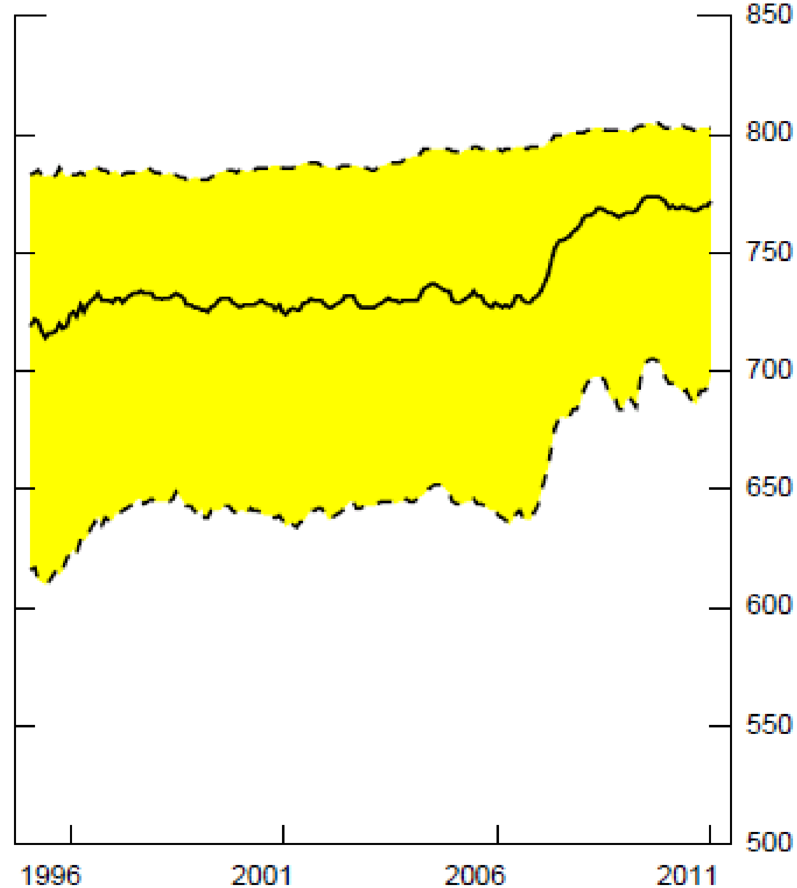


*For single-family homes.
Note: Vertical shading represents NBER recession dates.
Source: Census Bureau.

Slowing the Recovery: Housing

- Very tight lending standards on mortgages have blunted some of the effects of low mortgage rates.

Credit Scores on Newly Originated Mortgages

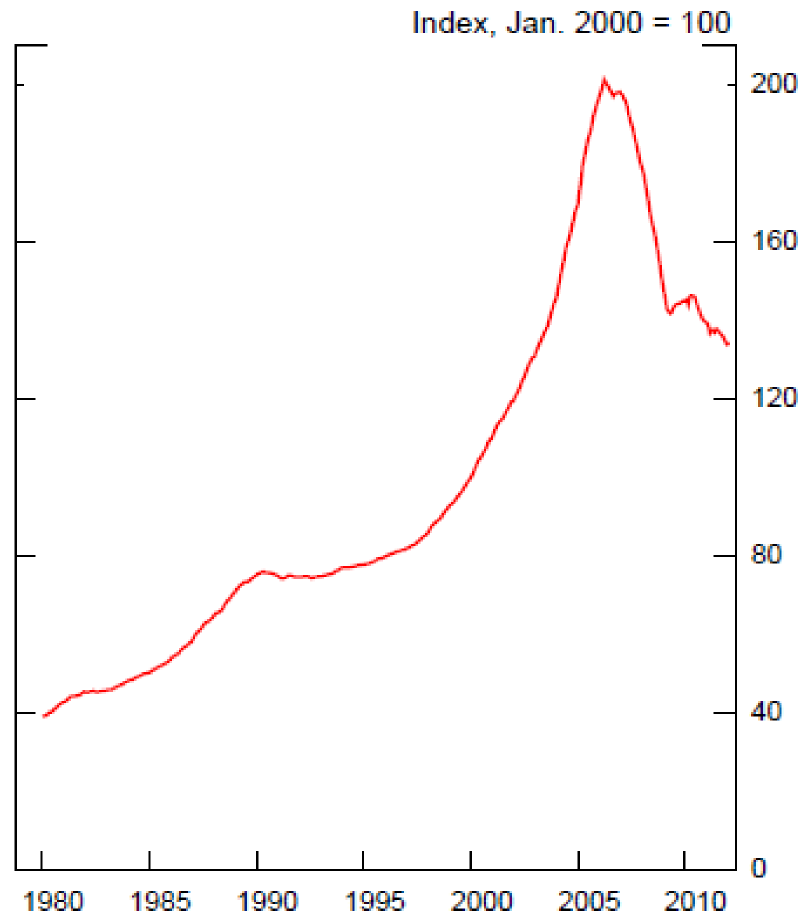


Note: Shaded region shows 10th to 90th percentile, line shows the median.
Source: LPS Applied Analytics.

Slowing the Recovery: Housing

- Declining house prices discourage new construction.
- More generally, sharp declines in house prices make consumers feel poorer, and thus less willing to spend.

Prices of Existing Single-Family Houses



Note: Includes purchase transactions only.
Source: CoreLogic.

Slowing the Recovery: Financial and Credit Markets

- The U.S. banking system is significantly stronger than it was three years ago, and credit is more available to households and businesses.

Slowing the Recovery: Financial and Credit Markets

- However, difficulties remain for some borrowers:
  - For households, mortgages are difficult to obtain for borrowers with less-than pristine credit scores.
  - For small businesses, credit market conditions remain tight but appear to have begun to improve.

Slowing the Recovery: Financial and Credit Markets

- Concerns about European fiscal and banking conditions have also stressed financial markets and led to more-conservative lending and diminished confidence.

Long-Term Economic Growth in the United States

- The financial crisis and recession were a major trauma. Many people who have been unemployed for a long time have seen their skills erode. And longer-term problems, like rising federal deficits, have not gone away.

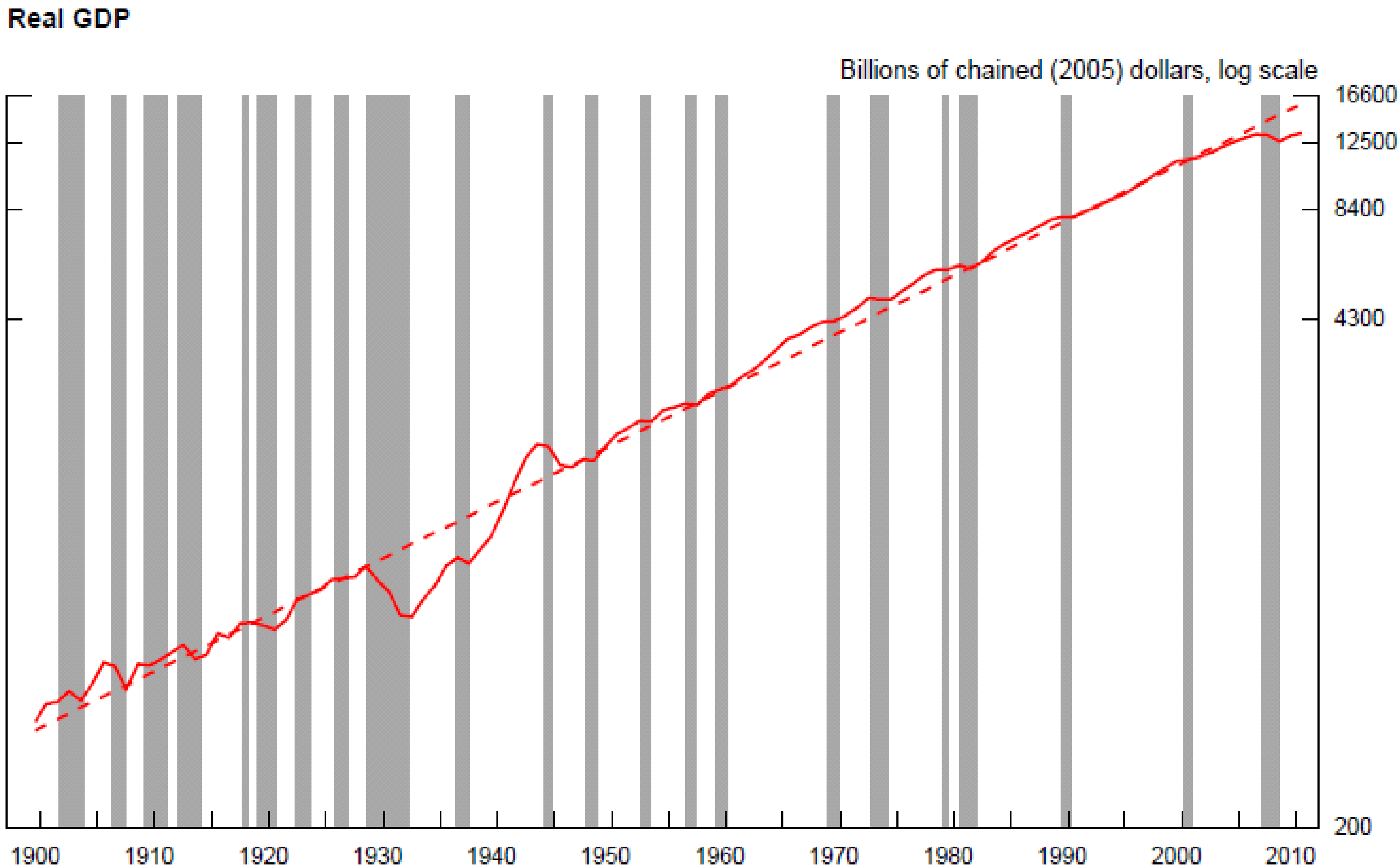
Long-Term Economic Growth in the United States

- On the upside, however:
  - The U.S. economy remains the largest in the world, with a highly diverse mix of industries.
  - Our economy has a robust entrepreneurial culture, with flexible capital and labor markets.

Long-Term Economic Growth in the United States

- On the upside, however:
  - We remain a technological leader, with many of the world's top research universities and the highest spending on research and development of any nation.
  - And, in the aftermath of the crisis, we have strengthened our financial regulatory system.

Long-Term Economic Growth



Note: Vertical shading represents NBER recession dates. Dashed line denotes trend.
Source: For 1900-1928, Historical Statistics of the United States: Millenial Edition, table Ca9; for 1929-present, Bureau of Economic Analysis.

Post-crisis Regulatory Changes

- The crisis revealed many important regulatory gaps and weaknesses.
- Lehman Brothers and AIG endangered the financial system and highlighted the need for new tools to address problems at systemically important financial institutions.
- More oversight of the system as a whole was needed.

Post-crisis Regulatory Changes

- The Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 instituted wide-ranging reforms of financial regulation in the United States.

Rep. Barney Frank

Sen. Christopher Dodd

Key Provisions of the Dodd–Frank Act: Supervision and Regulation

- The act expanded the financial stability duties of financial regulators, including the Fed:
  - It created the Financial Stability Oversight Council (FSOC) to help regulators coordinate their efforts.
  - It gave all regulators the responsibility to track and respond to possible risks to the financial system as a whole.

Key Provisions of the Dodd–Frank Act: Supervision and Regulation

- It closed gaps in the oversight of the financial system:
  - The FSOC can “designate” systemically important nonbank institutions to be supervised by the Fed.
  - The FSOC can also designate key financial market utilities (for example, stock exchanges) for enhanced supervision.

Key Provisions of the Dodd–Frank Act: Systemically Important Institutions

- The act subjected systemically important financial institutions to tougher supervision and regulation:
  - Higher capital requirements were established for most systemic firms.
  - Bank affiliates are prohibited from trading on their own account (Volcker rule).

Key Provisions of the Dodd–Frank Act: Systemically Important Institutions

- The act made systemically important financial institutions subject to tougher supervision and regulation:
  - Regular “stress tests” are being conducted to ensure that firms will have adequate capital even in bad economic scenarios.

Key Provisions of the Dodd–Frank Act: Systemically Important Institutions

- It also tackled the problem of "too big to fail" financial firms:
  - New "orderly liquidation authority" allows the Federal Deposit Insurance Corporation (FDIC) to close failing systemic firms in a way that causes less damage to the financial system.

Key Provisions of the Dodd–Frank Act: Other Features

- The act took steps to make the financial system more resilient:
  - It required more transparency and standardization of derivative transactions.

Key Provisions of the Dodd–Frank Act: Other Features

- It created a new agency (the Consumer Financial Protection Bureau) with broad powers to protect consumers in their financial dealings.

- Financial regulators are implementing these and other provisions, in consultation with foreign regulators.

The Effects of the Crisis on Central Bank Practice

- In the decades before the crisis, central banks often viewed financial stability policy as the junior partner to monetary policy.

- The crisis underscored that maintaining financial stability is an equally critical responsibility.

The Effects of the Crisis on Central Bank Practice

- Financial crises will always be with us. But as much as possible, central banks and other regulators should try to anticipate and defuse threats to financial stability and mitigate the effects when a crisis occurs.

Conclusion

- We began by noting the two principal tools and responsibilities of central banks
  - serving as lender of last resort to prevent or mitigate financial crises
  - using monetary policy to enhance economic stability

Conclusion

- The Fed and other central banks used both tools extensively in the crisis and its aftermath. These tools helped prevent a repeat of the Great Depression of the 1930s and set the stage for a slow but continuing economic recovery.

Conclusion

- A new regulatory framework will reduce, but not eliminate, the risk of financial crises in the future. Greater monitoring of potential systemic risks should help.

- However, the recent financial crisis shows both that a crisis can be hard to anticipate and that it can cause major damage to the economy.

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