FI 363

Week 3 Homework

Overview

You are to work alone to analyze and prepare answers/solutions for the following questions and/or case studies. The text should be your primary source of information throughout this course.

Consolidate your response into one file and submit it to your instructor not later than Sunday Midnight central time. Name your file with your name and the week number, i.e. Jones1 or Brown1. Your file should be in either Microsoft word (*.doc or *.docx) or rich text (*.rtf) format.

Submit your assignment by uploading it into the Dropbox, by clicking on the Dropbox tab at the top of the course frame and choosing the current week assignment. Do not paste it into the Dropbox.

Week 3 Assignment

You are to prepare answers to the following questions based on the information in the text. Throughout this course, the primary source of information to answer homework questions should be the text book. Each question has the same point value.

Chapter 7: Questions 2 and 10
    Web Exercise 1

Chapter 8: Questions 9 and 10
    Web Exercise 2

moral hazard refers to the risk of the borrower's engaging in activities that are undesirable from the lender's point of view

4. Adverse selection interferes with the efficient functioning of financial markets. Tools to help reduce the adverse selection problem include private production and sale of information, government regulation to increase information, financial intermediation, and collateral and net worth. The free-rider problem occurs when people who do not pay for information take advantage of information that other people have paid for. This problem explains why financial intermediaries, particularly banks, play a more important role in financing the activities of businesses than securities markets do.

5. Moral hazard in equity contracts is known as the principal–agent problem, because managers (the agents) have less incentive to maximize profits than stockholders (the principals). The principal–agent problem explains why debt contracts are so much more prevalent in financial markets than equity contracts. Tools to help reduce the principal–agent problem include monitoring, government regulation to increase information, and financial intermediation.

6. Tools to reduce the moral hazard problem in debt contracts include collateral and net worth, monitoring and enforcement of restrictive covenants, and financial intermediaries.

7. Conflicts of interest arise when financial service providers or their employees are serving multiple interests and have incentives to misuse or conceal information needed for the effective functioning of financial markets. We care about conflicts of interest because they can substantially reduce the amount of reliable information in financial markets, thereby preventing them from channeling funds to parties with the most productive investment opportunities. Three types of financial service activities have had the greatest potential for conflicts of interest: underwriting and research in investment banking, auditing and consulting in accounting firms, and credit assessment and consulting in credit rating agencies. Two major policy measures have been implemented to deal with conflicts of interest: the Sarbanes-Oxley Act of 2002 and the Global Legal Settlement of 2002, which arose from a lawsuit by the New York attorney general against the 10 largest investment banks.

KEY TERMS

agency theory, *p. 140*
audits, *p. 142*
collateral, *p. 144*
conflicts of interest, *p. 155*
costly state verification, *p. 147*
creditors, *p. 152*
economies of scope, *p. 155*
equity capital, *p. 145*
free-rider problem, *p. 141*
incentive compatible, *p. 149*
initial public offerings (IPOs), *p. 156*
net worth (equity capital), *p. 145*
pecking order hypothesis, *p. 144*
principal–agent problem, *p. 145*
restrictive covenants, *p. 137*
secured debt, *p. 137*
spinning, *p. 156*
state-owned banks, *p. 153*
unsecured debt, *p. 137*
venture capital firm, *p. 147*

QUESTIONS

1. How can economies of scale help explain the existence of financial intermediaries?

2. Describe two ways in which financial intermediaries help lower transaction costs in the economy.

3. Would moral hazard and adverse selection still arise in financial markets if information were not asymmetric? Explain.

4. How do standard accounting principles help financial markets work more efficiently?

5. Do you think the lemons problem would be more severe for stocks traded on the New York Stock Exchange or those traded over the counter? Explain.

6. Which firms are most likely to use bank financing rather than to issue bonds or stocks to finance their activities? Why?

7. How can the existence of asymmetric information provide a rationale for government regulation of financial markets?

8. Would you be more willing to lend to a friend if she put all of her life savings into her business than you would if she had not done so? Why?

9. Rich people often worry that others will seek to marry them only for their money. Is this a problem of adverse selection?

10. "The more collateral there is backing a loan, the less the lender has to worry about adverse selection." Is this statement true, false, or uncertain? Explain your answer.

11. How does the free-rider problem aggravate adverse selection and moral hazard problems in financial markets?

12. Explain how the separation of ownership and control in American corporations might lead to poor management.

13. Why can the provision of several types of financial services by one firm lead to a lower cost of information production?

14. How does the provision of several types of financial services by one firm lead to conflicts of interest?

15. How can conflicts of interest make financial service firms less efficient?

16. Describe two conflicts of interest that occur when underwriting and research are provided by a single investment firm.

17. How does spinning lead to a less efficient financial system?

18. Describe two conflicts of interest that occur in accounting firms.

19. Which provisions of Sarbanes-Oxley do you think are beneficial, and which are not?

20. Which provisions of the Global Legal Settlement do you think are beneficial, and which are not?

QUANTITATIVE PROBLEMS

1. You are in the market for a used car. At a used car lot, you know that the blue book value for the cars you are looking at is between $20,000 and $24,000. If you believe the dealer knows *as much* about the car as you, how much are you willing to pay? Why? Assume that you only care about the expected value of the car you buy and that the car values are symmetrically distributed.

2. Now, you believe the dealer knows *more* about the cars than you. How much are you willing to pay? Why? How can this be resolved in a competitive market?

3. You wish to hire Ricky to manage your Dallas operations. The profits from the operations depend partially on how hard Ricky works, as follows.

	Probabilities	
	Profit = $10,000	**Profit = $50,000**
Lazy	60%	40%
Hard worker	20%	80%

If Ricky is lazy, he will surf the Internet all day, and he views this as a zero cost opportunity. However, Ricky would view working hard as a "personal cost" valuec at $1,000. What fixed percentage of the profits shoulc you offer Ricky? Assume Ricky only cares about hi: expected payment less any "personal cost."

4. You own a house worth $400,000 that is located o a river. If the river floods moderately, the house wi be completely destroyed. This happens about onc every 50 years. If you build a seawall, the river woul have to flood heavily to destroy your house, whic only happens about once every 200 years. Wha would be the annual premium for an insurance po icy that offers full insurance? For a policy that onl pays 75% of the home value, what are your expecte costs with and without a seawall? Do the differe policies provide an incentive to be safer (i.e., to bui the seawall)?

WEB EXERCISES

Why Do Financial Institutions Exist?

1. In this chapter we discuss the lemons problem and its effect on the efficient functioning of a market. This theory was initially developed by George Akerlof. Go to **http://www.nobelprize.org/nobel_prizes/economics/articles/akerlof/index.html**. This site reports that Akerlof, Spence, and Stiglitz were awarded the Nobel prize in economics in 2001 for their work. Read this report down through the section on George Akerlof. Summarize his research ideas in one page.

2. This chapter discusses how an understanding of adve selection and moral hazard can help us better und stand financial crises. The greatest financial cri faced by the United States was the Great Depressi from 1929 to 1933. Go to **www.amatecon.co greatdepression.html**. This site contains a brief c cussion of the factors that led to the Gr Depression. Write a one-page summary explain how adverse selection and moral hazard contribu to the Great Depression.

KEY TERMS

agency problems, *p. 171*
agency theory, *p. 164*
asset-price bubble, *p. 166*
bank panic, *p. 167*
credit boom, *p. 164*
credit default swaps, *p. 172*
credit spreads, *p. 170*
collateralized debt obligations (CDOs), *p. 171*
debt deflation, *p. 168*
default, *p. 171*
deleveraging, *p. 166*
emerging market economies, *p. 178*
financial crisis, *p. 164*
financial engineering, *p. 171*
financial globalization, *p. 178*
financial liberalization, *p. 164*
haircuts, *p. 174*
mortgage-backed securities, *p. 171*
originate-to-distribute model, *p. 171*
principal–agent problem, *p. 171*
repurchase agreements (repos), *p. 174*
securitization, *p. 171*
shadow banking system, *p. 174*
speculative attack, *p. 182*
structured credit products, *p. 171*
subprime mortgages, *p. 171*

QUESTIONS

1. How can a bursting of an asset-price bubble in the stock market help trigger a financial crisis?

2. How does an unanticipated decline in the price level cause a drop in lending?

3. When can a decline in the value of a country's currency exacerbate adverse selection and moral hazard problems? Why?

4. How can a decline in real estate prices cause deleveraging and a decline in lending?

5. How does a deterioration in balance sheets of financial institutions and the simultaneous failures of these institutions cause a decline in economic activity?

6. How does a general increase in uncertainty as a result of a failure of a major financial institution lead to an increase in adverse selection and moral hazard problems?

7. What are the two ways that spikes in interest rates lead to an increase in adverse selection and moral hazard problems?

8. How can government fiscal imbalances lead to a financial crisis?

9. How can financial liberalizations lead to financial crises?

10. What role does weak financial regulation and supervision play in causing financial crises?

11. Why do debt deflations occur in advanced countries, but not in emerging market countries?

12. What technological innovations led to the development of the subprime mortgage market?

13. Why is the originate-to-distribute business model subject to the principal–agent problem?

14. True, false, or uncertain: Financial engineering always leads to a more efficient financial system.

15. How did a decline in housing prices help trigger the subprime financial crisis starting in 2007?

16. How can opening up to capital flows from abroad lead to a financial crisis?

17. Why are more resources not devoted to adequate prudential supervision of the financial system to limit excessive risk taking, when it is clear that this supervision is needed to prevent financial crises?

18. Why does the "twin crises" phenomenon of currency and banking crises occur in emerging market countries?

19. How can a currency crisis lead to higher interest rates?

20. How can a deterioration in bank balance sheets lead to a currency crisis?

WEB EXERCISES

1. This chapter discusses how an understanding of adverse selection and moral hazard can help us better understand financial crises. The greatest financial crisis faced by the United States was the Great Depression of 1929–1933. Go to **www.amatecon.com/greatdepression.html**. This site contains a brief discussion of the factors that led to the Great Depression. Write a one-page summary explaining how adverse selection and moral hazard contributed to the Great Depression.

2. Go to the International Monetary Fund's Financ Crisis page at **www.imf.org/external/np/exr/ke finstab.htm**. Report on the most recent three cou tries that the IMF has given emergency loans to response to a financial crisis. According to the IM what caused the crisis in each country?

WEB REFERENCES

www.amatecon.com/gd/gdtimeline.html

A time line of the Great Depression.

www.imf.org

The International Monetary Fund is an organization of 185 countries that works on global policy coordination (both monetary and trade), stable and sustainable economic prosperity, and the reduction of poverty.

www.publicpolicy.umd.edu/news/Reinhart%20paper

Paper by Carmen Reinhart and Kenneth Rogoff com ing the 2007 subprime crisis to other international cri