

# AFIN8003 - Workshop 10

## Banking and Financial Intermediation

Dr. Mingze Gao

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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?