
UNIVERSITY
UNIVERSITY EXAMINATIONS
2010/2011 ACADEMIC YEAR
FOR THE DEGREE OF BACHELOR OF COMMERCE
COURSE CODE: FNCE 414
COURSE TITLE: MANAGEMENT OF FINANCIAL

## INSTITUTIONS

## STREAM: Y4S1

## DAY:

WEDNESDAY

## TIME:

2.00 - 4.00 P.M

## DATE:

8/12/2010

## INSTRUCTIONS:

i. The paper contains FOUR questions
ii. Answer ALL the questions
iii. All the questions carry EQUAL marks
iv. Marks are allocated at the end of each question

## QUESTION ONE

(a) The regulation of a financial system is a fine balancing act. Explain and discuss. (10 marks)
(b) Clearly explain the vital roles that financial institutions play in economy

## QUESTION TWO:

(a) Discuss the reasons for and against demand deposit inclusion as Rate Sensitive liabilities
(6 marks)
(b) State and explain some of the weaknesses of re-pricing model
(6 marks)
(c) The following table shows the duration and weighted duration of First Bank's assets.

Table: Duration of the first Bank's Assets and Liabilities FRIENDLY FINANCE COMPANY

| Assets | Amount(\$millions) | Duration <br> (years) | Weighted <br> duration(years) |
| :--- | :--- | :--- | :--- |
| Reserved and cash items | 5 | 0.0 | 0.00 |
| Securities |  |  |  |
| Less than 1 year | 5 | 0.4 | 0.02 |
| 1 to 2 years | 5 | 1.6 | 0.08 |
| Greater than 2 years | 10 | 7.0 | 0.70 |
| Residential mortgages |  | 0.5 | 0.05 |
| Variable-rate | 10 | 6.0 | 0.60 |
| Fixed-rate(30-year | 10 | 0.7 |  |
| Commercial loans | 15 | 1.4 | 0.11 |
| Less than 1 year | 10 | 4.0 | 0.14 |
| 1 to 2 years | 25 | 0.0 | 1.00 |
| Greater than 2 years | 5 |  | 0.00 |
| Physical capital |  |  | 2.70 |
| Average duration |  | 2.0 | 0.32 |
|  |  | 0.1 | 0.01 |
| LIABILITIES | 15 | 1.0 | 0.16 |
| Check deposits | 5 |  |  |
| Money market deposit accounts | 15 | 0.5 | 0.05 |
| Savings deposits |  | 0.2 | 0.03 |
| CDs | 10 | 1.2 | 0.06 |
| Variable-rate | 15 | 2.7 | 0.06 |
| Less than 1 year | 5 | 0.0 | 0.00 |
| 1 to 2 years | 5 |  |  |
| Greater than 2 years | 5 |  |  |
| Overnight funds |  |  |  |
| Borrowings |  |  |  |


| Less than 1 year | 10 | 0.3 | 0.03 |
| :--- | :--- | :--- | :--- |
| 1 to 2 years | 5 | 1.3 | 0.07 |
| Greater than 2 years | 5 | 3.1 | 0.16 |
| Average duration |  |  | 1.03 |

## Required:

i. The bank manager wants to know what happens when interest rates rise from $10 \%$ to $11 \%$.The total asset value is $\$ 100$ million, and the total liability value is $\$ 95$ million. Calculate the change in the market value of the assets and liabilities.
(5 marks)
ii. Based on the information provided in question (a), determine the duration gap for first Bank.
(4 marks)
iii. What is the change in the market value of net worth as a percentage of assets in interest rates rise from $10 \%$ to $11 \%$ ?
(4 marks)

## 2

## QUESTION THREE:

a) What is maturity gap? How can the maturity model be used to immunize an FI's portfolio? What is the critical requirement to allow maturity matching to have some success in immunizing the balance sheet of an FI?
(6 marks)
b) James the finance manager of Kazi Ngumu Bank has provided you with the following balance sheet for the bank (in millions):

## Assets

Floating-rate mortgages
(Currently $10 \%$ annually) $\$ 50$
30-year fixed-rate loans
(Currently 7\% annually) $\quad \underline{50}$

Total Assets

## Liabilities and Equity

| 1-year time deposits <br> (currently $6 \%$ annually) <br> 3-year time deposits | $\$ 70$ |
| :--- | :---: |
| (currently $7 \%$ annually) | 20 |
| Equity | $\underline{\$ 10}$ |
| Total Liabilities \& Equity | $\underline{\underline{\$ 100}}$ |(currently $6 \%$ annually)\$70

year time deposits
(currently 7\% annually)
\$10 $\$ 100$

## Required:

i) What is Kazi Ngumu's expected net interest income at year-end?
ii) What will net interest income be at year-end if interest rates rise by 2 percent?
iii) Using the cumulative repricing gap model, what is the expected net interest income for a 2 percent increase in interest rates?
iv) What will net interest income be at year-end if interest rates on RSAs increase by 2 percent but interest rates on RSLs increase by 1 percent? Is it reasonable for changes in interest rates on RSAs and RSLs to differ? Why?
(18 marks)

## QUESTION FOUR:

Capital market integration is one of the most important aspects of the global capital market. Capital market integration has a significant impact on the global economic growth. Recently, the European Union and the United States have taken a strong commitment towards capital market integration. Capital market integration plays a significant role in the field of international financial economics because capital market integration deals with a number of issues associated with integration of markets, implementation of policies, and the handling of crisis resulting from integration.

## Required:

i) Clearly explain the justifications of attempt to achieve global integration of financial markets,
(8 marks)
ii) Despite the efforts towards global financial market integration, there are many national financial markets that have largely remain segmented

1) Clearly explain what segmentation theory in relation to the behavior of interest rates in an economy
2) What are the main disadvantages for a firm to be located in a segmented market?
3) What have been the major causes of such segmentation?
4) What are the major effects of financial market segmentation?
