

Tutorial Letter 201/1/2018

Banking: Introduction to Treasury Management

BAN2602

Semester 1

Department of Finance, Risk Management and Banking

IMPORTANT INFORMATION

Please activate your myUnisa and myLife e-mail addresses and visit the myUnisa module site regularly.

Please note: This module is offered online only. All material will be available on myUnisa under "Official Study Material", "Additional Resources" and/or "Learning Units". However, to support you in your learning process, you will also receive some study materials in printed format.

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INTRODUCTION

Dear Student

The purpose of this tutorial letter (TL201) is to provide proposed solutions to Assignment 01 and Assignment 02 for semester 1 of 2018.

It also provides information on the structure of the BAN2602 May/June 2018 examination.

FIRST SEMESTER ASSIGNMENT 01

SECTION A (10 marks) (Correct choices are indicated in the table)

1. Which of the following is a key objective of the funds management strategy for banks?
 - A. Banks need to coordinate control of assets and liabilities.
 - B. Banks only need to worry about control of assets.
 - C. Banks only need to worry about control of liabilities.
 - D. Banks do not need to worry about control of either assets or liabilities.

2. A bond has a coupon rate of 8,75 per cent and has 12 years to maturity. This bond has a face value of R1 000 and is selling in the market for R1 231. What is this bond's yield to maturity?
 - A. 8.75 per cent
 - B. 6.00 per cent
 - C. 9.84 per cent
 - D. 12.00 per cent

3. Suppose a Treasury Bill has a face value of R10 000 and has 35 days to maturity. This Treasury Bill has a discount rate of 5.25 per cent. What price is this Treasury Bill selling for?
 - A. R10 000.00
 - B. R5 400.00
 - C. R9 948.96
 - D. R9 475.00

4. An announcement that the prices of goods and services in the market are rising would cause an increase in which of the following?
 - A. The risk-free rate
 - B. The default risk premium
 - C. The liquidity risk premium
 - D. The inflation risk premium

5. The Brits Stars Bank has rand interest sensitive assets of R475 million and rand interest sensitive liabilities of R200 million. If interest rates rise, what is likely to happen to the net interest margin of this bank?
- The net interest margin is likely to rise.
 - The net interest margin is likely to fall.
 - The net interest margin is likely to stay the same.
 - The impact on net interest margin cannot be determined from this information.
6. Suppose a bond has a duration of eight years and is selling in the market for R1 085. Currently, market interest rates are 6 per cent and are expected to rise by 1.5 per cent. What should happen to the price of this bond?
- The price of this bond should rise by 11.32 per cent.
 - The price of this bond should rise by 8.00 per cent.
 - The price of this bond should fall by 11.32 per cent.
 - The price of this bond should fall by 8.00 per cent.
7. Suppose the Augustina National Bank has assets with a duration of 6.5 years and liabilities with a duration of 3.0 years. This bank has R200 million in assets and R180 million in liabilities. What should happen to this bank's net worth if interest rates go from 7 per cent to 8 per cent?
- The net worth should fall by 6.26 million.
 - The net worth should rise by 6.26 million.
 - The net worth should fall by 5.61 million.
 - The net worth should fall by 7.1 million.
8. Which risk has to do with the breadth and depth of the secondary market?
- Interest rate risk
 - Business risk
 - Liquidity risk
 - Call risk
9. Which risk has to do with the falling sales and rising unemployment in the local area?
- Interest rate risk
 - Business risk
 - Liquidity risk
 - Call risk
10. Which risk has to do with that loans will be terminated or paid off ahead of schedule because they will be refinanced or because of turnover of assets used to back the loans?
- Interest rate risk
 - Business risk
 - Call risk
 - Prepayment risk

1. A	2. B	3. C	4. D	5. A
6. C	7. D	8. C	9. B	10. D

SECTION B
(15 marks)

1. Explain, with examples, the following terms: (3x2=6)
- (a) Asset management
 - (b) Liability management
 - (c) Funds management

ANSWER

- (a) The asset management view of assets and liabilities held that the amount and types of deposits were determined primarily by customers, and therefore that the key decision that a bank needed to make, relates to the assets.
- (b) Recent decades have ushered in dramatic changes in banking. The goal of liability management was simply to gain control of the bank's sources of funds.
- (c) The maturing of the liability management techniques, coupled with more volatile interest rates, gave birth to the fund management approach, which dominates banking today.

2. Explain the different forces that cause interest rates to change. (3)

ANSWER

Interest rates are determined, not by individual banks, but by the collective borrowing and lending decisions of thousands of participants in the money and capital markets. They are also impacted by changing perceptions of risk by participants in the money and capital markets, especially the risk of borrower default, liquidity risk, price risk, reinvestment risk, inflation risk, term or maturity risk, marketability risk, and call risk.

3. (a) Describe the meaning of the "yield curve". (3)

ANSWER

The yield curve is a graphical presentation of how market interest rates differ across loans and securities of varying term or time to maturity. It thus provides an implicit forecast of future interest rate changes. A positively sloped yield curve indicates the average expectation in the market that future short-term interest rates will be higher than they are today. Investors translate this expectation by shifting their investment holdings away from longer-term securities, as these will incur greater capital losses when interest rates rise.

On the other hand, a downward sloping yield curve indicates investor expectation of declining short-term interest rates. In this instance, a treasury manager or officer would consider lengthening portfolio maturity, as falling interest rates offer the prospect of substantial capital gains income from longer-term investments.

- (b) Explain why it is important to know about the shape or slope of the yield curve. (3)

ANSWER

The yield curve provides indications about the current trade-offs between greater returns and greater risks. The shape of the curve determines how much additional yield the treasury officer can earn by replacing shorter-term securities with longer-term issues or vice versa.

The yield curve provides a measure of how much might be earned at a particular time by pursuing the carry trade. A treasury manager can borrow funds at the shortest end of the curve (in other words, borrow short-term money by using the safest and most liquid investments securities as collateral) and then invest the borrowed funds in income-generating assets farther out the curve.

OR

A yield curve provides an indication about overpriced and under-priced securities. A security with a yield that lies above the curve represents a temptation to buy because its yield is temporarily too high, and hence its price is too low. Similarly, a security whose yield is below the curve represents a possible sell or do-not-buy situation because its yield is too low, and hence its price is too high.

When the yield curve is strongly upward sloping, gains could be made through riding the yield curve. A treasury officer could achieve this by selling securities soon to approach maturity whose prices have risen significantly while their yields have fallen. He or she can then reinvest the proceeds in longer-term securities carrying higher rates of return.

The yield curve generally rises in economic expansion and falls in recessions; therefore, in the long run, it gives signals about what stage of the business cycle the economy occupies at any particular time.

TOTAL MARKS [25]

FIRST SEMESTER ASSIGNMENT 02

1. Name and interpret five fundamental objectives of bank regulation. (10)

ANSWER (marks 2x5)

The first objective is to ensure the safety and soundness of banks. This involves maintaining domestic and international confidence, protecting depositors and ultimately taxpayers, and maintaining financial stability. Through safety and soundness, a financial system can ensure the efficient allocation of scarce resources because the payments system is reliable and institutions willingly extend credit, which stimulates economic growth. This goal is generally accomplished by limiting risk-taking at individual institutions, by limiting entry and exits, and by the government's willingness to act as a lender of last resort.

The second objective is to provide monetary stability through efforts to control growth in the nation's money supply and maintain the efficient operation of the payments system.

The third objective is to provide an efficient and competitive financial system. Regulation has attempted to prevent undue concentration of banking resources that would be anticompetitive, yet to allow banks to alter their product mix and delivery systems to meet economic and market needs. This goal has generally been accomplished by restricting mergers and acquisitions that reduce the number and market power of competing institutions.

The fourth objective is to protect consumers from abuse by credit-granting institutions. In the past, some individuals found it difficult to obtain loans for reasons unrelated to their financial condition. Regulations now stipulate that borrowers should have equal credit opportunities, and banks are not allowed to discriminate based on race, gender and geographic location.

The fifth objective is to maintain the integrity of the nation's payments system. As long as regulators ensure that banks clear cheques and settle non-cash payments in a fair and

predictable way, participants will have confidence that the payments media can be used to effect transactions. This is especially important given the trend toward e-commerce and e-cash.

It is also important to recognise that there are certain things that regulation cannot achieve. For example, regulation does not prevent bank failures. It cannot eliminate risk in the economic environment or in a bank's normal operations. It does not guarantee that bankers will make sound management decisions or act ethically. It simply serves as a guideline for sound operation policies.

2. (a) Explain why the centralisation of cash reserves in a central bank is a source of strength to the banking system of a country. (6)

ANSWER

When cash reserves are pooled in a central bank, which is responsible for monitoring the stability of the banking system of a country ✓, these reserves can be employed effectively to meet seasonal strains, ✓ or be used during financial crises. ✓ For instance, if a particular bank needs additional funds, the central bank can utilise part of the cash reserves of commercial banks to help the bank in need.

Centralised cash reserves facilitate the role of the central bank in supplying legal tender currency to commercial banks. ✓

Centralised cash reserves provide a central bank with a certain amount of funds with which it can operate and strengthen its financial position. ✓ The introduction of statutory provisions for the holding of minimum cash balances by commercial banks with certain central banks was designed to secure the advantages of centralised cash reserves. ✓

- (b) Provide three examples of foreign reserve assets. (3)

ANSWER

Foreign reserve assets include:

- gold
- foreign exchange (all assets denominated in currencies other than the domestic currency)
- SDRs (special drawing rights), an international reserve asset, created by the International Monetary Fund (IMF) in 1969 to supplement the existing official reserves of member countries

(SDRs are allocated to member countries in proportion to their IMF quotas. The SDR also serves as the unit of account of the IMF and some other international organisations. Its value is based on a basket of key international currencies.)

3. In addition to deposits, explain what other sources of funds for banks exist. (3)

ANSWER

There are multiple sources of funds for banks. The first is the owners' capital[√] (contributions). Owners of a bank have to risk their own money before asking other people to place deposits in their bank. The confidence and trust of depositors in a bank emanate from the perceived capitalisation of the institution. Regulators ensure the protection of depositors by requiring banks to hold certain levels of capital before they are licensed to operate.

Other sources of funds include borrowing from the money market,[√] the inter-bank market (where banks lend funds among themselves) and the central bank's discount window and lender-of-last resort option.[√]

4. What factors have motivated financial institutions to develop funds management techniques in recent years? (3)

ANSWER

The factors that have motivated financial institutions to develop funds management strategies are:

- deregulation
- volatile interest rates
- competition
- increased risks
- increase bundle of services

(Prior to deregulation, managers had limited discretion in reshaping their sources of funds. The types of deposits, the rates offered, and the non-deposit sources were closely regulated.)

TOTAL MARKS [25]

EXAMINATION

Examination admission will be granted to all students who submit Assignment 01 or Assignment 02 before the due date. Students who do not submit an assignment on time, will NOT be allowed to write the examination. The provisional examination dates have been published at <https://my.unisa.ac.za>.

Please note that a student must attain a mark of at least 40% to qualify for admission to the supplementary examination. Details about the procedure and cost for the re-marking of examination scripts are available on myUnisa (<https://my.unisa.ac.za>).

The examination will be a two-hour paper for 70 marks. This examination consists of **FOUR SECTIONS**.

Sections A and B comprise essay questions for 45 marks.

Section C consists of multiple-choice questions for 15 marks.

Section D consists of True/False questions for 10 marks.

We wish you luck in the examination and hope you have enjoyed studying Banking: Introduction to Treasury Management.

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