Module 8 – The Global Financial Crisis

Self-assessment questions 8.1

Revision questions from Valentine et al., chapter 12

1. How can you detect the presence of a bubble in an asset market?

   Answer:

   Consider the case of the share market. Signs of a bubble include:

   - increases in share prices not justified by fundamentals (company earnings and interest rates)
   - a sharp fall in the dividend yield
   - high price-earnings ratios
   - high leverage
   - irrational investment behaviour.

5. If you had been a low income earner in the USA in 2005, how would you have decided whether or not to borrow money to buy a house?

   Answer:

   Buying a house was an attractive option because:

   - interest rates were low and even lower ones could be obtained initially, i.e. repayments would be very low
   - a mortgage could be obtained easily
   - if it didn't work out, the borrower could simply walk away without any impact on his/her credit rating.

   In effect, the borrower has obtained a house at a cheap rent. It would be a rational decision to take the mortgage.

6. Describe the forms of leverage which played a role in the GFC.

   Answer:

   Leverage appeared at many points in the process:

   - individual borrowers were highly leveraged sometimes borrowing more than 100 per cent of the value of a house
   - investment banks (such as Lehmann Brothers) were highly leveraged
   - hedge funds are highly leveraged vehicles

- many investment funds borrowed to buy CDOs.

7. Provide arguments for and against the proposition that securitisation is a useful financial innovation.

Answer:

Securitisation:

- makes mortgages a liquid asset and allows banks to use them in their asset/liability management
- allows lenders to construct a better diversified loan portfolio
- allows such lenders as independent mortgage providers to exist without having to offer other products or have a branch network. This adds to competition in the mortgage market
- allows pension funds and other institutional investors to access another asset class – the housing market.

The process went wrong during the GFC because toxic debt was securitised. Problems also arose from the failure of credit default swaps and the poor performance of credit rating agencies. However, this is no reason to abandon the innovation.

8. What is a credit default swap? What role did CDSs play in the GFC?

Answer:

Credit default swaps are described on pages 287–8 of the text. At the time of the GFC, they were over-the-counter instruments, i.e. a contract between two parties, not traded on an exchange. This characteristic introduces counter-party risk, i.e. the possibility that the CDS provider will default if there is loss to be covered. This happened during the GFC so that loans assumed to be insured turned out to be uninsured, imposing losses on investors.

9. What are the arguments for a government guarantee of bank deposits?

Answer:

Bank deposits play an important role in the economy because they are the basis of the payments system. Also, banks are subject to "runs". Depositors know that banks hold a narrow margin of liquidity and if a bank's solvency comes into doubt, they hasten to withdraw their money. This could cause banks to fail. Governments prevent this loss by guaranteeing deposits.

10. What is a 'credit crunch' and what are the signs of its emergence?

Answer:

A credit crunch involves an increase in the interest rates paid by personal and business borrowers. It can also involve the enforcement of stricter credit standards which reduces

the availability of finance. These changes lead potential borrowers to cut their expenditure which will cause the economy to slow down.

Signs of a credit crunch include:

- higher interbank interest rates as banks become reluctant to lend to each other
- banks suffering capital pressures
- increases in credit spreads for lower rated debt.

In Australia, the credit crunch included a large increase in bank deposits in Exchange Settlement Accounts (ESAs) at the end of 2008 – up to $20 billion as against a typical value of $1 billion.

11. Discuss the role of 'informational asymmetry' in the GFC. Do credit rating agencies overcome this problem?

Answer:

Informational asymmetry refers to the fact that investors in securities generally have less information about them than the issuers. For example, buyers of CDOs would have less information about the underlying mortgages than the issuers. Credit ratings were supposed to overcome this problem—a high rating told investors that the assets were of a high quality. Unfortunately, the credit ratings turned out to be very inaccurate.

Answers to end-of-chapter questions Mishkin & Eakins, chapter 8

1. When an asset-price bubble bursts and asset prices realign with fundamental economic values, the resulting decline in net worth means that businesses have less skin in the game and so have incentives to take on risk at the lender's expense. In addition, lower net worth means there is less collateral and so adverse selection increases. The bursting of an asset-price bubble therefore makes borrowers less credit-worthy and causes a contraction in lending and spending. The asset price bust can also lead to a deterioration in financial institutions' balance sheets, which causes them to deleverage, further contributing to the decline in lending and economic activity.

4. A decline in real estate prices lowers the net worth of households or firms that are holding real estate assets. The resulting decline in net worth means that businesses or businesses have less at risk and so have incentives to take on risk at the lender's expense. In addition, lower net worth means there is less collateral and so adverse selection increases. The decline in real estate prices can thus make borrowers less credit-worthy and cause a contraction in lending and spending. The real estate decline can also lead to a deterioration in financial institutions' balance sheets, which causes them to deleverage, further contributing to the decline in lending and economic activity.

5. If financial institutions suffer a deterioration in their balance sheets and they have a substantial contraction in their capital. They will have fewer resources to lend, and lending will decline. The contraction in lending then leads to a decline in investment spending, which slows economic activity. When there are simultaneous failures of financial institutions, there is a loss of information production in financial markets and a direct loss of banks' financial intermediation. In addition, a decrease in bank lending during a banking crisis decreases the supply of funds available to borrowers, which leads

to higher interest rates, which increases asymmetric information problems and lead to a further contraction in lending and economic activity.

6. A failure of a major financial institution which leads to a dramatic increase in uncertainty in financial markets, makes it hard for lenders to screen good from bad credit risks. The resulting inability of lenders to solve the adverse selection problem makes them less willing to lend, which leads to a decline in lending, investment, and aggregate economic activity.

9. With restrictions lifted or new financial products, financial institutions often go on a lending spree and expand their lending at a rapid pace. Unfortunately, the managers of these financial institutions may not have the expertise to manage risk appropriately in these new lines of business, leading to overly risky lending. In addition, regulation and government supervision may not keep up with the new activities, further leading to excessive risk taking. When loans eventually go sour, this causes a deterioration in financial institution balance sheets, a decrease in lending and therefore a decrease in economic activity.

10. Weak regulation and supervision mean that financial institutions will take on excessive risk because market discipline is weakened by the existence of a government safety net. When the risky loans eventually go sour, this causes a deterioration in financial institution balance sheets, which then means that these institutions cut back lending and economic activity declines.