AFIN8003 - Workshop 10

Banking and Financial Intermediation

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1 MCQ

1. The cost of holding reserves that pay no interest at the central bank is:
   - ☐ buffer reserves
   - ☐ a reserve requirement tax
   - ☐ the liquid assets ratio
   - ☐ required by law in all countries
2. A deep market is an important consideration in the management of FI liquidity in that:
   - ☐ the FI may wish to issue more loans
   - ☐ the FI may wish to issue more equity
   - ☐ the FI could be an inactive market participant
   - ☐ the FI will need to be able to sell short-term assets quickly to convert to cash
3. Which of the following is a determinant of an FI's optimal liquid asset ratio?
   - ☐ the variability of deposit inflows and outflows
   - ☐ the yield on non-liquid assets
   - ☐ the liquidation costs of highly non-liquid assets
   - ☐ All of the listed options are correct.
4. A facility that allows a DI to utilise RBA repos, in order to obtain liquidity overnight to fund its liquidity settlement needs, is called a(n):
   - ☐ RBA repurchase agreement
   - ☐ overnight repurchase agreement
   - ☐ intra-day repurchase agreement
   - ☐ committed liquidity facility
5. Covered bonds are:
   - ☐ bonds issued by banks that have backing of a pool of high quality assets
   - ☐ bonds that are backed by the Australian government
   - ☐ bonds issued by sovereign nations and backed by the IMF
   - ☐ a pool of various assets
6. What is the primary method of meeting cash demands in modern financial institutions?
   - ☐ Asset liquidity
   - ☐ Liability liquidity
   - ☐ Securitization
   - ☐ Cash reserves
7. A high quality liquid asset (HQLA) must be:

- ☐ well rated by the rating agencies
- ☐ easy to obtain
- ☐ a long-term investment
- ☐ unencumbered and easily and immediately able to be converted into cash

8. Governments seek to protect depositors more than other DI creditors because:
   - ☐ deposits are a critical part of the financial system
   - ☐ deposits are a primary form of savings for individuals
   - ☐ non-deposit creditors are usually better placed to assess and manage risk
   - ☐ All of the listed options are correct.

9. Which of the following instruments is considered a low-cost liability but carries high withdrawal risk?
   - ☐ Negotiable certificates of deposit (NCDs)
   - ☐ Term deposits
   - ☐ Demand deposits
   - ☐ Savings accounts

2 Short answer questions

2.1 Q1

An FI has estimated the following annual costs for its demand deposits:

- management cost per account = \$140,
- average account size = \$1500,
- average number of cheques processed per account per month = 75,
- cost of clearing a cheque = \$0.10,
- fees charged to customer per cheque= \$0.05, and
- average fee charged per customer per month = \$8.

(a) What is the implicit interest cost of demand deposits for the FI?
(b) If the FI has to keep an average of 8 per cent of demand deposits as required reserves with the RBA paying no interest, what is the implicit interest cost of demand deposits for the FI?
(c) What should be the per-cheque fee charged to customers to reduce the implicit interest costs to 3 per cent? Ignore the reserve requirements.

2.2 Q2

A cheque account requires a minimum balance of \$750 for interest to be earned at an annual rate of 4 per cent. An account holder has maintained an average balance of \$500 for the first six months and \$1000 for the remaining six months. The account holder writes an average of 60 cheques per month and pays \$0.02 per cheque, although it costs the bank \$0.05 to clear a cheque.

(a) What average return does the account holder earn on the cheque account?
(b) What is the average return if the bank lowers the minimum balance to \$400?
(c) What is the average return if the bank pays interest only on the amount in excess of \$400? Assume that the minimum required balance is \$400.
(d) How much should the bank increase its cheque fee to the account holder to ensure that the average interest it pays on this account is 5 per cent? Assume that the minimum required balance is \$750.

3 Extra

3.1 Q1

How can liquidity and interest rate risk management objectives conflict in a DI? Where possible, provide examples. Are these conflicts resolvable? Explain

3.2 Q2

How do deposit insurance and deposit guarantees help mitigate the problem of bank runs and what schemes are available in Australia to protect DI deposits?