Chapter 15

THE FINANCIAL CRISIS AND THE GREAT RECESSION

Macroeconomics in Context (Goodwin, et al.)

Chapter Overview

This chapter reviews the origins and development of the financial crisis of 2007-8 and the ensuing recession, and also discusses policy responses. It provides a classic test case concerning macroeconomic instability, the institutional and financial structures that affect macroeconomic stability and growth, and the impacts of unemployment and recession. The debate over policy responses continues, and this chapter provides you with the background they need to assess the current state of macroeconomic policy and the efforts to restore the economy to full employment.

Chapter Objectives

After reading and reviewing this chapter, you should be able to:

- 1. Describe the development of the housing bubble and the reasons for its collapse.
- 2. Understand how a crisis in one sector spread to the whole economy.
- 3. Be aware of the extent, severity, and duration of unemployment resulting from the crisis.
- 4. Understand the similarities and differences between the Great Recession and the Great Depression.
- 5. Be aware of how factors such as inequality, bank size, regulatory policy, corporate incentive structures, and global financial imbalances can contribute to macroeconomic instability.
- 6. Describe the major fiscal and monetary responses to the crisis.
- 7. Be aware of financial regulatory reforms implemented in response to the crisis, criticisms of these reforms, and proposals for further reform.

Key Terms

mortgage-backed security (MBS) collateralized debt obligation credit default swap subprime mortgage home equity loan economies of scale "too big to fail" moral hazard

Active Review

Fill in the Blank

- 1. When housing prices rise rapidly, as they did prior to 2006, then suddenly fall, this is known as a ______
- 2. The law formerly separating commercial and investment banking, which was repealed in 1999, was known as the ______

3. A bundle of home mortgages sold to an investor is known as a _____

- 4. A variety of loans can be packaged together into a complex investment product know as a ______
- 5. Companies can use ______to insure against defaults in other investment products.

6. Mortgages given to people with poor credit are known as _____

- 7. The U.S. economy lost nearly ______jobs between 2007 and 2009.
- 8. When larger size enables companies to operate at lower long-run average cost, this is considered to be a result of ______
- 9. The availability of government bailouts for large firms can encourage excessive risktaking, a phenomenon known as _____
- 10. In 2009, Congress passes the ______, an \$831 billion spending bill intended to stimulate economic recovery.
- 11. The major financial reform passed in the wake of the 2007-9 crisis was the ______ bill.
- 12. A tax on financial transactions is often referred to as ______, after the economist who first proposed it.

True or False

- 13. High mortgage rates contributed to the development of the housing bubble.
- 14. Home prices rose rapidly from 1998 to 2009.
- 15. From 2007 to 2009, U.S. households lost over \$10 trillion in financial asset values.
- 16. Unemployment levels in the Great Recession exceeded those of the Great Depression.
- 17. The share of banking sector assets held by large banks increased from 28% to over 75% between 1984 and 2007.
- 18. The Dodd-Frank bill promoted deregulation of banks.

Short Answer

- 19. What were some of the factors leading to the housing bubble?
- 20. What made the financial system in 2007 particularly vulnerable to crisis?
- 21. In what ways can unemployment be both a result and a cause of deepening recession?
- 22. How was increasing inequality related to the financial crisis?
- 23. How were corporate incentives related to the financial crisis?
- 24. How was globalization related to the financial crisis?
- 25. What were the major fiscal and monetary policy responses to the crisis?

Problems

1. Refer to Figure 15.2 in the text to describe how interest rates were related to the development and collapse of the housing bubble.

2. Refer to Figure 15.3 in the text to describe how the distribution of bank assets changed between 1984 and 2012.

3. As suggested in Exercise 1 in the text, you can find information on housing prices at The Federal Housing Finance Agency website <u>www.fhfa.gov</u>. To find the required data, go to www.fhfa/gov/DataTools/Tools and select HPI Motion chart. Then check off the states you want to view (it is possible to view multiple states at the same time). Select the third tab at the top right (with graph symbol) to get a historical view of the rate of change in state housing prices from 1991 to the present. What do you observe? (Note that the chart shows quarterly rate of change, not absolute price levels, so overall prices start to fall when the line goes below zero.)

4. As suggested in Exercise 2 in the text, you can find data on the Great Recession at the Federal Reserve Economic Database <u>http://research.stlouisfed.org/fred2/</u> To find data on unemployment rates, go to Current Population Survey/Unemployment Rate/Civilian Unemployment Rate/Seasonally Adjusted (do not select Natural Rate of Unemployment on the main Population, Employment, and Labor Markets page – this does not show total unemployment). Drag the cursor over graph to see the data on unemployment during the last four recessions. How does the Great Recession compare to previous recessions?

Self Test

1. Factors contributing to the housing bubble included:

- a. Unprecedented access to credit.
- b. Rising unemployment.
- c. Low interest rates.
- d. Both (a) and (b).
- e. Both (a) and (c).
- 2. By 2005, subprime mortgages made up:
 - a. 1% of all U.S. mortgages.
 - b. 10% of all U.S. mortgages.
 - c. 15% of all U.S. mortgages.
 - d. 25% of all U.S. mortgages.
 - e. 50% of all U.S. mortgages.

- 3. During the recession of 2007-9:
 - a. The U.S. economy lost nearly 9 million jobs.
 - b. About 11 million homeowners faced foreclosure
 - c. Manufacturing unemployment rose from 4.3% to 12.1%
 - d. U.S. consumer spending declined and business profits fell.
 - e. All of the above.
- 4. Comparing the Great Depression and the Great Recession, we can say that:
 - a. The Great Recession was more severe in terms of unemployment.
 - b. The Great Depression was more severe in terms of unemployment.
 - c. Both were preceded by bubbles in asset values.
 - d. Both (a) and (c).
 - e. Both (b) and (c).

5. Underlying causes of the financial crisis of 2007-8 included all of the following *except*:

- a. Increasing bank size.
- b. Increasing inequality.
- c. Excessively contractionary monetary policy.
- d. Deregulation
- e. Short-term corporate incentive.
- 6. Government responses to the 2007-9 recession included all of the following *except*:
 - a. Bailouts for key financial institutions.
 - b. Stimulus spending by state and local governments.
 - c. Stimulus spending by the federal government.
 - d. Expansionary monetary policy.
 - e. "Quantitative easing" or security purchases by the Fed
- 7. Housing prices have shown a pattern of:
 - a. Steady increase since 2006.
 - b. Steady decrease since 2006.
 - c. Decline from 2001 to 2006, followed by increase through 2012.
 - d. Decline after 2006, with some recovery after 2012.
 - e. Increase from 2001 to 2006, followed by stabilization.

- 8. The Dodd-Frank bill does all of the following *except*:
 - a. Sets up a Consumer Protection Agency.
 - b. Relaxes bank regulation.
 - c. Institutes minimum lending standards.
 - d. Institutes some regulation of credit default swaps (CDSs).
 - e. Requires greater disclosure by ratings agencies.
- 9. Criticism of Dodd-Frank have included all of the following *except*:
 - a. It is too complex.
 - b. It creates significant costs for financial firms.
 - c. It has been watered down in response to bank pressure.
 - d. It causes higher taxes.
 - e. It does not do enough to protect consumers.
- 10. Proposals for further financial reform beyond Dodd-Frank include:
 - a. A financial transactions tax.
 - b. An increased sales tax.
 - c. A lower sales tax.
 - d. A general reduction in business taxes.
 - e. A general increase in business taxes.

Answers to Active Review Questions

- 1. housing bubble
- 2. Glass-Steagall Act
- 3. mortgage-backed security
- 4. collateralized debt obligation
- 5. credit default swaps
- 6. subprime mortgages
- 7. nine million
- 8. economies of scale
- 9. moral hazard
- 10. American Recovery and Reinvestment Act (ARRA)
- 11. Dodd-Frank
- 12. Tobin tax
- 13. False. It was *low* mortgage rates that feed the growth of the housing bubble.
- 14. False. Home prices started to fall rapidly after 2006.
- 15. True.

16. False. Though very severe at 10%, unemployment levels during the Great Recession were much less than those of the Great Depression, when unemployment reached 25%.

17 True.

18. False. Acts such as the Financial Services Modernization Act of 1999 promoted bank deregulation, while Dodd-Frank re-imposed some tighter regulation including tougher lending standards and restrictions on some types of financial instruments.

19. Factors leading to the housing bubble included a period of low interest rates, unprecedented expansion of credit including sub-prime mortgages, and speculation in the housing market driving prices even higher.

20. New financial instruments including mortgage-backed securities (MBSs) and Collateralized Debt Obligations (CDOs) increased the amount and complexity of debt. Credit Default Swaps (CDSs), an instrument to insure debt, encouraged expanding debt even further, creating an unstable system that crashed as soon as house prices, which were the basis of the underlying mortgages, turned downwards.

21. As the economy falls into recession, more people are laid off. Unemployed workers have less income to spend, leading to lower consumption. This lowers business profits, which in turn promotes further cutbacks and layoffs. The process creates a vicious spiral of unemployment and lower consumption that feeds on itself and deepens the recession.

22. As middle-class and lower-income families lost ground after about 1999, they faced difficulties maintaining their level of consumption. This encouraged greater use of debt to maintain consumption, and unprecedented credit expansion made it possible for families to take on more debt. But the debt amounted to a time-bomb that would cripple the economy once families found it impossible to make mortgage payments.

23. The structure of corporate incentives encouraged short-term decision making. CEOs were rewarded based on stock values, which encouraged them to take measures that would boost stock prices in the short-term, even if these measures were risky and could hurt the company in the longer term. By the time the risk-based structure collapsed, CEOs had already received huge salaries and bonuses, and were under no obligation to return the funds.

24. Globalization affected the development of the financial crisis in two ways. Competition from imports lowered salaries and cut jobs in manufacturing industries, forcing these workers and their families to take on more debt. At the same time, large inflows of foreign capital contributed to lower interest rates and provided fuel for an increasingly debt-based financial structure.

25. After the immediate responses of bailouts for endangered financial institutions, the Federal government instituted large-scale stimulus spending to prevent a collapse in aggregate demand and to promote economic recovery. At the same time, the Federal Reserve engaged in an extraordinarily expansionary monetary policy, purchasing hundreds of billions of dollars' worth both of Treasury bonds (traditional expansionary policy) and other financial assets ("quantitative easing").

Answers to Problems

1. A steep decline in interest rates after 2001 contributed to inflating the bubble in housing prices. The fact that interest rates rose in 2005 and 2006 may have been a precipitating factor in the bursting of the bubble. Once the bubble burst, with a steep decline in housing prices, interest rates also fell as the Fed moved back to an expansionary policy to respond to the crisis and ensuing recession.

2. Bank assets became increasingly concentrated in the largest banks, with the share of assets held by banks with assets over \$10 billion went from about 30% to 80%. Meanwhile the share of the smallest banks, those with less than \$100 million in assets, fell from about 14% to less than 2%. The shares of intermediate-sized banks also declined, with the share of banks having assets between \$100 million and \$1 billion going from about 26% to about 10%, and the share of banks having between \$1 and \$10 billion going from about 32% to about 10%.

3. In general, all states show the pattern of a housing price run-up prior to 2006, with a significant price crash by 2008. After 2008, the rate of decline slows, but the rate of change remains below zero for most states until 2011. The fluctuations are more extreme for states such as Florida and Nevada than, for example Connecticut and Illinois, indicating that the crisis was concentrated in specific housing markets (but, as the text notes, spread nationwide due to the complexity of mortgage finance instruments).

4. The Great Recession was much more severe than the previous three recessions, with an increase in unemployment of over five percentage points. The FRED graph also shows that unemployment continued to rise after the formal end of the recession, then declined only slowly, falling below 7% only at the end of 2013.

Answers to Self Test Questions

- 1. E 2. D
- 2. D 3. E
- 5. E 4. E
- 4. E 5. C
- 5. C 6. B
- 0. D 7. D
- 8. B
- 9. D
- 10.A