

Managing Financial Institutions: Markets and Sustainable Finance

Test Bank

Elizabeth S. Cooperman

University of Colorado Denver

Part 1: Test Bank, Chapters 1 to 8

Module 1: The Financial Services Industry: Today and the Future

Chapter 1: Financial Institutions as Social Value Creators and Financial Risk Takers

Short Answer Questions and Problems (with Answers Below):

- 1) Should managers of financial institutions be concerned about other stakeholders (i.e. regulators, depositors, uninsured debt-holders, community, employees, customers)? Explain how problems for corporate cultures for financial institutions contributed to serious problems for financial institutions and their customers and other stakeholders giving a recent example.**

Answer: Financial institutions have obligations to consider repercussions of their strategies and actions for all stakeholders that determine their reputation and success including stockholders, regulators, depositors, uninsured debt-holders, community, and customers. This is particularly the case for depository institutions that are chartered to serve their communities and to abide by federal and state regulations. The U.S. Subprime Loan Crisis is an example of the serious repercussions when financial institution managers fail to have good corporate governance, and corporate cultures that value all stakeholders that add to the success and reputation of a financial institution.

By having cultures that encouraged short-term profits and provided bonuses for making quantities of loans versus the quality of loans and ability for borrowers to repay loans, for instance contributed to huge numbers of bankruptcies when housing prices collapsed. Wells Fargo's scandal in September 2016 is another example where managers did not consider customers as stakeholders and a corporate culture was created pushing employees for sales goals versus serving customers' best interests. Wells Fargo managers imposed a high-pressure tactics on employees to push products on customers to hit sales goals. This led to fraudulent behavior by employees, where 2 million customer accounts were opened without customers' knowledge. When this scandal was uncovered, Wells Fargo's stock price plunged, and Wells Fargo had serious reputational damage losing major clients and customers. Wells Fargo was given a \$185 million fine, and 5,300 employees were fired, and a new CEO put in place. Under the Sarbanes-Oxley Act, Wells Fargo also violated the requirement that executives personally required to certify that a bank has financial and operational controls in place.

(See: Matt Egan, "Wells Fargo stock sinks to 2-1/2 year low." CNN Money, September 26, 2016, accessed on November 14, 2016 at:

<http://money.cnn.com/2016/09/26/investing/wells-fargo-stock-fake-account-scandal/>

and Patrick W. Watson, "Wells Fargo scandal shows next bank crisis coming."

Forbes, September 15, 2016, accessed on November 14, 2016 at:

[http://www.forbes.com/sites/patrickwwatson/2016/09/15/wells-fargo-scandal-shows-next-bank-crisis-coming/#79b153f269ec.](http://www.forbes.com/sites/patrickwwatson/2016/09/15/wells-fargo-scandal-shows-next-bank-crisis-coming/#79b153f269ec))

- 2) In setting strategies for risk/return for a financial institution, what would be the likely respective opinions of different stakeholders (stockholders, uninsured debt-holders, regulators, managers, and insured depositors) for taking on more or less risk? Explain why some stakeholders prefer more risk than others.**

Answer: Stockholders with limited liability with a maximum loss their investment may prefer greater risk-taking with in effect a put option where future returns on a small investment are unlimited, but the investment loss is limited to the amount a shareholder invests. Uninsured debt-holders, in contrast, would prefer that managers take less risk to ensure that they will be paid back. Similarly, regulators would prefer that managers take less risk to protect the financial system from financial institution failures, and to ensure against losses for deposit insurance funds. Managers may or may not prefer more or less risk taking depending on bonuses, salary incentives, and the culture of the organization, desiring to protect their own human capital, in terms of their jobs. During the Subprime Loan Crisis, with bonus and fee incentives to make a large volume of loans versus the quality of loans, lenders were encouraged to engage in greater risk taking. Depositors would prefer lower risk taking to protect the bank against failure, but have less incentive to monitor the bank than other debt holders for insured deposits.

- 3) Given the quote at the beginning of Chapter 1: “*At its most basic definition, finance is the act of allocating capital to individuals and businesses that want to make productive use of it. In short finance creates social value,*” discuss how financial institutions provide benefits to individual, businesses, and an economy, giving examples for different types of financial institutions.**

Answer: Financial institutions, when they are working well, create social value by providing funds to businesses and individuals that these borrowers in turn can use for productive purposes. Examples include banks providing financing and guidance for small as well as medium sized, and large businesses. This in turn provides a stimulus for economic growth. Banks also provide social value by ensuring a stable and safe payments mechanism and by encouraging savings. Mutual funds provide diversified investments and the means for consumers to save for future goals, such as retirement, dream vacations, college tuition for their children, and other financial needs. Life/Health insurance companies provide protection in the event of adverse events and health coverage payments, and P/L companies provide protection against property damage and liability protection in the event of adverse events. Venture capital firms provide funds for start-ups including new innovations, such as new disruptive technologies to help solve environmental challenges, among other examples.

- 4) Give an example of direct finance and an example of indirect finance and the benefits provided by financial intermediaries giving examples for depository institutions, mutual funds, and contractual financial institutions.**

Answer: With direct financing borrowers and lenders get directly together without the assistance of a financial intermediary. With indirect financing financial intermediaries provide indirect financing contracts and other services including liquidity, maturity, denomination, search, monitoring, and information financial intermediation benefits. Examples include for depository institutions taking in deposits offering check writing services and providing liquidity to depositors and using maturity intermediation making longer-term loans to borrowers and providing monitoring services. Mutual funds provide diversification services and information and professional investment, and liquidity services allowing small investors to invest in diversified portfolios. Contractual financial institutions, such as insurance firms and pension funds, provide maturity intermediation and investing benefits whereby customers pay premiums that are invested for protection against the advent of adverse events in the future, where the insurance companies invest premiums to have funds available in the future, and pension funds take employee and employer contributions and invest these for employees for retirement benefits in the future.

5) Discuss how technology has affected financial institutions, giving examples of both increased opportunities and risks for FIs with new technologies. Give some examples.

Answer: Financial institutions have both increased opportunities and risks with new technologies. Increased opportunities include new technology for financial institutions to use and make payments easier for customers, such as new payment apps and mobile banking and new developments for the use of block chain technology for making secure payments, and having FinTech subsidiaries that make investment and other financial services more accessible and easier for customers. Technological advances have also reduced the use of checks, lowering bank costs. Risks are greater use of direct financing such as technology allowing large, creditworthy corporations to issue commercial paper, bonds, and engage in direct finance globally. From the standpoint of risks, financial institutions have competitive risks from FinTech firms and high tech firms including non-bank technology firms are able to enter the payments arena. Examples of technological firms entering the payment arena include Apple, Google, Amazon, Facebook, and Samsung, and the development of digital payment apps, among many others. Technology has also increased the risks of technological failures, hacking, and fraud and embezzlement.

6) Discuss how bank asset and liabilities differ from those of a firm with physical assets, such as a manufacturing firm. What are typical assets and liabilities for a bank? What special risks does a bank have because of the nature of its assets and liabilities?

Answer: Banks have primarily financial assets, mainly loans and also securities, versus real assets that depend on the performance of borrowers for loans and security interest and principles payments. Thus, banks have credit risk and interest rate risk.. Bank liabilities are primarily deposits that can be withdrawn at any time, so banks also have liquidity risk. With differences in the maturities of assets and liabilities, banks also have

considerable interest rate risk, since a primary source of income is net interest income, the difference between interest revenues less interest expenses. Banks also have higher financial leverage than non-bank firms, with high equity multipliers, and hence greater capital risk.

- 7) **The Silver Mountain Bank has interest revenue of 10%, interest expense of 6%, a provision for loan loss to assets of 1%, noninterest expense of 4%, and noninterest revenue of 2%, and equity to total assets of 10%. What is the bank's NIM%, Burden%, OROA, and what is its OROE? If the bank's equity to total assets ratio went up to 11%, what would be the new OROE?**

Answers and Calculations:

$$\text{NIM} = \text{Int. Rev}\% - \text{Int. Exp.}\% = 10\% - 6\% = 4\%$$

$$\text{Burden}\% = \text{Noninterest Exp}\% - \text{Noninterest Rev}\% = 4\% - 2\% = 2\%$$

$$\text{PLL}\% = 1\%$$

$$\text{OROA} = \text{NIM} - \text{Burden}\% - \text{PLL}\% = 4\% - 2\% - 1\% = 1\%$$

$$\text{EM} = 1 / (\text{equity/assets}) = 1/.10 = 10 \times$$

$$\text{OROE} = \text{OROA} \times \text{EM} = 1\% \times 10 = 10\%$$

- 8) **The Go Broncos Bank has the following questions it would like to ask you about its bank. The bank's balance sheet is as follows:**

Assets:			Maturity
Securities	2% rate	\$150 million	1 year
Long-term Loans	6% rate	<u>\$850 million</u>	5 years
Total Assets		\$1000 million	
Liabilities & Equity:			
Short-term Deposits	1% rate	\$600 million	1 year
Certificates of Deposit	3% rate	<u>\$300 million</u>	2 year
Total Liabilities		\$900 million	
Equity		<u>\$100 million</u>	
Total Liab. & Equity		\$1000 million	

Questions Below and Answers:

- a. **What is the bank's expected net interest income \$(NII) and expected net interest margin (NIM)? [Hint: $\text{NII} = \text{Sum (Each asset} \times \text{its rate)} - \text{Sum (Each liability} \times \text{its rate)}$ and $\text{NIM} = \text{NII} / \text{Earning Total Assets (excludes cash)}$]**

$$\text{NII} (\$'s) \underline{\$39 \text{ mil.}} \quad \text{NIM \%} \underline{3.9\%}$$

$$\text{IR} = (150 \times .02) + (850 \times .06) = \$54 \text{ mil.}$$

$$\text{IE} = (600 \times .01) + (300 \times .03) = \$15 \text{ mil.}$$

$$\text{Net Interest Income} = \$39 \text{ mil.}$$

$$\text{NIM} = \$39 \text{ mil.} / \$1000 \text{ mil.} = .039 \text{ or } 3.9\%$$