Chapter 17

5. You should want to make short-term loans. Then, when these loans mature, you will be able to make loans at higher interest rates, which will generate more income for the bank.

11. The net interest margin measures the difference between interest income and expenses. It is important because it indicates whether asset and liability management is being done properly so that the bank earns substantial income on its assets and has low costs on its liabilities.

14. The benefit is that the bank now has a larger cushion of bank capital and so is less likely to go broke if there are losses on its loans or other assets. The cost is that for the same ROA, it will have a lower ROE, return on equity.

QP2. X-Bank reported an ROE of 15% and an ROA of 1%. \( \text{ROE} = \text{ROA} \times \text{EM} \) \( 0.15 = 0.01 \times \text{EM} \) \( \text{EM} = 15 = \text{assets/equity} \) So equity/assets = 6.66%. This is a well-capitalized bank, at least under the old rules. Under Dodd-Frank, all banks are required to have bank capital of 7% held as common equity. And, new rules are being developed that will require larger banks to hold an extra capital cushion of 1 to 2.5%.

Chapter 23

2. Secured loans are an important method of lending for financial institutions because if the borrower defaults, the financial institution can take title to the collateral, sell it off, and use the proceeds to offset any losses on the loan. Thus the financial institution can worry less about the adverse selection problem because it has some protection even if the borrower was a bad credit risk.

3. Uncertain. In some cases, raising rates may generate more income and thus increase profits. However, the higher interest rates do increase adverse selection in which the risk-prone borrowers are more likely to seek out the loans. Thus the rate of default might go up and bank profits could suffer.

QP3. Technically, the duration should be calculated taking into account the 360 monthly payments. Doing this, the duration can be calculated as 10.15 years. If you used the duration formula in excel, your duration was much higher because you are assuming the frequency of payments is lower and that the final face value is paid back at maturity.

\[
\frac{\Delta P}{P} = - \text{Duration} \times \frac{\Delta i}{1+i} = -10.15 \times (-0.005/1.07) = 4.74\%
\]
Another way to state this is the bank has a liability-sensitive gap of $185 million.

Chapter 7

6. Smaller firms that are not well known are the most likely to use bank financing. Since it is harder for investors to acquire information about these firms, it will be hard for the firms to sell securities in the financial markets. Banks that specialize in collecting information about smaller firms will then be the only outlet these firms have for financing their activities.

12. The separation of ownership and control creates a principal-agent problem. The managers (the agents) do not have as strong an incentive to maximize profits as the owners (the principals). Thus the managers might not work hard, might engage in wasteful spending on personal perks, or might pursue business strategies that enhance their personal power but do not increase profits.

18. a. Clients may be able to pressure auditors into skewing their opinions in order to get fees for other accounting services.
   b. Auditors may be auditing information systems or structuring (tax and financial) advice put in place by their non-audit counterparts within the firm, and thus may be reluctant to criticize this advice or systems.
   c. Auditors may provide overly favorable opinions in order to solicit or retain business.