

# ch17

Student: \_\_\_\_\_

1. When liquidity risk problems occur at a DI, they often threaten the solvency of the institution.  
True False
2. Depository institutions generally rely on each other for cash and to meet their daily liquidity needs.  
True False
3. During the financial crisis of 2008, liquidity problems were avoided as banks continued to provide lending to each other.  
True False
4. During the financial crisis of 2008, there were large deposit inflows to the banking system.  
True False
5. Mutual funds tend to have less exposure to liquidity risk than do banks and thrifts.  
True False
6. An FI's most liquid asset is cash.  
True False
7. Demand deposits pose a liquidity risk for FIs because funds may be withdrawn at any time.  
True False
8. A bank must be ready to pay out all demand deposit liabilities on any given day.  
True False
9. Liquidity risk for an FI includes the possibility of an unexpected inflow of funds.  
True False
10. Bank runs occur because customers know that banks will be forced to liquidate assets at fire-sale prices.  
True False
11. Asset-side liquidity risk may be a result of OBS lending commitments.  
True False
12. Core deposits represent a relatively short-term source of funds.  
True False
13. An expected net deposit drain on any given day means that deposit withdrawals are less than deposit inflows.  
True False
14. Purchased liquidity risk management usually involves purchased funds such as Fed funds, repurchase agreements and CDs.  
True False
15. Purchased liquidity management carries the potential risk of significant increases in the cost of funds during periods of high interest rate volatility.  
True False
16. Because cash reserves at the Federal Reserve do not earn interest, DIs do not hold any excess cash reserves beyond the minimum requirements.  
True False

17. Managing asset-side liquidity risk can involve either purchased liquidity management or stored liquidity management.  
True False
18. Liquid funds can be obtained by a DI through unlimited borrowing in the money or purchased funds markets.  
True False
19. High loan commitment banks face less liquidity risk exposure than low commitment banks.  
True False
20. The liquidity index should be a number that is either greater than one or less than zero.  
True False
21. The greater the difference between fair market prices and fire-sale prices for assets, the less liquid the DI's portfolio of assets.  
True False
22. In terms of liquidity risk measurement, the financing gap is defined as rate sensitive assets minus rate sensitive liabilities.  
True False
23. Maturity ladder/scenario analysis is a method of measuring liquidity risk and net funding requirements.  
True False
24. The relative time frame for active liquidity management is 2 to 4 months.  
True False
25. Liquidity planning primarily is designed to assist management in dealing with relatively predictable events.  
True False
26. Abnormally large and unexpected deposit withdrawals can occur because of concerns by depositors about a bank's solvency relative to other banks.  
True False
27. The cost of stored liquidity management is the interest that must be paid on the stored funds.  
True False
28. The future liquidity position of a DI cannot be forecasted.  
True False
29. Deposit insurance is the only deterrent to bank runs, contagious runs, and bank panics.  
True False
30. A liquidity plan for a DI should provide a detailed list of fund providers who are most likely to withdraw in the case of a liquidity crisis.  
True False
31. Even with liquidity planning, net deposit withdrawals and/or the exercise of loan commitments can pose significant liquidity problems for banks.  
True False
32. Liquidity planning should identify the size of potential deposit withdrawals over various time horizons in the future, as well as alternative emergency private funding sources to meet those withdrawals.  
True False
33. In the event of a bank run, depositor claims on the bank are satisfied on a pro rata basis.  
True False

34. A contagious run, or bank panic, differs from a run on a bank in that a contagious run involves loss of faith in the entire banking system as opposed to just one bank.  
True False
35. In general, money center banks are exposed to less liquidity risk than smaller, regional banks.  
True False
36. The Fed discount window maintains three lending programs to assist DIs in managing liquidity problems.  
True False
37. For life insurance companies, the distribution of premium income minus policyholder liquidations normally is predictable.  
True False
38. Surrender value is the amount of cash a life insurance policy holder can receive by turning in the policy before it expires or matures.  
True False
39. The assets of PC insurers are relatively short term and more liquid than those of life insurance companies.  
True False
40. Insurance companies have had to deal with liability runs by policyholders.  
True False
41. Government securities represent the reserve asset fund for life insurance companies.  
True False
42. Liquidity risk for a life insurance company only occurs when asset returns do not provide sufficient cash flows to meet policyholder liquidations.  
True False
43. Open-end mutual funds issue a fixed number of shares as liabilities.  
True False
44. Net asset value is the current value of a mutual fund's assets divided by the number of shares outstanding.  
True False
45. Liquidation of a mutual fund causes assets to be liquidated and funds received to be dispersed to shareholders on a first come, first served basis.  
True False
46. It is impossible for money market mutual fund share prices to fall below \$1.00.  
True False
47. Hedge funds are not susceptible to liquidity risk or a liquidity crisis.  
True False
48. Which of the following is NOT a potential cause of liquidity risk for a DI?
- A. A decrease in the DI's stock price caused by market factors.
  - B. An increase in requests to fund large amounts of loan commitments.
  - C. A decrease in the availability of short-term borrowed funds.
  - D. An increase in requests by depositors to withdraw large amounts of deposits.
  - E. A decrease in asset prices of securities held in the investment portfolio.

49. Which type of financial intermediary is more highly exposed to liquidity risk?
- A. Property-casualty insurance companies.
  - B. Life insurance companies.
  - C. Mutual funds.
  - D. Depository institutions.
  - E. Pension funds.
50. What is a fire-sale price?
- A. Market value of an asset.
  - B. Price received for an asset that has to be liquidated immediately.
  - C. Maximum price that will be received on sale of an asset irrespective of the time of sale.
  - D. Replacement value of an asset.
  - E. Book value of an asset.
51. A bank's net deposit drain
- A. is negative if deposits exceed withdrawals.
  - B. is positive if deposits exceed withdrawals.
  - C. decreases during holiday and vacation periods.
  - D. is unaffected by holiday and vacation periods.
  - E. fluctuates unpredictably on any given day.
52. Which of the following is a condition for a DI to be growing?
- A. Net positive drain on deposits.
  - B. Peak of the net deposit drain probability distribution should lie at a point to the right of zero.
  - C. Average deposit drain such that new deposit funds more than offset deposit withdrawals.
  - D. The liability side of its balance sheet is decreasing.
  - E. Unused loan commitments is increasing.
53. Which of the following balance sheet entries is not a part of liability management?
- A. Bonds.
  - B. Federal fund.
  - C. Demand deposit.
  - D. Repurchase agreement.
  - E. Subordinated note.
54. Which of the following observations is NOT true?
- A. Traditionally, DI managers have relied on purchased liquidity management as the primary mechanism of liquidity management.
  - B. Today, many DIs rely on purchased liquidity management to deal with the risk of cash shortfalls.
  - C. The largest banks with access to the money market and other nondeposit markets for funds rely on liability management to deal with the risk of cash shortfalls.
  - D. Purchased liquidity management and stored liquidity management are ways of managing a drain on deposits.
  - E. None of the above.
55. A disadvantage of using liability management to manage a FI's liquidity risk is
- A. the resulting shrinkage of the FI's balance sheet.
  - B. the high cost of purchased liabilities.
  - C. the accessibility of international money markets.
  - D. tax considerations.
  - E. loss of flexibility as a result of dependence upon purchased liabilities.
56. A disadvantage of using asset management to manage a FI's liquidity risk is
- A. the resulting shrinkage of the FI's balance sheet.
  - B. the high cost of purchased liabilities.
  - C. the accessibility of international money markets.
  - D. tax considerations.
  - E. loss of flexibility as a result of dependence upon purchased liabilities.

57. Which of the following statements is NOT true?
- A. Stored liquidity management involves liquidation of assets.
  - B. Traditionally DIs have stored cash reserves at the Federal Reserve and in their vaults to overcome liquidity risk.
  - C. When the DI uses its cash as the liquidity adjustment mechanism, both sides of its balance sheet contract.
  - D. DIs hold cash reserves in excess of the minimum required to meet liquidity drains.
  - E. Bank sustains no cost under stored liquidity risk management.
58. Why have purchased liquidity management techniques become very popular in spite of its limitations?
- A. Because it insulates the assets of an FI from normal drains on liability liquidity.
  - B. Because funds can be easily raised in the eventuality of a liquidity crunch.
  - C. Because of decrease in the cost of funds during periods of high interest rate volatility.
  - D. Because the funds are covered by deposit insurance.
  - E. Because the adjustment to the deposit drain occurs on the liability side of the balance sheet.
59. When banks use stored liquidity management, they
- A. must pay interest on the funds that are stored.
  - B. store the funds at the U.S. Treasury.
  - C. necessarily increase the asset side of the balance sheet.
  - D. may shrink the balance sheet if cash is used as the liquidity adjustment mechanism.
  - E. threaten the capital position of the institution.
60. If purchased liquidity is used by a DI to fund an exercised loan commitment
- A. the balance sheet will decrease by the amount of the new loan.
  - B. only the asset side of the balance sheet will increase.
  - C. the balance sheet will increase by the amount of the new loan.
  - D. only the liability side of the balance sheet will increase.
  - E. there will be no effect on the balance sheet.
61. If stored liquidity is used by a DI to fund an exercised loan commitment
- A. the balance sheet will decrease by the amount of the new loan.
  - B. only the asset side of the balance sheet will increase.
  - C. the balance sheet will increase by the amount of the new loan.
  - D. only the liability side of the balance sheet will increase.
  - E. there will be no effect on the balance sheet.
62. What is the asset adjustment to a bank's balance sheet if the bank sold a five-year, 7 percent annual coupon \$100,000 bond acquired at par, but now yielding 8 percent? The bond was not in the mark-to-market portfolio.
- A. A \$96,007 reduction in assets.
  - B. A \$96,007 increase in assets.
  - C. A \$100,000 reduction in assets.
  - D. A \$100,000 increase in assets.
  - E. A \$100,000 increase in liabilities.
63. An open-end bond mutual fund is holding a three-year, \$1 million par value 5 percent annual coupon bond. What is the impact on the total asset value of the fund of a 1 percent decrease in interest rates?
- A. A decrease of \$10,000.
  - B. An increase of \$10,000.
  - C. A decrease of \$26,730.
  - D. An increase of \$27,751.
  - E. The answer depends upon the number of mutual funds shares outstanding.

64. What is the impact of a 50 basis point increase in interest rates on the net asset value of an open-end bond mutual fund holding a seven year, \$100 million par value 7 percent annual coupon bond? The fund has 10 million shares.
- A. An increase of \$0.24 per share.
  - B. A decrease of \$0.265 per share.
  - C. An increase of \$0.05 per share.
  - D. A decrease of \$0.05 per share.
  - E. An increase of \$0.265 per share.
65. In the event of financial distress, open-ended mutual fund investors
- A. have an incentive to cash in their shares quickly since they are paid on a first come, first served basis.
  - B. have an incentive to avoid a run since that will deplete the fund net asset value.
  - C. have an incentive to cash in their shares quickly since that will increase the fund's net asset value.
  - D. will switch into low risk bank deposits.
  - E. have an incentive to avoid a run since the Federal Reserve guarantees mutual fund holdings.
66. The surrender value of an insurance policy is
- A. its promised payoff.
  - B. normally a portion of the contract's face value.
  - C. its value upon bankruptcy.
  - D. the value of the junk bonds in the insurance company's portfolio.
  - E. its holdup value.
67. Which intermediation function results in an FI's exposure to liquidity risk?
- A. Information production.
  - B. Asset transformation.
  - C. Conduit for monetary policy.
  - D. Lender of last resort.
  - E. Brokering between funds deficit units and funds surplus units.
68. How does liability management affect profitability?
- A. By its impact on the interest rate sensitivity of assets.
  - B. By its impact on the interest rate sensitivity of liabilities.
  - C. By determining the default risk of investment securities.
  - D. By its impact on the cost of purchased funds.
  - E. By enhancing the liquidity of assets held.
69. When comparing banks and mutual funds,
- A. mutual funds have more liquidity risk than banks because all shareholders share the loss of value on a pro rata basis.
  - B. mutual funds have less liquidity risk than banks because all shareholders share the loss of value on a pro rata basis.
  - C. mutual funds have more liquidity risk than banks because all shareholders have the ability to withdraw . their money on a first-come first basis.
  - D. mutual funds have less liquidity risk than banks because all shareholders have the ability to withdraw . their money on a first-come first basis.
  - E. mutual funds have the same liquidity risk as banks because both shareholders and depositors share the . fall in the loss of value on a pro rata basis.
70. Which of the following is NOT a primary source of liquidity?
- A. Excess cash reserves over and above regulatory reserve requirements.
  - B. Borrowings in the money market.
  - C. Borrowings in the purchased funds market.
  - D. Capital notes and other long-term financing alternatives.
  - E. Cash-type assets that can be sold with little price risk and low transaction costs.

71. Which of the following is NOT a method of measuring liquidity?
- A. Net liquidity statement.
  - B. Liquidity index.
  - C. Financing gap and financing requirement.
  - D. Peer group ratio comparison.
  - E. Current ratio.
72. What information does the net liquidity statement provide?
- A. Maturity ladder.
  - B. Sources and uses of liquidity.
  - C. Net asset value.
  - D. Liquidity index information.
  - E. Peer group ration comparison.
73. Which of the following is a measure of the potential losses an FI could suffer as the result of fire-sale disposal of assets?
- A. Quick ratio.
  - B. Liquidity index.
  - C. Financing gap and financing requirement.
  - D. Peer group ratio.
  - E. Current ratio.
74. A DI has two assets: 50 percent in one-month Treasury bills and 50 percent in real estate loans. If the DI must liquidate its T-bills today, it receives \$98 per \$100 of face value; if it can wait to liquidate them on maturity (in one month's time), it will receive \$100 per \$100 of face value. If the DI has to liquidate its real estate loans today, it receives \$90 per \$100 of face value liquidation at the end of one month will produce \$92 per \$100 of face value. The one-month liquidity index value for this DI's asset portfolio is
- A. .973.
  - B. .940.
  - C. .979.
  - D. 1.06.
  - E. 1.10.
75. What does a high ratio of loans to deposits indicate?
- A. DI relies heavily on the short-term money market to fund loans.
  - B. High degree of loan commitments.
  - C. DI has large amounts of asset-side liquidity.
  - D. Liquidity concerns are at a bare minimum for the FI.
  - E. DI relies heavily on core deposits to fund loans.
76. In terms of liquidity risk measurement, the financing gap is defined as
- A. total deposits minus core deposits.
  - B. financing requirement plus liquid assets.
  - C. rate sensitive assets minus rate sensitive liabilities.
  - D. total assets minus total liabilities.
  - E. average loans minus average deposits.
77. In terms of liquidity risk measurement, the financing requirement is defined as
- A. total deposits minus core deposits.
  - B. financing gap plus liquid assets.
  - C. rate sensitive assets minus rate sensitive liabilities.
  - D. total assets minus total liabilities.
  - E. average loans minus average deposits.

78. In a crisis, which of the following are more likely to withdraw funds quickly from banks and thrifts?
- A. Correspondent banks.
  - B. Small business corporations.
  - C. Individual depositors.
  - D. Mutual funds.
  - E. Foreign depositors.
79. In a crisis, which of the following are relatively less likely to withdraw funds quickly from banks and thrifts?
- A. Correspondent banks.
  - B. Small business corporations.
  - C. Individual depositors.
  - D. Mutual funds.
  - E. Pension funds.
80. Which of the following observations concerning the Fed's discount window is true?
- A. The facility is provided to meet DI's permanent liquidity needs.
  - B. Four lending programs are offered through the Fed's discount window.
  - C. Primary credit is available to sound depository institutions on a very short-term basis.
  - D. Secondary credit is available only to depository institutions that are eligible for primary credit.
  - E. Eligible institutions for seasonal credit are big banks located in urban areas.
81. What are the two major liquidity risk insulation devices available?
- A. Deposit insurance and discount window.
  - B. Liquidity planning and maturity ladder.
  - C. Scenario analysis and liquidity index.
  - D. Financing gap and the financing requirement.
  - E. Secondary credit and seasonal credit.
82. What is the drawback of deposit insurance facility?
- A. Even when the DI is in trouble, the deposit holder has no incentive to run.
  - B. DIs are more likely to increase the liquidity risk on their balance sheets.
  - C. Deposit holder's place in line affects his or her ability to obtain the funds.
  - D. Deposit insurance does not deter contagious runs and panics.
  - E. Deposit holders are less likely to panic if there is a perceived bank solvency problem.
83. Which of the following is NOT a component of liquidity planning?
- A. Establishing internal limits on subsidiary and branch borrowings.
  - B. Detailed list of funds providers who have seasonal patterns of funds usage.
  - C. A calculation of the value of assets at fire-sale prices relative to the fair market value of those assets.
  - D. A detailed itemization of managerial responsibilities.
  - E. A summary of the size of potential net deposit drains over various time horizons.
84. A liquidity plan will include
- A. the size of potential deposit and fund withdrawals.
  - B. a list of fund providers that are most likely to withdraw funds.
  - C. the pattern of potential withdrawals.
  - D. the details and responsibilities of management.
  - E. All of the above.
85. Which of the following statements is true?
- A. Closed-end funds issue an unlimited number of shares as liabilities.
  - B. Open-end funds supply limited number of shares to investors.
  - C. Open-end funds need not stand ready to buy back previously issued shares from investors at the current market price for the fund's shares.
  - D. At a given market price, the supply of open-end fund shares is perfectly inelastic.
  - E. The number of outstanding shares of a closed-ended fund may change when the issuing fund chooses to repurchase them.



86. Consider a mutual fund with 100 shareholders who each invested \$10 for a total of \$1,000. If the assets of the mutual fund are worth \$900, what is the net asset value for each one of the mutual fund shares?
- \$0.9.
  - \$9.
  - \$90.
  - \$10.
  - \$0.10.
87. The price at which an open-end investment fund stands ready to redeem existing shares is the
- strike price.
  - face value.
  - book value.
  - net asset value.
  - net worth.

Assets		Liabilities and Equity	
Cash Required Reserves	21	Demand Deposits	550
Short-term Securities	369	Fed Funds Borrowed	151
Loans	400	Equity	89
Total	790	Total	790

88. If the bank's expected net deposit drain is +4 percent, what is the bank's expected liquidity requirement?
- \$7,560.
  - \$6,040.
  - \$16,000.
  - \$22,000.
  - \$14,760.
89. What are the possible ways that the bank can meet an expected net deposit drain of +4 percent using purchased liquidity management techniques?
- Utilize further the Fed funds market.
  - Utilize repurchase agreements.
  - Liquidate all cash holdings.
  - All of the above.
  - Answers A and B only.
90. What are the possible ways that the bank can meet an expected net deposit drain of +4 percent using stored liquidity management techniques?
- Liquidate all cash holdings.
  - Utilize further the Fed funds market.
  - Liquidate some securities and/or loans.
  - Liquidate all cash and use more Fed funds.
  - All of the above are suitable techniques.
91. If the bank decides to cut down on interest expenses by reducing its dependence upon borrowed funds, what policy must the bank follow?
- Manage liquidity risk exclusively through reserve asset management.
  - Manage liquidity risk exclusively through liability management.
  - Reduce the bank's dependence upon demand deposits.
  - Increase interest income by increasing lending.
  - Increase interest income by increasing securities holdings.

92. If the bank experiences a \$50,000 sudden liquidity drain caused by a loan commitment draw down, what will be the impact on the balance sheet if stored liquidity management techniques are used?
- A reduction in cash of \$21,000 and an increase in demand deposits of \$29,000.
  - A reduction in securities and/or current loans totaling \$50,000.
  - A reduction in cash of \$21,000 and a decrease in securities holdings of \$29,000.
  - A decrease in equity of \$50,000.
  - A decrease in lending of \$50,000.

Assets		Liabilities and Equity	
Cash Required Reserves	\$2 million	Deposits	\$8 million
Loans	\$10 million	Long-term Debt	\$2 million
		Equity	\$2 million
Total	\$12 million	Total	\$12 million

The average interest earned on the loans is 6 percent and the average cost of deposits is 5 percent. Rising interest rates are expected to reduce the deposits by \$3 million. Borrowing more debt will cost the bank 5.5 percent in the short term.

93. What will be the size of the bank if a stored liquidity management strategy is adopted?
- \$9 million.
  - \$11 million.
  - \$12 million.
  - \$14 million.
  - \$15 million.
94. What will be the cost of using a strategy of reducing its asset base to meet the expected decline in deposits? Assume that the bank intends to keep \$2 million in cash as a liquidity precaution.
- \$10,000.
  - \$15,000.
  - \$30,000.
  - \$40,000.
  - \$50,000.
95. What will be the cost of using a strategy of purchased liquidity management to meet the expected decline in deposits? Assume that the bank intends to keep \$2 million in cash as liquidity precaution.
- \$10,000.
  - \$15,000.
  - \$30,000.
  - \$40,000.
  - \$50,000.
96. What will be the size of the bank if a purchased liquidity management strategy is adopted?
- \$9 million.
  - \$11 million.
  - \$12 million.
  - \$14 million.
  - \$15 million.

An FI has \$5 million in cash reserves with the Fed in excess of its reserve requirements, \$5 million in T-Bills, and a credit line of \$10 million to borrow in the repo market. It currently has lent \$2 million in the Fed Funds market and borrowed \$1 million from the Federal discount window to meet its seasonal needs.

97. What are the bank's total available sources of liquidity?
- A. \$17 million.
  - B. \$18 million.
  - C. \$20 million.
  - D. \$21 million.
  - E. \$22 million.
98. What are the bank's current total uses of liquidity?
- A. \$1 million.
  - B. \$3 million.
  - C. \$8 million.
  - D. \$10 million.
  - E. \$15 million.
99. What is the net liquidity of the bank?
- A. \$7 million.
  - B. \$12 million.
  - C. \$17 million.
  - D. \$21 million.
  - E. \$22 million.
100. Assume that the T-Bills can only be sold at a 10 percent discount, what is the net liquidity of the bank given this information?
- A. \$6.5 million.
  - B. \$11.5 million.
  - C. \$16.5 million.
  - D. \$20.5 million.
  - E. \$21.5 million.

## ch17 Key

1. FALSE
2. TRUE
3. FALSE
4. TRUE
5. TRUE
6. TRUE
7. TRUE
8. TRUE
9. TRUE
10. FALSE
11. TRUE
12. FALSE
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19. FALSE
20. FALSE
21. TRUE
22. FALSE
23. TRUE
24. FALSE
25. TRUE
26. TRUE
27. FALSE
28. FALSE
29. FALSE
30. TRUE
31. TRUE
32. TRUE
33. FALSE
34. TRUE
35. FALSE
36. TRUE

- 37. TRUE
- 38. TRUE
- 39. TRUE
- 40. TRUE
- 41. TRUE
- 42. FALSE
- 43. FALSE
- 44. TRUE
- 45. FALSE
- 46. FALSE
- 47. FALSE
- 48. A
- 49. D
- 50. B
- 51. A
- 52. C
- 53. C
- 54. A
- 55. B
- 56. A
- 57. E
- 58. A
- 59. D
- 60. C
- 61. E
- 62. C
- 63. D
- 64. B
- 65. B
- 66. B
- 67. B
- 68. D
- 69. B
- 70. D
- 71. E
- 72. E
- 73. B
- 74. C

75. A  
76. E  
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78. D  
79. C  
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82. B  
83. C  
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89. E  
90. C  
91. A  
92. B  
93. A  
94. C  
95. B  
96. C  
97. E  
98. A  
99. D  
100. D

# ch17 Summary

<u>Category</u>	<u># of Questions</u>
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