《银行管理学》作业习题

Chapter 1 Fundamental Forces of Change in Banking

1. Many experts argue that it was not deregulation that brought about fundamental change in the banking industry — rather increases in competition from all providers of financial services. Many argue that deregulation was a response to increased competitive pressures. Outline the fundamental competitive forces of change and how this has pushed regulators and legislators to deregulate the industry.
2. What impact is securitization likely to have on the quality of assets that banks keep in their portfolios?
3. Change is always good for some participants and bad for others. Which types of banks appear best situated to gain from increased competition in the financial services arena? Which banks seem most likely to lose?
4. Describe the basic services provided by investment banks. Why are large commercial banks eager to offer investment banking services domestically?
5. Explain how the growth in commercial paper and junk bonds has affected commercial lending and yield spreads at banks.
6. Globalization results in more efficient financial markets. Why do some bankers fear globalization? Will globalization have a different impact on community banks than on nationwide banking organizations?

Chapter 2 Analyzing Bank Performance

1. What are the major categories of bank assets and their approximate percentage contribution to total resources? What are the major categories of bank liabilities? What are the fundamental differences between them?
2. Banks typically differentiate between interest and noninterest income and expense. What are the primary components of each? Define net interest income and burden. What does a bank's efficiency ratio measure?
3. Arrange the following items into an income statement. Label each item, place it in the appropriate category, and determine the bank's bottom line net income.
    1) Interest paid on time deposit under $100,000
    2) Interest paid on jumbo CDs $101,000
    3) Interest received on U.S. Treasury and agency securities $44,500
    4) Fees received on mortgage originations $23,000
    5) Dividends paid to stockholders of $0.50 per share for 5,000 shares
    6) Provisions for loan losses $18,000
    7) Interest and fees on loans $189,700
    8) Interest paid on interest checking accounts $33,500
    9) Interest received on municipal bonds $60,000

10) Employee salaries and benefits $145,000
11) Purchase of a new computer system $50,000
12) Service charge receipts from customer accounts $41,000
13) Occupancy expense for bank building $22,000
14) Taxes of 34 percent of taxable income are paid
15) Trust department income equals $15,000

4. What are the primary sources of risk facing bank managers? Describe how each potentially affects bank performance. Provide one financial ratio to measure each type of risk and explain how to interpret high versus low values.
5. Define each of the following components of the Return on Equity model and discuss their interrelationships:
    a. ROE
    b. ROA
    c. EM
    d. ER
    e. AU
6. Explain why profitability ratios at small banks typically differ from those at the largest money center banks.
7. Regulators use the CAMELS system to analyze bank risk. What does CAMELS stand for and what financial ratios might best capture each factor?
8. Rank the following assets from lowest to highest liquidity risk:
    1) 3-month Treasury bills
    2) year construction loan
    3) 4-year car loan with monthly payments
    4) 5-year Treasury bond
    5) 5-year municipal bond
    6) year individual loan to speculate in stocks
    7) month Treasury bill pledged as collateral
9. In each pair below, indicate which asset exhibits the greatest credit risk. Describe why.
    a. Commercial loan to a Fortune 500 company or a loan to a corner grocery store
    b. Commercial loans to two businesses in the same industry; one is collateralized by accounts receivable from sales, while the other is collateralized by inventory as work-in-process
    c. 5-year Ba-rated municipal bond or a 5-year agency bond from the Federal HomeLoan Mortgage Corp. (Freddie Mac)
    d. 1-year student loan (college) or a 1-year car loan
10. What ratios on common-sized financial statements would indicate a small bank versus a large, multibank holding company? Cite at least five.

Chapter 3 Managing Noninterest Income and Non-interest Expense

1. When confronted with runaway noninterest expense, management's first impulse

is to cut costs. What are the advantages and disadvantages of this approach? What other approaches are possible?

2. What are the primary sources of noninterest income for both a small community bank and a large bank with many subsidiaries and global operations?
3. What are the components of noninterest expense?
4. Describe why the efficiency ratio is a meaningful measure of cost control. Describe why it may not accurately measure cost control.
5. Canadian Imperial Bank of Commerce (CIBC) reports that just 20 percent of its customers were profitable. Assuming that this applies to individuals' account relationships, make three recommendations to increase the profitability of these accounts.
6. Describe the strengths and weaknesses of expense reduction, revenue enhancement, and contribution growth strategies.

Chapter 4 Managing Interest Rate Risk: GAP and Earnings Sensitivity

1. List the basic steps in static GAP analysis. What is the objective of each?
2. Are the following assets rate sensitive within a six-month time frame? Explain.
   a. 3-month T-bill
   b. federal funds sold (daily repricing)
   c. 2-year Treasury bond with semiannual coupon payments
   d. 4-year fully amortized car loan with $450 monthly payments including both principal and interest
   e. commercial loan priced at the bank's prime rate plus 2 percent
3. What is the fundamental weakness of the GAP ratio compared with GAP as a measure of interest rate risk?
4. Consider the following asset and liability structures:

   County Bank
   Asset: $10 million in a 1-year, fixed-rate commercial loan
   Liability: $10 million in a 3-month CD
   City Bank
   Asset: $10 million in a 3-year, fixed-rate commercial loan
   Liability: $10 million in a 6-month CD

   a. Calculate each bank's 3-month, 6-month, and 1-year cumulative GAP.
   b. Which bank has the greatest interest rate risk exposure as suggested by each GAP measure? Consider the risk position over the different intervals.
5. Management at Bay Bank expects its net interest margin to equal 4.8 percent during the next year. It will allow variation in NIM of just 10 percent during the year and expects interest rates to either rise or fall by 2 percent. If management expects the bank to have $400 million in earning assets, determine how large its 1-year cumulative GAP can be to not exceed the allowable variation in NIM.
6. What information is available from earnings sensitivity analysis that is not provided by static GAP analysis?

Chapter 5 Managing Interest Rate Risk: Duration Gap and Market Value of Equity

1. List the basic steps in duration gap analysis. What is the importance of different interest rate forecasts?
2. Which has a longer Macaulay's duration: a zero coupon bond with a 2-year maturity, or a 2-year maturity coupon bond that pays 6 percent coupon interest if they both carry a 6 percent market yield? Explain your reasoning.
3. Use duration gap analysis to determine if there is interest rate risk in the following transaction. A bank obtains $25,000 in funds from a customer who makes a deposit with a 5-year maturity that pays 5 percent annual interest compounded daily. All interest and principal are paid at the end of five years. Simultaneously, the bank makes a $25,000 loan to an individual to buy a car. The loan is at a fixed rate of 12 percent annual interest but is fully amortized with 60 monthly payments, such that the borrower pays the same dollar amount (principal plus interest) each month.
4. Compare the strengths and weaknesses of GAP and earnings sensitivity analysis with DGAP and MVE sensitivity analysis.
5. Suppose that your bank currently operates with a duration gap of 2.2 years. Which of the following will serve to reduce the bank's interest rate risk?
   a. Issue a 1-year zero coupon CD to a customer and use the proceeds to buy a 3-year zero coupon Treasury bond.
   b. Sell $5 million in 1-year bullet (single payment) loans and buy 3-month Treasury bills.
   c. Obtain 2-year funding from the Federal Home Loan Bank and lend the proceeds overnight in the federal funds market.
6. ALCO members are considering the following MVE sensitivity estimates. The figures refer to the percentage change in market value of equity compared to the base rate forecast scenario. What does the information say about the bank's overall interest rate risk?

	Rate Change from Base Case					
	-3%	-2%	-1%	-1%	-2%	-3%
% change in MVE	-38%	−47%	−19%	−5%	−14%	−18%

Chapter 6 Managing Liabilities

1. Rank the following types of bank liabilities first according to their level of liquidity risk, and then according to their interest rate risk. Then rank them according to their current cost to the bank. Explain why they vary.
   1) DDAs
   2) NOW accounts
   3) MMDAs

   4) small time deposits
   5) jumbo CDs
   6) Federal funds purchased
   7) Eurodollar liabilities
   8) Federal Home Loan Bank advances
2. Indicate how a bank’s core deposits differ from its hot money or volatile liabilities in terms of interest elasticity. What factors are relatively more important to attracting and retaining core deposits as compared to purchased funds?
3. As a potential jumbo CD depositor, what would your circumstances have to be for you to prefer a variable-rate CD over a fixed-rate CD? What would the circumstances be for you to prefer a zero coupon CD over a variable-rate CD?
4. Many banks compete aggressively for retail time deposits. What marketing strategies will attract large volumes of deposits from individuals? Why are retail deposits attractive to banks?
5. When a bank fails, regulators have a choice of ways to resolve all claims. In one type of resolution uninsured depositors get full reimbursement of their deposits, but in another type they only receive their share of residual claims beyond the insured deposit amount.
   1) Explain how the two different systems work. Who are the uninsured depositors?
   2) Is the different treatment of uninsured deposits unfair? If so, who is treated unfairly?
   3) Explain how the concept of Too-Big-to-Fail is related to the issue of FDIC insurance premiums and bank failure policy. Are small banks discriminated against?

Chapter 7 The Effective Use of Capital

1. What are the advantages and disadvantages of using financial leverage? Answer from the banker’s view and then from a bank regulator’s view.
2. Provide the general outline of existing risk-based capital requirements. Is there a difference between default risk, interest rate risk, and liquidity risk?
3. Explain how capital reduces banking risks. Discuss the importance of cash flows and economic value rather than accounting value.
4. Many regulators would like to see bank capital requirements raised. Consider a proposal to increase the minimum Tier 1 and total capital ratios to 6 percent and 12 percent, respectively. What impact would this have on bank risk? Would small banks and large banks have equal opportunity in meeting these requirements? What impact would this have on banking industry consolidation?
5. Explain why increased regulatory capital requirements lead to a greater consolidation of banking firms via mergers and acquisitions.
6. What is the leverage capital ratio and why do regulators specify a minimum for it?
7. FDICIA imposes increasingly severe operating restrictions on undercapitalized banks (those in zones 3, 4, and 5). Explain why these restrictions are appropriate.

Describe how managers should respond to these restrictions if they manage an undercapitalized bank.

Chapter 8 Liquidity Planning and Managing Cash Assets

1. What are the different types of cash assets and the basic objectives for holding each?
2. The determination of cash requirements is closely associated with a bank's liquidity requirements. Explain why.
3. What are the advantages and disadvantages for a bank contemplating holding more cash?
4. What are the fundamental differences and similarities between the commercial loan theory, shiftability theory, anticipated income theory, and liability management theory regarding liquidity?
5. What do the terms core deposits and volatile, or noncore, deposits mean? Explain how a bank might estimate the magnitude of each.
6. Liquidity measures and potential sources of liquidity differ for large multinational banks and small community banks. List the key differences and explain why they appear.
7. Explain how a bank's credit risk and interest rate risk can affect its liquidity risk.
8. Rank the following types of depositors by the liquidity risk they typically pose for a bank.
   1) A CD depositor attracted through a stockbroker
   2) Foreign investors trading with a local corporation
   3) Local schoolchildren
   4) A two wage earner family with $38,000 in annual salaries and with three children

Chapter 9 Overview of Credit Policy and Loan Characteristics

1. Discuss the importance of a bank's credit culture in managing credit risk.
2. Describe the basic features of the three functions underlying the credit process at commercial banks.
3. What are the five Cs of credit? Discuss their importance in credit analysis. Describe the five Cs of bad credit introduced in the text.
4. Explain how a company's permanent working capital needs differ from its seasonal working capital needs.
5. What motivation encourages commercial banks to make adjustable-rate mortgages? Why are adjustable mortgage rates normally below fixed mortgage rates? As the level of rates declines, would you expect banks to increase or decrease the adjustable rate proportion of their mortgage portfolios?
6. Many banks compete aggressively for business in consumer credit cards. What is the particular attraction of this type of lending?
7. Describe how each of the following helps a bank control its credit risk.

a) Loan covenants
b) Risk rating systems
c) Position limits

Chapter 10 Evaluating Commercial Loan Requests

1. Rank the importance of the five basic credit issues described in the text.
2. Explain why collateral alone does not justify extending credit. Cite examples using real estate or agriculture products as collateral.
3. Standard ratio analysis distinguishes between four categories of ratios. Describe how ratios in each category indicate strength or weakness in the underlying firm's performance.
4. Explain how it is possible for a firm to report rising net income each year yet continue to need more working capital financing from a bank.
5. Should a firm's cash flow from operations generally exceed capital expenditures?
6. Develop a list of questions that a loan officer should ask Marcus Wade, from the example in the text, to gain a better understanding of the risks in lending to Wade's Office Furniture.

Chapter 11 Evaluating Consumer Loans

1. Explain how an installment loan differs from revolving credit in terms of risk and the nature of the return to the lender.
2. What are the major expenses associated with making consumer loans? What is the average size of consumer installment loans at small banks? How does loan size affect loan rates that banks charge on consumer loans?
3. What different sources of revenue are available from credit card lending? Outline the clearing process with a credit card transaction. What is the biggest risk in credit card loans?
4. The differential between fixed-rate credit card rates and a bank's cost of funds typically varies over the interest rate cycle. What is this relationship and why does it exist? Does the differential between commercial loan rates and a bank's cost of funds behave similarly?
5. Subprime loans have higher loss rates than many other types of loans. Explain why lenders offer subprime loans. Describe the characteristics of the typical borrower in a subprime consumer loan.

Chapter 12 Customer Profitability Analysis and Loan Pricing

1. Explain how ledger deposit balances differ from collected balances and investable balances. Which is more restrictive to a borrower in meeting compensating balance requirements?
2. Loan officers and borrowers negotiate the earnings credit rate applicable to the

borrower's deposit balances. What rate is appropriate theoretically? Analyze this from both the banker's and borrower's position.

3. List the three primary sources of revenue from a commercial customer's account. In today's economic environment, indicate whether each is growing or declining in use and explain why.
4. What is the difference between a bank's marginal cost of debt and its marginal cost of capital? Which should be used in estimating a bank's expenses and/or target profit when analyzing the profitability of a customer's account relationship?
5. Suppose that a borrower needs $80,000. A bank gives the borrower a choice of two pricing schemes. The first is a $100,000 loan with 20 percent compensating balance requirements (funded from the loan) priced at 10 percent. The second is an $80,000 loan with no balance requirements priced at 12.5 percent. Calculate the effective cost to the borrower of each alternative. Assuming the bank must hold 12 percent required reserves against customer deposits, calculate the effective return to the bank of each alternative. Which pricing scheme is preferred for the bank?
6. If consumer loans tend to have longer maturities than commercial loans, why are fewer consumer loans priced on a floating rate basis?

Chapter 13 The Investment Portfolio and Policy Guidelines

1. Describe how a bank makes a profit with its securities trading account. What are the risks?
2. What types of securities are banks prohibited from buying for investment purposes?
3. Explain how the composition of a small community bank's investment portfolio differs, in general, from the composition of a large bank's portfolio. Why might mutual funds be attractive to banks?
4. List the objectives that banks have for buying securities. Explain the motive for each.
5. How do banks judge the credit risk in the investment portfolio? What information is available that helps?
6. What group within a bank sets the investment policy? What issues does the policy address?
7. Large banks often borrow heavily in the federal funds market and maintain small investment portfolios relative to their asset size. Are these offsetting risk positions? Why do large banks organize themselves this way?