Setul 3: Managementul riscului de lichiditate în instituțiile financiar – bancare

1. What is the impact on the bank's balance sheet if there is a $15 million net deposit drain? Show the bank's balance sheet if:
   a. The bank purchases liabilities.
   b. The reserve asset adjustment method is used to meet the liquidity shortfall.

Balance Sheet ($ millions)

Assets		Liabilities	
Cash	$10	Core deposits	$68
Loans	50	Equity	7
Securities	15		

2. Calculate the net liquidity position for the following FIs:
   a. Cash: $1 billion; maximum borrowed funds limit: $3 billion; Bank of Canada reserves; $0.5 billion; interbank liquid deposits placed: $0.3 billion; interbank funds borrowed: $1.5 billion; Bank of Canada borrowing: 0.
   b. Cash: $0.55 billion; maximum borrowed funds limit: $1 billion; Bank of Canada reserves: $0; interbank liquid deposits placed: $0.1 billion; interbank funds borrowed: $1.5 billion; Bank of Canada borrowing: $0.1 billion.
   c. Compare the liquidity risks of the two FIs in parts *a* and *b*.
3. A bank has the following balance sheet:

($ billions)

Assets		Liabilities	
Cash	$ 1	Demand deposits	$40
Loans	44	Net worth	5

Loans have one year until maturity and are priced at par, paying 7 percent annual rates. Demand deposits are noninterest bearing.

   a. The bank experiences a run on its demand deposits. Deposit withdrawals are financed through asset sales. If the bank attempts to conduct a fire sale of its loan portfolio by selling it in one day, the loans will be priced at a 35 percent annual rate. If the bank takes two days to package the loan sale, the loan sales rate falls to 10 percent annually. It will take three days for the bank to get the true market value of its loan portfolio. What is the value of the bank's loan portfolio if sold on day 1? day 2? day 3? (Use annual interest rates.)
   b. How much will depositors receive if they all attempt complete withdrawals of their balances on day 1? day 2? day 3? What will be the impact on the bank's net worth at each point in time? (Assume that regulators do not step in to close the bank.)
   c. How would your answer differ if this balance sheet was for a mutual fund? (Assume that all mutual fund investments are completely financed by fund shareholders; that is, there are no liabilities other than unit holders' claims.)
   d. Contrast the experience of bank depositors with the experience of mutual fund shareholders in the event of financial distress.
4. Consider the following FI balance sheet:

($ millions)

Assets		Liabilities	
Liquid assets	$ 20	Deposits	$1,800
Loans	2,550	Interbank	xx
Property	330	Equity	150

   a. If stable core deposits are only 90 percent of current total deposits, what is the FI's financing gap?
   b. What is the financing requirement of the FI? How much in interbank funds is required?
   c. If stable core deposits are only 40 percent of total deposits, how do your answers to *a* and *b* change? How is the liquidity risk exposure of the FI affected?