



THE FEDERAL RESERVE AND THE FINANCIAL CRISIS





THE FEDERAL RESERVE AND THE FINANCIAL CRISIS

THE FEDERAL RESERVE AFTER WORLD WAR II

Lecture 2: The Federal Reserve after World War II

1. Early Challenges
2. The Great Moderation
3. Origins of the Recent Crisis



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What Is the Mission of a Central Bank?

- Macroeconomic stability
 - All central banks use monetary policy to strive for low and stable inflation; most also use monetary policy to try to promote stable growth in output and employment.
- Financial stability
 - Central banks try to ensure that the nation's financial system functions properly; importantly, they try to prevent or mitigate financial *panics* or *crises*.



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Fed–Treasury Accord of 1951

- During World War II and subsequently, the Fed was pressed by the Treasury to keep longer-term interest rates low to allow the government debt accrued during the war to be financed more cheaply.
- Keeping interest rates low even as the economy was growing strongly risked economic overheating and inflation.



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Fed–Treasury Accord of 1951

- In 1951, the Treasury agreed to end the arrangement and let the Fed set interest rates independently as needed to achieve economic stability.
- The Fed has remained independent since 1951, conducting monetary policy to foster economic stability without responding to short-term political pressures.

The Fed in the 1950s and Early 1960s

- Between World War II and the recent financial crisis, macroeconomic stability was the predominant concern of central banks.
- During most of the 1950s and early 1960s, the Federal Reserve followed a “lean against the wind” monetary policy that sought to keep both inflation and economic growth reasonably stable.

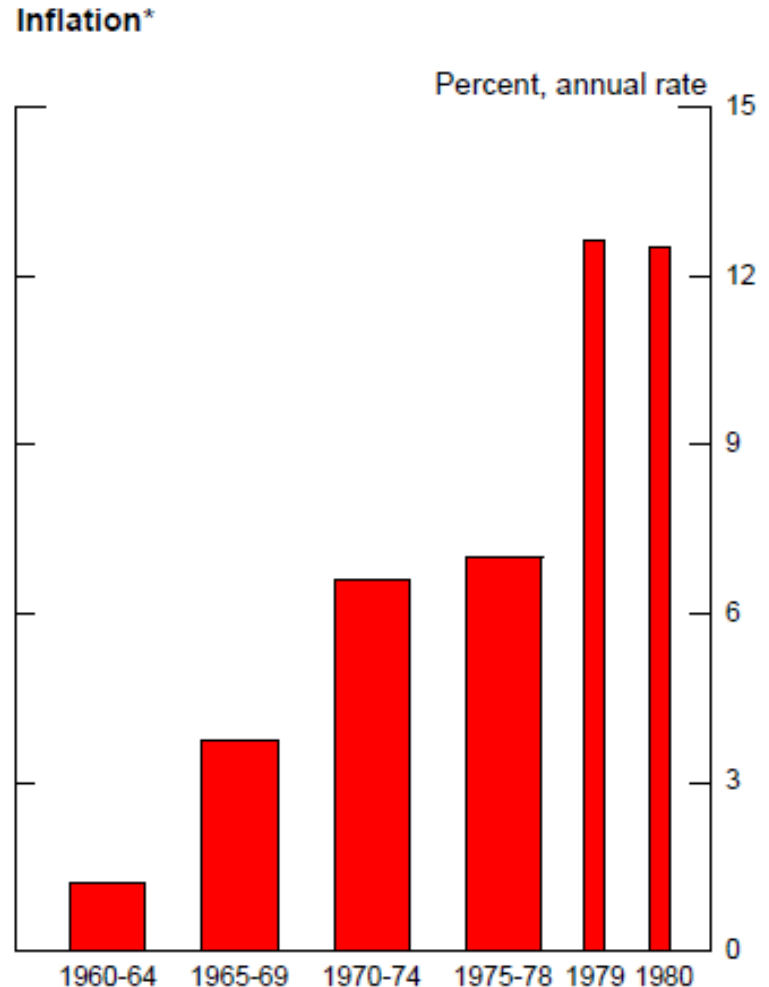


William McC. Martin
Chairman, 1951–1970

“Inflation is a thief in the night and if we don’t act promptly and decisively we will always be behind.”

The Great Inflation: Monetary Policy from the Mid-1960s to 1979

- Starting in the mid-1960s, monetary policy was too easy.
- This stance led to a surge in inflation and inflation expectations.
- Inflation peaked at about 13 percent.



*Consumer price index (CPI). Percent change calculated from end-of-period to end-of-period.
Source: Bureau of Labor Statistics.



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The Great Inflation: Why Was Monetary Policy Too Easy?

- Monetary policymakers were too optimistic about how “hot” the economy could run without generating inflation pressures.
- When inflation began to rise, monetary policymakers responded too slowly.



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The Great Inflation: Why Was Monetary Policy Too Easy?

- Exacerbating factors included
 - oil and food price shocks
 - fiscal policies (such as spending for the Vietnam War) that stretched economic capacity
 - Nixon's wage-price controls that artificially held down inflation for a time

Central Banking in an Evolving Economy

- These experiences illustrate how central banks have to struggle with an evolving economy and imperfect knowledge.



Arthur Burns
Chairman, 1970–1978

“In a rapidly changing world the opportunities for making mistakes are legion.”

The Volcker Disinflation

- To subdue double-digit inflation, Chairman Volcker announced, in October 1979, a dramatic break in the way that monetary policy would operate.
- In practice, the new approach to monetary policy involved high interest rates (tight money) to slow the economy and fight inflation.

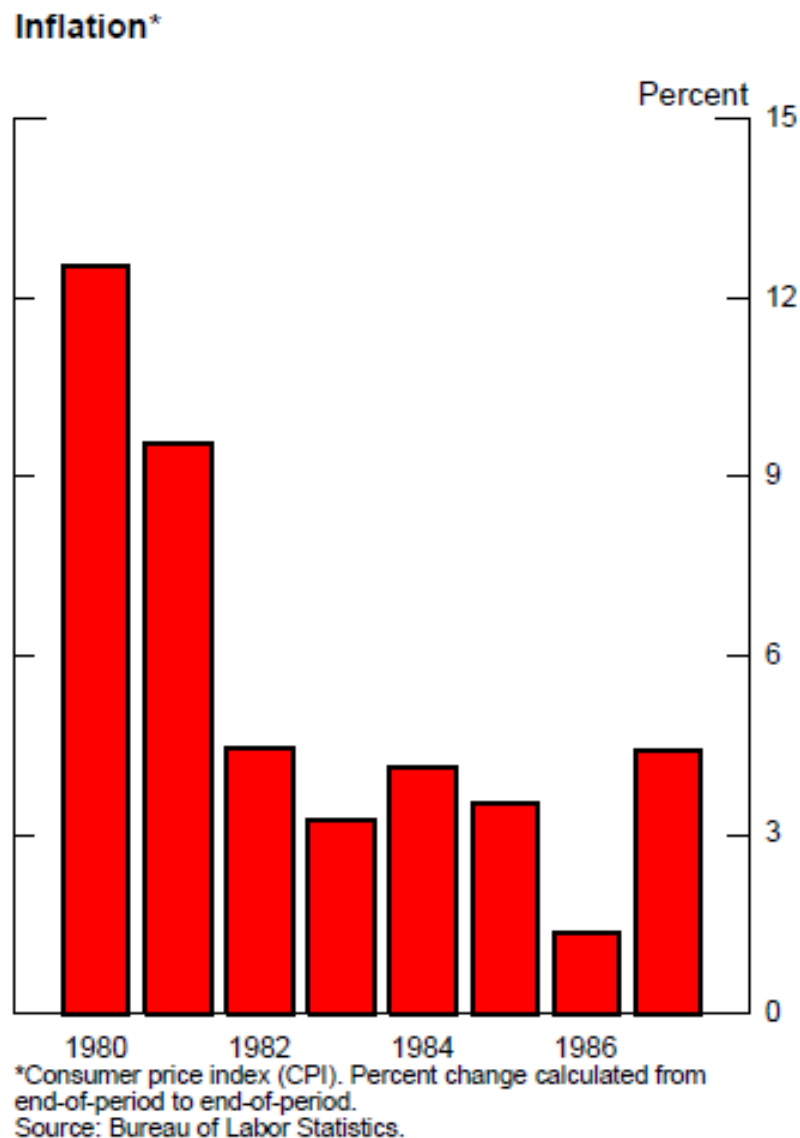


Paul Volcker
Chairman, 1979–1987

“To break the [inflation] cycle, ... we must have credible and disciplined monetary policy.”

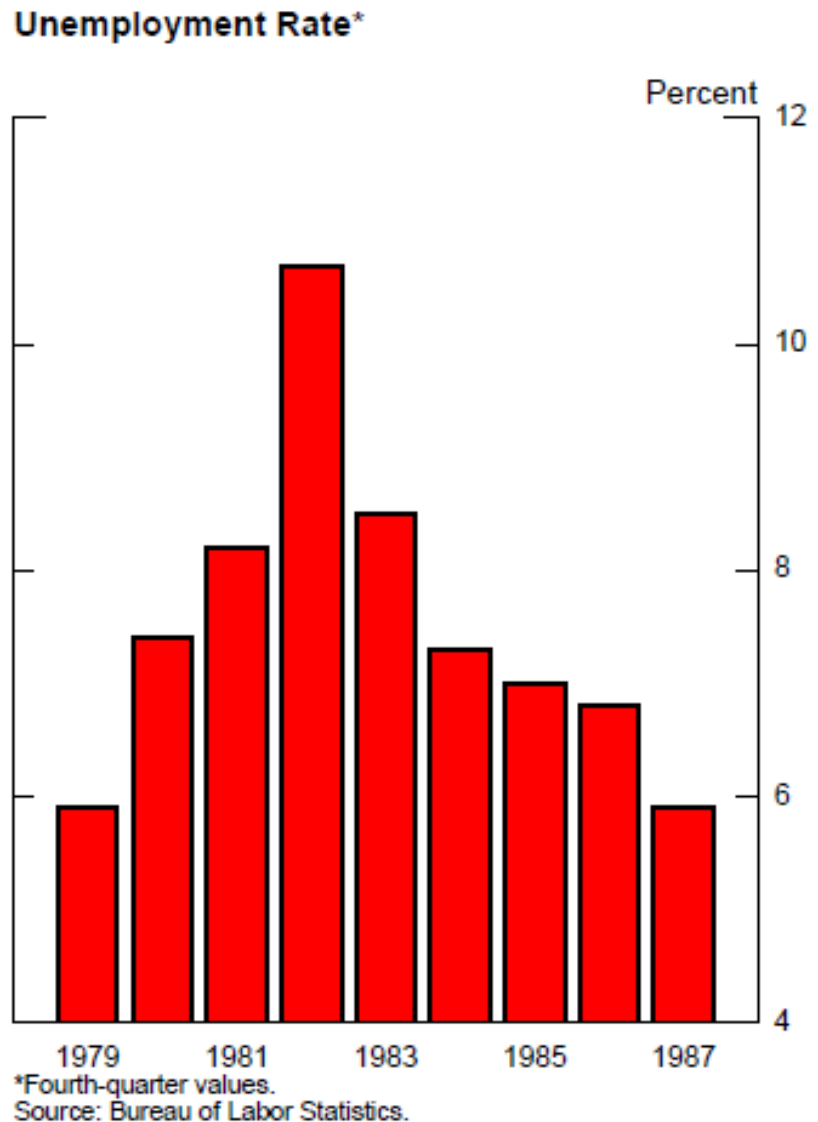
Inflation in the 1980s

- In the years after the new disciplined monetary policy began, inflation fell markedly.
- When Chairman Volcker left his post in 1987, the inflation rate was around 3 to 4 percent.



The 1981–1982 Recession

- The high interest rates needed to bring down inflation were costly.
- In the sharp recession during 1981 and 1982, unemployment peaked at nearly 11 percent.



The Great Moderation

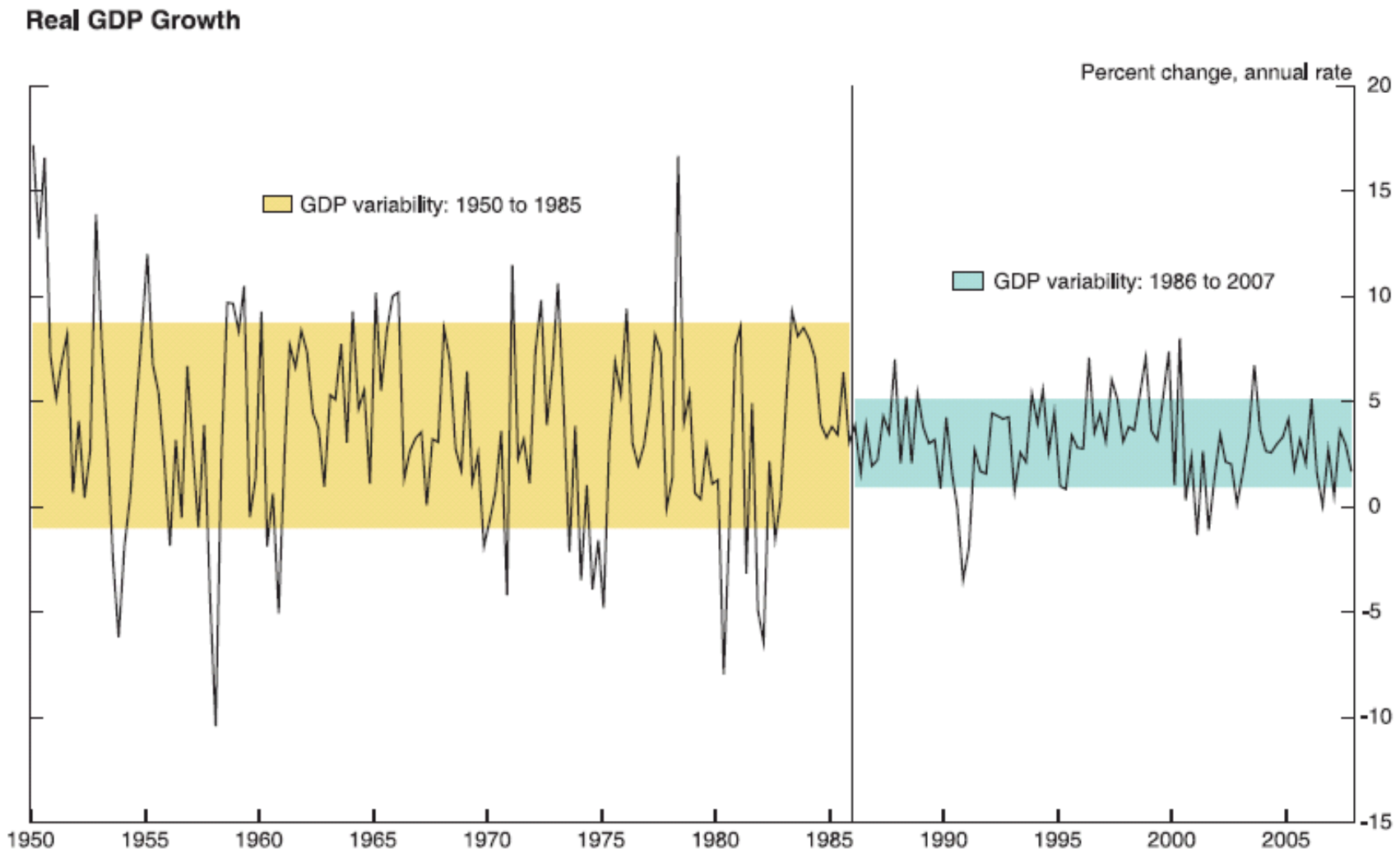
- During the Great Inflation of the 1970s, both output and inflation were highly volatile.
- Following the Volcker disinflation, from the mid-1980s through 2007 (primarily Chairman Greenspan's term), both output and inflation were much less volatile.
- This was the period of "The Great Moderation."

Alan Greenspan
Chairman, 1987–2006



"... an environment of greater economic stability has been key to impressive growth in the standards of living and economic welfare so evident in the United States."

The Variability of Real GDP Growth

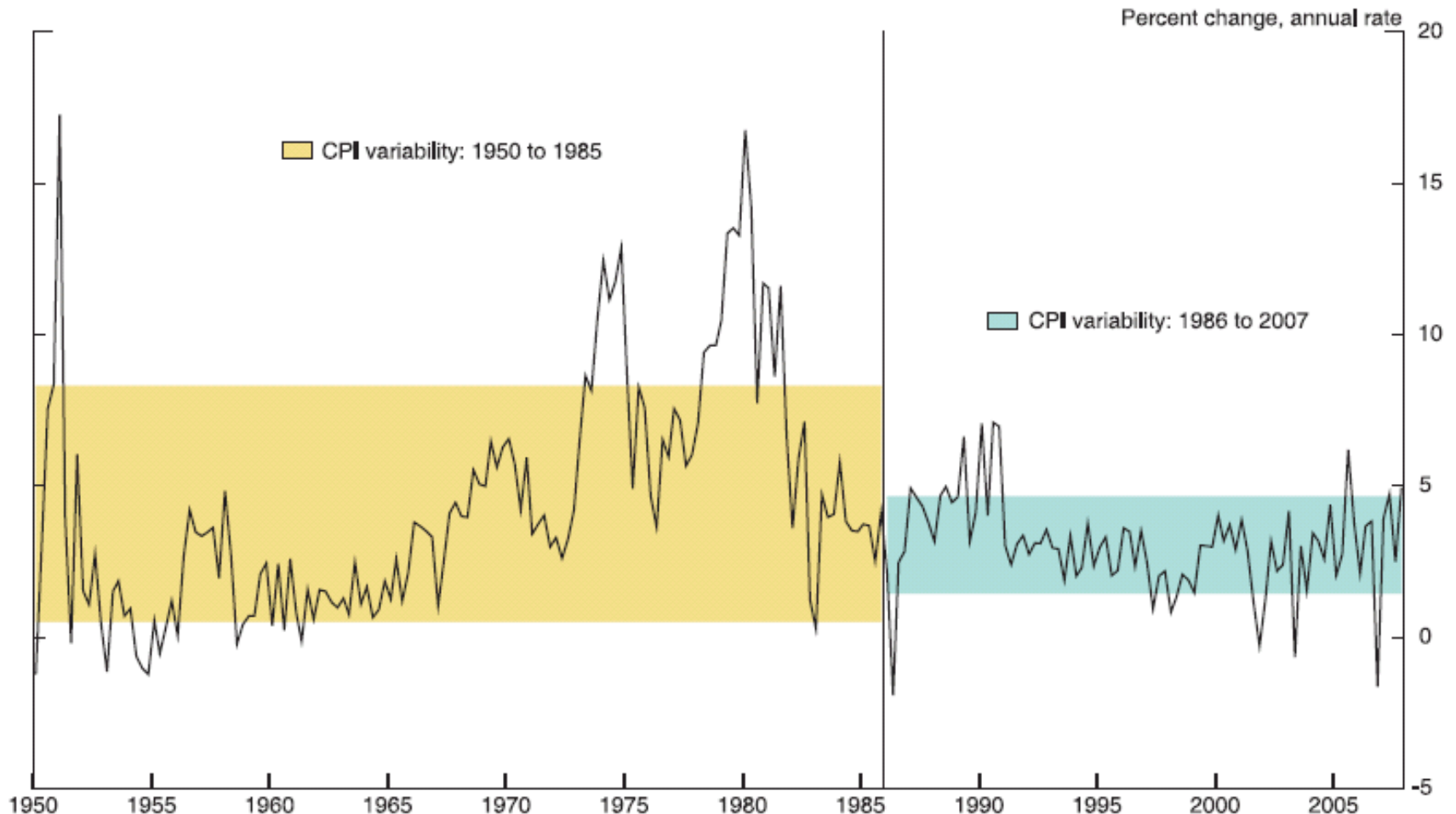


Note: Data are quarterly. The shaded areas of the chart show a common measure of data variability – plus and minus one standard deviation around the sample period mean of the data.

Source: Bureau of Economic Analysis

The Variability of Inflation

CPI Inflation



Note: Data are quarterly. The shaded areas of the chart show a common measure of data variability – plus and minus one standard deviation around the sample period mean of the data.

Source: Bureau of Labor Statistics



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Understanding the Great Moderation

- Improved monetary policy after 1979 contributed to the Great Moderation.
- In particular, low and stable inflation promoted broader economic stability.
- Structural change (such as better inventory management) and simple good luck may also have contributed.



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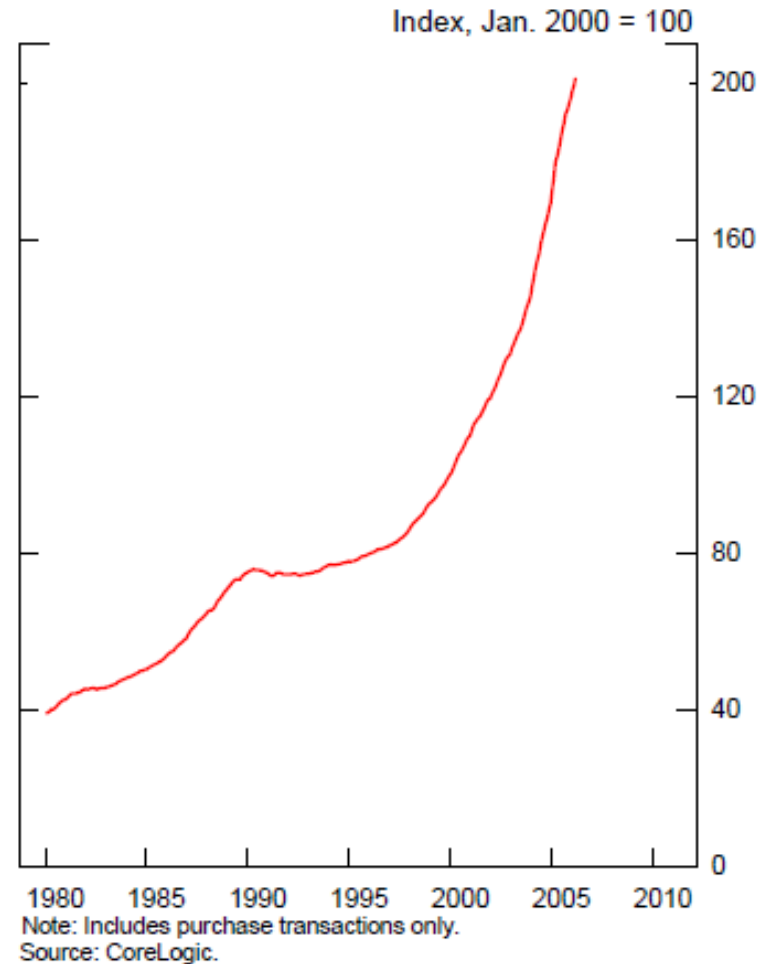
Understanding the Great Moderation

- Financial stresses occurred (for example, the 1987 stock market crash), but they did not cause major economic damage.
 - One exception was a boom and bust in the stock prices of “dot-com” companies that touched off a mild recession in 2001.
- Because of the relative tranquility during this period, monetary policy generally received greater emphasis than financial stability policies.

Prelude to the Financial Crisis: The Housing Bubble

- From the late 1990s until early 2006, house prices soared 130 percent.
- Meanwhile, mortgage lending standards deteriorated.

Prices of Existing Single-Family Houses



Inflationary House Price Psychology

- Rising house prices and weakening mortgage standards fed off each other:
 - Rising house prices created an expectation that housing was a “can’t lose” investment.
 - Lax underwriting and the availability of exotic mortgages drove up demand for housing, raising prices further.





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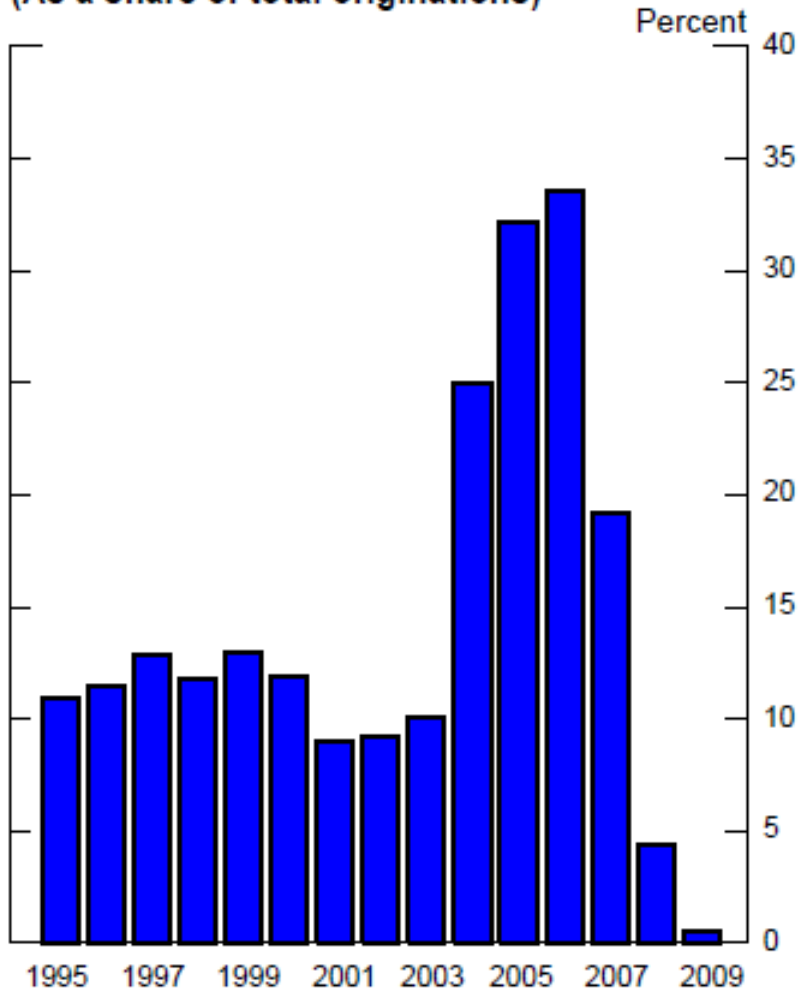
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Deterioration of Mortgage Quality

- Prior to the early 2000s, homebuyers typically made a significant down payment and documented their finances in detail.
- But as house prices rose, many lenders began offering mortgages to less-qualified borrowers (nonprime mortgages) that required little or no down payment and little or no documentation.

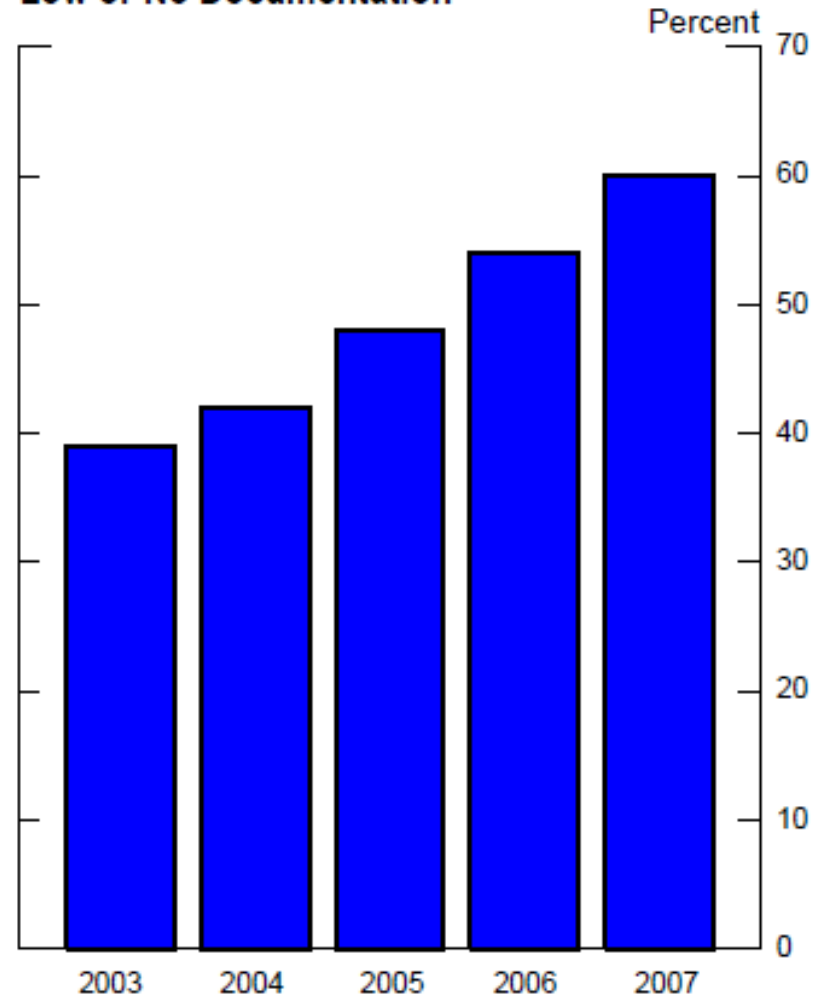
The Deterioration of Mortgage Quality

**Nonprime Mortgage Originations
(As a share of total originations)**



Source: Federal Reserve staff estimates, based on data from Inside Mortgage Finance.

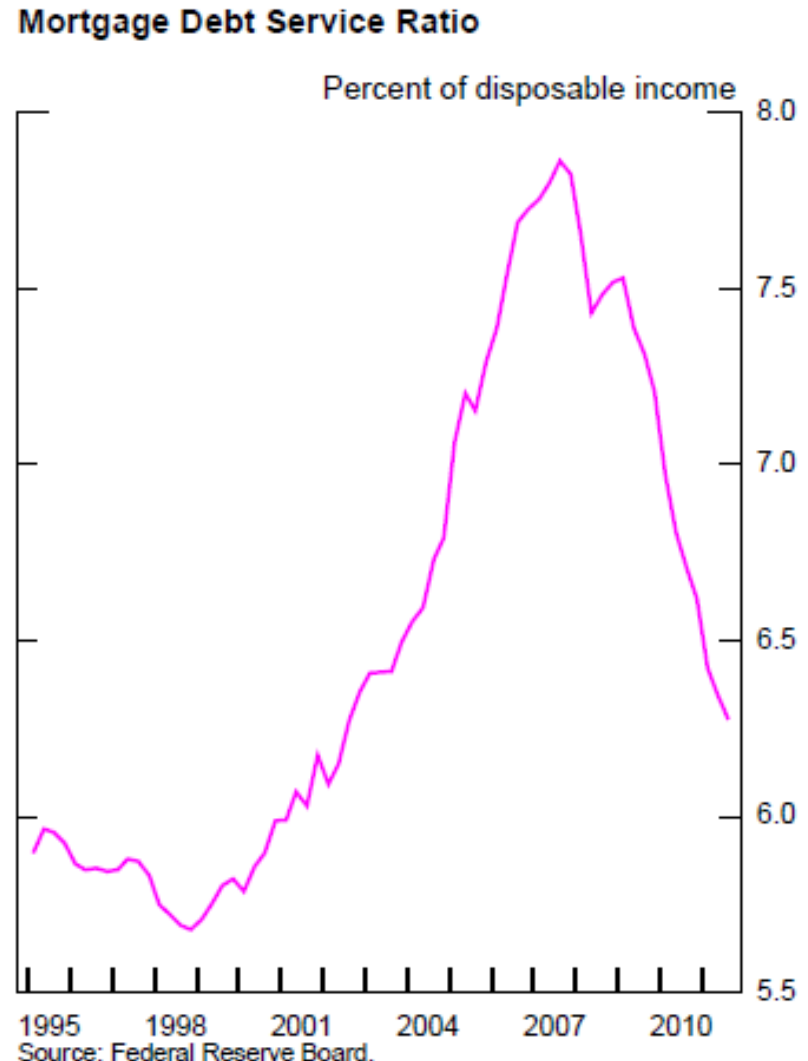
**Percent of Nonprime Loans with
Low or No Documentation**



Source: Derived from data in Mayer, Pence, and Sherlund, "The Rise in Mortgage Defaults," Journal of Economic Perspectives, Winter 2009, Table 1 and Table 2, panel C.

The House Price Bubble Bursts

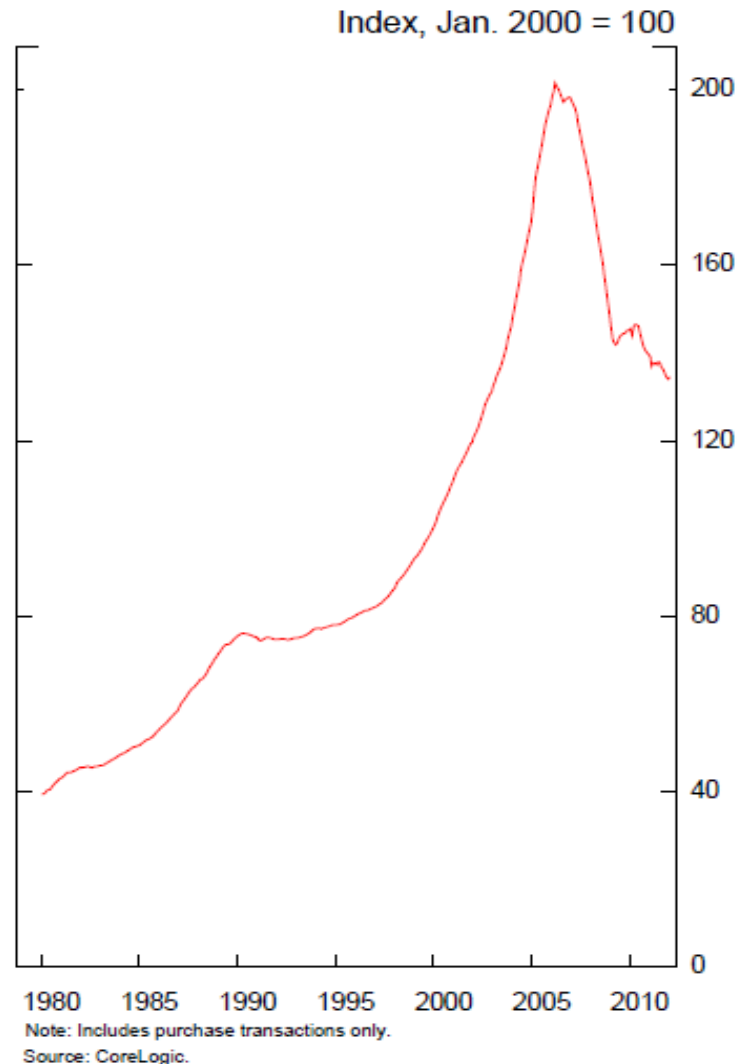
- House price increases made housing less affordable.
- Mortgage payments as a share of income rose sharply.
- Eventually, rising costs of homeownership began to damp housing demand.



The House Price Bubble Bursts

- Declining demand for houses led to a drop in house prices beginning in early 2006.
- Since then, house prices have fallen more than 30 percent.

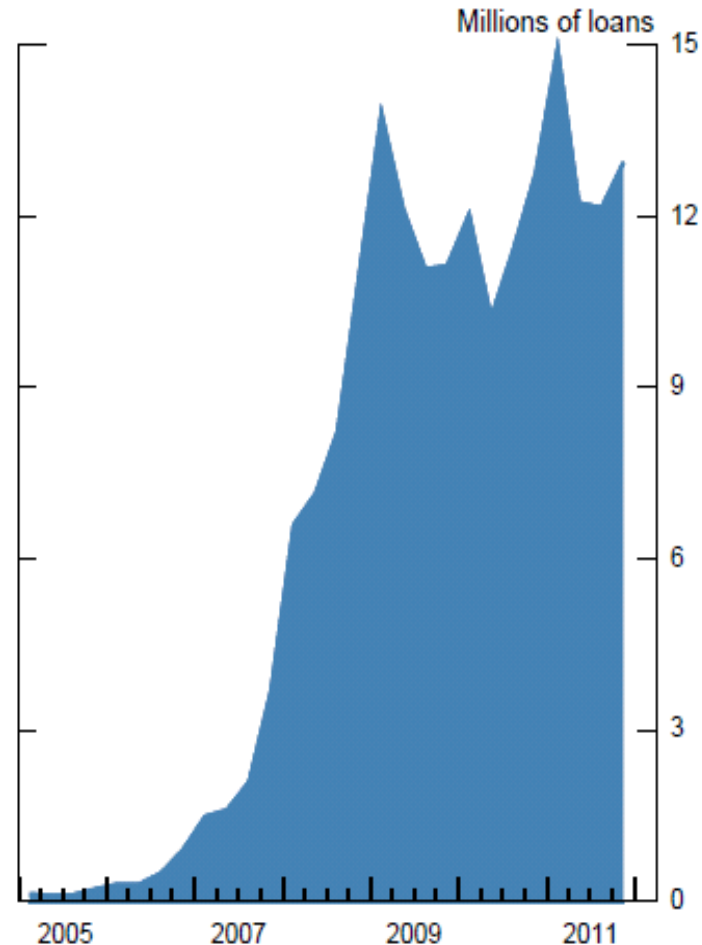
Prices of Existing Single-Family Houses



The Aftermath of the House Price Bust

- As house prices fell, borrowers—especially those who had made little or no down payment—increasingly went “underwater” (owed more on their mortgages than their houses were worth).

Mortgages with Negative Equity

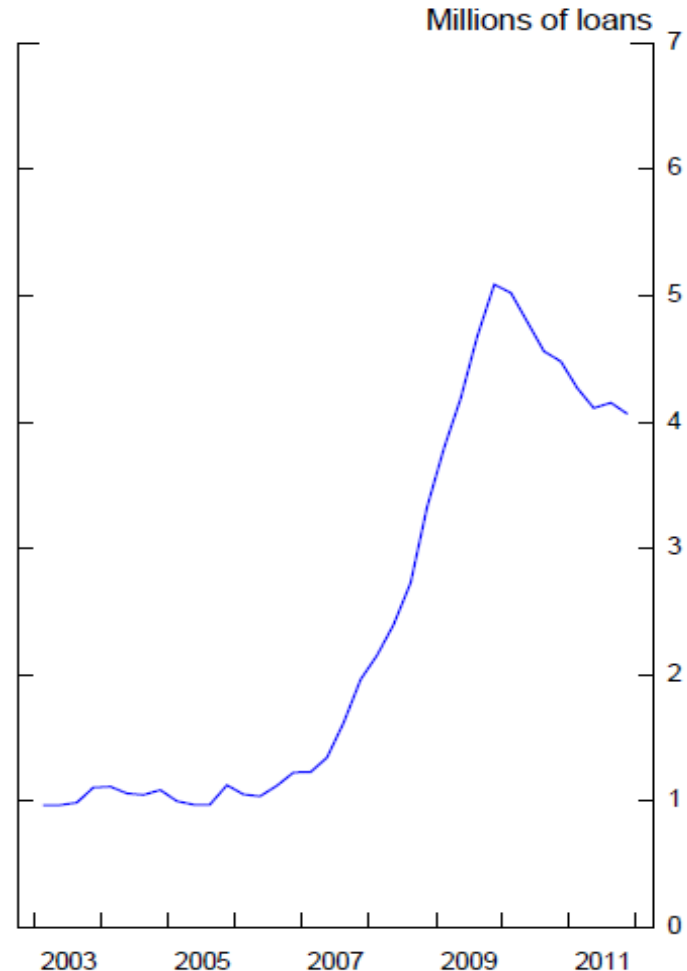


Note: Negative equity number likely is understated because of incomplete data on junior liens.
Source: Federal Reserve staff calculations, based on data from CoreLogic and LPS Applied Analytics.

The Aftermath of the House Price Bust

- Mortgage delinquencies and foreclosures surged.

Mortgage Delinquencies



Note: Loans 90 days or more past due or in foreclosure.

Source: Federal Reserve Board estimates based on data from the MBA National Delinquency survey.



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The Aftermath of the House Price Bust

- Banks and other holders of mortgage-related securities suffered sizable losses—a key trigger of the crisis.



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How a Housing Bust Became a Financial Crisis: Triggers versus Vulnerabilities

- It is important to distinguish between triggers and vulnerabilities:
 - The decline in house prices and the associated mortgage losses were key triggers of the crisis.
 - The effects of those triggers were amplified by vulnerabilities in the economy and financial system.



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Private-Sector Vulnerabilities

- Perhaps lulled into complacency during the Great Moderation, borrowers and lenders took on too much debt (leverage).
- Banks and other financial institutions failed to adequately monitor and manage the risks they were taking (for example, exposures to subprime mortgages).



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Private-Sector Vulnerabilities

- Firms relied excessively on short-term funding, such as commercial paper.
- The increased use of exotic financial instruments concentrated risk.



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Public-Sector Vulnerabilities

- Gaps in the regulatory structure left important firms without strong supervision (for example, AIG).
- There were failures of regulation and supervision, including consumer protection.
- Insufficient attention was paid to the stability of the financial system as a whole.



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The Role of Monetary Policy

- Some have argued that the Fed's low interest rate monetary policy in the early 2000s contributed to the housing bubble, which in turn was a trigger of the crisis.



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The Role of Monetary Policy

- Most evidence suggests otherwise:
 - *International comparisons*: For example, the United Kingdom had a house price boom during the 2000s despite tighter monetary policy than the United States.
 - *Size of the bubble*: Changes in mortgage rates during the boom years seemed far too small to account for the magnitude of house price increases.



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The Role of Monetary Policy

- Most evidence suggests otherwise:
 - *Timing of the bubble*: House prices began to pick up (late 1990s) before monetary policy began easing and rose sharply after monetary policy began tightening (2004).
- Economists continue to debate this issue.



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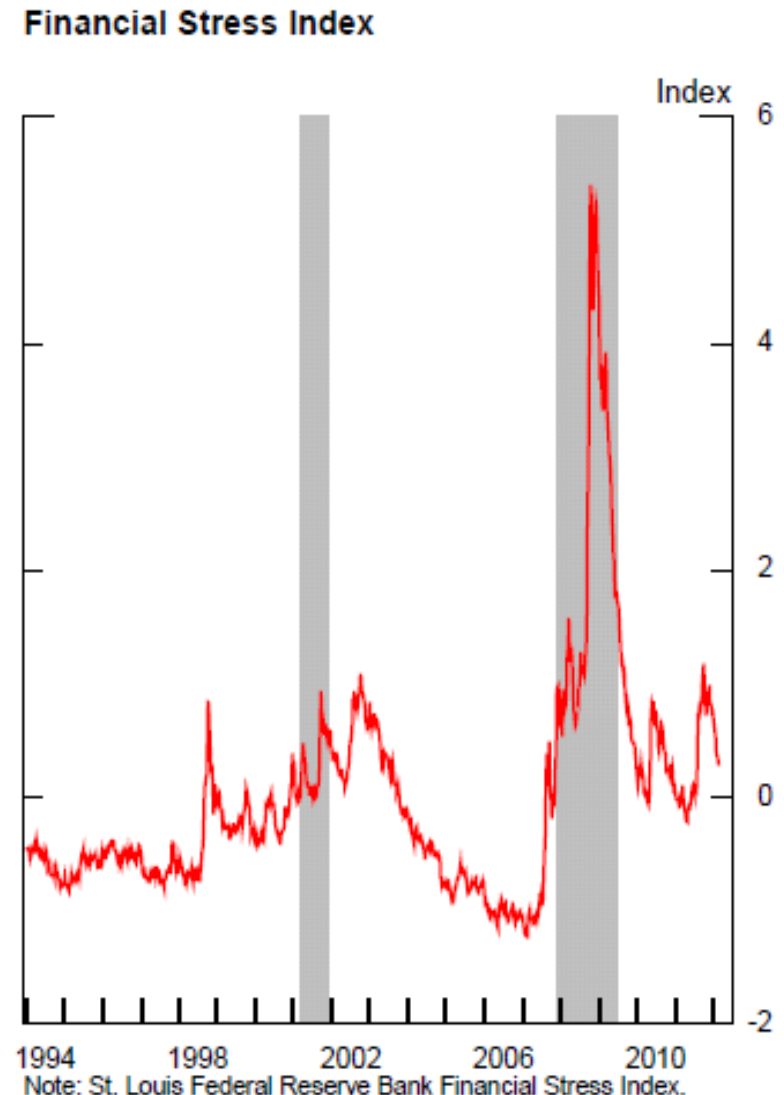
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References on Monetary Policy Role

- Kenneth Kuttner (forthcoming). “Low Interest Rates and Housing Bubbles: Still No Smoking Gun,” in Douglas Evanoff, ed., *The Role of Central Banks in Financial Stability: How Has it Changed?* Hackensack, N.J.: World Scientific.
- Jane Dokko and others (2011). “Monetary Policy and the Housing Bubble,” *Economic Policy*, vol. 26 (April), pp. 237–87.
- Carmen Reinhart and Vincent Reinhart (2011). “Pride Goes before a Fall: Federal Reserve Policy and Asset Markets,” NBER Working Paper Series 16815. Cambridge, Mass.: National Bureau of Economic Research, February.
- Ben S. Bernanke (2010). “Monetary Policy and the Housing Bubble,” speech delivered at the Annual Meeting of the American Economic Association, Atlanta, Ga., January 3, www.federalreserve.gov/newsevents/speech/bernanke20100103a.htm.

Economic Consequences of the Crisis

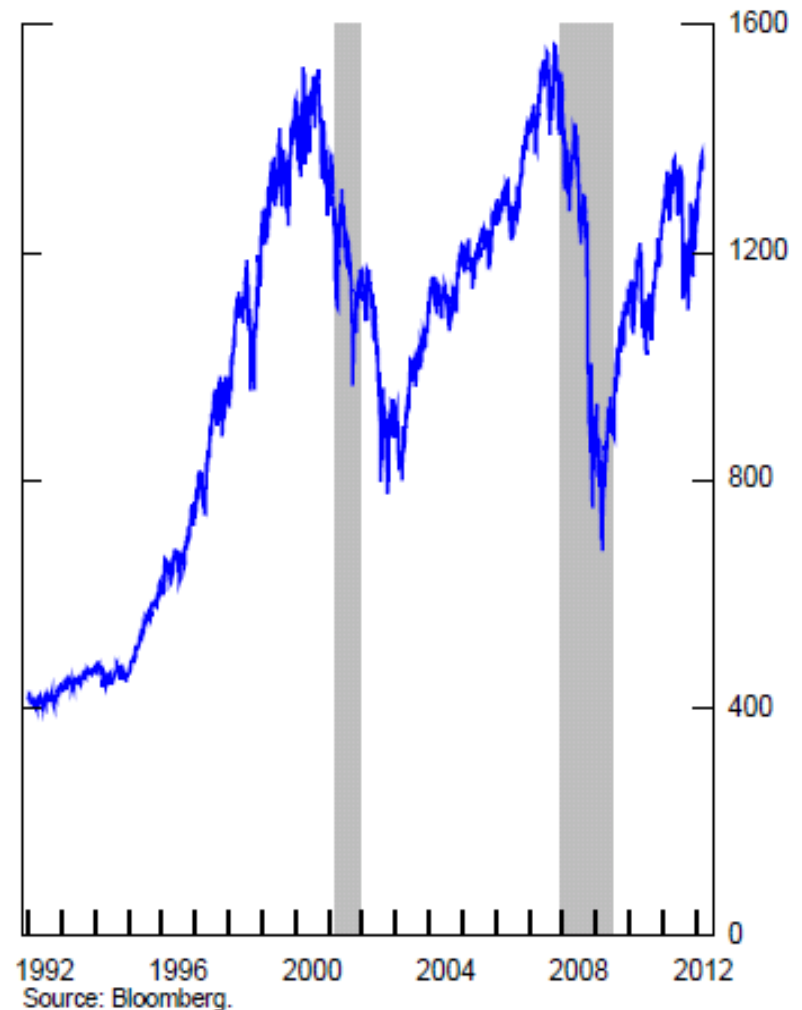
- Financial stress skyrocketed. (Note: Shaded areas represent periods of recession.)



Economic Consequences of the Crisis

- The stock market plunged.

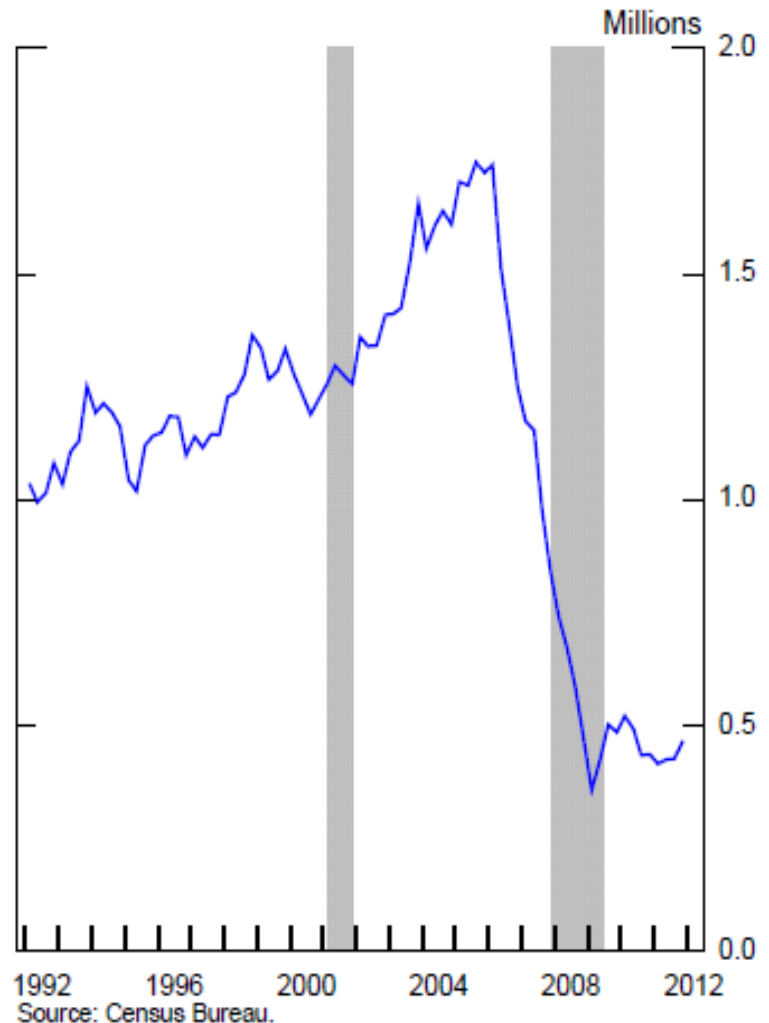
S&P 500 Composite Index



Economic Consequences of the Crisis

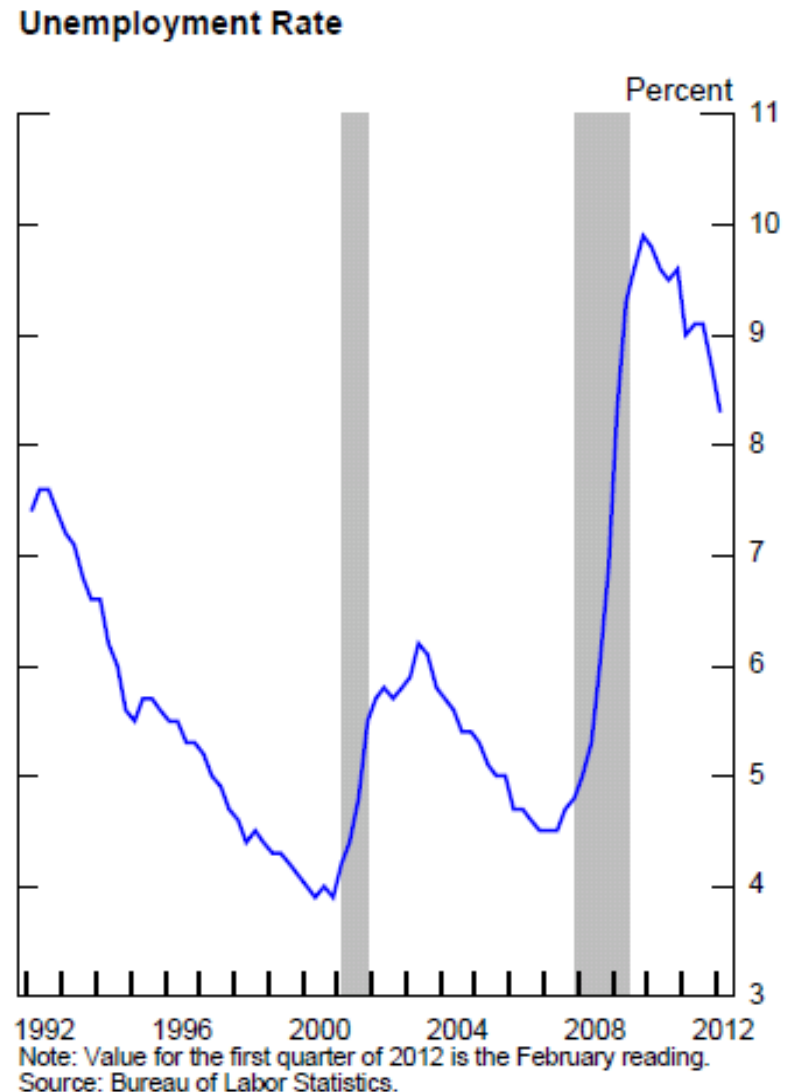
- Home construction continued its sharp decline.

Single-Family Housing Starts



Economic Consequences of the Crisis

- The unemployment rate rose sharply.





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ORIGINS AND MISSION OF THE FEDERAL RESERVE

- The next two lectures examine the unfolding of the crisis and the recession and describe the policy response:
 - Lecture 3 describes the financial stability policy responses to the crisis and recession by the Fed and others.
 - Lecture 4 discusses monetary policy responses to the recession, the sluggish recovery, post-crisis changes in financial regulation, and the implications of the crisis for central bank practice.



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