Crises and Consequences

1. Which of the following are examples of debt overhang? Which examples are likely to lead to a cutback in spending? Explain.
   
   a. Your uncle starts a restaurant, borrowing to fund his investment. The restaurant fails, and your uncle must shut down but still must pay his debt.
   
   b. Your parents take out a loan to buy a house. Your father is transferred to a new city, and now your parents must sell the house. The value of the house has gone up during the time your family has lived there.
   
   c. Your friend’s parents take out a loan to buy her a condo to live in while she is at college. Meanwhile, the housing market plummets. By the time your friend leaves college, the condo is worth significantly less than the value of the loan.
   
   d. You finish college with an honors degree in a field with many good job prospects and with $25,000 in student loans that you must repay.

Solution

1. a. This is an example of debt overhang because your uncle is left with high debt and diminished assets. Your uncle will likely cut back on his spending in order to repay the debt from the failed restaurant and to rebuild his assets.
   
   b. This is not an example of debt overhang because your parents can sell the house and still have money left over after repaying the loan. It is likely that they will feel wealthier and increase spending.
   
   c. This is an example of debt overhang because your friend’s parents are left with a loan that is worth more than the value of the condo. They will likely cut back on spending in order to repay the loan and rebuild their assets.
   
   d. This is not an example of debt overhang. Although you leave college with a large amount of debt, you also leave with an honors degree, which is a valuable asset. It is unlikely that you will cut back on spending because it is very likely that you will now have a job.

2. Which of the following are not examples of a vicious cycle of deleveraging? Explain.
   
   a. Your university decides to sell several commercial buildings in the middle of town in order to upgrade buildings on campus.
   
   b. A company decides to sell its large and valuable art collection because other asset prices on its balance sheet have fallen below a critical level, forcing creditors to call in their loans to the company because of provisions written into the original loan contract.
   
   c. A company decides to issue more stock in order to voluntarily pay off some of its debt.
   
   d. A shadow bank must sell its holdings of corporate bonds because falling asset prices have led to a default on the terms of its loans with some creditors.
2. a. This is not an example of a vicious cycle of deleveraging. The university is voluntarily selling its commercial buildings in order to improve its campus.
b. This is an example of a vicious cycle of deleveraging. If a company sells a large holding of valuable art, this is likely to depress art prices elsewhere, leading to balance sheet effects on other firms that hold art and possibly forcing them to sell other assets in order to meet the terms of their creditors.
c. This is not an example of a vicious cycle of deleveraging. The company is voluntarily issuing more stock because it wants to lower the amount of debt that it owes.
d. This is an example of a vicious cycle of deleveraging. The shadow bank must sell its assets (corporate bonds) because losses due to falling asset prices have led to a default on the terms of its loans from some creditors.

3. In the following figure showing the Case–Shiller U.S. Home Price Index from 2000 to 2010, did housing prices peak before or after the financial crisis in the United States? Explain your answer.

[Graph of Case–Shiller U.S. Home Price Index from 2000 to 2010]


3. In the United States, housing prices peaked in 2006, two years before the height of the financial crisis in October 2008. As in Sweden, Japan, and Finland, the fall in housing prices caused many borrowers to default on their mortgages. This led to massive losses in the financial sector and precipitated the financial crisis of 2008.

4. Figure 17-2 tracks the unemployment rate in the years before and after the Panic of 1893 in the United States and the banking crisis of 1991 in Sweden.
a. In Figure 17-2, how many years after the Panic of 1893 did unemployment peak in the United States?
b. In Figure 17-2, how many years after the banking crisis of 1991 did unemployment peak in Sweden?

4. a. From the figure, it appears that unemployment peaked in 1894, one year after the panic. However, although unemployment dropped in 1895, it went up again in 1896 and peaked at levels very close to 1894 levels.
b. From the figure, unemployment reached one peak in 1994, three years after the banking crisis. However, although unemployment decreased in 1995, it again continued to increase five and six years after the crisis, in 1996 and 1997.
5. In 2007–2009, the Federal Reserve, acting as a lender of last resort, stepped in to provide funds when private markets were unable to do so. The Fed also took over many banks. In 2007, it seized 3 banks; in 2008, it seized 25 banks; and in 2009, it seized 140 banks. Go to www.fdic.gov; under “Bank Closing Information,” click on “Complete Failed Bank List.” Then count the number of banks that the Federal Reserve has seized so far this year. Have bank failures decreased since the crisis in 2008?

5. Answers will vary. The rate of bank failures continued to rise in 2010, with 157 failures. However, only 92 banks failed in 2011.

6. During the financial crisis in October 2008, the federal government could borrow at a rate of 2.73% (the yield on five-year Treasury securities). During October 2008, though, Baa borrowers (corporate borrowers rated by Moody's as not being completely reliable) had to pay 8.88%.

a. What was the difference in borrowing costs for these corporate borrowers and the federal government?

b. Go to research.stlouisfed.org/fred2/categories/22. Click on the link for “Treasury constant maturity” and find the most recent interest rate on 10-year U.S. Treasury bonds. Then click on the link for “Corporate bonds” and find the rate for Baa corporate bonds. What is the current difference in borrowing costs between corporate borrowers and the U.S. government?

c. Has this difference in borrowing costs increased or decreased since the height of the financial crisis in October of 2008? Why?

6. a. The difference in borrowing costs between Baa borrowers and the federal government was 8.88% − 3.81% = 5.17 percentage points.

b. At the time of this writing (February 2012), the yield on ten-year Treasury securities was 1.97% and the yield on Baa securities was 5.14%. So the difference in borrowing costs between Baa borrowers and the federal government was 5.14% − 1.97% = 3.17 percentage points.

c. The difference in borrowing costs as of February 2012 had decreased because the credit crunch that resulted in sharply higher interest rates for medium-grade borrowers during the height of the financial crisis had eased.

7. Go to www.federalreserve.gov and click on the tab “Banking Information & Regulation.” Then select the links “Banking Data” followed by “Large Commercial Banks.” Once there, choose the latest release of quarterly data.

a. Which bank has the largest consolidated assets?

b. Which bank has the largest domestic assets?

c. What percent of U.S. GDP are the domestic assets of the bank listed in part b? (Hint: You can find U.S. GDP at http://research.stlouisfed.org/fred2/series/GDP?cid=106 using the links “Gross Domestic Product (GDP)” and then “Current-dollar and ‘real’ GDP.”)

7. a. On December 31, 2011, JP Morgan Chase was the bank with the largest consolidated assets.

b. On June 30, 2010, Bank of America was the bank with the largest domestic assets.

c. For the fourth quarter of 2011, annual GDP in current dollars was estimated to be 15,321 billion U.S. dollars. On December 31, 2011, the domestic assets of Bank of America were 1,345 billion U.S. dollars. So the domestic assets were (1,345/15,321) × 100 = 8.8% of U.S. GDP.
   a. President Roosevelt was sworn in on March 4, 1933. What was one of his first official acts in response to the banking crisis?
   b. How many banks suspended operations during 1933?
   c. Who was the chief proponent of federal deposit insurance in Congress?
   d. How much coverage did the temporary fund for federal deposit insurance provide?

Solution

8. a. President Roosevelt declared a national bank holiday that was to begin on March 6 and last for four days. This holiday was subsequently extended in order to give officials time to reopen the banks.
   b. About 4,000 banks suspended operations during 1933, never reopening after the bank holiday.
   c. Henry B. Steagall was one of the chief proponents of deposit insurance in Congress.
   d. The temporary fund provided federal deposit insurance coverage up to $2,500 for each depositor.

9. The U.S. Government Accountability Office (GAO) does research to support congressional decision making. After the Long Term Capital Management (LTCM) crisis, the GAO produced a summary of the events of the crisis located at http://www.gao.gov/products/GGD-00-3. Read the summary and then answer the following questions.
   a. How much of its capital did LTCM lose in 1998?
   b. Why did the GAO conclude that LTCM was able to establish leveraged trading positions of a size that posed systemic risk to the banking system?
   c. What was the recommendation of the President’s Working Group regarding the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC)?

Solution

9. a. LTCM lost more than 90% of its capital in 1998.
   b. The GAO concluded that LTCM was able to establish extraordinarily large trading positions because large banks and securities and futures firms failed to follow sound risk management practices in providing LTCM credit.
   c. The President’s Working Group recommended that Congress provide the SEC and the CFTC with expanded authority to obtain and verify information from unregistered affiliates of firms that they regulate, many of which were hedge funds.