

**Prep Questions for Exam #2**  
 ECON 4673  
 Dr. Keen

1. What are the six basic facts about the financial system?
2. Briefly explain the difference between adverse selection and moral hazard. How does the government help reduce the adverse selection and moral hazard problems for publicly-traded companies? How do financial intermediaries reduce the adverse selection problem without generating a free-rider problem?
3. What are collateral and restrictive covenants, and how do they reduce the moral hazard problem in debt contracts?
4. Name and briefly describe the five types of assets and the three types of liabilities of a bank.
5. Consider a bank with the following balance sheet (in millions of \$). You may assume the required reserves ratio is 10% and the bank's net profits after taxes are \$5 million.

Assets		Liabilities/Equity	
Required reserves	16	Checkable deposits	160
Excess reserves	14	Nontransaction deposits	200
Business loans	240	Borrowings (other banks)	15
Residential mortgages	75	Borrowings (the Fed)	5
U.S. Treasury Securities	55	Bank equity	20

- a. Calculate the equity multiplier for this bank.
  - b. Calculate the return on equity for this bank.
  - c. Calculate the return on assets for this bank.
  - d. Calculate the leverage ratio for this bank.
  - e. Calculate the Basal Accord's risk-weight measure of assets for this bank.
  - f. Use a T-account to show how the balance sheet changes when \$1 million is deposited into checkable deposits. How does your result change if the \$1 million is deposited into nontransaction deposits instead of checkable deposits?
  - g. Use a T-account to show how the balance sheet changes when the bank makes a \$3 million business loan.
  - h. Use a T-account to show how the balance sheet changes when the bank writes off \$5 million in residential mortgages.
  - i. Suppose required reserves, excess reserves, and U.S. Treasury Securities are short-term assets, while checkable deposits and borrowings from the Fed and other banks are short-term liabilities. If the interest rate rises by 2%, how much do bank profits change?
  - j. If the average duration of a bank's assets is 4 years and the average duration of the bank's liabilities is 2 years, how much does the bank's market value change when the interest rate rises by 2%.
6. Name and briefly explain the four primary concerns of a bank manager.

7. What are the four ways a bank can immediately raise reserves.
8. Name and briefly describe the two key financial innovations in the 1960s that led banks to place more emphasis on liability management.
9. Name and briefly describe the three strategies a bank can use to raise bank equity relative to bank assets.
10. What is a loan commitment, and how is it beneficial to the firms receiving it and the banks providing it?
11. Discuss compensating balances and how they are a form of collateral.
12. What are off-balance sheet activities by banks? Do those activities expose the bank to additional risk? Briefly discuss.
13. Name and briefly describe the two ways the Federal Deposit Insurance Corporation (FDIC) can respond to an insolvent bank. How does FDIC insurance impact the adverse selection and moral hazard problems of a financial institution? If the insolvent bank is “too big to fail,” which of the two methods does the FDIC use?
14. What is meant when a financial firm is “too big to fail?” Briefly discuss how the designation of being a “too big to fail” firm affects the incentive structure of the firm’s management. What are the three approaches to solving the “too big to fail” problem? Briefly discuss.
15. How does a financial institution’s appetite for risk change as its level of equity falls? How should the FDIC respond to that change?
16. What are the three entities that regulate banks?
17. What are disclosure requirements in the financial industry? What entity imposes the disclosure requirements and on what type of companies are they imposed on? How do those disclosure requirements improve the health of the financial system?
18. What are the two forms of restrictions on banking competition discussed in class that were previously enshrined in U.S. law. How did the financial system benefit from those restrictions? What are two disadvantages (discussed in class) of those restrictions on the banking industry?
19. Briefly discuss the dual banking system in the U.S. What role did the National Banking Act of 1863 play in the development of the dual banking system in the U.S.?
20. What did the Glass-Steagall Act of 1933 do? What legislation repealed the Glass-Steagall Act, and in what year was the repeal enacted?

21. Name the three main reasons to financially innovate. Briefly describe what adjustable rate mortgages and financial derivatives are, and how each instrument reduces a financial institution's interest-rate risk. What two types of bank regulations have been driving financial innovation? How do money market mutual funds and sweep accounts help avoid those regulations?
22. What is securitization? Name and briefly describe the four steps of the securitization process.
23. Identify the legislation that effectively prohibited banks from branching out across state lines? Name and briefly describe two financial innovations banks used to circumvent those restrictions on branch banking. What are two reasons why banks wanted to spread out across state lines? What was the name of the act that effectively removed the restrictions on interstate banking?
24. What is a financial crisis? Briefly discuss the role of the credit boom and bust and the asset price boom and bust in a financial crisis. How can those stages of a financial crisis precipitate a banking crisis? Briefly discuss the three causes of the 2008 Financial Crisis. Discuss three ways the government responded to the 2008 Financial Crisis.
25. What are two possible causes of a credit boom?
26. Name the legislation that was enacted to modernize regulations of the financial industry after the 2008 Financial Crisis? What are the major features of that legislation?
27. How many Federal Reserve Banks are there? Briefly discuss the main functions of the Federal Reserve Banks.
28. What type of commercial banks must become members of the Federal Reserve, and what type of commercial banks can elect to be members of the Federal Reserve. Regardless of membership in the Federal Reserve, what two ways can or will all banks interact with the Federal Reserve.
29. How many governors are there on the Board of Governors of the Federal Reserve System? How many members are there on the Federal Open Market Committee (FOMC), and who are they (i.e., what positions do they hold)? What is the main task of the FOMC? What does the FOMC advise the Board of Governors on?
30. Briefly discuss two ways the Federal Reserve is independent from the President and Congress. Despite the Fed's high degree of independence, how can the President and Congress influence the Fed?
31. Compare and contrast the Federal Reserve and the European Central Bank? How are the National Central Banks different from the Federal Reserve Banks? Which central bank is more independent and why?

32. Suppose the Federal Reserve purchases \$35 million in bonds. If the currency-to-deposit ratio is 0.20, the excess reserves-to-deposit ratio is 0.05, and the required reserves ratio is 0.10, then how much does the money supply change?
33. State the assets and liabilities of the Fed. Use a T-account to show how the Fed's balance sheet changes when it purchases \$2.5 million in bonds. Use a T-account to show how the Fed's balance sheet changes when it provides a \$1 million loan of reserves to First National Bank? What is the name given to those reserves?
34. Name the five ways the money supply can increase? For each way, does the Fed, banks, or the public make the decision?
35. Use the information below to answer the following questions:

Currency	\$1,750
Excess reserves-to-checking deposit ratio	0.15
Money supply	\$8,750
Required reserves ratio	0.10

- a. Calculate checkable deposits.
- b. Compute excess reserves.
- c. Determine required reserves.
- d. Calculate total reserves.
- e. Compute the monetary base.
- f. Determine the money multiplier.