

**Banking Regulation
Final Examination
December 13, 2002**

General Instructions:

The exam is 180 minutes. I have designated the number of minutes for each question, which also will be the number of points (out of 180) that a correct answer will receive for that question. You may incorporate earlier explanations by reference. The information in the questions is not cumulative, i.e., each question is independent of every other question, unless stated otherwise. Assume that there are no loans outstanding unless stated otherwise and all banks are insured depository institutions.

When answering "yes" or "no," provide the best answer. If you provide only a "yes" or "no" in your answer but no explanation, and the answer is correct, you will receive partial credit.

1. What are fractional reserves and what is the relationship between this concept and the problem of bank runs? **3 points/minutes**
2. Briefly describe three methods by which the Federal Reserve can cause changes in the money supply. Choose one method and illustrate how it would affect banks such that the money supply would grow or shrink. **4 points/minutes.**
3. Briefly explain how interest rate risk (a change in market interest rates) can harm a bank's financial condition. **3 points/minutes.**
4. What is moral hazard and how does deposit insurance create it? **3 points/minutes.**
5. What are the primary and secondary regulators for these banks (the primary and secondary regulators can be the same regulator)? **2 points/minutes.**
 - a) Oxford National Bank
 - b) Oxford State Bank
 - c) Oxford State Savings Bank
 - d) Oxford Federal Savings Association
6. What are the particular safety and soundness risks presented by brokered deposits? **2 points/minutes.**
7. For purposes of questions (a) through (c), assume that Beta National Bank has \$110 million in assets, \$8 million in tier 1 capital and \$3 million in tier 2 capital.
 - a) Beta has no outstanding extensions of credit to Greek Inc. How much can Beta lend to Greek? **2 points/minutes.**
 - b) Assume that Beta already has made a \$1 million unsecured loan to Greek Inc. for questions (1) through (4). Can Beta make the following loans to Greek? Answer "yes" or "no" to each question and briefly explain each answer.
 - (1) \$500,000 unsecured. **2 points/minutes.**
 - (2) \$1 million secured by government securities with a market value of \$300,000. **2 points/minutes.**
 - (3) \$1 million secured by a single property appraised at \$1 million in a subdivision in which comparable properties have consistently sold at or above their appraisal value soon after going on the market. **2 points/minutes.**

- (4) \$1.75 million secured by highly volatile shares of MBI Corporation that are traded on the New York Stock Exchange and have a current market value of \$1.2 million. **2 points/minutes.**
- c) Assume the facts in (b)(4) immediately above except that after making the loan, the shares of MBI Corporation drop 10% in value. What steps must Beta take, if any, to comply with lending limits? **4 points/minutes.**
8. For purposes of questions (a) through (f), assume that Kappa National Bank has \$200 million in assets, \$10 million in tier 1 capital and \$15 million in tier 2 capital. Can Kappa make the extensions of credit described in (a) through (e) below? Answer "yes" or "no" to each question and briefly explain each answer. (Note that the question in (f) is different.)
- a) Kappa National Bank lends \$2.5 million to Shopping Center Inc. The loan is secured by government securities worth \$1 million. Shopping Center uses the proceeds to buy land on which it plans to build a large mall. Kappa commits to provide up to \$500,000 additional financing for the project. **2 points/minutes.**
- b) Assume the facts in (8)(a). Two weeks after the \$2.5 million loan is made, Kappa's tier 1 capital drops to \$8 million and a radioactive meteor lands on the land. Construction of the mall cannot proceed until the meteor is removed and the land cleaned up. Kappa lends Shopping Center another \$300,000 to take care of the meteor and clean up the land. **2 points/minutes.**
- c) Assume the facts in (8)(a). Bob, Shopping Center's CEO and 100% owner, discovers that another landowner owns a right-of-way across the back of the land that will reduce the mall's square footage by 5%. Kappa loans Bob \$400,000 to buy the right-of-way, which he then transfers to Shopping Center. **3 points/minutes.**
- d) Assume the facts in (8)(a). Bob, Shopping Center's CEO and 100% owner, learns that the IRS is about to take possession of the land to pay back taxes owed by Shopping Center. Kappa lends Shopping Center \$300,000 to pay the back taxes. **2 points/minutes.**
- e) Assume the same facts in (8)(a). Kappa arranges another \$1.5 million in financing for Shopping Center, of which Kappa loans \$200,000 and Sigma Bank, an unaffiliated bank, accepts a \$1.3 million participation in the loan on the condition that Kappa bears the first \$200,000 in losses. **3 points/minutes.**
- f) Assume all of the facts in (8)(a) through (e) above and that the loans occurred in the order in which they appear. Shopping Center files for bankruptcy, and Kappa recovers \$500k from Shopping Center and \$400,000 from Bob. Sigma recovers \$1.2 million of its \$1.3 million loan. The OCC sues Kappa's directors for approving the illegal loans, if any. Assume that the directors are financial responsible for any illegal loans. If you represented the directors, what would you argue they owed and why? If you represented the OCC, what would you argue the directors owed and why? Briefly explain who has the better argument and why. **4 points/minutes.**

9. For purposes of questions (a) through (f), assume that Gamma National Bank has \$200 million in assets, \$12 million in tier 1 capital and \$6 million in tier 2 capital. Can Gamma make the extensions of credit described in (a) through (f)? Answer "yes" or "no" to each question and briefly explain each answer.

- Gamma*
- a) Gamma loans \$3 million to Jill, ~~Alpha~~ Bank's CEO, on an unsecured basis. 3 points/minutes.
- b) Assume the same facts in (a) except that (1) Gamma is a state bank, (2) the state in which it is incorporated limits loans to one borrower to 20% of capital for unsecured loans and an additional 15% for secured loans, and (3) the loan was approved by majority vote of the entire board of directors. 2 points/minutes.
- c) Gamma loans \$3 million to Jill's Senate Campaign that is fully secured by marketable collateral. 3 points/minutes.
- d) ~~Assume the same facts in (c) except that~~ Gamma grants Jill's Senate campaign a \$2 million line of credit, which the campaign has not drawn upon. 2 points/minutes.
- e) Gamma loans \$1 million to Jill. Gamma's directors had voted on the loan as follows:
- | | |
|------------|---------|
| Washington | Reject |
| Lincoln | Reject |
| Jill | Approve |
| Skilling | Approve |
| Ebbers | Approve |
- 2 points/minutes.
- f) Gamma loans \$3 million to Henry, Jill's son and a branch manager for Gamma Bank. The loan is secured by \$3 million in government securities. 3 points/minutes.

10. For purposes of questions (a) through (c), assume that Delta Bank has 100 million in assets, \$7 million in tier 1 capital and \$3 million in tier 2 capital.

- a) Herbert owns 30% of Delta and 27% of Affiliated Boats. Affiliated Planes is controlled by Herbert. Herbert, Carla and Felicity are a majority of the board of directors of Delta, three-quarters of the board of directors of Affiliated Trains, and three-sevenths of the directors of Affiliated Automobiles. Delta loans \$750,000 to Affiliated Boats, \$650,000 to Affiliated Planes, \$500,000 to Affiliated Trains, and \$500,000 to Affiliated Automobiles. The Boats loan is secured by \$800,000 in government securities, the Planes loan is secured by \$800,000 in bonds issued by Jen & Berry's Ice Cream Incorporated, and the Trains loan is secured by \$500,000 in securities issued by the City of Oxford. Are the loans legal (answer "yes" or "no")? Briefly explain each answer. 8 points/minutes.
- b) From Pajamma Bank, Delta's 83%-owned subsidiary, Delta purchases a \$400,000 loan that is 20-days past due, and \$3 million in the common stock of Jen & Berry's Ice Cream Incorporated, which is traded on the New York Stock Exchange. Are the purchases legal (answer "yes" or "no")? Briefly explain each answer. 6 points/minutes.

- c) Delta loans \$600,000 to the Affiliated Planes company described in (a) above, 100%-secured by government securities; purchases \$400,000 in common stock of Jen & Berry's Ice Cream Inc. at its current market price on the New York Stock Exchange from The Jack The Ripper Novelty Corporation (which is controlled by Herbert, who owns 30% of Delta's stock); loans \$300,000 to Jen & Berry's Ice Cream Incorporated, secured by shares of The Jack The Ripper Novelty Corporation; loans \$1 million to the Affiliated Boats company described in (a) above, secured by \$1 million in government securities; loans \$1.2 million to Underwriting Entrepreneurs Inc., a wholly-owned subsidiary of Delta, collateralized 100% by government securities. **9 points/minutes.**

Pappa National Bank Balance Sheet

Assets		Liabilities and Equity	
Cash	30	Deposits	2,920
Texas State Revenue Bonds	50	Secured Borrowings	300
First Mortgages on 1-4 Family Housing	100	Unsecured Borrowings	50
California State General Obligation Bonds	50	Other Liabilities	80
Commercial Loans	700	Noncumulative Perpetual Preferred Stock	100
Secured Loans to Individuals	550	Qualifying Subordinated Debt	320
Unsecured Loans to Individuals	900	General Loan/Loss Reserves	160
Commercial Real Estate Loans	850	30-Year Preferred Stock	120
Real Estate Owned	470	Common Shareholders' Equity	50
Bank Premises & Equipment	400		
Totals:	4,100		4,100

Pappa National Bank Off-Balance Sheet Assets:

Standby Performance Construction Letter of Credit	520
Standby Guarantee Commercial Letter of Credit	1,000

11. Based on the balance sheet provided above, what is the value of Pappa National Bank's:

- a) Tier 1 Capital? **2 points/minutes.** *150*
- b) Tier 2 Capital (for risk-based capital ratio purposes)? **2 points/minutes.** *150*
- c) Leverage Ratio? **2 points/minutes.** *3.66%*
- d) Risk-Weighted assets? **4 points/minutes.** *508,590*
- e) Risk-Based Capital Ratio? **2 points/minutes.** *2.9%*
- f) Tier 1 Risk-Based Capital Ratio? **2 points/minutes.**

12. For purposes of (a) through (c), assume the date in the balance sheet provided above.

- a) Into which capital category does Pappa fall? **2 points/minutes.**
- b) Under the prompt corrective action provision, is the Comptroller presumptively required to take any actions against Pappa? Briefly explain your answer and identify the presumptive actions, if any, that the Comptroller must take. **2 points/minutes.**
- c) Name at least three other actions the Comptroller could take against Pappa under the prompt corrective action statute. **2 points/minutes.**

13. Assume these facts for purposes of (a) through (d). Whappa, a small national bank located in Eastone, Maryland is well capitalized, with a 4% leverage ratio and a 8% risk-based capital ratio. 80% of Whappa's assets are 30-year mortgages on homes in Eastone with a weighted average maturity of 23 years. More than 75% of Whappa's deposits are brokered deposits paying above-market interest rates.
- a) Assume these facts for purposes of (1) and (2). Flack & Becker Tool Company, which provides 80% of the jobs in Eastone, closes its Eastone plant and lays off all of its workers. Real estate values plummet.
- 1) Evaluate Whappa's situation by applying each of the components of CAMELS and explain whether, based on your CAMELS analysis, the Comptroller should take action, and why such take action is appropriate. **5 points/minutes.**
- 2) If the Comptroller refused to take action, could the FDIC appoint a conservator under the general enforcement statute? Briefly explain your answer. **3 points/minutes.**
- b) The Fed's Open Market Committee raises its target federal funds rate by 1 percentage point. How will this affect Whappa's demand deposits and its overall financial soundness? **2 points/minutes.**
- c) The Fed's Open Market Committee lowers its target federal funds rate by 1 percentage point. How will this affect Whappa's assets? **2 points/minutes.**
- d) About which of the two situations described in (b) and (c) would you, as the Comptroller, be more concerned and why? **2 points/minutes.**
14. Fred is the CEO of Schtappa Bank, which is well-capitalized. The Comptroller learns that Fred was previously convicted of embezzling funds in three different countries. The Comptroller decides that Fred poses an immediate, serious threat to the bank's financial health. What steps (i.e., describe each step in the process that you propose) can and should the Comptroller take regarding the management of Schtappa? **4 points/minutes.**
15. Assume the facts in (14) above except that Schtappa Bank is significantly undercapitalized. What steps can and should the Comptroller take under the prompt corrective action provision in addition to or instead of the steps described in your answer above? Briefly explain your answer. **4 points/minutes.**

16. Beelappa Bank, an adequately capitalized bank, is engaging in an unsound and unsafe practice. What steps can the Comptroller take under the prompt corrective action statute? **2 points/minutes.**
17. Shirley is Frappa Bank's CEO, Laverne is the controlling shareholder of Frappa, Lenny is a noncontrolling shareholder of Frappa, Squiggy is Frappa's attorney and Hedwig is Frappa's accountant. Shirley calls a meeting that includes Lenny and Squiggy. She proposes a new marketing strategy for Frappa, namely, that Frappa convert all of its assets to long-term loans and use part of the added income to pay above-market rates to depositors. All three meeting attendees discuss the strategy at length and agree that it should substantially increase Frappa's profits, notwithstanding that short-term interest rates are at a 50-year low and the Fed had recently indicated that at its next meeting it expected the Open Market Committee to raise the federal funds target rate by 1 percentage point. Hedwig, whose approval Shirley also seeks, receives a memo regarding the meeting that states only that Frappa proposes to increase profits by shifting to longer-term loans. On the basis of this memo, Hedwig approves the new strategy. Frappa implements the strategy. Can the Comptroller issue a cease and desist order against Shirley, Laverne, Lenny, Squiggy and Hedwig? Briefly explain your answer. **6 points/minutes.**
18. Assume the facts in (17) except that most of the new long-term loans made by Frappa are to a mortgage company that is wholly-owned by Shirley. Shirley uses the part of the proceeds of the loans to pay substantial bonuses to herself and to Squiggy, who is in-house counsel to the company and is unaware of the source of the bonus. Assuming that the loans to the company do not violate any law or regulation, what is the largest civil monetary penalty that the Comptroller can obtain from Shirley, Laverne, Lenny, Squiggy and Hedwig? **6 points/minutes.**
19. Halfappa Bank is well capitalized but is engaging in practices that the Comptroller believes are marginally unsound and unsafe. The Comptroller threatens to institute cease and desist proceedings against Halfappa unless Halfappa agrees to achieve a risk-based capital ratio of 14% within six months and to maintain that RBCR for four years. Halfappa executes the agreement, and achieves a 14% RBCR in only three months. Three years later, Halfappa's RBCR falls to 13.9%. The Comptroller institutes proceedings solely on the basis of the violation of the agreement. What is the basis for the Comptroller's action? What are the best arguments Halfappa could make in its defense? **4 points/minutes.**
20. Briefly explain the term "open bank assistance" and the difference between a whole bank and clean bank transaction. **3 points/minutes.**
21. Briefly explain the "source of strength doctrine," the related "cross-guarantee rule," and the difference between the two. **4 points/minutes.**
22. Bonnie, Rappa Bank's CEO, left the Bank's vault open one night, and Clyde, her boyfriend stole \$50 million from the open vault. Bonnie, who claims that she left the vault open by accident, was discovered with Clyde in the penthouse suite at a Monte Carlo resort where \$100,000 of the stolen money was recovered. Rappa became insolvent and the FDIC was appointed receiver. Rappa is covered by a typical Director and Officer Liability Policy and a typical Bankers Bond. The policy limits are \$100 million and \$10 million, respectively, and both policies contain insured versus insured exclusions. The FDIC sues the insurance company under the D&O policy on the ground that Bonnie was grossly negligent. Will the FDIC prevail under the policy? Briefly explain your answer. **4 points/minutes.**
23. How might the federal government's criminal enforcement interests conflict with the FDIC's interests in its civil action described in (22) above? **2 points/minutes.**
24. Briefly argue whether the enforcement of a regulatory agency exclusion in a Directors and Officers Liability Policy is or is not consistent with the policies underlying the appointment of the FDIC as receiver of a failed bank. **3 points/minutes.**

25. Zappa Bank is significantly undercapitalized. Frank, the Bank's Vice President for marketing, met with Moon Unit about the possibility of his depositing \$1 million in the bank. Frank created a false set of financial statements solely for Moon Unit that showed that the bank was well capitalized, and Moon Unit made the deposit. Frank also deleted references in the Bank's publicly available financial statements to the fact that a number of bonds held by the Bank were in default. Although the changes were material, they did not affect the Bank's capitalization category. The Bank failed and the FDIC was appointed as receiver. Large depositors who relied on the public financial statements as well as Moon Unit sued to recover the uninsured portions of their deposits on the ground that their deposits assets were held in a constructive trust. What advantage do ~~plaintiffs hope to realize by prevailing on this argument?~~ Will they prevail? Briefly explain your answers. **4 points/minutes.**
26. Ardappa Bank fails and the FDIC is appointed as receiver. The FDIC seeks to repudiate Ardappa long-term office lease. Will it succeed? Is the result in this case consistent with the fair prioritization of claims among different creditors of the bank? Is it consistent with the U.S. Constitution? How should the court's resolve this question? Briefly explain each of your answers **6 points/minutes.**
27. Assume these facts for purposes of (a) and (b). Barnum meets with representatives of Geerappa Bank to discuss a personal loan. They reach agreement regarding the terms of the loan, pending a review of Barnum's credit history, and Barnum and the Bank execute the note and loan agreement. The credit check reveals problems with Barnum's credit history and the loan is refused. Barnum does not retrieve the executed note or loan agreement. Geerappa becomes insolvent. The FDIC is appointed as a receiver and it acquires the Barnum loan as part of a bulk purchase and assumption transaction. Barnum defends on the ground that he never received the proceeds of the loan.
- a) Briefly describe three theories under which the FDIC can recover the amount of the loan from Barnum. **3 points/minutes.**
- b) Will the FDIC prevail? Answer "yes" or "no" for each of the three theories and briefly explain each answer. **6 points/minutes.**