# NATIONAL OPEN UNIVERSITY OF NIGREIA

## SCHOOL OF MANAGEMENT SCIENCES

## COURSE CODE: PSM 825

## COURSE TITLE: FINANCIAL MANAGEMENT IN GOVERNMENT

# PSM 825: FINANCIAL MANAGEMENT IN GOVERNMENT

## COURSE GUIDE

## NATIONAL OPEN UNIVERSITY OF NIGERIA

## INTRODUCTION

PSM 825: Financial Management in Public Sector is a first semester year one three credit units and 600 level core course. The course material is prepared for all students who are taking courses in financial management. The course is a useful material to you in your academic pursuit as well as in your work place as managers and administrators.

The course will expose you to understanding many of the concepts, theories and formulas in financial management as they affects government institutions/establishments. It will assist you to be able to apply these concepts, theories and formulas to the task you perform as financial manager in the corporate business setting and government establishments.

The course consists of 21 units, which include course guide, Introduction of Financial Management; The Nigerian Financial System; The Capital Market Operation; Sources of Finance; Right Issue; Investment Decision under Certainty; Investment Decision under Uncertainty; Leasing; Cost of Capital; Working Capital Management; Budget and Budgetary Control in the Organization; Variance Analysis; Cost – Volume Profit Analysis; Public Sector Financial management; Techniques and tools for achieving efficiency management of government finance

This course guide tells you briefly what the course is all about, what course, material you will be using and how you can work your way through these materials. It suggest some general guidelines for the amount of time you are likely to spend on each unit of the course in order to complete it successfully.

It also gives you some guidance on your tutor-marked assignments, which will be made available in the assignment files. There are regular tutorial classes that are linked to the course. You are advised to attend these sessions.

## WHAT YOU WILL LEARN IN THIS COURSE

PSM 825: Financial Management in Government introduces you to various techniques, guide, principles, practices, forms and methods of financial management in government.

## COURSE AIMS

The main aim of the course is to expose you to the meaning and application of Public Financial Management. The course also aims at pointing out techniques of Public Financial Management. It also aims to help you develop skills in the business/government settings. You can also apply the principles to your job as Financial Managers in both public and private sectors.

## COURSE OBJECTIVES

To achieve the aims set out, the course sets overall objectives. Each unit also has specific objectives. The unit objectives are always included at the beginning of the unit, you should read them before you start working through the unit. You may want to referrer to them during your study of the unit to check your progress.

You should always look at the unit objectives after completing a unit. In doing so, you will be sure that you have followed the instructions in the unit.

Below are the wider objectives of the course as a whole. By meeting these objectives, you should have achieved the aims of the course as a whole. On successful completion of the course, you should be able to:

1. Explaining the nature of Financial Management.
2. Enumerating the values of Financial Management to civil servants.
3. Evaluating and providing practical applications of Financial Management principles.
4. Evaluating and expatiating on the value of Budgeting and the budgetary process.
5. Stating and explaining the various processes of appraising investment projects in the public sector.
6. Evaluating the process and concept of working capital management.
7. Evaluating the various process and politics of financial bill and budget in the government.
8. Discussing the financial control and reporting functions of the financial manager in the public sector.
9. Evaluating the dichotomy of agency function and problem of the financial manager in the public sector.
10. Describing the total flow of financial resources in the public service.

## WORKING THROUGH THE COURSE

To complete this course, you are required to read the study units, read textbooks and read other materials provided by the National Open University of Nigeria (NOUN). Each unit contains self-assessment exercises, and at a point in the course, you are required to submit assignments for assessment purposes. At the end of the

course, is a final examination. The course should take you about 17-18 weeks in total to complete.

Below you will find listed all the components of the course, what you have to do, and how you should allocate your time to each unit in order to complete the course successfully on time.

Below are the lists of all the components of the course:

**COURSE MATERIALS**

Major components of the course are:

a. Course guide
b. Study units
c. Textbooks
d. Assignment guide

**STUDY UNITS**

There are six modules (twenty one units) in this course which should be studied carefully. They are as follows:

**Module 1**

Unit 1: The meaning and nature of Financial Management

Unit 2: Evolution and Development of Nigerian Financial System

Unit 3: Regulatory and structure of Nigerian Financial System

Unit 4: The Development of Nigerian Capital Market

Unit 5: The Capital Market Operations

**Module 2**

Unit 1: Sources of Finance

Unit 2: Right Issue

**Module 3**

Unit 1: Traditional methods of Investment Appraisal

Unit 2: Scientific Methods of Investment Appraisal

Unit 3: Investment Decision under condition of Uncertainty

Unit 4: Leasing

**Module 4**

Unit 1: Cost of Capital

Unit 2: Weighted Average Cost of Capital

Unit 3: Working Capital Management

Unit 4: Management of Working Capital Components

Unit 5: The Meaning and Nature of Budget

Unit 6: Budgetary Control in the Organization

**Module 5**

Unit 1: Variance Analysis

Unit 2: Cost – Volume Profit Analysis

**Module 6**

Unit 1: Public Sector Financial management

Unit 2: Techniques and tools for achieving efficiency management of government finance

The first module deals with the theory of finance, the Nigerian financial market, and the capital market operation

The second module examines sources of finance and right issue

The third model deals with investment decision under certainty, investment decision uncertainty and leasing.

The fourth module examines cost of capital, working capital management and budget and budgetary control in an organization.

Module five deals with variance analysis and cost volume profit analysis

The sixth module is the last segment, it examines public sector financial management and technique and tools for achieving efficiency in management of government finance.

**TEXTBOOKS AND REFERENCES**

1) Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd
2) Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing
3) Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd
4) Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers
5) Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd
6) Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers
7) Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

## THE ASSIGNMENT FILE

There are many assignments in this course and you are expected to do all of them by following the schedule prescribed for them in terms of when to attempt them and submit same for grading by your tutor.

## TUTOR–MARKED ASSIGNMENT (TMAs)

In doing the tutor-marked assignment, you are to apply your transfer knowledge and what you have learnt in the contents of the study units. These numerous assignments are expected to be turned into our tutor for grading. They constitute 30% of the total score for the course.

## FINAL EXAMINATION AND GRADING

At the end of the course, you will write the final examination. It will attract the remaining 70%. This makes the total final scores to be 100%.

## COURSE MARKING SCHEME

Total Course Marking Scheme

| ASSESSMENT | MARKS |
|---|---|
| Assignment 1-9 | Nine assignments, six best six marks of the nine count @ 5% each = 30% of the course marks |
| Final Examination | 70% of overall course marks |
| Total | 100% of course marks |

## COURSE OVERVIEW

This table brings together the units, the number of weeks you should take to complete them and the assignments that follow them.

| Unit | Title of Work | Weeks activity | Assessment (end of unit) |
|---|---|---|---|
| | Course Guide | | |
| | **Module 1** | | |
| 1 | The meaning and nature of Financial Management | 1 | Assignment 1 |
| 2 | Evolution and Development of Nigerian Financial System | 1 | Assignment 2 |
| 3 | Regulatory and structure of Nigerian Financial System | 1 | Assignment 3 |
| 4 | The Development of Nigerian Capital Market | 1 | Assignment 4 |
| 5 | The Capital Market Operations | 1 | Assignment 5 |
| | **Module 2** | | |
| 1 | Sources of Finance | 1 | Assignment 6 |
| 2 | Right Issue | 1 | Assignment 7 |
| | **Module 3** | | |
| 1 | Traditional methods of Investment Appraisal | 1 | Assignment 8 |
| 2 | Scientific Methods of Investment Appraisal | 1 | Assignment 9 |
| 3 | Investment Decision under condition of Uncertainty | 1 | Assignment 10 |

| 4 | Leasing | 1 | Assignment 11 |
|---|---|---|---|
| | **Module 4** | | |
| 1 | Cost of Capital | 1 | Assignment 12 |
| 2 | Weighted Average Cost of Capital | 1 | Assignment 13 |
| 3 | Working Capital Management | 1 | Assignment 14 |
| 4 | Management of Working Capital Components | 1 | Assignment 15 |
| 5 | The Meaning and Nature of Budget | 1 | Assignment 16 |
| 6 | Budgetary Control in the Organization | 1 | Assignment 17 |
| | **Module 5** | | |
| 1 | Variance Analysis | 1 | Assignment 18 |
| 2 | Cost – Volume Profit Analysis | 1 | Assignment 19 |
| | **Module 6** | | |
| 1 | Public Sector Financial management | 1 | Assignment 20 |
| 2 | Techniques and tools for achieving efficiency management of government finance | 1 | Assignment 21 |
| | **Total** | 21 | |

## HOW TO GET MOST FROM THIS COURSE

In distance learning, the study units replace the university lecturer. This is one of the great advantages of distance learning. You can read and work through specially designed study material at your own pace, and at a time and place that suits you best. Think of it as reading the lecture that a lecturer might set you some reading to do, the unit will tell you when to read your other materials. Just as a lecturer might

give you an in-class exercise, your study units provide exercise for you to do at appropriate points.

Each of the study units follows a common format. The first item is an introduction to the subject matter of the unit, and how a particular unit is integrated with the other units and the course as a whole.

Next is a set of learning objectives. These objectives let you know what you should be able to do by the time you have completed the unit. You should use these objectives to guide your study. When you have finished the unit, you must go back and check whether you have achieved the objectives. If you make a habit of doing this, you will significantly improve your chances of passing the course.

The main body of the unit guides you through the required reading from other sources. This will usually be either from a reading section of some other sources.

Self-tests are interspersed throughout the end of units. Working through these tests will help you to achieve the objectives of the unit and prepare you for the assignments and the examination. You should do each self-test as you come to it in the study unit. There will also be numerous examples given in the study units, work through these when you come to them too.

The following is a practical strategy for working through the course. If you run into any trouble, telephone your tutor. Remember that your tutor's job is to help you. When you need help, do not hesitate to call ans ask your tutor to provide it.

(i) Read this course guide thoroughly.
(ii) Organise a study schedule. Refer to the course overview for more details. Nate the time you are expected to spend on each unit and how the

assignments relate to the units. Important information e.g. details of your tutorials, and the date of the first day of the semester will be made available. You need to gather all this information in one place, such as your diary or a wall calendar. Whatever method you chose to use, you should decide on and write in your own dates for working on each unit.

(iii) Once you have created your own study schedule, do everything you can to stick to it. The major reason that students fail is that they get behind with their coursework. If you get into difficulties with your schedule, please let your tutor know before it is too late for help.

(iv) Turn to unit 1 and read the introduction and the objectives for the unit

(v) Assemble the study materials. Information about what you need for a unit is given in the "Overview" at the beginning of each unit. You will always need both the study unit you are working on and one of your references, on your desk at the same time.

(vi) Work through the unit. The content of the unit itself has been arranged to provide a sequence for you to follow. As you work through the units, you will be instructed to read sections from your other sources. Use the unit to guide your reading.

(vii) Well before the relevant date, check your assignment file and make sure you attend the next required assignment. Keep in mind that you will learn a lot by doing the assignments carefully. They have been designed to help you meet the objectives of the course and, therefore, will help you pass the exam. Submit all assignments not later than the due date.

(viii) Review of the objectives for each study unit confirms that you have achieved them. If you feel unsure about any of the objectives, review the study material or consult your tutor.

(ix) When you are confident that you have achieved a unit's objectives, you can then start on the next unit. Proceed unit by unit through the course and try to face your study so that you keep yourself on schedule.

(x) When you have submitted an assignment to your tutor for making, do not wait for its return before starting on the next unit. Keep to your schedule. When the assignment is returned, pay particular attention to your tutor's comments, both on the tutor-marked assignment form and also written on the assignment. Consult your tutor as soon as possible if you have questions or problems.

(xi) After completing the last unit, review the course and prepare yourself for the final examination. Check that you have achieved the unit objectives (listed at the beginning of each unit) and the course objectives (listed in the Course Guide).

## FACILITATORS/TUTORS AND TUTORIALS

There are 17 hours of tutorials provided in support of this course. You will be notified of the dates, times and location of these tutorials, together with the names and phone numbers of your tutor, as soon as you are allocated a tutorial group

Your tutor will mark and comment on your assignments, keep a close watch on your progress and on any difficulties you might encounter and provide assistance to you during the course. You must mail your tutor-marked assignments to your tutor well before the due date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible. Do not hesitate to contact your tutor by telephone, e-mail, or discussion board if you need help. The following might be circumstances in which you would find help necessary.

**CONTACT YOUR TUTOR IF:**

- You do not understand any part of the study units or the assigned readings
- You have difficulty with the self-test or exercise
- You have a question or problem with an assignment with your tutor's comment on an assignment or with the grading of an assignment

You should try your best to attend the tutorials. This is the only chance to have face-to-face contact with your tutor and to ask questions which are answered instantly. You can raise any problem encountered in the course of your study. To gain the maximum benefit from your tutorials, prepare a question list before attending them. You will learn a lot from participating in discussions actively

**SUMMARY**

As earlier stated above, this course expose you to the meaning and application of Public Financial Management. The course also aims at pointing out techniques of Public Financial Management. It also aims to help you develop skills in the business/government settings. You can also apply the principles to your job as Financial Managers in both public and private sectors.

We hope you will enjoy your acquaintances with the National Open University of Nigeria (NOUN). We wish you every success in the future.

# NATIONAL OPEN UNIVERSITY OF NIGERIA
# SCHOOL OF MANAGEMENT SCIENCES
# 14/16, AHMADU BELLO WAY, VICTORIAL ISLAND, LAGOS

## COURSE DEVELOPMENT

**COURSE CODE: PSM 825**

**COURSE TITILE: FINANCIAL MANAGEMENT IN GOVERNMENT**

**COURSE DEVELOPER/WRITER: J.S. KEHINDE, Ph.D, ACA**

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**LAGOS STATE UNIVERSITY, OJO**

**COURSE EDITOR: DR (MRS) A.O. FAGBEMI**

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**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**14/16 AHMADU BELLO WAY, VICTORIAL ISLAND, LAGOS**

MODULE 1

## Unit 1: THE MEANING AND NATURE OF FINANCIAL MANAGEMENT


**1.0 Introduction**

**2.0 Objectives**

**3.0 Main contents**

- **3.1 Financial Management**
- **3.2 Functions of the Financial Manager/Roles of Financial Management**
- **3.3 Objectives of Financial Management**
- **3.4 Agency problem in financial management**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**


### 1.0 Introduction

In this unit, we will attempt to explain financial management. The unit will also explain the functions of the financial manager/roles of financial management. It examines the objectives of financial management. It further discusses agency problem in financial management.

### 2.0 Objectives

At the end of this unit, you should be able to:

1. Define Financial Management
2. Discuss the functions and objectives of financial management
3. Explain the agency problem in financial management

### 3.0 Main content

The world over, the issues of raising and utilizing of fund have been the heart beat of all financial managers both in the corporate world and in the public

sector. The profitable utilization of this scarce resource (fund) by various sectors has become more important as cost of fund rises on a daily basis. Thus, the financial manager must do all that is possible to generate returns that will not only be sufficient to meet the cost of fund but also enough to satisfy the wealth maximization objective of the firm. This being the age long prime purpose of establishing a firm. Raising finance for corporate bodies, thus becomes important and of highest importance.

### 3.1 Financial Management

"Finance is the management of money", it is the management of money and investment or borrows(ing) or raise(ing) of money for purchase of investment or to provide money for a project. Finance is the heart-beat of all corporate bodies. Thus management of finance has become relevant in modern business organizations. The financial effective management rules the finance world today, as the survival instinct of corporate organization continues to be an important factor.

Financial management is the process of planning and controlling of the financial resources of a firm. It includes the acquisition, allocation and management of firms' financial resources. It has today been identified with the totality of how the firm raises finance, where the firm sources funds, the cost of such funds, the alternative method(s) of utilizing such funds and the final benefits accruing from using such funds.

To the financial manager, the cost and benefit of capital remain the most important factor, since the primary objective of the firm is to maximize the shareholders' wealth i.e. the present value of equity holding. The shareholders' wealth is affected by:

1. The volume or quantity of future cash flows
2. The timing of future cash flow
3. The risk attached to the future cash flow.

Today, the firm does not exist to maximize the shareholders' wealth alone as this is gradually becoming a narrow (one-sided) objective of the firm, on the broader aspect is the maximization of the stakeholders' wealth. This is so since the firm exists for the benefits of all its stakeholders such as the shareholders, the management, the employees, the creditors, the government, and the public at large, who are public observers of firms' performances and potential stockholders.

**Self-Assessment Exercise (SAE) 1**

Explain the concept "Financial Management"

### 3.2 Functions of the Financial Manager/Roles of Financial Management

1. **Financial Decision:** This is the effective management of the capital structure of the business. The financial manager must ensure maximum mixture of debt and equity in financing the firm, so as to ensure maximum returns to the shareholders. The maximum mix of finance of debt and equity must be established to maximize the returns of shareholders.

2. **Investment Decision:** The financial manager should select the most profitable investment portfolio that will reduce to the bearest minimum the risk of the organization not maximizing stockholders' wealth.

3. **Dividend Decision:** The financial manager must select the best dividend policy per time, the timing dividend, the forms of dividend to be paid, the methods of payment, the amount to be paid etc. The fund(s) to use is an important factor to be considered by the financial Manager. As dividend can be paid either in cash (cash dividend), or by share allocation (stock dividend).

The amount to be retained by the firm for future finances must also be considered. Since retained earnings is the cheapest source of fund to the firm, and a bird in hand is worth more than ten in the bush. Thus, cash dividend will mean more to some section/segment of investors than the retained earnings which still remains an integral part of the shareholders wealth. Thus,

the financial manager must be able to draw the border line between amount to be declared as well as retained for future use.

4. **Acquisition Decision:** The financial manager must be interested in the organizations internal and external growth. The growth of corporate organization can be varied, either by way of merger or acquisition, by backward integration or forward integration etc.

5. **Working Capital Management (Treasury Management):** It is the totality of management of cash, debtor prepayments, stocks creditors, short term loans accruals, etc. to ensure the profitability of the firm's operation. It is the management of current asset and liabilities of firm, which is fast becoming important in the face of high cost of capital. In modern financial world, efficient management of the working capital will ensure maximum utilization of scarce financial resource and ipso facto maximization of the shareholder's wealth.

6. **Financial Control and Reporting:** Financial control and reporting is an important function of the financial manager. He must be able to present a lucid yet concise financial report that provides management with required information necessary to take financial decision.

### 3.3 Objectives of Financial Management

The major objective of management is to maximize the shareholders' wealth. The shareholders' wealth is the present value of future cash flows or present value of future dividends payable to the shareholders infinitely.

The Shareholders wealth maximization is gradually becoming the single and narrow objective of firms pursued by financial managers making it the most fashionable objective of the firm.

This is being achieved through a combination of goals such as:

1. Increase in the market share of the firm
2. Increase in reported profits
3. Continuous survival of the business

4. Provision of valued services to customers

5. Ensuring public acceptability of the firm and its products/services coupled with both social acceptability and legal acceptability.

**3.4 Agency Problem in Financial Management**

The financial manager is acting as agent for the shareholders of the firm. Thus, the financial manager is an agent of the shareholders in administering the firm for attainment of its objective i.e maximization of shareholders' wealth. Thus, an agent-principal relationship exists between them. At the same time, the financial manager stands between the shareholders and the creditors of the organization, thus an agency relationship existing between the financial manager and the creditors of the firm.

These agent-principal relationships can cause problem as the financial manager's objective or goal might be different from the shareholders' goals and that of the creditors might be different from that of the financial manger. For example, while the shareholders may be pursuing a huge dividend payment (aim), the financial manager might be pursuing a high retained earning policy. On the other hand, while the creditors are pursuing quick debt recovery policy the financial manager may be pursuing high fund re-investment policy.

Thus, the financial manager must strike a balance between all these opposing negating goals to ensure the sustainable survival of the firm.

In solving the problem therefore:

1. The financial manager must ensure provision of adequate information of both the creditors and the shareholders.

2. The shareholders can be appointed as directors so as to ensure active participation in the firm's activities.

3. The shareholders must have personal knowledge of who the financial managers are, and at the same time financial managers must have

adequate knowledge of who the shareholders are especially of their varying interests.

4. The financial manager must strike a balance between organizational goals and the creditors' interests so as not to operate against the object clause of firm, otherwise its activities will be declared ultra vires.
5. The financial manager must prevent utilization of short term fund to finance long term project and vice versa that may breach trust between the creditors and the firm.

**Self-Assessment Exercise (SAE) 2**

Briefly discuss the functions and roles of financial management.

## 4.0 Summary

In this unit, we examined the definitions of financial management. It outlined the major functions and roles of financial management in an organisation. We also discussed the problems of financial management.

## 5.0 Conclusion

Financial management is the process of planning and controlling of the financial resources of a firm. It includes the acquisition, allocation and management of firms' financial resources. The major objective of management is to maximize the shareholders' wealth. The shareholders' wealth is the present value of future cash flows or present value of future dividends payable to the shareholders infinitely.

## 6.0 Tutor-Marked Assignments (TMAs)

1. Explain the concept "Financial Management"

2. Distinguish between Financial management as an activity and as an academic discipline?

3. What are the roles of financial managers in an organisation?

**7.0 References/Further Reading**


Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

## MODULE 1

## Unit 2: EVOLUTION AND DEVELOPMENT OF NIGERIAN FINANCIAL SYSTEM

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**3.1 Evolution of the financial system**

**3.2 The history of the Nigerian financial system**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

### 1.0 Introduction

In the last unit, we examined the meaning and the functions of financial management. In this unit, we shall examine the evolution and development of the Nigerian financial management authorities.

### 2.0 Objectives

In this unit, our main objectives include:

1. To explain the evolution of financial system
2. To discuss the history of the Nigerian financial system

### 3.0 Main Contents

The financial system is the totality of institutions, bodies, rules and regulations governing the flow of financial resources within the economy.

The Nigeria financial system is described as the framework of:

1. Laws and regulations

2. Financial institutions

3. Practices which direct the flow of financial resources within the economy.

Broadly speaking, "A financial system consists of a network of financial links between economic units a web of debentures and shares. The financial system is a superstructure created on the basis of the real wealth of the economy "Jack revel (1975).

### 3.1 Evolution of the Financial System

The financial system as it is today developed from the effort of individuals who productively engage in trade; exchanging goods for goods in what was primordially denoted as barter, trade by barter evolve the present financial system. The process succeeds as long as the buyer and seller of equivalent goods exist. However, with ever increasing volume of activities and the need to exchange a variety of commodities (of the seller) for a single product and vice versa, the barter system soon became not only cumbersome but also inadequate on the one hand, surplus units could not preserve their surplus in the most convenient form and on the other hand deficit units could not obtain resource they require in the most convenient form on the other hand.

The poor performance of the barter system soon paved the way for the usage of gold as a means of exchange. As gold soon became means of exchange good for good; the higher the quantity of gold you possess the better your capacity to trade. Gold a commodity in itself soon became what could be exchanged for other forms of goods and services. Several values exist for several forms of gold and with these value equivalent amount of goods and services were exchanged.

The gold system was sustained for a long period of time. In England, precious metals and coins were used almost exclusively as money until the middle of the seventeenth century. However, in 1640, Charles I appropriated £130,000 worth of gold held for merchants in the tower of London.

Thereafter, gold and silver bullion plates were kept in the strong rooms of the goldsmiths. Eventually receipts for these deposits were accepted in exchange for goods and so withdrawal of the actual gold and silver became unnecessary.

This was the origin of the bank note and paper currency which soon began forming an increasing proportion of British money. The paper from which notes are made is comparatively worthless. However people who receive note are confident that other too will accept them. The evolution of money in its present form was the next stage and with money came the need for financial assets and claims in the form we have them today. The creation of financial assets and claims was facilitated by the emergence of financial intermediaries, which perform the crucial function of matching the needs of surplus units with those of the deficit units. These functions were performed in the form of financial markets-notably the money market and the capital markets.

The financial institutions, consisting of the money market and the capital market stand as the major subject of financial system mostly in a developed economy where the governments play only a little role in the financial intermediation. However, in a developing nation like Nigeria, the financial system cannot function without the activities of the government, which makes for a great player in the financial system. Most times in a nation like ours, financial intermediation remains at the subsidiary level because non financial activities are done in Cash rather than through other more articulated means which avoid the risk of Cash and the cumbersomeness of money.

### 3.2 The History of the Nigerian Financial System

The history of the financial system in Nigeria could be broadly divided into two parts namely: the colonial era and the post Colonial era. The post colonial era could be subdivided into the foundation (or the phase two of the system), the government intervention (or the phase three) the stabilization Era (or the phase four).

**The Colonial Era**

This era witnessed the initial development of the financial system in the nation. This era witnessed a period in which the Nigeria financial system remained a subject of the British financial system. The same rule that governs the British system operates in Nigeria, primarily edicts and ordinances were used in the nation; most operating laws were British laws.

**The Second Phase (The Financial System Foundation)**

The emergence of solid foundation for the Nigerian financial system did not come until after 1960 when Nigeria became an independent nation. Thus with the political independence, the Bank of England ceased to be the apex Bank for the Central Bank. Most operating laws were enacted as laws within the independent era and the Republican era of 1963.

Most already existing areas of the system received enabling laws, such that the following laws became operative.

1. Income Tax Management Act 1961
2. Companies Income Tax Act 1961
3. Income Tax Rent Act 1963
4. Lagos Stock Exchange Act 1961
5. Trustee Investment Act 1962
6. Exchange Control Act 1962
7. NPF Act 1961
8. Banking Act 1961

The above laws provided the requisite framework from development of Nigeria modern financial, system. They provide the basic foundation for the operation of the financial system. The laws allow for the co-existence of the private and public sector of the economy which remain inter-independent and the

establishment of some regulatory financial institution like the Nigeria Industrial and Development Bank (NIDB).

**The Third Phase: (Government Intervention) 1997**

This period witnessed the transformation of the Nigerian financial system. The major influencing factor of this period is the transition of the major revenue source to the nation. The transition from agricultural based economy to dependence on petroleum product, impact greatly on the financial system; the need to indigenize the industry and the financial sector also come in to focus. The period witnessed the oil boom era and its emergence impact on the economy.

This period witnessed the enactment of the following laws:

1. The Capital Gains Tax Act 1967
2. The Companies Act 1968
3. The Companies Income Tax 1979
4. The indigenization Acts 1972
5. The indigenization of Banking and Financial institution 1974

This period also witnessed the birth of several government parastatals such as industrial and Agricultural Development Corporations in the states, the Federal Mortgage Bank, other regulatory machineries such as the capital Issue commission and the Securities and Exchange Commission were also established. The role of the government in financial intermediation (e.g. in granting building loans and car loans and handling its own pensions and gratuity schemes) were also increased. This era witnessed increasing participation of the government in financial activities either as intermediaries, regulatory body or direct participant in financial activities. The capital market benefited a great deal from the development in this era although not as direct objective of the government but as a bye product (side effect) of the

development e.g. the indigenization Decrees led to the going public of the hitherto private limited liability companies.

**The Fourth Phase (The Stabilization Era)**

This period commenced from 1979 to date, the period witnessed a lot of conservative laws being enacted. The downturn in international oil price witnessed around this period impacted negatively on the Nigerian economy and Ipso factor the Nigerian financial system. Austerity measures were introduced to curb the excesses in the economy. The period witnessed the deregulation of the Nigerian economy when all facet of the Nigerian economy witnessed deregulation, the banking sector and all other aspects of the financial sector were also deregulated, including the foreign exchange system. The money market and the industrial sector were all either partially deregulated or fully deregulated. This period witnessed what could be called an artificial growth in the economy, a period of growth without development.

The deregulation of financial sector culminated in the indiscriminate licensing of Banks and Financial Houses and the proliferation of Banks and other financial institutions with little or no supervision or control. The result was the distress in the banking sector witnessed between 1993 and 1995; several banks became distressed and eventually liquidated due to unscrupulous bank workers perpetrating sharp practices.

Currently, the financial system is witnessing modification of existing rules and regulations, more strict control measures are being introduced to the system and rules and regulations that will guarantee dependability and sustainability growth are being enacted. Thus, the financial system is a conglomerate of various institutions, markets, and operators that interact within an economy to provide financial services. Such services may include resource mobilization and allocation; financial intermediation and facilitation of foreign exchange transactions to enhance international trade. The financial system plays a great role in problems of economic growth and development of a nation. It is the mid-

wife of industrial growth of a nation. Over the years the Nigerian financial system have been undergoing continuous revolution and hence re-positioning the nation for development growth.

**Self-Assessment Exercise (SAE) 1**

Explain various stages in the history of Nigerian financial system

**4.0 Summary**

The unit examined the evolution of financial system. It discussed the major stages in the evolution of Nigerian financial system. It also examined the various stages in the development of the Nigerian financial system.

**5.0 Conclusion**

In this unit, you have leant the nature and evolution of Nigerian financial system. The unit shows the major development in Nigeria and their functions.

**6.0 Tutor-Marked Assignments**

1. Explain the evolution of the financial system
2. Briefly explain the stages in the evolution of Nigerian financial system
3. Differentiate between financial system and financial market

**7.0 References/Further Reading**


Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London: Gulidfold and King’s Lynn

## MODULE 1

## Unit 3: REGULATORY ANS STRUCTURE OF NIGERIAN FINANCIAL SYSTEM

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**3.1 The structure of the Nigerian financial system**

**3.2 Nigeria financial system regulatory authority**

**3.3 Financial market**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

### 1.0 Introduction

In the last unit, we examined the meaning and the functions of financial management, the evolution and development of Nigerian financial market. In this unit, we shall examine the regulatory and the structure of financial management system in Nigeria.

**3.3 The structure of the Nigerian financial system**

**3.4 Nigeria financial system regulatory authority**

**3.5 Financial market**

### OBJECTIVE

1. Explain the structure of the Nigerian financial system
2. Understand the functions of regulatory agencies in Nigeria financial system

### 3.1 Nigeria Financial System Regulatory Authorities

#### A. The Central Bank of Nigeria

The Central Bank of Nigeria (CBN) came into existence by the CBN Act 1958 which became operative in 1959. The CBN remains the apex regulatory body of the financial system.

The CBN is responsible for monitoring activities of the Banks (Commercial Banks, Community Bank etc). The Central Bank of Nigeria is the Banker and Financial adviser to the Federal Government of Nigeria. The CBN is regarded as the lender of last resort to the Banks.

Thus, it promotes growth and stability in the financial sector. In 1991 the CBN assumed the highest controlling authority over the financial institutions by virtue of Decree 25 of 1991. Also it needs to be stated that in the recent years the power of the CBN have been grossly increased to enhance efficiency in the financial sector.

#### B. The Nigerian Deposit Insurance Corporation (NDIC)

The Nigerian Deposit Insurance Corporations (NDIC) was established by Decree No 22 of 15th June 1988. It effectively began operations in February 1989. It provides deposit insurance and related services for the banks, that is, it provides insurance for deposit with banks in order to promote confidence in the banking industry. The NDIC is empowered to peruse the books and affairs of insured banks and other deposit taking financial institutions. Licensed banks are mandated to pay 15/16 of one percent of their total deposit liabilities as insurance premium to the NDIC. The depositor's claim is limited to N 50,000 in case of banks liquidation. In recent years the CBN and the NDIC have intensified efforts to ensure that distress in the banking industry is reduced to the bearest minimum. In 1997 the NDIC became autonomous by the amendment of the 1988 NDIC decree. It reports now to the Federal Ministry of Finance.

### C. The Securities and Exchange Commission (SEC)

The Securities and Exchange Commission (SEC) was established by the SEC Act of 27th September 1979 (originally known as the capital Issues commission), which was latter reviewed and enacted by the SEC Degree of 1988, which was established as the apex body in charge of the Capital Market. Its major function is to regulate activities at the Capital Market and also promote confidence in the working of the system. It aims at improving public confidence and participation in the system. It also influences the pricing of shares and the volume of such shares that could be issued. Additionally it licenses dealers in securities investment advisers and market places, such as stock exchange branches with intention of maintaining proper standard of conduct and professionalism in the securities business.

The company and Allied Matters Decree 1990 further enlarged the responsibility of the SEC to include approval and regulation of mergers and acquisitions and the authorization of the establishment of the trustees. However, with the advent of deregulation, the function of pricing of stock has been transferred to the issuing house. However, with the advent of deregulation, the function of pricing of stock has been transferred to the issuing house. However, the SEC retains the power to maintain surveillance over the market to enhance efficiency.

In 1993 the SEC issued directives for the establishment of other stock exchange in other states of the nation in compliance with the deregulation principle; this was followed by the promulgation of the Nigerian Investment Promotion Commission Decree No 16 and the Foreign Exchange Monitoring and Miscellaneous Provisions Decree No 17 also in 1995.

### D. The Federal Ministry of Finance

The Federal Ministry of Finance is the Apex Government parastatal controlling the Fiscal Operations of the Federal Government. The CBN and the FMF prior to 1991 jointly awarded Bank licenses. However, with the 1991 reform, this

responsibility was transferred to the CBN, the CBN now reports to the presidency through the FMF.

### E. National Insurance Commission (NIC)

The national Insurance Commission established by the Insurance Special Supervision, Fund (Amendment) Decree No 62 of 1992 is charged with the duties of ensuring effective Administration, Supervision, regulation and controlling of insurance business. In Nigeria they issue standard of performance for insurance companies. It also ensures protection of policy holders and the establishment of a bureau to which complaints are made by members of the public.

To ensure efficiency and effectiveness of the insurance companies the NIC was established to take over the supervisory and regulatory role of FMF over the insurance business.

### F. The Federal Mortgage Bank of Nigeria (FMBN)

The FMBN was established to provide banking and advisory services and research activities pertaining to housing. In 1990 the National housing policy was adopted and subsequently Decree 3 of January 1991 was promulgated which empowered the Federal Mortgage Bank of Nigeria to license and regulate primary mortgage institutions in Nigeria; it thus becomes the Apex regulatory body for the Mortgage Finance industry. In 1993 a new institution called federal Mortgage Finance was established to carry out the finance function of the FMBN, however, the FMBN still retains its regulatory authority. The FMBN following the recent government directive is now placed under the CBN.

## 3.5 Financial Market

The Financial Market exists for the purpose of mobilization and intermediation of funds; that is, through the financial market, funds are transmitted from the surplus sector of the economy to the deficit unit of the economy. The funds mobilized might be a short term fund or a long term depending on the nature of institutions involved and the method of transaction. Funds traded can either

be a short term fund long term fund, or medium term fund. The operations of the financial market involve the commercial banks, the merchant banks, the development banks, financial houses and individuals. The Financial markets are generally categorized into two namely: the money market and the Capital market.

**Self-Assessment Exercise (SAE) 1**

Mention and explain at least four of the regulatory authorities of the Nigerian financial system

### 3.2 The Structure of the Nigerian Financial System

The Nigerian Financial System consists of the regulatory and supervisory authorities and the banks and non-bank financial institutions.

The regulatory and supervisory authorities include:

1. The Federal Ministry of Finance (FMF)
2. The Central Bank OF Nigeria (CBN)
3. Nigeria Deposit Insurance Corporation (NDIC)
4. Securities and Exchange Commission (SEC)
5. National Insurance Commission (SEC)
6. Federal Mortgage Bank of Nigeria (FMBN)
7. The National Board for Community Bank (NBCB)

The central Bank of Nigeria (CBN) remains the Apex regulatory body, for the money market. The CBN regulates exclusively the activities of the financial institutions and specialized financial institutions such as the Nigerian Industrial Development Bank (NIDB), The Nigerian Bank for Commerce and Industry (NBIC) and the Nigeria Agricultural and Cooperative Bank (NACB).

The Capital Market is solely regulated by the Securities and Exchange Commission (SEC) acting as the highest regulatory authority while the stock

market activities is being carried out by the Nigerian stock exchange, with branches in Lagos (Lagos Stock Exchange), and Abuja (Abuja Stock Exchange).

Operators in the Capital Market are the issuing houses, and the stock brokerage firms and the registrars.

In 1997, the CBN Decree No 24. of 1991 was modified such that with effect from 1997 the CBN reports directly to the presidency through the Federal Ministry of Finance. Also by the same token with effect from 1st January 1997, the CBN assumed the highest controlling authority over commercial bank and other banking institutions in Nigeria. Thus the CBN now regulates and control the activities of the Commercial Banks, Peoples Banks, Community Banks, Mortgage Banks, Finance Houses, Discount Houses, Bureaux de Change and Development Banks.

## 4.0 Summary

The unit examined the structure of the Nigerian financial system and the regulatory authorities in the Nigerian financial system.

## 5.0 Conclusion

In this unit, you have leant the structure of Nigerian financial system. The unit shows the major regulatory agencies in Nigeria and their functions.

## 6.0 Tutor-Marked Assignments

1. State and explain the actors in Nigeria financial markets
2. Differentiate between financial system and financial market

## 7.0 References/Further Reading

Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

## MODULE 1

## Units 4: THE DEVELOPMENT OF NIGERIA CAPITAL MARKET

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**3.1** Evolution of the Nigerian capital market

**3.2** Characteristics of the capital market

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

In this unit, we discuss the evolution of Nigerian financial market. You will learn about the characteristics of the capital market and the factors influencing activities in the capital market. The unit explain the opportunities in the Nigerian financial market. Also, we shall discuss the functions of the Nigerian financial market.

### 2.0 Objectives

1. To explain the meaning of capital market
2. To examine the characteristics of the capital market
3. To discuss the function of Nigerian capital market

## 3.0 Main Content

The capital market is the market where long term funds are being raised. It mobilizes surplus funds from the surplus unit of economy for usage by the deficit unit of the economy. Instruments traded in the capital market are of long term in nature. The capital market aside from providing a forum or fund mobilization, also help in development of investment opportunities, willing investors can come to the market to buy investment instrument being offered at the capital market. The growth of the capital market also makes for the growth of the national economy. The capital market as a whole is a complex arrangement of institutions and mechanism where medium and long term funds are pooled and made available to organization, government, and individuals.

The development of the capital market stems from the realization that household, corporate and institutional savings can be mobilized and channelled for investment purpose thereby reducing the clamour for foreign sources of fund which often times have political and economic strings attached thereon. The possibility of mobilizing funds domestically through the capital market induces expansion and growth by the firms through forward and backward integration which are made possible cheaply.

The growth of any nation economically is measured by the value of its accumulated wealth and its growth through savings and investment. The capital market provides funds for such development. The growth rate of capital market depicts the growth in investment and the productive sector of the economy at large.

### 3.1 Evolution of the Nigerian Capital Market

The need to raise funds domestically informed the coming together of some eminent Nigerian and British national in the corporate world as exists in Nigeria. They jointly agree on seeking the formation of a forum that will enable fund on the long term bases to be raised locally, Until then, most times

operating firms, borrow fund from the banks (mostly on short term basis) most of which have foreign nationality ownership. This desire for a capital market informed the appointment of a committee to advice the Federal Government on ways and means of establishing a stock market in Nigeria. This committee was formerly set up by the Federal ministry for Industry in May 1958. The Committee reported favourably in 1959 on the benefit of such a market. It also made the following recommendations among others.

1. The creation of facilities for dealing in shares
2. Measures to encourage savings and issue of securities of government and other organization.
3. The establishment of rules regulating transfers

Thus in 1960 The Nigeria Stock Exchange was first incorporated as the Lagos Stock Exchange on 15th September as a non profit making private limited liability company. It actually began operations on 5th June 1961 with an authorized share capital.

### 3.2 Characteristics of the Capital Market

The capital market represents the forum for mobilizing long term financial instrument. The major feature of the capital market involves.

1. Instrument traded in the capital market are intermediate and long term in maturity, involving both debt and equity.
2. The available financial instruments in the capital market come from five general categories of users; individuals and household business and financial corporations; the federal governments; state and local government and foreign borrowers.
3. The supply of new funds are mainly channelled through financial institution from the same five sources of fund.
4. The scope of the market covers both long term financial instrument and medium term financial instruments.

5. The long term financial instruments are normally open for trading among investors in the counter and organized exchange market rather than the raising of new funds in the primary market.

### Factors Influencing Activities in the Capital Market

The activities in the capital market have been mostly influenced by the government stock holding. Most times government stocks are rigid stocks that are rarely being traded. However the largest percentage of stock in the capital market are government stock, thus activities in the capital market are hampered. However, with the current trend of government divestment and a gradual withdrawal from participating in investment, it is hopeful that government stock being sold would stimulate activities in the capital market.

The activities of various institutional investors also impact negatively on the growth of stock market, since most institutional investors e.g pension fund, insurances companies, unit trust etc buy stock for almost permanent holding without necessarily trading in them; this reduces the volume of activities in the capital market.

However, with the current development and growth in the capital market most of the problems are being solved. Most especially with the realization that holding stock for the sake of dividend does not benefit the holder rather trading them provide the best yield. It is thus hopeful that volume of activities in the stock market would be on the increase.

**Self-Assessment Exercise (SAE) 1**

Trace the evolution of Nigerian capital market

## 4.0 Summary

This unit explains the evolution of the Nigerian Capital Market, characteristics of the Capital Market and the functions of the Nigerian Capital Market. In the

unit, we examine the factors influencing activities in the capital market and requirements for listing on the NSE

**5.0 Conclusion**

The development of the capital market stems from the realization that household, corporate and institutional savings can be mobilized and channelled for investment purpose thereby reducing the clamour for foreign sources of fund which often times have political and economic strings attached thereon.

**6.0 Tutor-Marked Assignments (TMAs)**

1. Explain the Factors Influencing Activities in the Capital Market
2. List and explain the Characteristics of the Capital Market

**7.0 References/Further Reading**


Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

MODULE 1

## Units 5: THE CAPITAL MARKET OPERATIONS

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**3.1 Opportunities in the stock market**

**3.2 Functions of the Nigerian capital market**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.1 Introduction

In the last unit we discussed, the evolution and the characteristics of the capital market in Nigeria, in this unit, we shall discuss the capital market operation by examining the opportunities in the Nigerian stock exchange and the functions of the Nigerian capital market.

### 2.0 Objectives

The objectives of this unit include:

1. To examine the functions of Nigerian Capital market
2. To discuss the roles and benefits of the central securities clearing system
3. To examine the techniques of going public

### 3.0 Opportunities in the stock market

### 3.1 Opportunities in the Stock Market

Professor Wilson Herbert has outlined some of the major benefits and opportunities open to investors through active participation in the capital market as follows:

1. Increased access to sources of funds and growth.
2. The capital market provides huge sources of external fund to the firm who operates in the capital market. It enhances both the internal and external growth of the organization. The ability to raise additional capital is ordinarily easier and more successful where the firm is quoted at the stock exchange.

   Organizations can grow through both internal and external methods. The internal methods occur through internal organic process while the external occurs through acquisition of other firms. The stock exchange listing facilitates the latter process.

**Status Symbol**

The stock exchange listing facilitates the possibility of a firm obtaining loan and other financial facilities from the Banking institutions more easily than the unlisted firms. The stock exchange listing enhances public confidence in the firm and hence can facilitate the giving of loans to them. Through stock exchange listing, a firm can seek fund internationally, it is possible for a firm to be quoted in another country's capital market. Currently the UBA is quoted in the American capital market being the second firm in the whole West African region to obtain such status.

**Flexibility of Capital Structure**

The availability of the stock exchange finance gives a firm more flexible capital structure. The debt equity structure of the company becomes easy to alter as and when deemed fit, the firm can decide to increase equity by issuing more shares and thus reducing risk and vice-versa as the need arises.

**Realization of Wealth**

Investment conversion becomes very easy with the existence of the capital market, the investors can at will dispose of their holdings in a firm for cash or to purchase the equity of other firms. The more the firm grows, the better will be the value of it shares, investors can realize more value from their initial investment than when first invested and such benefit could be reaped through the stock market. Going public, offers investors the opportunity to convert their securities holdings into cash and in the process increase their wealth.

## 3.2 Functions of the Nigerian Capital Market

The following are the functions of the Nigerian Capital market

1. The capital market acts as financial intermediary that refocuses funds from tile surplus sector to tile deficit sector.
2. The Capital market provides corporate organization individuals the opportunities to raise new funds
3. The capital market provides a market for existing securities and hence helps in proper valuation of both new and existing classes of stock.

**Nigerian Securities and Exchange Commission (SEC)**

The Nigeria Securities and Exchange Commission (SEC) came in to existence by virtue of the SEC Decree of 1979 which became effective from 1st April 1978 majorly to protect the interest of investors and to oversee an orderly development of the capital market. The commission is the apex regulatory body for the Nigerian capital market.

**Functions of the Nigerian Securities and Exchange Commission (SEC)**

The Major functions of the SEC include the following:

I. Registers all securities proposed to be offered for sale or for subscription by the public or to be offered privately with the

intention that the securities shall be held ultimately by others than to those to whom the offers were made or registered Stock exchange and securities dealers as stated by the Okigbo's committee on SEC.

2. Determine the amount and the time at which securities of a company are to be sold to the public.

3. Maintain surveillance over securities market to ensure orderly, fair, and equitable dealings in securities.

4. Registers stock exchange branches, registrars, investments advisers, securities dealers and their agents and control and supervises their activities with a view to maintain in standards of conduct and professionalism in the securities business.

5. Protects the integrity of the securities market against abuses arising from the practice of insider trading.

6. Acting as regulating or apex organization for the Nigerian stock Exchange and its branches to which it would be at liberty to delegate powers.

7. Create the necessary atmosphere for the orderly growth and development of the capital market. The SEC is also to undertake such other activities as are necessary for giving full effect to the provisions of the SEC decree.

**The Central Securities Clearing System (CSCS)**

The Central Securities Clearing system (CSCS) rests on the concept which provide an integrated central depository, clearing (electronic/book entry transfer of shares from seller to buyer and settlement (Payment for bought securities) for all stock market transactions. Established in 1992 (stemming from the 1989 conference of the Federation of International Stock Exchange of which the Nigerian stock exchange is a member) the Nigerian Stock Exchange endorsed the establishment of CSCS, following

the recommendation of a group of 10 private companies which conducted a research on the operation of the financial market.

Clearing settlement and delivery of transactions on the exchange are done electronically by the Central securities Clearing System (CSCS). THE CSCS a subsidiary of the Nigerian Stock Exchange was established as part of the effort to make the Nigerian Stock Market more efficient and investor – friendly, the CSCS also offers the custodian services. Transaction cycle currently has been reduced to four days (T +3) in the CSCS. The CSCS also help eliminate the bottlenecks between registrars and company Executives in issuing new certificates to investors.

**Stock Market Legislations**

Transactions in the stock market are guided by the following legislation these among others are:

Companies and Allied Matters Act 1990

Investment and Securities Act of 1999

Nigerian Investment Promotion Commission Act of 1995

Foreign Exchange (Miscellaneous Provisions) Act of 1995

Trustees Investment Act of 1990

**Pricing Of Issues**

The new issues (stock) prices are determined by issuing houses stock/ brokers. The prices of existing issues in the secondary market are determined by stockbrokers only. The prices in the stock exchange daily quoted on the stock exchange financial list.

**Benefits of the Central Securities Clearing System**

The CSCS though a new system in Nigeria yet holds a great future benefit for all categories of people dealing with the stock exchange from the investor to the

quoted company, to the capital market system itself and to the operating stock broking firms.

**Benefit to the Investor**

1) The persistent problem of stolen share certificate will no longer be relevant no certificates will be issued any longer

2) Speculation becomes easier and minimum risk is involved since transaction should be concluded within 5 days (now 3 days with the ATS installed).

**Benefit to the Quoted Company**

1. There is a great cost reduction since huge money expended in production and distribution of shares-certificates is now eliminated.
2. The huge manpower formerly concentrated in issuing and signing share certificates can now be concentrated in doing other jobs.
3. There is rapid increase in trading on companies share certificate.
4. Rapid increase in company capitalization and net worth are being experienced.

**Benefits to the Capital Market**

1. The market now witness more transparency.
2. There is improvement in investors' confidence in the Capital market system.
3. Turnover in the market has been on the increase.
4. It becomes easy to attract foreign investors.
5. The market's liquidity and vibrancy would be given a boost.

**Benefits to the Stock Broking Firms**

1. Prompt inter-banks money and stock settlement remain on the increase.

2. Problems of certificate delivery have been eliminated.

3. The stock brokerage firms' efficiency has been improved.

4. The stock brokerage firms' operational cost has been reduced drastically.

**Nigerian Stock Exchange (NSE)**

The Nigerian Stock Exchange was established in 1960 as the Lagos Stock exchange, In 1977 it became the Nigerian Stock exchange with branches established in Kaduna (in 1978), Port Harcourt (in February 1990) in Ibadan (August 1990) and Abuja area office (in 1999) operations started in the Lagos Stock exchange in 1961 with 19 securities stated for trading. The Nigerian Stock Exchange was established a company limited by guarantee. The emergence of the NSE ended the existence of the Trust Deed Arrangement which existed before the NSE trough which government stocks were marketed.

The stock exchange is a market for capital mobilization through which funds can be raised by public companies and government stock. The stock exchange primarily is the forum for trading in existing securities of quoted companies. The facility for trading in existing securities remove the restrictions that would have prevented individuals from investing their savings in securities, through this the stock exchange see to the efficient allocation of available capital funds to diverse uses in the economy. It also acts as vehicle for broadening the share ownership base of companies, thus creating wealth in the nation.

**Objectives of the Nigerian Stock Exchange**

The Nigerian Stock Exchange at inception was set up to achieve the following objective:

1. To mobilize savings for economic growth.

2. To ensure diversion of capital from less productive sectors (like real estate) to more productive industrial sector.

3. To augment the banking system and ensure the dependence of government on taxation for economic development.

4. To ensure decentralization of ownership of assess and creation of a healthy private sector.

5. To avoid or minimize excessive concentration of economic power in government hands.

6. To avoid or minimize excessive concentration of economic power in the hands of a small private group.

7. To encourage even distribution of wealth

8. To facilitate co-operation between indigenous and foreign investors in fostering economic development.

**Functions of the Nigerian Stock Exchange**

The NSE is saddled with the responsibility of rendering the following functions:

1. It provides a forum for trading in both existing and new securities e.g.. stocks and debenture.

2. It provides the surplus sector with the opportunities of investing such funds in profitable ventures.

3 It encourages inflow of funds from the international communities by enhancing inflow of funds for investment.

4 It provides a means of securing long term funds for commerce and industrial development

5. It helps in stock pricing by ensuring that the existing new stock and new stock of similar nature are traded at fair price acceptable to all parties.

6. It facilitates the determination of listing requirement for new s as well as secondary trading activities by dealers

7. To facilitate provision of information through the daily official list on securities and performances of participants in the capital market.

It should be stated that the activities of the stock exchange is being controlled by the Central Bank of Nigeria (CBN); The NSE submit periodic report to the Governor of the CBN. CBN analysis of the activities of the NSE is majorly on the gilt-edged securities and industrial stocks and shares. It is also concern with the number of listed securities and their price.

**Requirements for Listing on the NSE**

1. The company willing to be listed must have five (5) years successful trading.

2. The company willing to be listed on the stock exchange must have not less than ₦125, 000.00 or 25% of its issued share capital subscribed to by the public.

3. The company should be a limited liability company (or a public limited company).

4. The company must submit a duly audited account; such adult must have been carried out not less than 9 months before submission date.

5. It must submit quarterly and half yearly financial statement to the exchange after being listed.

6. The company must have at least five hundred shareholders.

However it was discovered that the above criteria may be too difficult to comply with by small companies willing to go public. As such the rules were relaxed; this led to the formation of the second-tier Securities

**Second-Tier Securities Market (SSM)**

The second-tier securities market (SSM) is the market in securities of companies that could not satisfy the requirement for the stock exchange, that is companies who could not have a full listing however the SSM is still regulated by the stock exchange.

The following are the requirements for listing in the SSM.

1. The Company should have traded for at least 3 years however the size of the company is not relevant.
2. The company must be willing to offer at least 10% of her shares for sale which nominal value should be at least N50,000, also no single shareholder should own more than 75% of the equity of the company.
3. The total number of shareholders should be at least 100. The company must equally be willing to sign an undertaking with the stock exchange.
4. The company can only raise a maximum amount of N5 million.

   A flat rate is usually levied on such company by the stock exchange usually this is less than the amount levied on the company quoted fully on the exchange.
5. Only authorized dealing member of the exchange can trade the shares of the company.

**Advantages of Public Quotation**

I. The company can raise funds from the issue of the company shares.
2. The company is regarded as a less risky company than those not quoted on the exchange.
3. The quoted company most times enjoy fair treatment when negotiating for loan from banks and other institutions.
4. The quoted company can enjoy the possibility of growth extra expansion that the unquoted company due to access to greater and cheaper sources of funds.

5. Quoted companies normally enjoy certain boosted status, which can promote greater customer patronage.

**Disadvantages of Public Quotation**

The quotation cost could be very expensive to some companies since all the cost would be borne by the company.

1. The possible dilution of ownership structure remains a problem to quoted companies.
2. The stringent rules and regulation that may be complied with is a problem.
3. The quoted company now becomes a public corporate citizen more information on the company must be made public thus eroding the secrecy of the firm.
4. The stock exchange listing does impose some administrative cost on the quoted companies; this might be an extra burden.

**Techniques of Going Public**

The firm willing to go public must take note of the several possible method of going public. These are:

**1. Offer by Prospectus: Or direct offer:** This is a process used when a firm is willing to raise new fund from the public. It involves public issue of prospectus; the issued prospectus must comply with the stock exchange issuing requirements as stipulated by the Companies and Allied Matter Decree 1990 and other rules and regulations governing the operation of the NSE. The prospectus and the accompanying application form must be published in a national daily. The copy of such prospectus is made available to the public through brokers and bankers of the issue.

**2. Offer for Sale by Tender:** Offer for sale by tender is a method commonly used when the value of shares to be quoted are not quite known. The issuing company may not be able to sell all issued shares if the price is too high. Thus,

offer for sale by tender is normally being used. This entails a process whereby the issuing company fixes a minimum price at which the share could be sold and the call for tender for the shares by the public. The stated price is the minimum possible share price the public can quote for the share. The share is being allotted to the highest subscriber bidder for the shares. This is known as the striking price.

3. **Offer for Sale:** This process is almost similar to offer for sale by tender: In this case the new issue (or shares) is being bought by another firm or merchant bank that is sponsoring the issued shares. He now re-offers the shares to the public for subscription. The issues are most times publicly advertised in the dailies for subscribers by the public. Thereafter the allotment follows due to possibly lower than expected subscription or higher than needed subscription. There may arise the need for under writing of the share issue

4. **Stock Exchange Introduction:** This does not involve issuing of shares (either new shares or existing); A company willing to have quotation on the exchange may have it shares quoted. This only occurs where shares in large companies operating in the same industry are already quote by the exchange. The purpose of this introduction is to improve upon the goodwill of the company to the public.

5. **Private Placement:** In this case the company shares are not offered to the public for purchase. The issuing house only look privately for willing buyers of the shares. Most times financial institutions are the buyers of such shares.

6. **Right Issue:** This is a method of raising new fund through the exchange. In this case however the shares are only made available to existing shareholders of the firm who can buy the shares at a price higher than the book value but lower than the market price of the share. Normally the right issue price is lower then the offer for sales price.

**Under Writers and the Under Writing Concept**

The concept of underwriting is to provide securities for companies willing to issue shares. The concept enable the issuing company to still be able to raise the needed amount in case of (under subscription) for its shares i.e. (the quantity of shares purchased by the public being less than the total shares issued). The underwriters are financial institutions which agree to purchase securities which are unsubscribed for by the investing public for an underwriting commission

The underwriter helps restore confidence in the company in case of under subscribing if the price is too high, making it too outrageous for the investing public to buy. In order to save the plan and the investing purpose of the issuing company from collapse or failure, the under writer purchases the unsubscribed shares for a commission, the purpose is to re-sell such shares at a future date. Most times it is only offer for sale that are underwritten, private placement of shares already have buyer so there is no need for underwriting. The underwriter most times is the issuing company's merchant bank.

**The Primary Market:** It is a market where new issues are being traded. The mode of offer for the securities traded in this market includes offer for subscription, rights issues offer for sale and private placements.

**The Secondary Market:** The secondary market is the market for trading in existing securities. This consists of stock exchanges and over the counter markets where securities are bought and sold after their issuance in the primary market.

**The Unit Trust Scheme:** This is a system whereby financial resources of small willing investors are pooled together in order to purchase several shares to achieve maximum returns with minimum risks through efficient portfolio diversification. Unit trust schemes normally ensure low-cost and high profitability in investment portfolio diversification. The CAMD'1990

provided for procedure of establishing a unit trust. The first of such trust was established in December 1990.

**Capital Market Instrument**

1. **Ordinary Shares:** The ordinary share is a unit of capital ownership in a firm in terms of equity investment by the shareholders. The ordinary shares do attract returns at the end of the trading period (normally 12 months. It accords its holders right of ownership in the asset of the firm. The ordinary shareholder can vote in the AGM (Annual General Meeting) of the firm. Currently in a public company no single individual is allowed to own more than 10% of the total issued shares of the firm. The ordinary share is assets (a financial asset) that are traded at will. Normally dividends can be paid as return to holders of ordinary shares. There exist also the preference shares.

2. **Preference Shares:** The preference shares are debt instruments in a firm. The holders of preference share are not owners of the firm since they cannot vote in the AGM of their firm. Preference share attract fixed dividend or interest e.g. 10% preference share of ₦100,000 will attract a finance interest of ₦100,000. However, the preference share is also regarded as shares in firm depending on the nature of the preference share. There are several forms of preference shares. There is the cumulative preference share, participating preference share convertible preference share, redeemable preference shares etc.

3. **Debentures:** These are long term debt securities normally offered for public subscription. They generally attract a fixed rate of return called interest. Most times Debentures are securities in a particular asset of the firm in such case tagged secured debenture. An unsecured debenture is one not secured on any particular asset of the firm. Debentures are mostly sold either at premium or at discount.

4. **Development Loan Stock:** These are financial instruments that allow the government to borrow money for a long period of time up to 25 years, bearing interest and capital repayment, thereon.

**Self-Assessment Exercise (SAE) 1**

Explain the various benefits of the Central Securities Clearing System

## 4.0 Summary

This unit explains the evolution of the Nigerian Capital Market, characteristics of the Capital Market and the functions of the Nigerian Capital Market. In the unit, we examine the factors influencing activities in the capital market and requirements for listing on the NSE

## 5.0 Conclusion

The development of the capital market stems from the realization that household, corporate and institutional savings can be mobilized and channelled for investment purpose thereby reducing the clamour for foreign sources of fund which often times have political and economic strings attached thereon. The activities in the capital market have been mostly influenced by the government stock holding. Most times government stocks are rigid stocks that are rarely being traded.

## 6.0 Tutor-Marked Assignments (TMAs)

1. Explain the various benefits of the Central Securities Clearing System
2. Discuss the Factors Influencing Activities in the Capital Market

## 7.0 References/Further Reading

Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

## MODULE 2

### Unit 1: SOURCES OF FINANCE

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 Factors to Consider Before Granting Bank Borrowing:

3.2 Ways of raising Ordinary shares

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

In the last module, we discussed the meaning and nature of financial management, we also explained the nature and function of capital market operation in Nigeria, in unit, we shall discuss source of finance and various ways of raising ordinary share.

### 2.0 Objectives

At the end of this unit, you should be able to:

1. **Explain the various sources of finance**
2. Examine the various ways of raising ordinary shares

## 3.0 Main Contents

### 3.1 Source of finance

Source of finance can therefore be conveniently classified into three groups:

- Short term sources - These are finance sources up to one year.
- Medium term sources - These are finance sources between 1 to 5 years duration.
- Long term sources - These are finance sources from 5 years and above.

#### A Short Term Sources

These are financing sources up to one-year duration (i.e. they are repayable within one year). It is suitable for funding shortages in working capital. They should not, if it can be avoided, be used to finance a long-term investment. A company that funds long term project with short term funds may be forced to renegotiate a long-term loan under unfavourable condition or to sell the asset, which is needed for the continuation of the business. In addition, where short term sources are recalled by the holders, a company might find itself in a position of technical or legal bankruptcy. The main methods of obtaining short-term funds arc:

1. Borrowing from friends and relations
2. Borrowing from co-operatives
3. **Trade credits (i.e. Suppliers)** - The use of credit from suppliers is a major source of finance. It is a facility granted to a company by a supplier since the system allows the company to pay at a later date. The cost of cash discount is depicted as follows:

$$\text{Cost of Cash Discount (i.e. Implied cost)} = \frac{\%\ \text{Discount}}{100\% - \%\text{Discount}} \times \frac{365}{CN - CD}$$

Where:

CN = Maximum payment period

CD = Maximum discount period

4. **Accruals** - These are deferred payment on items like salaries and wages, rent, tax. Accruals are amount owing on services rendered to firms for which payments have not been made. The amount owed is a source of finance. E.g. wages, tax payable etc.
5. **Bank borrowing** -This usually takes two forms namely: Bank overdraft (E.g. Drawings Against unclear Effect Facility) and Bank loan facility. Bank rate is negotiable with Central Bank of Nigeria requirements and the cost to the company is calculated as follows:

$$\text{Cost of the overdraft} = \frac{\text{Interest payment}}{\text{Total sum utilized}} \times \frac{365}{\text{Period of Loans}}$$

**Factors to Consider Before Granting Bank Borrowing:**

- The purpose for which the advance is required
- The Amount of the advance
- The Repayment term of the advance
- The Term of payment (i.e. how could the advance be paid?)
- The Collateral security of the advance
- Does the Character or record of the customer justify the advance?
- What is the Capital structure of the borrowing company?
- How Credible/Credit-worthy are the owners of the business?

**Documents to be Requested Before Granting Bank Borrowing**

a. Application requesting for the loans.

b. Memorandum of Association

c. Articles of Association

d. Names, Address & Particulars of the Directors

e. List of directors' shareholding.

f. Boards Resolution

g. Certificate of Incorporation

h. Collateral Security including personal guarantee of the Managing Director.

i. Audited Account of the company.

j. Management Accounts & Reports of the company.

k. Cash flow projection of the company.

l. Acceptance of the offer letter (by affixing company seal & two directors or a director & secretary must sign on behalf of the company).

6. **Speeding up payment from Trade debtors (Customers)** - This depends on the availability of sound credit control and reminder system.

7. **Debt Factoring** - A factor is an agent that manages trade debts. Factoring involves turning over the responsibility for collecting a firm's debt to specialist institution. A factor agent usually offers three main services namely:

   - Taking over the management of clients sales ledgers.
   - Insuring their clients against the risk of bad debts.
   - Providing finance by means of advances against the security of trade debtors.

8. **Bill of Exchange** - This is a form of short term finance used in trade financing. A bill of exchange is one method of settlement in a trade between a seller and a buyer. A bill of exchange takes two forms:

   - Trade Bills - These are bills of exchange in which the buyer acknowledges it by writing accepted across it and signing it.
   - Bank bills - These are bills or exchange drawn on a bank, which will accept them. This is known as acceptance credit.

9. **Invoice Discounting** - This is similar to factoring except that only the financing service is used meaning that the copies of company's invoices sent to customers are discounted with a financial institution and the

trading company still collects the debt as agents for the financial institution and remits the cash on receipt to the account open for that purpose.

10. **Commercial paper** - This is a short term and an unsecured money market instrument used to invest company's surplus. Large companies with good credit rating can raise short-term funds by issuing commercial notes, which arc then purchased by investors in the money market. The financial institution does not guarantee the notes but assists in finding investors to buy them. The investors effectively lend directly to the company issuing the notes. The financial institution charges commission for the service.

**B Medium Term Sources**

These are financing sources between 1 to 5 years duration.

1. **Medium Term loans**: These are usually issued for a definite period when compared with overdraft. This is a negotiated loan between a financial institution and a company between 1-5 years, usually at a fixed rate of interest. Medium Term Loans in form of bank lending can be secured or unsecured. Unsecured lending is not common and is only available to credit worthy companies. Secured lending requires heavy collateral securities and proper evaluation of credit worthiness of all customers are also considered.
2. **Hire purchase agreement**: This is in form of a credit sales agreement by which the owner of the assets or supplier grant the purchaser the right to take possession of the assets but ownership will not pass until all the hire purchase payment has been paid. The purchaser will pay the hire purchase payment over an agreed period. No form of collateral is required. It is normally reflected in the balance sheet of the borrower. It reduces the gearing ratio and increases ability to raise further finance. It also attracts capital allowance.

3. **Lease**: A lease is a contractual agreement between the owner of an asset (lessor) and the user of the asset (lessee) granting the user or lessee the exclusive right to use the asset for an agreed period in return for the payment of rent. The main advantage of lending to a lessee is the use of an asset without having to buy. This conserves an organization's funds. There are two major types of lease:
    - Finance leases (or full payment leases/ capital leases): The finance lease is non-cancellable. The lessee is responsible for the upkeep, insurance and maintenance of the leased asset. Finance lease is an example of off-balance sheet financing. It is off balance sheet because sources of financing fixed asset are not shown as liabilities on the balance sheet.
    - Operating leases: With operating lease, the owner (lessor) is responsible for the upkeep, insurance, servicing and maintenance of the leased asset
4. **Sales and leaseback**: This is an arrangement by which a firm sells its assets to a financial institution for cash and the financial institution immediately leases it back to the firm.
5. **Venture capital**: This is a major source of capital for SMEs and collapsed businesses. The provider of finance might decide to participate in the company instead of allowing the client to run the business himself. The participation might be in the form of equity or debenture stock. Small companies normally require this type of finance because of their inadequate collateral securities and poor management skills and talents. It is otherwise known as ***business angel***.
6. **Project finance**: This requires evaluation of the company and its project. The project itself serves as a collateral security for the fund. It is a risky source of finance if the project fails. However, the financial institution should request for additional collateral security.

## C Long Term Sources

These are financing sources of 5 years and more duration.

1. **Loan Stock/Debentures**: This is long-term debt finance raised by a company for which interest is paid usually at a fixed rate. The company must pay the interest whether it makes profit or not. Loan stock also has a nominal value of ₦100. Debentures are a form of loan stock that is legally defined as the written acknowledgement of a debt incurred by a company usually given under company seal and containing provisions as to the payment of interest and eventual repayment of principal.

   Loan stock and debentures are often secured. The security can take the form of ***fixed charge*** (usually on a specific asset/ property). ***Floating charges*** (charge on certain asset of the company e.g. stock/property). Floating charges can crystallize to a specific security if the company defaults in meeting its obligations under the terms of loan/debenture. Loan stock/debentures also are unsecured. However only high credit-worthy companies can issue unsecured loan stock. The interest on unsecured loan stock is usually higher than that of a secured loan stock. Loan stock and debentures are usually redeemable, irredeemable and convertible. The interest payments on loan stock/ debentures are allowable for corporation tax.

   The higher the loan stock/debentures in a company's capital structure, the higher the gearing or leverage. Gearing or leverage increases financial risk of a company since interest must be paid irrespective of profitability.

2. **Preference Shares**: The holders of preference shares are entitled to a fixed percentage dividend before ordinary shareholders can be paid any dividend. Preference shares are a form of hybrid security between ordinary shares and debentures. These are often issued as an alternative to debt when the company pays no tax. Preference shares can be redeemable or irredeemable.

3. **Ordinary Shares**: Ordinary shareholders are the owners of the firm. They exercise control over the firm through their voting rights. A firm contemplating on raising funds through ordinary shares will incur floatation cost/issue cost.

**Ways of Raising Ordinary Shares**

- **Public Subscription (Stock Exchange Introduction)**: This is an invitation to the public at large so as to invite them to subscribe for share in the company. The public issue must comply with CAMA 1990. This is also known as Initial Public Offering (IPO).

**Techniques of Conversion**

- **Conversion Price (CP)**: It is the nominal value of convertible security that can be converted into one ordinary share. It represents the effective price of ordinary shares paid for on conversion. CP can be derived as follows:

$$\text{Conversion Price} = \frac{\text{Market Value/Nominal value of Convertible security}}{\text{Number of ordinary shares issued on conversion}}$$

- **Conversion Rate (CR)**: It is the number of convertible security that could be exchanged for new ordinary shares or security. It is expressed as follows:

$$\text{Conversion Rate} = \frac{\text{Number of ordinary shares issued on conversion}}{\text{Market value/nominal value of converted security}}$$

- **Conversion Value (CV):** It is the market value of ordinary shares into which unit of stock or convertible security will be converted. This is expressed as follows:

Conversion Value = Conversion Rate **X** Market Value per share

➢ **Cost of option to convert**: At the point of conversion, the holder of such security has two options i.e. to convert and not to convert. The cost of option is derived as follows:

$$\text{Cost of option} = \frac{\text{Actual price of convertible security} - \text{Conversion price}}{\text{Conversion Rate}}$$

➢ **Conversion Premium/Discount**: This is the difference between the conversion price and market price.

**NOTE**:

i) Where conversion price is greater than (>) market price of share, it is equal to discount.

ii) Conversion premium/discount could be presented in form of yield i.e.

Conversion Yield is known as: $\frac{\text{Premium/Discount}}{\text{Conversion Price}} \times \frac{100}{1}$

- **Bonus/Script/Capitalization issue**: This is issued to existing shareholders by whom further shares are credited as fully paid-up out of the company's reserves in proportion to existing holdings. This is known as capitalization of reserves.
- **Offer for sale**: This is where a company issues its shares for public subscription through an issuing house in which the sales proceeds go to the existing shareholders not the company. Simply put, offer for sale is the sale of existing shares by existing shareholders but not a fresh issue of shares. This method was used by Daar Communication Plc and all the proceeds were paid directly into Daar Holding Plc for the existing shareholders of the company.
- **Offer for Sale by Tender**: This is when a company's share is being issued out by a company to the public asking the price that all intending shareholders can subscribe. This is referred to as striking price and the

stock exchange will ensure that all shares are taken up at the striking price.

4. **Retained Earnings**: This is a part of a company's profit not paid out as ordinary dividend. It is also a source of financing. It is a cheap source of raising finance as compared to share issue because no issue cost is involved. Raising funds through retained earnings avoid dilution of control since there is no share issue to outsiders. Retained earnings are an important source of financing for companies that do not have access to the capital markets.

**Self-Assessment Exercise (SAE) 1**

Briefly explain the three major sources of finance

## 4.0 Summary

In this unit, we examined the three major sources of finance and the prerequisites for each source. We also discussed the process of raising shares at the capital market.

## 5.0 Conclusion

The business organisation must ensure that their business is finance using the cheapest and the most convenience sources the government and its department must also finance their activity at the lowest cost for the highest effectiveness. It is therefore of value to consider the various sources of finance to the business organisation

## 6.0 Tutor-Marked Assignments

1. Explain the various ways of raising ordinary shares

2. Discuss the techniques of Conversion

## 7.0 References/Further Reading

Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting*. London: Gulidfold and King's Lynn

# MODULE 2

## UNIT 2: RIGHTS ISSUE

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 The meaning of right issue
3.2 Factors to be considered when setting The Price of a Right
3.3 Theoretical Right issue

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

In module one you have leant the meaning of financial management and the regulatory agencies in Nigerian financial system. In this unit, you will learn the meaning of right issue and the factors to be considered when setting the price of a right issue.

### 2.0 Objectives

At the end of this unit, you should be able to:

1. Explain the meaning of right issue
2. Discuss the factor to be considered setting the price of a right issue

## 3.0 Main Contents

### 3.1 The meaning of right issue

A right issue is an issue of new shares to existing shareholders in proportion to the number of shares already held by each shareholder. This enables existing shareholders to subscribe cash for shares in proportion to their existing holdings. The price at which the new shares are issued by the company is always below the current market price of the shares so as to encourage the existing shareholders to take up the issue.

**Options open to shareholders when a right issue is made (i.e. Premptive rights of existing shareholders)**

1. **Subscribe for the new shares**: If the shareholders have sufficient cash resources to buy the new shares and they feel that the company will use the money so raised to finance a profitable investment opportunity, then they should take up all the rights.
   The new shares are acquired without the need to pay stamp duty or brokerage commission provided it is the original shareholder that takes up the rights.
2. **Sell part and buy part**: If the shareholders feel the new shares are worth having but they lack the cash to pay for them, they can sell sufficient part of the rights to enable them to take up the balance.
3. **Sell the rights**: If the shareholders are not happy about the rights issue they should sell the rights. Usually, the rights are sold via a broker who will charge brokerage commission.
4. **Do nothing at all**: If the amount payable for the new shares has not been received by a stipulated deadline, the company will sell the new shares in the market. The shareholders will receive the sales proceeds of the new shares less the rights price and any expenses.

### 3.2 Factors to be considered when setting the Price of A Right Issue

a) The existing/ current share price

b) Current price of comparable stocks

c) The reasons for the issue

d) The size of the issue and ability of the shareholders to subscribe

e) Any current government controls

### 3.3 Definition of Rights issue terms

**Theoretical Ex-right price/value**: This is the new market price that arises as a result of an adjustment to allow for rebate price of the new shares. This can be calculated as:

$$\text{Theoretical Ex-right price/value} = \frac{\text{Total Investment in all new shares}}{\text{Total number of shares after the rights}}$$

OR

$$\frac{\text{(Market Value of old shares Theoretical value or the new shares)}}{\text{Total number of shares after the rights}}$$

OR

$$\frac{\text{(Number of shares in issue X market price)+(Number of rights shares X price of right shares)}}{\text{Total number of shares in issue after the rights}}$$

**Theoretical Nil price or The value of the rights**: When the right issues are made usually at a rebate price, automatically again will occur to shareholders. This gain is called Nil price and is calculated as follows:

Theoretical Nil price/value= (Theoretical Ex-right price/value minus Right issue price)

- **Placement issue**: This is an arrangement whereby a new issue of shares is not offered to the general public but is placed to a number of institutions such as Pension fund, Insurance Company etc.

- **Conversion of shares**: The conversion of other securities into ordinary shares.

**Theoretical Right issue**

Example1

Today's ltd has 80million ordinary share of N4.00 each and has recently decided to raise further capital through a 1 for 4 right issue just before the issues was announced the market price of the ordinary share was N5.00 and the right was put at N4.80

Required

A) Compute the theoretical ex-rights value of the  and the theoretical nil paid value of the right
B) Advice an existing shareholder of 5000 ordinary share of the possible course of action available to him in respect of his entitlement

**Solution**

| | | ₦ |
|---|---|---|
| (i) | 4 existing share at N5 | 20 |
| | 1 right issue at N4.8 | 4.80 |
| | | 24.80 |

Theoretical ex- right value $= \frac{24.80}{5} =$ ₦4.96

Theoretical Nil-paid value

= Theoretical ex- right value – Right price

= ₦4.96 – ₦4.8

= ₦0.16

(ii) The course of actions available to the holder of 5000 shares are

a) Sell all the right

b) A mixture of sell and buy(take the right )

Sell all the right

Proceed of sales (5000/4) 1250 x 0.16 = 200

Value of the original investment 5000 x 4.96 = 24800

25000

Subscribe fully

Value of investment 6250 X 4.96 = 31000

Less

Cost of investment 1250 x 4.80 = 6000

25000

Mixture of buy and sell

Let us assume that the shareholder sold a units of the shares

Cash received will be ₦0.16x

Total number of shares remaining will be 1250 – X

Cost of the remain share = (1250 - X) 4.80

Total value of the right 0.16X

Therefore

$$0.16X = 4.80(1250 - X)$$

$$4.96X = 6000$$

$$X = \frac{6000}{4.96} = 1210$$

The right to be taken the shareholder does not want a change in the cash position is 1250 – 1210 = 40

Therefore he should sell 1210 shares and subscribe for 40 shares

**Self-Assessment Exercise (SAE) 1**

**Explain the** options open to shareholders when a right issue is made

**4.0 Summary**

In this unit, we examined the meaning of right issue. It gives some examples of theoretical right issue. The unit also outlined the factor to be considered setting the price of a right issue.

**5.0 Conclusion**

A right issue is an issue of new shares to existing shareholders in proportion to the number of shares already held by each shareholder. This enables existing shareholders to subscribe cash for shares in proportion to their existing holdings.

**6.0 Tutor-Marked Assignments (TMAs)**

1. Explain the meaning of right issue
2. Discuss the factor to be considered setting the price of a right issue

**7.0 References/Further Reading**


Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

# MODULE 3

## Unit 1: TRADITIONAL METHODS OF INVESTMENT APPRAISAL

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 The meaning of payback period
3.2 The advantages and disadvantages of payback period
3.3 Average return on investment

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

**The Payback period method:**

The principle behind the Pay back method has more regard for liquidity than profitability. It is a measure of liquidity over cost. (or initial outlay).

**Advantages of Pay Back Period**

1. It is easy to understand and estimate.
2. It is liquidity based; rather than profitability, thus seems more acceptable where liquidity stands as the main factor to be considered.
3. It is less forecast biased sensitive, unlike other investment criterion used.
4. It is suitable for use in an unstable economic environment

**Disadvantages of Pay Back Period**

1. It disregards the time value of money.
2. It disregards all cash inflows which occur after the payback period.
3. It is not an objective criterion for decision-making
4. If it is not properly applied (Invoked). It may lead to wrong decision-making
5. It is highly subjective in nature.

**Illustration 1**

Two projects A and B with the following relevant information

A outlay = 200,000

Inflows year 1 = 60,000 Year2 = 80,000, Year 3 = 80,000 Year 4 =100,000.

Project B: outlay = 200,000

Inflows Year 1 = 80,000 Year 2 = 80,000 Year 3 = 40,000 Year 4 = 60,000

Year 5 = 60,000

Compute the payback period.

| **Project A** | **Cash flow** | **Cumulative** |
|---|---|---|
| Y0 | **(200,000)** | **(200,000)** |
| Y1 | 60,000 | 140,000 |
| Y2 | 80,000 | 60,000 |
| Y3 | 80,000 | |
| Y4 | 100,000 | |

Actual payback 2 years + $\frac{60,000}{80,000}$ yrs

2yrs + 0.75 yrs

2.75 years.

| Project A | Cash flow | Cumulative |
|---|---|---|
| Y0 | **(200,000)** | **(200,000)** |
| Y1 | 80,000 | 120,000 |
| Y2 | 80,000 | 40,000 |
| Y3 | 40,000 | |
| Y4 | 60,000 | |
| Y4 | 60,000 | |

N.B Where there is equal annual cash inflow or where the stream of cash inflow is the same over the life span of the project, then the pay back formula becomes

$$= \frac{I}{Cn}$$

$$I = \frac{\text{Initial cash outlay}}{\text{Annual cash inflow}}$$

In the above fisher's interception model, Project A intercept pro at remaking project B more preferable.

N.B In the above illustration, the payback period of project A is cumbersome to ascertain from the tabulated computation. This is largely due to the fact that the streams of cash inflows are the same over period of the project's life. Thus, a formula will help to allay this uncertainty, in the case where the streams of cash inflows are not the same over the life span of project.

$$\text{Pay back period} = L + \frac{I - CFL}{A\ (L+1)}$$

Where L = the last complete year in which cumulative net cash are less than the initial investment (outlay)

I = initial cash outlay (investment)

CFL = Cumulative cash inflow at period L

A (L+I) Actual cash inflows at the period immediately after period by applying the above formula, we have to identity the last period with negative cumulative flows i.e.-(60,000) for Yr2: -It -is discovered that at the end of this Yr2 (2nd year) N 140,000 out of the N200;000 has been realized. Meaning that the remaining N60,000 difference has to be accounted for in the 3rd year say mid of the Yr3.

**Average Return on Investment**

It is otherwise known as the average accounting rate of return (ARR). It is used in measuring the rate of return to investment..

The formula used is as follows:

$$ARR = \frac{\text{Average profit}}{\text{Average investment}}$$

Where:

$$\text{Average profit (AP)} = \frac{\text{Total Profit Generated}}{\text{No of years}}$$

$$\text{Average investment} = \frac{\text{Initial cash outlay - S}}{2}$$

**Illustration 2**

Mary & Co. invested ₦2, 000,000 in a certain investment yielding the following capital inflow after tax:

| | |
|---|---|
| Year 1 | 100,000 |
| Year 2 | 200,000 |
| Year 3 | 50,000 |
| Year 4 | 40,000 |

Given that the life span of the investment is 4 years and having 10% interest rate per annum for the life of the asset, you are required to compute the average Return on Investment (R.O.I)

**Solution**

Total profit 100,000 + 200,000 + 50,000 + 40,000

`= $\frac{390,000}{4}$

= 97500

**Oshogwemoh**

Average investment = $\frac{300.000}{}$ = 50,0

R.O.1 = $\frac{97500}{150,000}$ = 0.65

R.O.1 = 65%

**4.0 Summary**

The various methods of appraising investment project was covered, this is meant to be a guide to manager in decision making

**5.0 Conclusion:**

The students can use the internal rate of return, the net present value the probability index and the accounting rate of return to make decide profitability of investment project and be able to identify those the form can engage in and those they will not accept based on their profitability or otherwise.

**6.0 Tutor-Marked Assignments (TMAs)**

1. Explain the merits and demerits of payback period

2. Identify the major features of Investment Appraisal Method

**7.0 References/Further reading**


Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

**MODULE 3**

## Unit 2: SCIENTIFIC METHODS OF INVESTMENT APPRAISAL

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 Investment Appraisal Method

3.2 Net Present Value Method

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

The financial manager in the private and public organisations must decide which investment opportunity must be accepted among available opportunities. The risk and return factor on such investments must be given adequate thought. To successfully accomplish these, the financial manager will have to appraise available investment opportunities to ensure making the right decision.

### 2.0 Objectives

By the end of this study, you will be able to:

1. Explain the investment appraisal method
2. Identify the problems associated with Net Present Value Method

## 3.0 Main Contents

### 3.1 Investment Appraisal Method

There are two groups of investment appraisal methods. The first group involves considering the time value of money, while the second method does not give any cognizance to the time value of money. The methods are:

1. The payback period
2. Average annual rate of return on investment.
3. The net present value method.
4. The internal rate of return method.
5. Profitability index (Benefit-cost ratio) method
6. The net tern final value method.

The payback period method and the average annual rate of return on investment (or Accounting Rate of Return) method fall under the traditional method of investment appraisal because they do not consider the time value of money. The remaining methods give cognizance to the time value of money. They are equally called the scientific method of investment appraisal.

**Time Value of Money**

The net present value and the Internal Rate of Return (IRR) incorporate time value of money. The time value of money concept states that the value of ₦1 today will not be the same in a year's time, due to depreciation in the real value of naira. In order words, what a naira can buy today in a year's time an amount above a naira would be required to purchase that same article. Thus a naira invested today should yield an amount over and above the naira invested. Devaluation of money allows for this. However in a relatively stable economy, the interest rate could be taking to account for devaluation in naira. The interest rate per naira is the

compensation for the loss of value by the naira amount. Hence the interest rate is used for discounting.

**Money and Real Interest Rate**

The scientific method assumes therefore that the interest rate used is the real interest rate and not the money interest rate. The real interest rate is the after tax interest rate while the money interest rate is the before tax interest rate. The scientific method makes use of the real interest rate asking for granted that inflation rate will be equal the tax rate. Since normally the value of good should only be inflated by the tax paid thereon.

For example the money interest rate is 20% and the tax rate is 30% the real interest rate will be (1-0.30) (20%) (0.70) (20%) = (14%).

**Self-Assessment Exercise (SAE) 1**

Explain the two groups of investment appraisal methods.

### 3.2 Net Present Value Method

The net present value method is the total present value of a project which should be greater than the initial capital outlay of the project before such project could be accepted. The decision rule is that:

Total present value > capital outlay: accept the project

Total present value < capital outlay: reject the project

**Illustration 1**

A company wishes to invest N40,000 in a project which has a 6 year life span. With Net cash inflow as follows:

| | |
|---|---|
| Year 1 | 100,000 |
| Year 2 | 20,000 |
| Year 3 | 50,000 |
| Year 4 | 60,000 |

| | |
|---|---|
| Year 5 | 100,000 |
| Year 6 | 100,000. |

The interest rate of 10% is acceptable for the project acceptability should this project be accepted?

**SOLUTION**:

| **Time** | **Cash Flow** | **DCF (10%)** | **FV** |
|---|---|---|---|
| Year 0 | 400,000 | 1 | (400,000) |
| Year 1 | 100,000 | 0.909 | 90900 |
| Year 2 | 200,000 | 0.826 | 165200 |
| Year 3 | 50,000 | 0.75 1 | 37550 |
| Year 4 | 60,000 | 0.683 | 40980 |
| Year 5 | 100,000 | 0.621 | 62100 |
| Year 6 | 100, 000 | 0.564 | 56400 |
| | | NPV | 53130 |

**DECISION RULE**

Since the present value, is more than the initial outlay we will accept the project.

**INTERNAL RATE RETURN**

The internal rate of return is the interest rate or rate of return which produces a cumulative present value that is equal to the initial outlay.

$$P_0 = \sum_{n-1}^{t} \frac{P}{(1+r)^t}$$

$$\sum_{n-1}^{t} R_n \quad (1+r)^{-n} \qquad\qquad \sum_{n-1}^{t} C_n \quad (1+r)^{-n}$$

Where r = internal rate of return. The internal rate of return method helps to strike the point where the present value of inflows equals the initial outlay. That is NPV= Cumulative present value-Initial outlay =0

## LINEAR INTERPOLATION

Using the principle of similar triangle, a formula could be obtained for the internal rate of return. This method entails deriving two Net Present Values (NPVs) from two interest rates applied. One of the two NPVs must be negative and the other positive. These Net present values and the associated interest rates can now be used to secure the internal rate of return. It is otherwise known as Linear Interpolation Method.

$$IRR = R_0 + \frac{V_P}{(V_p + V_N)} (R_N - R_P)$$

**OR**

$$R_N - \frac{V_N}{|V_P + V_N|} (R_n - R_p)$$

$$IRR = LR + \frac{[NPV_p]}{NPV_p - NPV_N} (HR - LR)$$ Recommended for examination purposes.

Source : the author

Where

$R_P$ =Interest rate of positive net present value

$R_H$ = Interest rate of negative net present value

$V_P$ = Positive Net present value

$V_N$ = Negative Net Present Value.

| | = Means absolute term, which is addition of both positive NPV and negative NPV.

LR = The rate that produce positive NPV

HR= The rate that produce negative NPV

$NPV_P$ = Positive NPV

$NPV_N$ = Negative NPV

**ILLUSTRATION 2**

A company wishes to invest a sum of N350,000 in a project view the following net cash inflows for 5 years.

Year 1 200,000

Year 2 100,000

Year 3 100,000

Year 4 40,000

Year 5 10,000

The acceptable interest rate is 10%.

You are required to compute

1) The Net present value

2) Internal rate of return for the project

**SOLUTION**

| **Time** | **Cash Flow** | **DCF (10%)** | **PV** | **DCF (16%)** | **PV** |
|---|---|---|---|---|---|
| Year 0 | (350,000) | 1 | (350,000) | 1 | (350,000) |
| Year 1 | 200,000 | 0.909 | 181800 | 0.862 | 172400 |
| Year 2 | 100,000 | 0.826 | 82600 | 0.743 | 74300 |
| Year 3 | 100,000 | 0.751 | 75100 | 0.641 | 64100 |
| Year 4 | 40,000 | 0.683 | 27320 | 0.552 | 22080 |
| Year 5 | 10,000 | 0.620 | 6200 | 0.476 | 4760 |
| | | | **23020** | | **(12360)** |

2. To compute IRP

$$R_p + \frac{V_p}{(V_p + V_N)} (R_N - R_p)$$

$$10\% + \frac{23020}{[23020 + 12360]} (16-10)$$

10% + 3.90 = 13.90

OR

$$16 - \frac{12360}{[23020 + 12360]} (16-10)$$

16-2.096

=13.90

**PROBLEM WITH NPV**

There are several problems inhibiting the usage of NPV as a method of project evaluation.

**1. Multiple Internal Rates of Return:**

This is a situation whereby a negative inflow occurs during the project's life. While the Net present value of the project is still positive in this case multiple internal rates of return will exist thus making our result ambiguous.

**2. The Re-investment Rate Problem of the IRR and NPV**

The internal rate of return assumes that cash inflows are re-invested at the internal rate of return margin.

On the other hand the Net present value (NPV) principle assumes that inflows of cash are reinvested at the NPV rate. This can yield a different final result.

Two projects with the same internal rate of return of 20%

| Project | Price | Cash inflow ($yr_1$) | Cash inflow ($yr_2$) |
|---|---|---|---|
| A | 75 | 15 | 19 |
| B | 75 | 60 | 36 |

The company reinvested at a rate of 3% per annum.

**Project 1**

Yr 1 15 x 1.03 = 15.45

Yr 2 inflow = 19.00

34.45

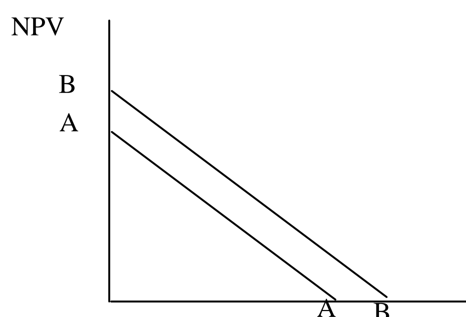
**Project 2**

Yr 1 60 x 1.03 = 61.8

Yr 2 inflow = 36.0

97.8

3. **Independency of Project (3):** The Net present value principle (NPV) assumes that project A is different from project B, project B is different from project C etc.



In the above, project B must always be preferred to A. However, this may not always hold. In a situation of Non-independence where a project is assumed to be the best now turns out to be false off.

**Advantages of NPV**

1. It considers the time value of money unlike the payback period
2. It considers the cash inflows both during and after the period i.e. over the project's entire life.

**Disadvantages of NPV**

1. It is cumbersome and difficult to compute.
2. It is not suitable for project with different cash inflows

**Net Terminal Value (NTV)**

The net terminal value is a compounded value of the net present value of the life of an asset or project obtained by compounding all the cash flows to the end year of the life span of the project.

**Illustration 4**

A project with cash flow of 250 and having inflow of

Year 1 60

Year 2 120

Year 3 80

Year 4 80

The rate of interest for the project being 10%, compute the net terminal value of the project.

**Solution**

There are two methods in solving the above problem.

**Method I**

$-250 (1.1)^4 + 60 (1.1)^3 + 120 (1.1)^2 + 80(1.1)' + 80(1.1)°$

- 250 (1.4641) + 60 (1.331) + 120 (1.21) + 80 (1.1) 80 (1)

- 366.025 + 79.86 + 145.2 + 88 + 80

= 27.035

= 27.

**Methods 2**

Using the NPV method:

| **Time** | **Cash flow** | **Df (10%)** | **PV** |
|---|---|---|---|
| Year 0 | (250) | 1 | (250) |
| Year 1 | 60 | 0.909 | 54.54 |
| Year 2 | 120 | 0.826 | 99.12 |
| Year 3 | 80 | 0.751 | 60.08 |
| Year 4 | 80 | 0.683 | 54.64 |
| | | | **18.38** |

NTV = 18.38 (1.1)4 = 26.91

= 27

**Profitability Index or the Benefit Cost Ratio**

This is the ratio of present value of project life to the initial capital outlay.

Profitability index (P.T) $= \frac{PV}{Outlay}$

Or

Profitability index = $\frac{NPV}{Outlay}$

**Illustration 5**

From Illustration 4, compute the profitability index of the project.

P.T = $\frac{268.38}{250}$ = 1.07352

**Illustration 6**

ABC Ltd is planning to replace two of his machine with a new model because of the maintenance cost of ₦ 5,000. One of the two old machines is considered to be expensive. The old machines are being depreciated over a period of 10 years on a straight line basis. The estimated scrap value after 10 years is ₦900.00 for each machine while the current market value is estimated at ₦1, 500.00 each. The annual operating costs for each of the old machine are as follows:

| | ₦ | |
|---|---|---|
| Materials | 90,000 | |
| Barbar- 1 operator for 2,000 hrs | | 2,025 |
| Variable expenses | 1387 | |
| Maintenance (excluding any compulsory expenditure) | | 3,000 |
| Fixed expenses: Depreciation | 135 | |
| Fixed Factory overhead | 4,050 | |

The new machine has an estimated life of 8 years and will cost N 100,000 made up of ex-showroom price of N87,000.00 and installation cost of 13,000.00. The scrap value after 8 years is estimated at N4,500.00 the operating costs of the new machine are estimated as follows:

| | | ₦ |
|---|---|---|
| Materials | | 162,000 |
| Labour -3 operators at 1,800 hrs | | 3,900 |
| Variable expenses | | 2,274 |
| Fixed expenses: | | |
| - Depreciation | 11,938 | |
| Fixed Factory overhead | 7,800 | |
| Maintenance | 4,500 | |
| | 24238 | |

The company's cost of capital is 10% and projects are evaluated on basis of rate of returns. In addition to satisfying the profitability test, projects are also required to satisfy a financial viability test by meeting 5 year pay-back condition.

You are required to:

a. Advise management on the profitability of the proposal by applying a discounted cash flow technique to calculate the internal rate of return.
b. Subject proposal to a financial viability test, and
c. Comment very briefly on two other factors that could influence the decision of management in respect of this proposal.
d. (Assume that residual value is received on the last day of the machine's working life and ignore taxation).

Present value of ₦1 for 8 years

Annuity

Ordinary
At 10% 5.335
0.4665

At 20% 3.837
0.2326

(ICAN MAY 1985 Q.1)

**Answer**

a. Operating Cost –Old Machines

| | | |
|---|---|---|
| Materials N (90,000 x 2) | | 180,000 |
| Labour, N (2025 x 2) | | 4,050 |
| Variable expenses N(1387 x 2) | | 2,774 |
| Maintenance | | 6,000 |
| | **Total** | **192,824** |

Operating Cost-Proposed Machine

| | |
|---|---|
| Material | 162,000 |
| Labour | 3,900 |
| Variable expenses | 2,271 |
| Maintenance | 4,500 |
| **Total** | **172,674** |

Savings per annum if new machine is bought

= ₦(192,824 - 172,674)

= ₦20,150

**Internal Rate of Return**

NPV AT 10%

| | | |
|---|---|---|
| Initial Outlay | = ₦(100,000 – 3,000) | 97,000 |
| NPV of savings | = 20150 x 5.333 | 107,500.25 |
| NPV of scrap value | = 4500 x 0.46645 | 2,099.25 |
| NPV | | 12,599.50 |

NPV at 20%

| | |
|---|---|
| Initial Outlay (100,000 - 3000) | (97,000) |
| NPV of savings = 20,150 x 3.837 | 77,316 |
| NPV of scrap value = 4t,500 x 0.2326 | 1,046.70 |
| NPV | (18,637,75) |

$$IRR = 10\% + \left[\frac{12599.5}{12599.5 + 18637.75}\right] 20\% - 10\%$$

= 10% + 4%

= 14%

**Financial Viability Test**

| Yr. | Cash Flow | Cumulative Cash flow |
|---|---|---|
| 0 | -97,000 | 97,000 |
| 1 | 20,150 | 76,850 |
| 2 | 20,150 | 56,700 |
| 3 | 20,150 | 36,550 |
| 4 | 20,150 | 16,400 |
| 5 | 20,150 | 3,750 |
| 6 | 20,150 | +23,900 |
| 7 | 20,150 | +44,050 |
| 8 | 20,150 | +64,200 |
| 9 | 4.500 | +63.700 |

$$\text{Payback period} = 4 \text{ year} + \frac{16400}{20150} \times 12 \text{ months})$$

= 4 years + 9.767 months

= 4 years, 10 months.

Two other factors that can influence the decision of management in respect of this proposal are:

(i) **Taxation:** The timing of taxation should especially take capital allowance into consideration. In this type of investment appraisal as this will affect the cash flows from the project.

(ii) **Inflation:** In an inflationary situation, the existing techniques for investment appraisal (NPV, IRR) are inadequate unless certain.

Adjustments are made, because real purchasing power is constantly being eroded. Unless this erosion is taken into account company will find that 'profitable' investment could actually turn out to be seriously unprofitable.

**Self-Assessment Exercise (SAE) 2**

Discuss the problems associated with Net Present Value Method

## 4.0 Summary

The various methods of appraising investment project was covered, this is meant to be a guide to manager in decision making

## 5.1 Conclusion:

The students can use the internal rate of return, the net present value the probability index and the accounting rate of return to make decide profitability of investment project and be able to identify those the form can engage in and those they will not accept based on their profitability or otherwise.

## 6.0 Tutor-Marked Assignments (TMAs)

1. Explain the merits and demerits of payback period

2. Identify the major features of Investment Appraisal Method

## 7.0 References/Further reading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Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn


# MODULE 3

## Unit 3: INVESTMENT DECISION UNDER CONDITION OF UNCERTAINTY

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 Risks in Investment Decision

3.2 Expected Net Present Value/Expected Value Method

3.3 Sensitivity Analysis

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

## 1.0 Introduction

Making investment decision many at times involve making several estimate due to uncertainty and risk in economic environment. Most time, it is not always easy to make decision with absolutism on the result of a particular venture due to uncertainty and risky economic environment. Thus, uncertain estimates will be given cognizance by the financial manager, to allow for variability in returns.

Where the possible outcome can be determined, as well as possible probability of return, with good sense of accuracy, it mean that situation of uncertainty is in place. However, outcome or return cannot be estimated when a risky situation is in place. In risky situation, there is no solution to problems that may exist.

## 2.0 Objectives

At the end of this unit, you should be able to:

1. know the risks in investment decision
2. to understand the meaning and nature of Expected Net Present Value/Expected Value Method
3. explain sensitivity analysis

## 3.0 Main Contents

### 3.1 Risks in Investment Decision

Where possible outcome or return cannot be estimated with probability of occurrence, a risky situation is said to be in place. Under risk, the financial manager might not be able to proffer any reasonable solution to the problem on hand. In fact, there is no decision rule in such a case.

**Methods used under Risk and Uncertainty**

1. Payback period method.
2. Finite horizon method.
3. Expected value method/Expected net present value.
4. Standard Deviation & variance method.
5. Risk premium method.
6. Sensitivity analysis method.
7. Decision tree method.
8. Simulation.
9. Certainty equivalent.
10. Capital asset pricing model (CAPM).
11. Portfolio theory.

### 3.2 Expected Net Present Value/Expected Value Method

Under this condition, the probability of occurrence of an event is already known. Where fair probability of occurrence is attached, the result obtained is a product of the various probabilities observed and the possible return on the investment.

**Illustration**

A project has an initial capital outlay of N30,000, generating return 30,000 in year one, 40,000 in year two, 60,000 in year three with a probability of 0.3 in year 1, 0.30 in year 2 and 0.4 in year 3, and interest rate of 10% per annum.

Should project be undertaken?

| Time | Cash Flow | Probability | Expected Cash Flow | DF (10%) | Present Values PV |
|---|---|---|---|---|---|
| Y0 | (30,000) | 1 | 1 | 1 | (30,000 |
| *Y 1* | 30,000 | 0.3 | 9,000 | 0.909 | 8,181 |
| *Y 2* | 40,000 | 0.3 | 12,000 | 0.826 | 9,912 |
| *Y3* | 60,000 | 0.4 | 24,000 | 0.751 | 18,024 |
| | | | | **Expected NPV** | **6117** |

**Decision rule:** Undertake the project, since it has positive NPV

**Self-Assessment Exercise (SAE) 1**

Explain various methods used under Risk and Uncertainty

### 3.3 Sensitivity Analysis

The sensitivity analysis measures the margin of safety. It measures the least price for which a product can be sold that will not result into loss. It is the margin of safety beyond which stock must not go down else, will result into loss. In the production section, it is known as the `buffer stock'. In sales it is the least price that may be offered without making loss. In project appraisal, sensitivity margin can be calculated as shown below.

$$\text{Sensitivity margin} = \frac{\text{NPV}}{\text{APV of measured variables}}$$

APV = Accumulated present value.

**Illustration 2**

Omotesho & Co. plans to invest the sum of ₦750,000 in a project which has a life span of 5 years and generating 20,000 units of koko-product annually. The selling price is ₦50 per unit of Koko, and a variable cost of ₦30 per unit of the product. Annual fixed cost amounts to ₦150, 000, and the associated cost of capital is put at 15%.

***Required***:

(1) Should Omotesho & Co invest in the project?

(2) Compute the sensitivity analysis of the project.

**Solution**:

| | |
|---|---|
| Annual contribution (20,000 x 20) | 400,000 |
| Less: Fixed Cost | (150,000) |
| Annual Net Cash Flow | 250,000 |
| Year initial outlay | 750,000 |
| Year 1-5 cash flow at 15% (3.35 x 250,000) | 837,500 |
| NPV | 87,500 |

**Computation of sensitive analysis**

**1. Contribution**

S.M (sensitivity margin) $\frac{NPV}{\quad}$ = $\frac{87,500}{\quad}$

APV of Contribution. 3.35 x 400,000

= 6.53%

This simply implies that sales volume can be comfortably reduced by 6.53% without resulting into loss.

2. **Selling Price**

**S.M** = 87,500

$$S.M = \frac{87,500}{3.35(20,000 \times 50)}$$

= 2.612%

This shows the maximum percentage decrease possible in selling-price, i.e. should selling price fall by 2.612% or more, the project will not be profitable.

3. **Variable Cost**

$$\textbf{S.M (of variable cost)} = \frac{87500}{3.35 \times (20,000 \times 30)} = 4.35\%$$

This shows the maximum percentage increase possible on variable cost.

4. **Fixed Cost**

$$\textbf{S.M} = \frac{87500}{3.35 \times 150,000} = 17.41\%$$

= 17.41%

This shows the maximum percentage increase that is possible in fixed cost.

5. **Outlay** $\frac{87,500}{750,000} = 0.1167 \times 100\%$

$= 11.67\%$

6. **Project Life**

To calculate the sensitivity margin for the project life, the assumption is that the project's life could be reduced more than 5yrs, without any effect on the profitability of the project.

Project Inflow = ₦250,000

Cost of project (initial outlay) = 750,000

$$\frac{A\{1 - (1+r)^{-n}\}}{r} - \text{Outlay} = 0$$

$$\frac{250{,}000\{1 - (1.15)^{-n}\}}{0.15} - 750{,}000$$

$$1 - (1.15)^{-n} = \frac{750{,}000 \times 0.15}{250{,}000} = \frac{112{,}500}{250{,}000} = 0.45$$

$$1 - 0.45 = (1.15)^{-n}$$

$$(1.15)^{-n} = 0.55$$

**ILLUSTRATION 3**

Risi Ltd A. novelty Toll Company is considering whether to produce a new toll called spymen and a special machine having no other use would be required which would cost N2,000.

The company's cost of capital is 5%. The direct cost of a spyman is expected to be N1 and whatever the number sold, the price will be N2. The demand for the toll is not likely to last more than three years. The sales in each year are highly uncertain.

The directors of the company have estimated the various possible levels of demand in each of these demands as in the table below. Because the nature of the products, the level of demand achieved in any one year is independent of that obtained in any other year.

| Year 1 Probability | Sales in Units | Year 2 Probability | Sales in Units | Year 3 Probability | Sales in Units |
|---|---|---|---|---|---|
| 0.2 | 500 | 0.2 | 250 | 0.2 | 100 |
| 0.2 | 1,000 | 0.3 | 500 | 0.2 | 250 |
| 0.4 | 2,000 | 0.3 | 750 | 0.3 | 500 |
| 0.1 | 2,500 | 0.1 | 1,000 | 0.3 | 750 |
| 0.1 | 3,000 | 0.1 | 2,000 | - | - |

The preliminary design studies for the `spyman' have already bee completed at a cost of ₦1,000. If the project is rejected, they could be sold for ₦250.

**Required**

(a) Calculate the project's expected net present value.

(b) Would you necessarily recommend acceptance if this value were positive? Specially, how would your conclusion be affected if the company were:

(i) One-man firm with no other project available except to invest at its cost of capital, and the ₦2,000 required to 100 finance the project was the entrepreneur's life-time saving

(ii) A very large company undertaking many large projects. (ICAN May 1986).

**Answer**

| Year 1 | | | Year 2 | | | Year 3 | | |
|---|---|---|---|---|---|---|---|---|
| Prob. | Unit | Expected | Prob. | Unit | Expected | Prob. | Unit | Expected Units |

| | Units | | | | Units | | | |
|---|---|---|---|---|---|---|---|---|
| 0.2 | 500 | 100 | 0.2 | 250 | 50 | 0.2 | 100 | 20 |
| 0.2 | 1,000 | 200 | 0.3 | 500 | 150 | 0.2 | 250 | 50 |
| 0.4 | 2,000 | 800 | 0.3 | 750 | 225 | 0.3 | 500 | 150 |
| 0.1 | 2,500 | 250 | 0.1 | 1,000 | 100 | 0.3 | 750 | 225 |
| 0.1 | 3,000 | 300 | 0.1 | 2,000 | 200 | - | - | - |
| **1.0** | | **1650** | **1.0** | | **725** | **1.0** | | **445** |

| | Yr1 ₦ | Yr2 ₦ | Yr3 ₦ |
|---|---|---|---|
| Sales value | 3,300 | 1,450 | 890 |
| Less direct cost | 1,650 | 725 | 445 |
| Cash flow | 1,650 | 725 | 445 |

***Note***: Sales value = Expected Unit X ₦2
Direct Cost = Expected Unit X ₦ 1

**Project's Net Present Value**

| Yr | Cash Flow | Discount Factor @5% | PV |
|---|---|---|---|
| 0 | -2000 | 1 | -2000 |
| 1 | +1650 | 0.9524 | +1571.45 |
| 2 | +725 | 0.9070 | +657.58 |
| 3 | +445 | 0.8638 | +384.39 |
| | | | ₦613.43 |

(b) If the Net present value of this project is positive but not more than ₦250 it will not necessarily be recommended since the company can realize ₦250 now if the project is not undertaken. If any case, the company will also consider the correlation of this project's cash flow to the cash from other investments of the company.

i) If the company is a one-man with no other project available except to invest at its cost of capital, and the N2,000 required

to finance the project was the entrepreneur's life-time saving, it would be advisable to carry out a sensitivity analysis of the projects variable (Nos of years for the product's demand, sales price, direct cost) to see how the adverse changes in those variables will affect the project's net present value before investing on this project, else, putting the amount on a deposit account with the bank may be a better alternative.

ii) If the company is a very large company undertaking many large projects, the company may only need to decide on whether the project is positively or negatively correlate with the other project of the company before investing in it. If negatively correlated, the company, to balance other project's risk may want to undertake the project. Also, if the project is very important to the achievement of cash flow from other profitable projects, the company may not need to look at this project in isolation but in conjunction with those projects

**4.0 Summary**

This unit explains the risks involved in investment decision. It examines the various methods used under Risk and Uncertainty with practical examples. The unit also explain sensitivity analysis in investment decision

**5.0Conclusion**

The student will be able to use the sensitivity analysis, expected net presnt value method and the decision tree method in decision making analysis and for management use.

**6.0 Tutor-Marked Assignments**

**1.** Explain the importance of Sensitivity Analysis

2. Discuss the various methods used under risk and uncertainty

**7.0 References/Further Reading**

Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

**MODULE 3**

## UNIT 4: LEASING

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 The Meaning of Leasing

3.2 Types of Leasing Agreement

3.3 Advantages and Disadvantages of Leasing

3.4 Process in Lease Finance Calculations

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

In the last two units, we have discussed investment decision under condition of certainty and uncertainty. In this unit, we shall discuss the meaning, types, merits and demerits of leasing.

### 2.0 Objectives

By the end of this study, you will be able to:

1. To understand the meaning and types of leasing agreement
2. To know the merits and demerits of Leasing
3. To understand the process in Lease Finance Calculations

## 3.0 Main Contents

### 3.1 The Meaning of Leasing

Leasing is a contractual agreement between two people, where the right to use the asset is transferred by the owner (the Lessor) to the (Lessee) for an agreed period of time and for a consideration called "Lease rental".

The lease rental usually is paid at an agreed time either monthly, quarterly, half-yearly or annually. The cash flow and profit generation of the leasing must be considered when fixing the periodic lease rental payment. There is the primary lease agreement and the secondary lease agreement.

The primary lease agreement entails payment of both the asset cost and the profit thereon for a period of 4 years to 5 years.

The secondary lease is a perpetual lease agreement with a nominal lease rental being paid.

Lease rental could be paid up-front in which case more rental is paid at the initial life of the asset and less rental paid at the later life of the asset. Where the lessor pay less rental at the initial life of the asset and higher rental toward the end of the asset's life is known as BACK-ENDED lease.

### 3.2 Types of Leasing Agreement

Finance Leasing and the Operating Leasing are the two major types of leasing agreement.

#### Finance Lease

Finance lease is mostly undertaken by banks and non bank financial institutions. Finance lease is equally known as ***"Capital on full payout lease"*** It relies on the proceeds from the lease rentals in the primary lease period to recover both the industrial and trade margins.

The aggregation of the primary lease rental covers either the initial capital outlay or cost of the asset and some amount of rents or returns on the

investments. The secondary lease rental account majorly for return on the leased asset. The risk on the asset and cost of maintenance remains the function of the leasee. He claims the capital allowance on the asset. Infact the right of ownership after the payment of the primary lease rental is transferred to the lessee.

All insurance cover on the asset is done by the lessee. The secondary lease period rental payment non-time account for only the recovery of the assets salvage value on the asset leased.

**Operating Lease**

In operating lease the asset cost is not wholly amortized during the primary lease period; the lessor while giving the lessee the use of the asset retains practically all risk, obligations, and ownership (in regard like early obsolescence, appreciation in value) of the asset.

This occur where the owner of the asset sells the asset to a leasing company transferring the ownership right to the leasing company however retain the usage of the asset for a payment of lease rental to the new owner (the lessor).

**Self-Assessment Exercise (SAE) 1**

Explain the major types of leasing agreement

### 3.3 Advantages and Disadvantages of Leasing

**Advantages of Leasing**

**Purchase Price:** The initial capital outlay which is natural in purchase of asset is avoided in leasing. Such huge amount can be invested in some other profitable investment. Leasing thus provides liquidity for the business organization.

**Off-Balance Sheet Financing:** Leasing being an off-balance sheet financing (operating leasing presents a strong but cheap means of financing to the

business organization). The business can make use of the asset without necessarily buying it.

Where an asset is needed for a few time period it will make no sense buying such an asset where leasing can be done. Leasing thus provide opportunity to use an asset for a few period without having to incur huge purchase cost and thus scraping the asset just after a few period. This account for while why conglomerates lease vehicle rather than out rightly purchase them.

**Illiquidity:** Most times investor may not be liquid enough to take bank loan, for asset purchase but by leasing such asset could be easily acquired.

**Risk Transfer:** The risk of obsolescence involved in dynamic assets is easily transferred to the lessor in the leasing agreement under an operating leasing agreement. This enables the lessee to cancel his agree in case the asset becomes obsolete.

**Disadvantages of Leasing**

**Loss of Claim on Depreciation:** The capital allowance is normally claimed by the lessor in operating leasing rather than such benefit accruing to the use the asset.

**Ownership Right:** The ownership right in operating leasing belongs to the Lessor; hence the user/Lessee will not have full authority on the asset(s).

### 3.4 Process in Lease Finance Calculations

Three cases are available under leasing decision. For the Financial Manager, they are:

1. Obtain a loan to finance the purchase of the asset.
2. Purchase the asset from company purse.
3. Lease the asset.

**Decision Criterion** (Where the company is in a taxable position.

***Step 1:*** Compute tax benefit on the interest on loan and tax benefit capital allowance.

**Tax benefit on Interest** = Tax rate X Interest on loan

***Step 2:*** Compute the cash repayment using amortization method. Cash repayment =

$$\frac{Loan}{\frac{1-(1+r)^{n}}{r}} \quad \text{or} \quad \frac{r(Loan)}{1(1+r)^{-n}}$$

***Step 3:*** Multiply the annual repayment by number of years total cash repayment.

***Step 4:*** Deduct tax benefit on interest and capital allowance from annual cash repayment to get real annual cash paid.

***Step 5:*** Compute the present value of net cash repayment.

**CASE 2: Leasing**

Follow the first 5 steps above.

**Leasing Or Buying Decision**

***Step 6:*** Compare the present value of net cash repayment and loan with present value of net cash repayment and leasing.

***Step 7:*** Accept the method that yields the least cost.

**ILLUSTRATION 1**

David Kenny Plc. have just secured a profitable investment opportunity using an asset with initial capital outlay of ₦2 million with a zero residual value after 6 years.

The Financial Manager of the Company is considering the method of finance to adopt. Two opportunities are available.

1) The usage of loan with a 20% interest, with a constant annual repayment.

2) Finance by leasing from a leasing company at an annual rental ₦600,000.00

Capital allowance on the asset is 20% straight line over 6 years. The company income tax is 35%. The company cost of capital is 13%.

***Required***:

Advice the company on which of the two options to select where the, company is in a taxable position.

**Answer**

1. Prepare an amortization schedule for the loan in order to identify the annual repayment and tax savings on the interest.

Step 1: $\frac{1-(1+r)^{-n}}{r} = \frac{1-(1.20)^{-6}}{0.20} = 3.3255$

Therefore, annual repayment = $\frac{₦2,000,000}{3.325}$ = ₦601,413

**Year payment**

| | |
|---|---|
| 1. | 601413 |
| 2. | 601413 |
| 3. | 601413 |
| 4. | 601413 |
| 5. | 601413 |
| 6. | 601413 |

Capital Allowance = $\frac{₦2,000,000}{6}$ = ₦333,333.

**Repayment Schedule**

| Year | Capital | Annual Cash | Interest | Capital | Balance |
|---|---|---|---|---|---|

| | B/F | Paid | 20% | Repaid | |
|---|---|---|---|---|---|
| 1. | 2,000,000 | 601,413 | 400,000 | 201,413 | 1,798,587 |
| 2. | 1,798,587 | 601,413 | 359,717 | 241,695.6 | 1,556,891 |
| 3. | 1,556,891.4 | 601,413 | 311,378 | 290,035 | 1,266,857 |
| 4. | 1,266,857 | 601,413 | 253,371 | 348,042 | 918,815 |
| 5. | 918,815 | 601,413 | 183,763 | 501,170 | 501,165 |
| 6. | 501,165 | 601,413 | 100,233 | 501,180 | NIL |

| Time | Saving on Interest | Saving on Capital Allowance | Total Benefit |
|---|---|---|---|
| Yr1. | 140,000 | 116,667 | 256,667 |
| Yr2. | 125,900 | 116,667 | 242,567 |
| Yr3. | 108,982 | 116,667 | 225,650 |
| Yr4. | 88,680 | 116,667 | 205,347 |
| Yr5. | 64,317 | 116,667 | 180,984 |
| Yr6. | 35,082 | 116,667 | 151,749 |

NB: Saving on interest = 20% of capital balance multiply by 35% capital balance saving on capital allowance = capital allowance multiply by 5%.

**OPTION 2**

**NCF** **DCF** **PV**

| | Year | | | |
|---|---|---|---|---|
| Item lease rental | 0-5 | 600,000 | 4.5172 | 2710200 |
| Tax saving in rental | 1-6 | 210,000 | 3.998 | (839580) |
| Tax saving on capi allowance | 2-7 | 116,667 | 3.5376 | (412721) |
| | | | | 1457899 |

**Advice**: It will be advisable for the company to lease the asset than for loan to purchase the asset.

### Illustration 2

Assuming from the above that the company is in a non-taxable position.

**Answer**

***Note***: Where the company is in a non-taxable position then there shall be no tax benefit on both capital and interest on loan or lease.

Loan will be: 601413 @ 3.998 = 2404450

Lease Rental amount 600,000 @ 4.5172 = 2710320

In the above case it will be better for the company to take loan for the purchase of the asset.

**Self-Assessment Exercise (SAE) 1**

Explain the major challenges of leasing

## 4.0 Summary

In this unit, you have learnt the meaning of leasing, the major types of leasing agreement. We have also explained the merits and demits of leasing and the Process in Lease Finance Calculations

## 5.0 Conclusion

In this unit you have studied the various methods used in calculating lease finance and the adaptability of leasing technique to business finance of assets .

## 6.0 Tutor-Marked Assignments

1. Explain the major types of leasing agreement you know

2. Discuss the major challenges of leasing

## 7.0 References/Further Reading


Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

MODULE 4

Unit 1: COST OF CAPITAL

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 Cost of Capital

3.2 Types of Cost

3.3 Cost of Preference Share.

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

## 1.0 Introduction

In the last unit, we looked at the meaning of leasing, various types. We also examined the merits and demerits of leasing and the process in lease finance calculation. In this unit, we shall examine cost of capital, its usage and various types.

## 2.0 Objectives

In this unit, you will be able to;

1. Understand the meaning of cost of capital and its usefulness
2. To examine the opportunity Cost of Capital

## 3.0 Main Contents

### 3.1 Cost of Capital

It is the minimum required rate of return on investment. It is the present value of future stream of Net Cash flow on investment.

It is also the minimum value per share in the capital market.

**The usefulness of Cost of Capital**

1. It is an important tool in capital budgeting decision.
2. It is a useful measurement of the firm's financial performance
3. It is a tool of financial decision making.
4. It can be used in selecting source of finance; as cost of capital the market is known the Financial Manager can select a cheap source of fund.
5. It is also important in dividend policy formulation and working capital management

### 3.2 Types of Cost

***Future Cost:*** Are expected cost associated with investment.

They are those costs used in appraising investment opportunities when matched with future benefits or expected returns on the investment, it will produce the net return on such investment. Future cost of fund is also used as discounting factor.

***Historical Cost:*** These are past financial expenditures used in securing a future benefit. It is the sacrificing of present consumption (in investment) for future consumption benefit

***Explicit Cost:*** The explicit cost of capital is that cost of capital that equates the present value of future incremental cash inflow with present value of future incremental cash outflow. That is, the cost of debt, equity etc.

**Opportunity Cost of Capital/Explicit Cost of Capital:** It is the cost of alternative project forgone for the purpose of investing in the selected projects. Explicit cost of capital becomes relevant only when there are several possible investment opportunities to be selected from.

**VALUATION OF SECURITIES**

**Debt (Irredeemable debenture)**

The cost of Debt is the internal rate of return on Debt; that is the cost at which the present value of incremental cash inflow equals the present market value (or purchase cost) of the asset.

$N_0 = 1(1 + r)^{-1} + (1 + r)^{-2} + I(1 + r)^{-3}$

$N_0 = EI_n(1 + r)^{-n}$

I = 1 or 1 = I

| Where | $N_0$ | = | Net cash inflow in year zero |
|---|---|---|---|
| | I | = | Cash inflow in year 1 to year n |
| | N | = | Number of years |
| | R | = | Interest rate |

Note: This is the cost of irredeemable Debt e.g. irredeemable debenture.

**Illustration I**

Kemi-Alabi purchased a 15% irredeemable debenture for ₦100 ex-interest. Compute the cost of debt.

Answer: Cost of Debt $= \frac{15}{100} = 0.15$

**Cost Of Redeemable Debt:** (e.g. Debenture)

The cost of redeemable debt is calculated using the internal rate of return method. This represents the discount rate that equates the current market value (ex-interest) of the debenture with the present value of associated future

cash inflows. These are the interest payable annually plus the redemption value in the year of redemption.

$$i = 1$$

$$V_{RD} = \frac{I}{(1+r)^1} + \frac{I}{(1+r)^2} + \frac{I}{(1+r)^3} + \frac{R}{(1+r)^n}$$

| Where | $R(1 + r)^{-1}$ | = | Present value of redemption value |
|---|---|---|---|
| | $V_{RD}$ | = | Value of redeemable debenture |
| | R | = | Interest rate |
| | I | = | Interest recovered |

**Illustration: 1**

Kolade bought a 12% redeemable debenture, redeemable at par in 10 year's time. The current market value of the debenture is N80, associated tax is 40%. What is the cost of the redeemable debenture?

**Answer**

Yr 0 Current market value = ₦80 (outflow)

Yr 1 - 10 Interest net of tax = ₦12 (1- 0.4) = ₦ 7.20

Yr.10 Redemption value= N100 (i.e. at par) (inflow)

| **Time** | **NCF** | **NCF 10%** | **PV** | **DCF at 13%** | **PV** |
|---|---|---|---|---|---|
| Yr 0 | 80 | 1 | (80) | 1 | (80) |
| Yr 1-10 | 7.20 | 6.144 | 44.24 | 5.426 | 39.067 |
| Yr 10 | 100 | 0.38 | 38.00 | 0.29 | 29 |
| | | | 2.24 | | (11.933) |

By interpolation,

IRR =

$$10 + \left\{ \frac{2.24}{(2.24 + 11.931)} (13 - 10) \right\}$$

$$= \underline{\underline{10.47\%}}$$

**Self-Assessment Exercise (SAE) 1**

Explain the major usefulness of cost of capital

### 3.3 Cost of Preference Share.

**Irredeemable preference share/redeemable preference share**

Preference share is assumed to be debt in nature because a preference shareholder is entitled to fix Dividend like the Debenture holder that earn fix interest rate. Thus in computing the cost of preference shareholder same method used in Debenture cost calculation is used.

Cost of irredeemable preference share will be.

Cost of irredeemable preference share:

$No = D (1 + Kp)^{-1} + D (1 + kp)^{-2} + D (1 + kp)^{-3}$

Where No = Net cash inflow in year zero

Kp = Rate of return on preference share

D = Dividend received

R = Number of year.

Redeemable preference share

$$V_{RP} = \frac{I}{(1 + kp)^1} + \frac{I}{(1 + kp)^2} + \frac{I}{(1 + kp)^3} + \frac{I}{(1 + kp)^n}$$

**Note**: This can only be solved by using interpolation i.e. the internal rate of return method.

**Cost of Equity (Ordinary Share)**

The ordinary share are irredeemable, they earn dividend however the dividend can be growing dividend; that is, where the Dividend grows at a particular rate annually.

$$K_E = \frac{D}{P}$$

Where $K_E$ = Cost of equity

D = Dividend

P = Market value

G = Growth rate.

**Cost of Equity with Issuing or Floatation Cost**

$$K_E = \frac{D}{P - X}$$

Where D = Dividend

$K_E$ = Cost of equity

X = Flotation or issuing cost.

**Illustration**

The issue price of a share is ₦30 and issue cost are 30k per share. New shareholders expect constant annual dividend of 50 kobo. What is the cost of equity?

$$KE = \frac{0.5}{30 - 0.3} = \frac{0.50}{29.7} = 0.0168 = 1.682\%$$

**Dividend Growth Model**

No shareholder in real life expect a constant dividend for a long time his investment. Thus most times the dividend is assumed to increase or grow annually.

$$MV\ (Ex\text{-}div) = \frac{D_0(I+g) + D(I+g)^2 + D(1+g)_n}{(I + ke) \quad (I+ke)^2 (I+ke)^n}$$

Most time a constant dividend increase for perpetuity is assumed.

$$MV = \frac{D_0(I+g)}{Ke-g}$$

$$KE = \frac{D(I+g)}{MV} + g$$

$$KE = \frac{d}{MV} + g$$

Where

D = D(I+g) = Dividend in year I

KE = Cost of share

MV = Market value.

Growth Calculation

$$g = \sqrt[(n-1)]{\frac{\text{Latest Dividend}}{\text{Earliest Dividend}}}$$

Gordon Model of Dividend Growth Calculation

g = rb

b = retention rate

r = return on capital employed rate

i.e return rate on capital employed

$$\frac{EPS}{APS} = \frac{\text{Earning per share}}{\text{Asset per share}}$$

$$b = \frac{EPS - DPS}{EPS}$$

$$rb = \frac{(EPS - DPS}{(EPS} \times \frac{EPS)}{APS)} = \frac{EPS - DPS}{APS}$$

## 4.0Summary

The method of calculating the various cost of financial assets was discussed which include ordinary share debenture and other bond. the various techniques of those appraisals and their market value was also discussed

## 5.0 Conclusion

The student will be able to apply the knowledge gained to making market decision on when to use a means of finance and when not to use it it will be of value in deciding whether to go for finance by equity or debt

## 6.0 Tutor-Marked Assignments

1. Explain the meaning and various types of cost
2. Identify the Importance of Cost of Preference Share.

## 7.0 References/Further Reading


Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

Oye, A (2005). *Financial Management.* Third edition. Lagos: El-Toda Ventures Ltd

Robert, O.I (1999). *Financial Management Made Simple.* Lagos: ROI Publishers

Terry, L (2003). *Management Accounting.* London:Gulidfold and King's Lynn

MODULE 4

# UNIT 2: WEIGHTED AVERAGE COST OF CAPITAL

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**3.1 Weighted Average Cost of Capital**

**3.2 Importance of Weighted Average Cost of Capital**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

## 1.0 Introduction

In the last unit, we examine the cost of capital, types and the cost of preference share. In this unit, we shall examine Weighted Average Cost of Capital.

## 2.0 Objectives

The objectives of this unit include:

1. To examine the importance of Weighted Average Cost of Capital
2. To understand the short Comings of Weighted Average Cost of Capital

## 3.0 Main Content

### 3.1 Weighted Average Cost of Capital (WACC)

The weighted average cost of capital is the minimum average cost of capital of all sources of finance of a firm.

It is the minimum rate of return any project should yield to make it acceptable. It is computed by calculating the weighted average all the capital element in a capital structure.

The market value and not the book value is used in the compute, weighted average cost of capital.

**Importance of Weighted Average Cost of Capital (WACC)**

1. The weighted average cost capital (WACC) is used in appraising a future project not a historical project.
2. The weighted average cost of capital (WACC) is important it makes use of market value which considers both the systematic risk and the unsystematic risk.

**Short Comings of Weighted Average Cost of Capital**

1. **Risk**: There is the assumption that the new project appraised is of the same class of risk (both financial and operating risk) as the existing project; however where the new project not of the same class of risk then using the WACC will produce an invalid result.
2. **Sources of finance difficulties.**
   - (i) The Bank overdraft has a variable interest rate this makes the WACC based on the cost of Bank overdraft amp The ambiguity is compounded by the nature Bank overdraft which is payable on demand.
   - (ii) Convertible Securities: The option to convert and not to convert makes the WACC computed based on the convertible securities

difficult to rely upon; because the converted security cost will be different from the cost of the unconverted security.

(iii) Cost of unquoted securities: Non listed or unquoted securities cost are normally difficult to measure.

(iv) Constant Dividend Growth Rate: In reality the dividend growth rate might not be constant. Thus the WACC based on the constant dividend growth rate might be unrealistic

(v) Constant tax rate: It is wrongly assumed for the purpose of convenience that the tax rate will be constant. This might not be true in reality. Thus the WACC might present an incorrect and unreliable cost of capital.

**Illustration 1**

Sunspring Plc, issued N4,000,000 15% debenture stock redeemable at par in six (6) year's time and have a current market value of N108 cum int. The company's equity capital has N7,000,000 ordinary share of N1 each and retained earning of N1,500,000. The current market value of the ordinary share is N4.25 cum dividend.

The company has N2,000,000 of 9% preference share, currently priced at 70 kobo per share. Equity dividend for the current period is N 1,750,000 the project dividend growth rate is 7% per annum. Corporate tax rate is 45%. Dividend on ordinary share is about to be paid, debenture interest are due but unpaid. The preference share dividend have been paid. Sunspring Plc., needs your advice on the appropriate cost of capital to use in appraising the investment projects.

**ANSWER**

***Step 1:*** Compute the cost of each component of capital.

(1) Cost of equity

Market value of share = N4.25 (given)

Dividend per share = $\frac{1,750,000}{7,000,000}$ = 0.25

Market value ex div = 4.25 - 0.25 = 4

:. MV = N4 x 7,000,01 = N28,000,00

Cost of equity = $\frac{D\ (1+g)}{M.V}$ + g = $\frac{1,750,000\ (1.07)}{28,000,000}$ + 0.07 = $\underline{0.1368}$

(2) Cost of Preference share

= $\frac{0.09}{0.70}$ = 0.1285

(3) 15% Debenture: Cost

Market value = N108 (Cum-Int)

Market value ex-Int. = 108 - 15 = 93

Interest = 15%, Tax = 35%

Interest (Net of taxes) N15 x (1 – 0.45) = ₦8.25

Years = 6 years

| **Time** | **NCF** | **DCF** | **PV** | **DCF 7%** | **PV** |
|---|---|---|---|---|---|
| Yr0 | 93 | 1 | (93) | 1 | (93) |
| Yrl-6 | 8.25 | 35.93 | 35.89 | 4.77 | 39.35 |
| Yr 6 | 100 | 0.56 | 56 | 0.67 | 67 |
| | | | (1.07) | | 13.35 |

$$C = 10 + \left( \left( \frac{13.35}{13.35+1.07} \right) (10-7) \right)$$

C = 12.77% OR 0.1277

WACC

| Capital Item | Market value | weigh | Cost | WACC |
|---|---|---|---|---|
| Ordinary share | 28,000,000 | 0.846 | 0.1368 | 0.1157 |
| 9% Preference share | 1,400,000 | 0.042 | 0.1285 | 0.0054 |
| 15% Debenture | 3,720,000 | 0.112 | 0.1277 | 0.0143 |
| | 33,120,000 | | | 0.1354 |

Note: Weight is the market value per source (i.e per capital item by the total market value (i.e total capital source).

**Self-Assessment Exercise (SAE) 1**

Discuss the short-comings of Weighted Average Cost of Capital

## 4.0Summary

The method of calculating the various cost of financial assets was discussed which include ordinary share debenture and other bond. the various techniques of those appraisals and their market value was also discussed

## 5.0 Conclusion

The student will be able to apply the knowledge gained to making market decision on when to use a means of finance and when not to use it it will be of value in deciding whether to go for finance by equity or debt

## 6.0 Tutor-Marked Assignments

1. Explain the importance of Weighted Average Cost of capital
2. Identify the shortcomings of Weighed Average Cost of Capital.

## 7.0 References/Further Reading

Akinde, M.A.O (2006). *Fundamentals and Practice of Business Finance.* Lagos: Abioudun-Kinson Nigeria Ltd

Frank, W and Alan, S (2002). *Business Accounting*. London: Pitman Publishing

Mohammed, S.R (2003). *Theory and Practice of Auding.* Lagos: Abioudun-Kinson Nigeria Ltd

Okijo, Y (2000). *Financial Management.* Lagos: Laco Publishers

## MODULE 4

## UNIT 3: WORKING CAPITAL MANAGEMENT

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

The working capital is the required fund necessary for the day to day running of the business. It includes Cash, Inventory, Accounts receivable, Prepayment, (which constitute application of fund) accounts payable, accruals, etc. (which constitute sources of term fund).

The working capital constitutes the short term investment decision of the organization. It is the short term sources and application of fund the cost of these short term sources of fund are very important to an organization. It is the current assets circulating or floating capital. It changes form in the production and trading process. E.g. Cash is used to purchase raw materials (Inventory). These are being used up in the production process to yield finished goods (stock). The stocks are sold for cash or on credit (yielding) account receivables; sometimes inventories (raw material) are obtained on credit (Account payable).

## 2.0 Objectives

After study this unit, you should be able to:

1. Understand factors affecting working capital
2. Financing Working Capital

## 3.0 Main Contents

### 3.1 Working Capital Concepts

**The Gross concept:** It is the totality of the current assets of the business which include accounts receivable, cash, short dated securities (short term investment), bill receivable and Stock (or inventory). The gross concept advocates that a firm should posses working capital just adequate and sufficient to meet the firm's operating cycle. It ensures that excess investment in cash is avoided, since excess investment in cash results in excess liquidity resulting to high cost of income. Thus it is called optimal level of Investment in current assets; excess investment in current asset is avoided.

Secondly, this emphasizes available source of fund- such that such fun are called up as at when needed. Excess investment in current asset is thus avoided.

**The Net Concept:** This emphasises continuous liquidity of the firm. The concept advocates a finance of Working Capital by a permanent source of funds e.g shares, debentures, long term debts, preference shares, retained earning etc. The Net concept advocates the efficient mix of long term and short term sources of funding Working Capital.

There exists no rule as to the exact Working Capital level a firm should hold and there exists no rule as to how current asset should be financed.

### 3.2 Factors Affecting Working Capital

1. The fluctuations necessitated by seasonal sales, change in taste and fashion etc.

2. The operating cycle affect the working capital, a long term operating cycle would result into capital tie down and hence increased cost of working capital.

3. The nature of the business also determines the level and extent of working capital the business will have.

4. The variability in stock purchase due to the firm speculators purchase is another factor affecting working capital.

5. The growth stage of the firm is another factor. A new growing firm will require a high level of Working Capital and the Working Capital cycle will be short and rapid.

6. The credit policy of' a firm can impact either negatively or positively upon its working capital. A liberal credit term will result in capital tie-up but a high level sales, and hence high level, while a tight credit policy may reduce sales but improve liquidity. Profitability may be low with high credit policy. Thus, the firm must strike a balance between liquidity and profitability.

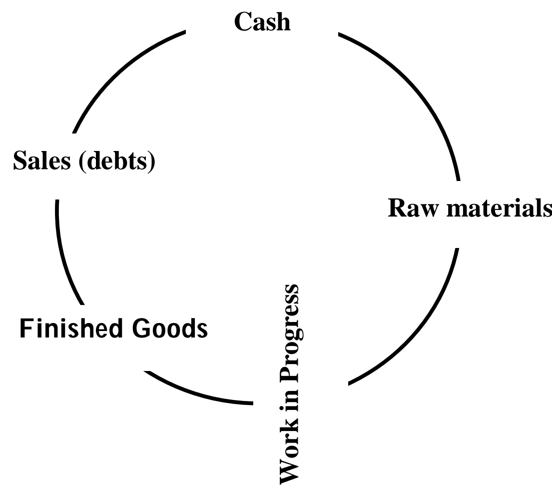
7. Another factor affecting the working capital of a firm is the extent to which short term funds (cash) are used to finance long term investment.

8. An efficient operating cost will contribute to the working capital efficiency of a firm.

### 3.3 Operating Cycle

It is the total period of converting raw materials into cash and returning the cash into raw materials. This actually involves converting the raw

materials to work in progress and the work in progress to finished good and the finished goods into sales and finally the sales to cash.




The operating cycle is the total period it will take to convert raw materials into cash as above.

To maintain an uninterrupted operating cycle, cash must be maintained

Liquidity is the most important factor for operating cycle.

**Operating Cycle Length**

To determine the length of operating cycle the total period of cash component of the operating cycle must be determined.

**1. Inventory**

$$\text{Raw materials conversion period} = \frac{\text{Raw materials x 360}}{\text{Raw materials consumption}}$$

$$\text{Raw materials conversion } \frac{\text{RMI}}{\text{RMC}} \text{ x 360 (0r 365)}$$

**2. Work In Progress**

Work in progress conversion period (WIPCP) =

$$= \frac{\text{Work in Progress Inventory}}{\text{Cost of Production}}$$

$$= \frac{\text{W I P I}}{\text{Cost of production}} \quad \text{X} \quad _360(\text{ or } 365)$$

**3. Finished Goods**

$$\frac{\text{Finished good conversion period (FGI)}}{\text{Cost of good sold}} \text{ X } 360 \text{ (or } 365)$$

4. Book Debts Conversion Period (BDCP)

(Debt repayment period)

$$= \frac{\text{Book debt inventory}}{\text{Credit sales}} \text{ or } \frac{\text{Debtor}}{\text{Credit sales}} \text{ x } 360(\text{or } 365)$$

**5.** Payable Different Period

(Credit Repayment Period)

$$\frac{\text{Creditors}}{\text{Credit purchase}} \text{ x } 360(\text{or } 365)$$

The information below is extracted from the records of Kunle Plc.

| | 1998 | 1999 | 2000 |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Stock: Raw material | 100,000 | 140,000 | 160,000 |
| Work in progress | 78,000 | 90,000 | 100,000 |
| Finished goods | 90, 000 | 128,000 | 160,000 |
| Purchases | 500,000 | 700,000 | 800,000 |
| Cost of goods sold | 800,000 | 900,000 | 980,000 |
| Sales | 800,000 | 1,900,000 | 1,200,000 |
| Debtor | 170,000 | 200,000 | 280,000 |
| Trade creditors | 90,000 | 100,000 | 120,000 |

Assume a 365 days year.

**Compute**: The operating cycle of the business.

**Solution**

| Days taken can be computed as below. | **1998 (Days)** | **1999 (Days)** | **2000 (Days)** |
|---|---|---|---|
| | **1998** | **1999** | **2000** |
| Raw material x 365 / Purchases | 73 | 73 | 73 |
| 1-2 Trade creditor x 365 / Purchases | 65.7 | 52.1 | 54.75 |
| 3-4 Word in progress x 365 / Cost of sales | 35.59 | 36.5 | 37.24 |
| 4-5 Finished goods x 365 / Cost f sales | 41.06 | 51.91 | 59.59 |
| 5-6 Debtors x 365 / Sales | 68.94 | 66.97 | 85.17 |
| (Total length of days) | 284.29 | 280.48 | 309.75 |

**Self-Assessment Exercise (SAE) 1**

Explain the major factors affecting working capital

### 3.4 Financing Working Capital

In financing working capital the risk return trading must be considered That is, the cost of fund and return from usage of that fund must be given a considerate attention, to ensure profitability and liquidity. Financing method must equally be flexible to accommodate constant change involved in working capital management. Thus there are three major methods of financing working capital namely:

1. *Long Term Financing:* This involves using fund from long term securities.
2. *Short Term Financing:* This involves using fund from short term securities.
3. *Spontaneous Financing:* This involve utilization of short term unnegotiated financing source e.g. credit from creditors.

## 4.0 Summary

In this unit, we examined the working capital concepts, the factors affecting working capital. It outlined the factors Influencing Credit Control Policy, and the factors to be considered in granting Credit to a Specific Customer.

## 5.0 Conclusion

The student will be able to determine the various levels of optimal combination of current assets and current liabilities for the benefit of the organisation.

## 6.0 Tutor-Marked Assignments (TMAs)

1. Explain the working capital concepts

2. Discuss the factors affecting working capital in Nigeria

**7.0 References/Further Reading**

Akinsulire, O (2005). *Financial Management,* 3rd edition. Lagos: Ceemol Nigeria Ltd

Brigham, C and Houston, D (1999). Fundamentals of Financial. Florida: the Dryden Press

Lucey, T (2002). Costing. London: Thomson Learning

Pandy, L.M (2004). Financial Management. New Delhi: Vikas Publishing House

MODULE 4

## UNIT 4: MANAGEMENT OF WORKING CAPITAL COMPONENTS

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

Working capital is the life blood of an organization, it consists the liquidity flow as different from the profitability of the organization. A profitable but illiquid business could be forced to close down. This unit examine the components of working capital management.

### 2.0 Objectives

3. Management of Working Capital Components
4. Factors Influencing Credit Control Policy

3.0 Main contents

### 3.1 Management of Working Capital Components

#### Cash Management

Cash is the most liquid assets of the company; it is used as a medium of exchange in business activities. Sales represent inflow of cash, while

purchase brings about outflow of cash. It is used to meet daily components of organization obligations. Cash management involves three major stages namely: Cash planning, Cash flow management and maintaining optimal cash level.

Cash planning entails analyzing the organizational cash needed and estimating inflow and outflow of cash. The purpose is to avoid carrying excess cash or running into cash shortages.

Managing the cash flow involves evolving method of maximizing cash outflow. Keeping optimal cash level, no surplus cash or shortage of cash exist.

**Cash Planning**

This is a process of estimating current and future cash needs for the organization and making appropriate effort to attain these. The singular purpose of cash planning is to avoid excess liquid and low shortage of cash.

**Cash Budgeting and Financing**

Cash budgeting entails estimating relative inflow and outflow throughout the life of the asset. The cash budget could be long term or share term capital. A cash budget that goes beyond a year will be termed long term budget.

**Financial Management Question**

Kay Nig Ltd. produced the following information covering November, December, January, February, and March 2011. The information is stated below:

| | NOV | DEC | JAN | FEB | MAR |
|---|---|---|---|---|---|
| | N | N | N | N | N |
| Sales | 150,000 | 200,000 | 200,000 | 300,000 | 400,000 |
| Expenses | 10,000 | 12,000 | 12,000 | 13,000 | 15,000 |
| Wages | 15,000 | 16,000 | 18,000 | 20,000 | 25,000 |
| Loan repay | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Purchases | 150,000 | 160,000 | 180,000 | 200,000 | 250,000 |
| Rental income (Rec'd) | 10,000 | 12,000 | 18000 | 20,000 | 25,000 |

Additional Information:

Before preparing the cash budget, your enquiry revealed the following:

1. Payment for sales is 50% cash sales and 50% credit sales. The credit sales are paid for in two equal installments a month after sales.
2. Purchases are paid for 40% in the month of purchases and the remaining are paid in two equal installments a month after purchase.

The management of Dr. Kay Nig Ltd. has requested you to prepare a cash budget for the firm covering January, February and March, 2011.

# SOLUTION

## CASH

## BUDGET

| | January | February | March |
|---|---|---|---|
| | N | N | N |
| Sales | 187,500 | 250,000 | 325,000 |
| Rental Income | 18,000 | 20,000 | 25,000 |
| | 205,500 | 270,000 | 350,000 |
| **Payment** | | | |
| Purchases | (165,000) | (182,000) | (214,000) |
| Expenses | ( 12,000) | ( 13,000) | ( 15,000) |
| Wages | (18,000) | ( 20,000) | ( 25,000) |
| Loan repayment | ( 10,000) | ( 10.000) | ( 10,000) |
| | 205,000 | 225,000 | 264,000 |
| Balance | 500 | 45,000 | 86,000 |
| | 205,500 | 270,000 | 350,000 |

**WORKINGS**

**SALES**

| NOV | DEC | JAN | FEB | MAR |
|---|---|---|---|---|
| N | N | N | N | N |
| 75,000 | 37,500 | 37,500 | | |
| ------ | 100,000 | 50,000 | 50,000 | |

**PURCHASES**

| NOV | DEC | JAN | FEB | MAR |
|---|---|---|---|---|
| N | N | N | N | N |
| 60,000 | 45,000 | 45,000 | ------- | ------- |
| -------- | 64,000 | 48,000 | 48,000 | ------- |
| -------- | -------- | 72,000 | 54,000 | 54,000 |
| -------- | -------- | --------- | 80,000 | 60,000 |
| -------- | -------- | --------- | -------- | 100,000 |
| 60,000 | 109,000 | 165,000 | 182,000 | 214,000 |

**Managing the Cash Flows**

This is a process of ensuring adequate cash collection period and the disbursement of the same. The purpose is to ensure accelerated cash collections and decelerated cash disbursements.

**3.6 Cash Management Techniques**

1. **Accelerated Cash Collections:** This is a method of ensuring reduction in time lag or gap between the time customer enjoys a service or buys a product and the time the customer receives the bill and settles it, and the time cash becomes available for maintaining the operating cycle.

A cash collection method could either be centralized or decentralized system or the lock- box system. The lock-box system entails establishing various collections centres taking into account customer location and the volume of remittances.

2. **Optimal Cash Level:** This is determined through the use of Economic Order Quantity. It is used to determine the optimal cash level.

Formula: $EOQ = \sqrt{\frac{2DO}{C}}$

D = Cash need or cash demand

O = Cost of cash investment

C =  Cost of carrying cash

**Illustration *2***

Mary James Plc operates a centralized collection system. It takes 6 days to receive mail remittance and another 3 days for processing mail. Mary James Plc daily collection amount to ₦600,000. Mary James Plc currently is thinking about the introduction of Lock - Box System. By this same time mailing is expected to fall by two days while the processing time is also expected to drop by two days. Interest of' 22% is expected to be paid by PEPZIM BANK PLC.

***Required***:

a) Find the fall in cash balance expected to result from adopting the lock-box.

b) What is the opportunity cost of the present centralized system?

c) Should the lock-box system be established.

If its annual cost is ₦100,000?

**Answer**

a. Reduction in cash balances

= Time saved X Daily Average Collection

= 2 x 600,000 = N 1,200,000

(b) Opportunity Cost: Interest Rate X Reduction in Daily Cash Balance

= 0.22 X 1200,000 = ₦ 264,000

(c) Cost of lock Box System= ₦100,000

The new system should be adopted since the lock box system cost less than the opportunity cost.

That's lock box system = ₦100,000

Opportunity Cost = ₦264,000

**Illustration 3**

Kolawale Plc required ₦100,000 annually for raw material purchases. This cost is equally available for lending at a cost of 30% annually. ₦200 transaction cost will be required to secure the cash required; Kolawale Cash flow follows an annuity.

**Required**:

( I ) Compute the optimal cash conversion size for Kolawale Plc.

(2) Compute total cost of holding cash in hand during this period.

(3) How often (in days) will cash conversion be made, assume a 30 days month.

**Answer**

(a) **Using the EOQ Method** Optimal Cash level = $(QCL) = \sqrt{\frac{2DO}{C}}$

Where D = Cash demand

O = Holding cost

C = Carry cost

(Carrying cost) all in capital letter

Cost in naira = $\frac{₦100,000 \times 0.30}{\text{Cost} \times I}$ = ₦30,000

Cash Demand (year) = ₦100,000

Carrying cost = $\frac{₦30,000}{₦100,000} \times \frac{1}{12}$ = ₦0.025

Carrying cost = 0.025

OCL = $\sqrt{\frac{2 \times ₦100{,}000 \times ₦200}{₦0.025}}$ = ₦40,000

b. The cost of holding cash during the period is the opportunity cost of not investing cash.

$$\frac{030 \times 100{,}000 \times 30}{360} = ₦2{,}500$$

C. Number of order = $\frac{₦100{,}000}{₦40{,}000}$ = 2.5 times

The number of days = $\frac{360}{2.5}$

= 144days.

**Motives for Holding Cash**

Organization should hold cash for three purposes as follows:

- **Transactionary Motives**

  The business organization holds cash for the purpose of conducting its day to day activities such as for the purchase of raw materials, payment of wages and salaries, maintenance of machine etc.

- **Precautionary Motives**

  The business organization holds cash to meet unexpected contingencies. This acts as a `buffer' to meet unexpected needs for cash.

- **Speculative Motives**

  Corporate organization may hold cash for the purpose of investing in business opportunities that may surface suddenly.

**Inventory Management**

Inventory is stock. It includes raw materials, work in progress and finished goods ready for sales. It is the most illiquid component of the working capital. Thus a company willing to estimate its liquid must deduct the

inventory or stock portion of the current asset before it against the current liability to obtain the quick asset ratio or the acid out Ratio.

$$\text{Working Capital Ratio} = \frac{\text{Current Asset}}{\text{Current liability}}$$

$$\text{Acid test ratio} = \frac{\text{Current Asset - Stock}}{\text{Current Liabilities}}$$

The firm must decide what quantity of stock is needed, at what point should order be made and at what price and what is the cost of stock out; can we reduce stock costs? These questions will help the financial manager to work out a proper stock management policy.

It is imperative to know that the firm can pile up stock in order to eliminate cost in production runs, sometimes they do keep large stock to reduce the time lag between when an inventory is needed and when t is fully bought.

**Optimum Level Of Stock**

The economic order quantity (E.O.Q provides the firm with the most profitable form of obtaining the Optimum level of raw material.

$$E.O.Q = \sqrt{\frac{2DO}{C}}$$

Where D = Annual demand

O = Ordering cost

C = Carry cost.

**Ordering Cost:** This is cost associated with placing new order such as invoices cost, book-keeping of inventory, cost of stationary, transportation cost, inspection handling cost etc.

**Carrying Cost:** Is the cost incurred to hold the stock. To protect the stock, such cost includes, storage cost, insurance, depreciation, cost of obsolescence and deterioration cost.

**Minimum Stock Level: (**Margin of safety or buffer stock) It is the level to which stock should not fall before new order is place it is the stock's margin of safety. It constitutes the firms buffer stock.

**Minimum Stock Level:** Re-order level - (Normal consumption X Average reorder period).

**Maximum Stock Level:** This is the highest level stock must not rise above. It is the level above which stock should not rise.

Maximum Stock Level =

Reorder Level - (Min consumption x minimum reorder period) + Reorder quantity.

ROL - (Min consumption x min reorder period) + ROQ.

**Creditors: (Account Payable)**

This is a source of fund to the firm. It constitute the cheapest source of fund to the firm, however, the firm must design a proper method of settling the creditors. This will enhance continuous and repeated purchase. Creditors include the accounts payable where the credit is on overdraft, then the cost of the overdraft must be considered and compared with cost of alternative financing.

**Debtors: (Account Relievable)**

The Debtor includes accounts receivable. It is very important to the firm due to the fact that such debtor could impact negatively on the liquidity of the firm. Liquidity of the firm accounts for the viability of such firm's security. The debtor is a tied down capital, this capital tied down would impact negatively on the firm's ability to finance other current assets.

Thus the firm must establish a flexible credit policy. Sometimes the credit Policy of a firm might be rigid depending on the nature of the business, the Current Asset Stock and the preference for liquidity over profitability.

Thus the Credit Policy of the firm should be flexible enough to boost profitability of the firm. It is also important to consider liquidity as the daily activities of the firm need cash realized from sale to meet the needs for finance for the moment.

### 3.6 Factors Influencing Credit Control Policy

1. **Policy of the competitors:** The Credit Control Policy of the competitors is of utmost important in deciding a company Credit policy; since Credit Policy have direct impact on sales such that the higher the credit granted the higher the sales; Thus a competitor offering a hot credit facility {say 90 days} will be considered to have more sales than a company with less credit facility (say 30 days).

2. **Nature of Product:** A company with a unique product, without substitute will not need to consider any credit policy. A monopoly will not consider any credit facility nor have any credit policy.

3. **Trade-Off between Profits on Sales and Cost of Having Debtors Plus Bad Debts:** Increased profits anticipated from increased sales coming in a result of credit facility should be compared with cost of bad debt and maintenance cost of a wage credit control department before deciding on a particular credit policy.

4. **Customers Risk Category:** The customers risk category should be considered in grating credit facility. Customer with poor record of credit repayment will have less chance of obtaining credit facility compare compared with a customer with good record of credit repayment.

5. **Cost of Debt Factoring and Invoice Discounting:** The cost involved in debt factoring and invoice discounting should be given congruence in granting credit facilities. Where the cost of factoring is too high, it becomes difficult therefore, to grant credit facilities.

6. **Cost of Working Capital:** The financial cost of working capital should be considered. The increased working capital required should be considered in term of cost involved and risk thereon.

**Factors to be considered in Granting Credit to a Specific Customer**

1. Trade Reference: One or more companies which the customer has dealt with in business before will be asked to give a reference on the Customer.
2. Bank reference or bank's opinion: A bank may also be asked to comment on the financial standing of its customers.
3. Published information: e.g. annual accounts of the particular customer can be analysed to determine its liquidity and profitability position.
4. Salesmen's Opinion: The opinion of the salesmen should be considered when granting credit facility to a customer since they are more close to the customer than others.
5. Customers Past Credit Record: An emanation of how will the customer has paid in the past might give some insight as to how well he will perform in the future.

**Self-Assessment Exercise (SAE) 2**

Explain the factors influencing credit control policy

## 4.0 Summary

In this unit, we examined the working capital management components, the factors affecting working capital. It outlined the factors Influencing Credit Control Policy, and the factors to be considered in granting Credit to a Specific Customer.

## 5.0 Conclusion

The student will be able to determine the various factors Influencing Credit Control Policy and the factors to be considered in Granting Credit to a Specific Customer

## 6.0 Tutor-Marked Assignments (TMAs)

1. Explain the management of working capital components

2. Explain the factors Influencing Credit Control Policy

3. Briefly examine the factors to be considered in Granting Credit to a Specific Customer

## 7.0 References/Further Reading


Akinsulire, O (2005). *Financial Management,* 3rd edition. Lagos: Ceemol Nigeria Ltd

Brigham, C and Houston, D (1999). Fundamentals of Financial. Florida: the Dryden Press

Lucey, T (2002). Costing. London: Thomson Learning

Pandy, L.M (2004). Financial Management. New Delhi: Vikas Publishing House

MODULE 4

# UNIT 5: MEANING AND NATURE OF BUDGET

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 The Meaning of Budget

3.2 Types and purpose of budget in an organisation

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

## 1.0 Introduction

In the last unit, we discussed the working capital concepts, factors affecting working capital, financing working capital, and the factors to be considered in Granting Credit to a Specific Customer. In this unit, we shall examine budget and budgetary control in an organisation

## 2.0 Objectives

The objectives of this unit include:

1. To discuss the meaning and various types of budget
2. To examine the purpose of budget in an organisation

## 3.0 Main Contents

### 3.1 The Meaning of Budget

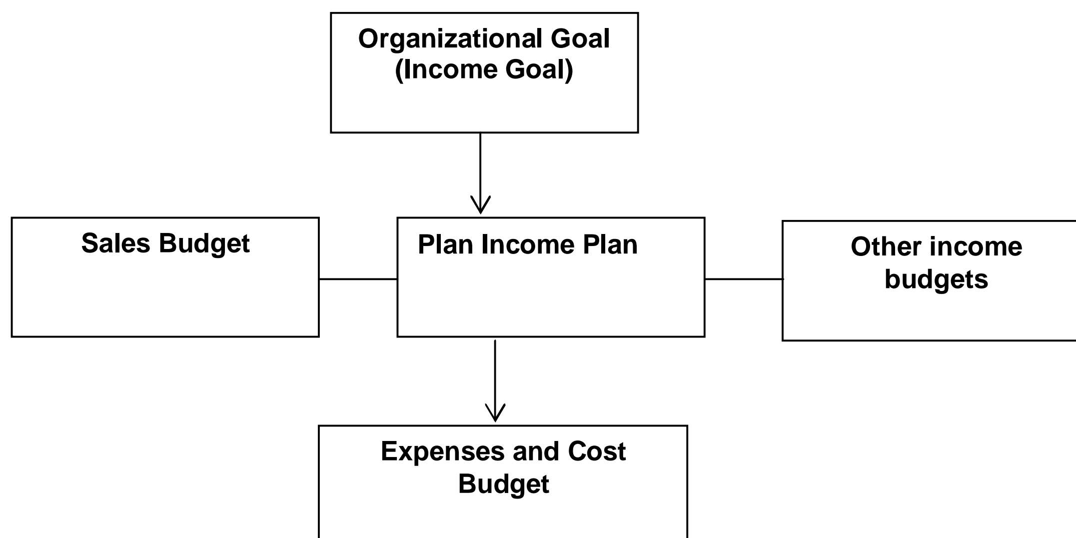
Steiner (1979) define budget as "integrating methods to translate plans into current action" Budget is a quantitative financial plan of the firm covering a stated period of time. They are guides to action. The plan or standard set would be assigned quantitative value and the actual performance would be compared to the standard set. They are used as a control to performance. There are various budget that could be set, thing include the sales and other income budget, expense and cost budgets, cash budgets, production and material budgets, human resources budget, etc

The whole of these budgets fused together from the master budget of the firm for a given period of time.

### Organizational Goal and Budget

There is a kin relationship between organizational goal and budget, normally the goals are broken down into short various organization object that would be attained within a given period of time are expressed in term of the budget. The budget is purely the quantitative and financial expression of the organizational goal or objective.

For example let us assume the organization aims at attaining certain income or return level. The process could be graphically represented as below:




### Purpose of Budgets

(1) Budgets improve planning: The budget are designed to improve on planning process, the goals expressed financial plan would constitute the budget.

(2) Budgets Assist in coordinating operation: The operation of the organization would lack coordination if there is no written down quantified financial plan. Budget help in shaping t operation of the firm without a budget, operation remain within a direction.

(3) Budgets Assist Management Control over Performance.

Without a budget the performance measurement could be vague. The standard for measuring performance is the budget. The extent of success and failure are better measured by the means of a budget. The standard set in the budget is compared with actual performance.

(4) It also assists in achieving the organizational objectives without a clear budget the objective of the organization would not be attained.

(5) Budgets assist in effective utilization of the organization resources.

(6) Budgets help in minimizing waste and hence increase profitability.

**Type of Budget**

There are three major type of budget, these are:

1. Operation budget.
2. Financial budget
3. Capital budget.

**Operational Budget**

Operation budget is the quantitative plan of the firm operation. This include:

1. Production budget
2. Material/Inventory purchase budget.
3. Sales budget.

**Financial Budgets**

This relate to budgeted financial statements expected by management to be reported at the end of the period. The management set standard to be achieved of each financial resources of the organization. These budgets include:

1. Cash flow budget
2. Profit and loss budget
3. Cash budget
4. Balance sheet budget

The cash flow budget is a standard statement of sources, and application of those fund. The organization sets the expected cash for the period and the source of those fund are also stated. The expected application of funds is also stated. This forms a standard of operation that will be compared with the actual report at the end of the period. The purpose of such budget is to serve as a guide for operation.

Cash budget remains the most important of all financial budgets. The cash budget is simply an estimation of expected cash that will be needed ration. This for the firms activity for the year. The purpose of the budget is to assist management in realizing needed cash and sources of such cash for the year.

The profit and loss budget is simply an estimation of income and revenue to the firm in the year in view. The balance sheet budget is an estimation of the position or state of affairs of the firm for the year in view. The purpose of such budget is to guide the operational standard of the firm.

**Capital budgets**

The capital budget is the quantitative financial plan of the firm in acquisition of tangible assets or investment or long-term projects it is mostly asset base budget. The purpose is to estimate possible project the firm can undertake.

**Zero-Base Budgeting (ZBB)**

Peter A. Pybirr (1977) have defined zero base budgeting as: "A planning and the process which require each manager to justify his entire budget request is detail from scratch hence zero-base and shift the burden of proof to each manager to justify why he should spend any money a all the approach requires that all activities; he analyzed as decision packages" which are evaluated by systematic analysis and ranked in order of importance".

Zero-base budgeting is a budgeting process which de that cost benefit analysis of each expenditure to be included in a budget is done. Where the cost is greater than the benefit, such expenditure will be rejected. Each manager is expected to defend the expenditure incurred in a particular year. The purpose of this budget is to ensure that only those expenditure whose benefit will justify the cost are the only one that would be incurred. The purpose is that the benefit from expenditure is paramount and of the highest import unlike the traditional budgeting system that have a classes of expenditure which are normally included in the budget without evaluation of their benefit e.g administration expenses.

In Zero-base budget each expenditure is evaluated separately and accounted separately unlike the traditional budget that has classes of expenditure e.g. administration expenses, operational expenses etc In zero-base budget such classes of expenditure do not exist.

However the zero-base budget follows the same process of development as the traditional budget. The plan and the overall objectives of the firm must be evaluated, strategic plan must be developed. Thereafter the budget headings are created that is, the activities are grouped in such a way to allow for decision making process. The grouping may include grouping into cost centre, a particular product, project, or service etc.

The next step is to develop the alternative ways of achieving the set objective. The best of the alternative process is then accepted and re sources are committed to the pursuit of the course.

**Advantages of Zero- Base Budgeting.**

1. It enhance careful evaluation of each expenditure head or cost and relating them to benefit for maximizing the usage of the firm resources.
2. It ensures that utilization of resources is linked with result. The target of the zero-base budget is result.
3. It is a decision making process in allocating the scarce resource of the organization.
4. It is a great cost saving device for the firm.

**Problem of Budgeting**

1. It may be too stereo type for operation in a dynamic environment Budget are sometime rigid and may not lend itself to require change in a dynamic period.
2. It is always a cumbersome process and difficult to operate small organization with low level of resources.
3. Budget requires the cooperation and support of all levels of st this may be difficult in a loose system.
4. Forecast and plan used in budget are pure estimate that may be inaccurate and sometime not realistic under cent tin situation.
5. Budgeting require huge cost that a small firm might not be to afford.
6. The problem evaluation, monitoring and follow-up procedure remain a task in budgeting process.

**Self-Assessment Exercise (SAE) 1**

Explain various types of budget you know

**4.0 Summary**

The unit examined the meaning of budgeting and its various types. We have explained the importance of budgeting in an organisation..

## 5.0 Conclusion

There is a kin relationship between organizational goal and budget, normally the goals are broken down into short various organization object that would be attained within a given period of time are expressed in term of the budget. The budget is purely the quantitative and financial expression of the organizational goal or objective.

## 6.0 Tutor-Marked Assignments

1. Explain the importance of budgeting in an organisation

2. Explain the advantages and disadvantages of Zero based budgeting

## 7.0 References/Further Reading

Akinsulire, O (2005). *Financial Management,* 3rd edition. Lagos: Ceemol Nigeria Ltd

Brigham, C and Houston, D (1999). Fundamentals of Financial. Florida: the Dryden Press

Lucey, T (2002). Costing. London: Thomson Learning

Pandy, L.M (2004). Financial Management. New Delhi: Vikas Publishing House

MODULE 4

# UNIT 6: BUDGETARY CONTROL IN THE ORGANISATIONS

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 The Meaning of Control

3.2 Budgetary Control Method

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

## 1.0 Introduction

In the last unit, we discussed the meaning, nature and types of budget in an organisation. In this unit, we shall examine budget and budgetary control in an organisation

## 2.0 Objectives

The objectives of this unit include:

3. To understand the meaning of control and its various types
4. To examine budgetary control methods

## 3.0 Main Contents

### 3.1 The Meaning of Control

Control is a process of comparing performance with standard set and measuring deviation thereby enhancing future standard setting. It is a process

of obtaining feedback from organization activities. Every organization must set objective to be achieved and within a specific period of time. To this objective, resources of the organization are normally committed. Feedback from the system is always obtained by comparing actual performances with standard set deviation are measured. Reasons for this deviation are sorted and corrected so that future performance could he better than the previous years, significance of deviation is measured and controlled is made and control led to ensure that performance conforms to plans.

**Process of Control**

There are several process involved in control these include:

1. Objective setting
2. Establishing standards
3. Monitoring the performance
4. Measuring performances against standards
5. Obtaining feedback
6. Evaluating performances
7. Taking corrective action.

**Types of Control**

Control could be classified according to usage, it can also be classified according to level of authority in an organization.

**Control according to usage could be classified as below:**

(1) Control to standardize performance

(2) Control to conserve assets or asset control

(3) Control to standardize quality and quality control

(4) Control to limit authority without top management's approval

(5) Control to measure performances.

Control could also be classified according to level of management authorities and position in the organization. In this regard control would be classified as:

1. Strategic control or top management control.

2. Management control or middle management control.

3. Operations control or day-to-day control of performance by staff.

4. Profitability control.

**Method of Control**

There are several forms of activities in the organization to each of these activities techniques of control can be adopted. These include:

(I) Budgetary control method.

(2) Audit control method.

(3) Network analysis method

(4) The Grant chart method.

**3.2 Budgetary Control Method**

Budgetary control entails the process of using budgeting as a means of control of financial activities in an organization.

The organization transmutes the plan into a financial or quantitative form that covers a period time normally a financial year. The budget is the standard of performance expected during the year, the actual performance at the end of the year could now be compared to standard set, and deviation could be monitored and corrected in future budget.

**Audit Control:** This entails the usage of internal control system of the organization to ensure control of activities, the safety physical of assets, cash, and other assets include what Audit control is aimed at.

**Network Analysis:** The net work analysis is the process of ensuring that the job or events are completed within a reasonable time and at the least cost.

Thus Net work analysis ensures cost and time control of an event or job to be done.

**Budgeting and Budgetary Control**

The process of ensuring success in an organization entails evolving the goals of the organization from the organization vision.

The goals and objectives of the organization state where the organization is going and what it aims at, achieving goals are normally long term and broad in nature while the objective are short term and concise in nature. Budgets are set to achieve the various objectives of the firm; sales budget is set to achieve the market (or sale) objective.

Cash budget is set to achieve the level of liquidity required by the organization. Various other expenses budget are set to ensure that the targeted profit objective is attained etc.

**Self-Assessment Exercise (SAE) 1**

Explain the meaning of control and its various types

## 4.0 Summary

The unit examined the meaning of control and its various types. We have explained budget and budgetary control, and the major problems of budgeting.

## 6.0 Conclusion

Every organization must set objective to be achieved and within a specific period of time. Control is a process of comparing performance with standard set and measuring deviation thereby enhancing future standard setting. It is a process of obtaining feedback from organization activities.

## 6.0 Tutor-Marked Assignments

1. Explain the concept “Control”

2. Briefly explain the budgetary control methods in Nigeria

**7.0 References/Further Reading**

Akinsulire, O (2005). *Financial Management,* 3rd edition. Lagos: Ceemol Nigeria Ltd

Brigham, C and Houston, D (1999). Fundamentals of Financial. Florida: the Dryden Press

Lucey, T (2002). Costing. London: Thomson Learning

Pandy, L.M (2004). Financial Management. New Delhi: Vikas Publishing House

MODULE 5

# UNITS 1: VARIANCE ANALYSIS

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

3.1 Variance Analysis

3.2 How to determine favourable and adverse variance

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

## 1.0 Introduction

In the last module, we discussed cost of capital, working capital management and budget and budgetary control in organisations. In this module, we shall examine variance analysis and how to determine favourable and adverse variance.

## 2.0 Objectives

The objectives of this unit include:

1. understand the meaning of variance analysis
2. to know how to determine favourable and adverse variance

## 3.0 Main Content

### 3.1 Variance Analysis

The Basic tool of budgetary control is Variance analysis. Variance analysis is the process of comparing budgeted item of revenue or expenditure with the actual performance. The purpose is to evaluate deviation either a favourable deviation or adverse. Corrective actions are taken to improve upon the performance in the coming year.

There are basically two type of variance namely:

(1) Cost variance

(2) Sale Variance

**Cost Variance** relates to manufacturing and non-manufacturing cost variance. This could be subdivided into:

I. Material cost variance

2. Labour cost variance

3. Overhead cost variance.

**Sale Variance** refers to the comparison of budgeted sales with actual sales.

1. Material cost variances: The comparison of budgeted or stand material cost with actual material cost.

2. Labour cost variance is the comparison of budgeted labour cost with the actual labour cost.

3. Overhead cost variance is the comparison of budgeted overhead cost with the actual overhead cost. Material labour and overhead are vital elements of cost to an organization in determining the unit price of product or services

**Material Cost Variance**

Material cost variance = (Budgeted material cost - actual material cost).

Budgeted material cost = SQ x SP

Actual material cost = AQ x AP

Material cost variance = (SQ x SP) – (AQ x AP)

Where SQ = Standard quantity

SP = Standard price

AP = Actual price

AQ = Actual quantity

**Material Mixture Variance**

(Budgeted Material Units – Actual Material Units) X Budget Price

**Material Yield variance**

(Budgeted Yield - Actual Yield) X Budgeted Yield Price.

**Example 1**

Standard price of material = N5 per unit

Actual price of material = N6 per unit

Standard quantity = 100 units

Actual quantity = 80 units

Find the material cost variance

**Solution**

Material cost variance = (100 x 5) – (80 x 6)

MCV = 500 – 480

= ₦20

₦20 is a surplus because it is reduction over the standard cost, which will affect the unit price of the product positively. To maximize profit material cost needs to be minimized.

**Labour Cost Variance**

1. **Labour Cost Variance (LCV) = Budgeted Labour Cost – Actual Labour Cost.**
2. **Labour Rate Variance (LRV)** = Budgeted Actual rate x Actual Hours
3. **Labour Efficiency Variance (LEV)** = Budgeted Hours – Actual Hours for actual output.

**Example 2**

The following are extracted from the records of JNNY & SONS Ltd.

Standard labour hours = 100 hours

Standard labour rate = N10/hrs

Actual labour hours = 800 hrs

Actual labour rate = N12 per hr.

You are required to calculate the labour cost variance.

**Solution**

LCV = 1000(10) - 800(12)

LCV = 10,000 – 9,600

LVC = 400 F

The above variance is favourable because the actual labour cost is less than the budgeted labour cost. This will help the organization to maximize profit and maximize sales as the reduction in labour cost will also reduce the unit price of product or service.

**Overhead Cost Variance**

Overhead cost variance = (Budgeted Variable Overhead + Fixed Overhead) – (Actual Variable Overhead + Fixed Overhead).

OCV = (BVO + BFO) – (AVO + AFO)

Where overhead cost is only variable.

Overhead, OCV = BVO – AVO

Where overhead cost is only fixed.

Where:

OCV = Overhead Cost Variance

BVO = Budgeted Variable Overhead

AVO = Actual Variable Overhead

BFO = Budgeted Fixed Overhead

AFO = Actual Fixed Overhead

**Example 3**

The following are the standard and actual overhead cost of a firm:

Budgeted variable overhead cost N150,000

Budgeted Fixed Overhead Cost = N50,000

Actual Variable Overhead Cost N135,000

Actual Fixed Overhead cost N75,000

**Solution**

TOCV = (BVO + BFO) – (AVO + AFO)

= (150,000 + 50,000) – (135,000 + 75,000)

= 200,000 – 210,000

= N10,000A

The variance is a adverse because there is an increment of ₦10,000 in actual overhead. This will affect the pricing of the organization and reduce the profit margin of the product.

**Sales Variance**

Sales variance = Budgeted sales – Actual sales

Budgeted sales = SQS x SP

Actual sales = AWS x AP

Sales variance = (SQS X SP) – (AQS x AP)

Where:

SQS = Standard quantity to be sold

SP = Standard selling price per unit

AQS = Actual Quantity sold

AP = Actual selling price per unit.

**Example 4**

The following are extracted from the books of Mrs. James a seller of electric cooker.

Standard sales quantity 600 units

Standard sales price N350 per units

Actual sales quantity 750 units

Actual sales price N320 per unit.

You are required to determine whether the sales variance is favourable or adverse.

**Solution**

SV = (SQS X SP) – (AQS X AP)

= (600 x 350) – (750 x 320)

= 210,000 - 240,000

= ₦30, 000 **F**

The variance is favourable because for an organization to maximize profit it needs to increase it sales. The increment of N30000 sales over the budgeted sales will help the seller to maximize profit.

**Self-Assessment Exercise (SAE) 1**

Explain two types of variance you know

**3.2 How to determine favourable and adverse variance**

I. In cost variances (material, labour and overhead), there is favourable variance when the actual cost is less than the budgeted cost. In contrast, there is an adverse variance when the actual cost is greater than budgeted cost.

2. In sales variance there is favourable variance when the actual sales is greater than the budgeted sales. On the other hand, there is adverse variance, if the actual sales are less than the budgeted sales. However in a situation where the budgeted cost or sales equal to the actual cost or sales, there is no variance. It must be noted that the above variance calculated can be broken down into parts that can be calculated separately and derive the same answers as shown above. Nevertheless, these are treated under Management Accounting.

**Self Test Exercise**

I. Professor Sunny established a factory where canned juices are produced. He act as the chairman of the company and has the managers Running the company. At the end of 2002 financial year,

Professor Sunny wants to know the extent the actual performance of the company deviated from the budgeted performance.

The managers presented the following information to him.

| | |
|---|---|
| Budgeted material quantity | 80000 units |
| Budgeted sales quantity | 200000 units |
| Budgeted labour rate | N30 per hour |
| Budgeted material price per unit | N15 per unit |
| Budgeted labour hours | 5000 hours |
| Budgeted sales price | N50/unit |
| Budgeted fixed overhead | N1,200,000 |
| Budgeted variable overhead | N2,500,000 |
| Actual material quantity | 70000 units |
| Actual sales quantity | 190000 units |
| Actual labour rate | N24 per hr |
| Actual labour hours | 4800 hrs |
| Actual material price per unit | N25 per unit |
| Actual sales price | N55 / unit |
| Actual variable overhead | N2,800,000 |
| Actual fixed overhead | N1,200,000 |

Assuming you are the budget officer.

You are required to calculate the

(1) Material cost variance

(ii) Labour cost variance

(iii) Overhead cost variance and

(iv) Sales variance, and show which ones are favourable or adverse

2. A company manufacturing a special type of wall files 12″ X 8″ x ½ ″ uses a system of standard costing. The standard mix of the compound used for making the tiles is:

   2400 units of material A at N300 per unit

   1000 units of material B at N600 per unit

   1600 units of material C at N720 per unit.

This compound should produce 240000sq. It is of the wall files of ½″ thickness. During a period in which 2000,000,000 files of the standard size were produced; the material usage was:

1400,000 units of materials A at N320 per unit

600,000 units of materials B at N640 per unit

1000,000 units of material C at 760 per unit.

Compute the following

a. Material price variance

b. Material mixture variance

c. Material cost variance

3. ABC Ltd. Manufactures a product called Kunde. A standard cost system is in operation and the relevant information is as follows:

   Standard rate = N50 per hour

   Standard time = 4 hours per product.

During the period the production work unveiled that 800 units had been produced of Kunde in 1840 hours. The wage rate paid had been N60 per hour.

You are required to compute:

a. The labour rate (usage) variance

b. The labour efficiency variance

c. Labour variance.

**Self-Assessment Exercise (SAE) 2**

Discuss the various ways of determining the favourable and adverse variance

**4.0 Summary**

This unit explains the meaning of variance analysis and the major factors in determining favourable and adverse variance

**5.0 Conclusion**

The various types of variances was covered, the cost variance and sales variances were equally covered. The reason for the variances and how to apply them for management decision making was also covered for the student benefit in work place.

**6.0 Tutor-Marked Assignments (TMAs)**

1. Differentiate between cost variance and sale variance
2. Explain the meaning of Overhead Cost Variance

**7.0 References/Further Reading**

Akinsulire, O (2005). *Financial Management,* 3rd edition. Lagos: Ceemol Nigeria Ltd

Brigham, C and Houston, D (1999). Fundamentals of Financial. Florida: the Dryden Press

Lucey, T (2002). Costing. London: Thomson Learning

Pandy, L.M (2004). Financial Management. New Delhi: Vikas Publishing House

MODULE 5

## UNITS 2: COST - VOLUME PROFIT ANALYSIS

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

In the last unit, we discussed variance analysis and how to determine favourable and adverse variance. In this unit, we examine cost-volume profit analysis, the assumptions of cost volume profit analysis and limitations of cost volume profit analysis.

### 2.0 Objectives

At the end of this unit, you should be able to:

1. Explain the meaning and elements of cost
2. Calculate Cost Volume Profit Analysis

## 3.0 Main Contents

### 3.1 What is Cost?

It is the amount of expenditure (actual or notional) incurred on or attributable to, a given thing. Cost is any value or amount of an attribute or product or service per unit.

It is the per unit measurement of value of an attribute, service, a product or activity. Costs are most time historical in nature. The quantity and price are two attributes of cost. Every cost is a variance of unit and price.

They are some time's called direct cost.

Most times costs are measured for planning purposes. In a firm, planning as expressed by the budget of the organization is a variance of many components of which cost is of utmost importance. Planning rests on good costing system; such that if the costing system is vague then the resultant price or financial plan or budget from such system would be at best vague and highly unreliable.

**Elements of Cost**

This is the primary classification of costs according to the factors upon which expenditure is incurred. This include materials cost, labour cost (wages) and overhead cost.

**Nature of cost**

Cost can be classified according to the nature of concurrence. Cost classifications according to nature delimit cost into either a fixed cost or a variable cost.

**Fixed cost**

These are costs which tend to remain constant with variation in volumes of output. Fixed cost primarily depends on the effusion of time. It does not vary directly with volume of production. They are sometimes referred to as period cost.

**Variable Cost:** These are costs that vary directly with volume of output.

They are some times called direct cost.

**Cost centre**

This is a location, person, or item of equipment (or group of these) for which cost may be ascertained and used for the purpose of cost control.

**Historical Cost**

This is the ascertainment of costs after they have been incurred. They are based on historical data.

**Future Cost**

These are cost ascertained based on forecast of future activities and events.

**Cost Unit**

This is a unit of quantity of product, service or attribute in relation to which costs may be ascertained or expressed.

**Cost Apportionment**

This is the allotment of proportion for items of cost to cost centres and cost units.

**Cost Allocation**

This is the process of assigning indirect or common cost to different departments, processes or products.

Direct costs are allocated to the department or cost centre where they are incurred occur, however, indirect cost or common cost have to be apportioned to various cost centres. Examples of such cost include human resources department cost, office overhead cost etc.

Costs are normally allocated for various purposes. These include tax purpose, financial reporting purpose, third party reimbursement, decision making and control purposes.

Several organizations have evolved methods or steps in cost allocation. However, an effective cost allocation steps would require the following.

1. Definition of the cost objects: The cost objects relates to ascertainment of whether a department or unit will be classified as cost centre or cost unit to which cost can be allocated.
2. Cost accumulation: The total cost that would be distributable to the available cost centres have to be determined. The organization would decide what constitute a direct and indirect cost for easy allocation and the organization must ensure that ascertained costs are not counted twice.

**Cost Control**: It is the practice of regulating the cost of operating an undertaking. The purpose is to reduce cost of operation. i.e. an attempt to keep cost at a reduced level enhancing the profit of the firm..

**Price**: It is the cost to a purchaser of any articles or service expressed in monetary terms. It is the money rate used to calculate cost, normally it is a unit of money used to establish a cost of product or service or an attribute.

### 3.2 Cost Volume Profit Analysis

This is an analytical tool applied by management in forecasting and determining future level of activities such as level of sales required at a given level of profit, e.t.c. it is one of the techniques used by management in its planning activities.

The ability to separate cost into fixed and variable cost makes possible several manipulation of various cost variables to predict the future level of activities. Using the techniques, it is possible to predetermine a future level of profit, it can be used to determine sales units, sales value when total cost is known and divisible into fixed and variable cost.

The basic formula derived as follows:

$SP = TC + \bar{\Lambda}$

$SP = QP$

TC = FC + VC

Where

SP- Selling price

Q- Quantity

P- Price per unit

TC- Total cost

VC – QV Variable cost

FC - Fixed cost

Λ - Profit

SP – TC

PQ – QV + FC + Λ

Collect like terms

PQ – QV = FC + Λ

Q (P-V) = FC + Λ

$$Q = \frac{FC + \Lambda}{P - V}$$

Note: (P- V = is contribution margin (CMR)

**Possible Calculation**

(1) Break- even point in Unit.

To calculate the break-even point, this will occur where profit equal zero (i.e Λ = 0)

From the above if Λ = 0

Then $Q = \frac{FC}{P - V}$ or $\frac{FC}{CMR}$

OR

$$Q = \frac{FC}{I - \frac{VC}{SP}}$$

(2) To compute the break-even point in naira value, multiply the Q by P (Price)

Sale value = FC x P

$$I - \frac{V}{P}$$

(3) To compute the level of sales in unit to attain a desired predetermined profit.

$$Q = \frac{FC + \Lambda}{CM} \quad \text{or} \quad \frac{FC + \Lambda}{P}$$

(4) The value of sales to attain a desired/predetermined profit

$$\frac{FC + \Lambda}{CM}P$$

**Assumptions of Cost Volume Profit Analysis**

(1) Variable cost per unit must be known and must remain constant irrespective of the volume of production

(2) The technological level is expected to remain static.

(3) It is assumed that all unit produced are sold such that products must equal sales.

(4) All factors of production are quantifiable and are expected available at all time.

(5) The inflated profit level is assumed to be constant.

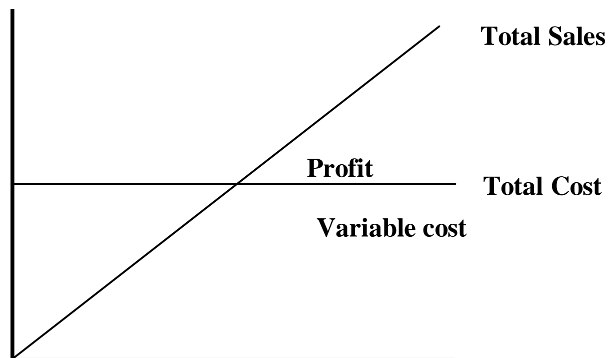
**Limitations of Cost Volume Profit Analysis**

(1) The assumption of constant variable cost might not hold quantity and cash discount.

(2) Technical development cannot be constant in a dynamic technological world.

(3) There are sex oral qualitative factors influencing production and sales which may not be quantifiable in monetary value.

## Break Even Point Diagram




## Example

Kolawole Plc. is a manufacturing company having in 1996 the total fixed cost to be N1, 200,000 the variable cost being N2,000,000 and sales for the year equal N4,000,000.

Compute the break even point in Nara value

## Solution

$$B.E.P (₦) \quad \frac{FC}{1 - V/P}$$

This is: $$\frac{1,200,000}{1 - 2,000,000/4,000,000} = ₦2,400,000$$

## Example 2

Ojo and Co is a manufacturing firm with the budget given below for the year ending 28th February 2000

Budgeted sales ₦1, 000,000

Budgeted Variable Cost ₦ 500,000

Budgeted Fixed Cost ₦ 200,000

Compute the break-even point in naira

$$B.E.P\ (₦) = \frac{FC}{1 - V/P}$$

$$\frac{200{,}000}{1 - \frac{500{,}000}{1000{,}000}} = \frac{200{,}000}{0.5}$$

= ₦400, 000

**Self-Assessment Exercise (SAE) 1**

1. List and explain the major element of cost

**4.0Summary**

The relationship between the cost and volume of products was examined in the study the economics order quantity was equally examined it also seek to help determine the best time to buy a particular quantity and when not to order. The contribution margin was also covered.

**5.0 Conclusion**

The student will be able to use the knowledge of cost volume analysis in decision making process. It will be of value to making decision on units of a raw material to order and at what price.

**6.0 Tutor-Marked Assignments**

1. Explain the basic assumptions of Cost Volume Profit Analysis

2. Discuss the Limitations of Cost Volume Profit Analysis

## 7.0 Reference/further readings

Akinsulire, O (2005). *Financial Management,* 3rd edition. Lagos: Ceemol Nigeria Ltd

Brigham, C and Houston, D (1999). Fundamentals of Financial. Florida: the Dryden Press

Lucey, T (2002). Costing. London: Thomson Learning

Pandy, L.M (2004). Financial Management. New Delhi: Vikas Publishing House

## MODULE 6

### Unit 1: PUBLIC SECTOR FINANCIAL MANAGEMENT

**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**

### 1.0 Introduction

Finance is an important aspect of government's business at all levels. It is a very prominent position in organizations, be they private or public. Indeed, of the many factors that do affect organizational performances, none is greater than finance. Finance is the engine room of all organizations; It is the lifeblood of any organization. It is likened to air in the body of human beings without which, no human being can survive. It keeps the administrative machinery of any organization on its wheels. No organization can function effectively without finance. Indeed, it is the life elixir of any organization (Idahosa and Nchuchuwe, 2005). Management scholars see it as the most significant asset in any organization. As Bhagwan and Bhushan (2006) put it, the success of any administration depends upon the availability of finance.

Almost everything government does requires finance. The best policies and plans will come to naught unless funds are available to pay for the personnel

and materials/equipments required. Every administrative act has its financial implications. Nothing can be done without the expenditure of money, at the very minimum for buying stationeries or for the payment of the salary and wages of the officials or employees who perform one duty or the other. Unavailable financial resources set a limit on administrative activity as a whole and on each of its separate parts. It is therefore not too surprising that Lloyed George remarked that "Government is finance" (cited in Tonwe, 2008). This according to Bhagwan and Bhushan (2006) is quite correct because the governmental machinery will come to a halt unless funds are available to pay the personnel and purchase the equipments and materials required.

## 2.0 Objectives

By the end of this study, you will be able to:

1. Explain financial management and control in the public service
2. The importance of budget to government
3. Discuss the procedures in government budget

## 3.0 Main Contents

### 3.1 Financial Management and Control Framework In Public Service

Financial management and control is the bedrock of government management and its framework should provide the principal source of reference for guiding managers and their financial advisers in the efficient, effective and proper use of public resources.

It is the premise of this study that the status of financial management and control has diminished in recent years because of unclear communications and a lack of accountability by those responsible for exercising it. The commendable objectives of recent management reforms, such as improved stewardship and accountability, will be much more difficult to achieve without clear, comprehensive and coherent financial management and control frameworks in government departments and agencies.

A model framework for financial management and control is outlined as that which is consistent with the objectives of the most recent management reforms, notably those related to modern comptrollership and the management accountability framework.

It is possible to extract a financial management and control framework from the management reforms and expert commentaries of the last few years, and this is the subject of the rest of this study.

Let's start with the definition of comptrollership submitted by the Society of Management Accountants to the Independent Review Panel on Modern Comptrollership:

> *…the process of acquiring resources and using them effectively and efficiently in the accomplishment of an organization's purposes and objectives*

This definition focuses on what preoccupies most government managers, namely, getting the resources they need to get the job done, and being able to account to stakeholders on how well they used approved resources in accordance with stakeholders' expectations. I say this because in my view 'accomplishment of an organization's purposes and objectives' includes staying within the bounds of a legal mandate and meeting the stated values of the organization with respect to ethics, and applicable rules.

Given the above interpretation, I suggest that the purpose of a governmental or departmental/agency financial management and control framework is: *To facilitate and set the boundary lines for the planning, use and accounting of resources.* The phrase 'and set the boundary lines' establishes that an Financial management and control framework facilitates the resource management cycle (from planning to external reporting) within the rules, values, and performance expectations of the organization's stakeholders.

Financial planning and control in public sector involves the process of financial planning. Budgeting and control of budget in the public sector or government sector.

Financial control in the public sector is aimed at ensuring accountability, strict utilization of public fund. A meritorious discharge of duty in the public service enhances prudent expenditure of public funds.

Financial planning entails the establishment of a financial plan and budget. The budget is a legal document stating the projected revenue and expenditure of the government for a fiscal period normally a year spanning from January to December (Kehinde and Abiola, 2006).

The budget states the various revenue expenditure, it states the sources of those revenue and amount expected from each, such bases are the government forecast. The revenue is matched with expenditure. Government expenditure is basically divided into the recurrent expenditure and capital expenditure. Recurrent expenditures are those expenditure on government consumption activities like payment and settling of other consumption spending of the government.

The capital expenditure is that which is spent on capital project, it is that fund expended on capital varieties e.g road construction, electricity generation, government housing estate etc. They are money spent on investment that would generate future income to the government. Where they do not generate direct income to the government, they generate utility to the nation (Kehide and Abiola ( 2006).

### 3.2 Importance of Budget to Government

a. It represents a legal and economic document that guides government activities and operations.
b. It projects the policy operation of the government. It is the translation of government policy to action. It is the policy document of the government.

c. It represents government allocation of the national resources.
d. It provides the basis for control of government financial activities.
e. It is a measure of government performance. It provides a basic means of measuring government performances.
f. It serves as a basic tool for decision making in the private sector since government budget provides the direction of the private sector, budget as a tool for planning their affairs and determining their policy.
g. It is a basic tool for a community government plans and activities to the nation as a basic tool of performance.

### 3.3 Government Budget Procedure

**Presidents in Council.** This is the first process in government budgeting and planning. The president and all the ministers come together to determine the government policies and strategy for the year. The president and all his ministers decide what must be done sometimes as part of government programme. Thereafter each ministry and departments prepare their department budget based on the objective of the government for the year.

**Call Circulars:** The ministry of finance requests for the various ministries budget through call circulars, which the ministry of finance budget and planning sector put together for the president consideration.

The ministry of finance's budget department proposal put the various department proposals together to form the budget.

**Budget Committee:** The ministry of finance then set up a budget committee members consists of a director from the ministry (most times the Director of

budgeting and planning). A Director from the Office of the Accountant General of the Federation, Ministry of establishment, ministry of works and housing. The committee looks at the call circulars submitted by each ministry to ensure that they comply with laid down rules and regulation. When the call circular requires they are to be return for necessary amendment.

Thereafter the President in Council considers the budget proposal and sends it to the National Assembly for Legislative approval.

Section 81(1) of the 1999 constitution in regard to the budget process, states that the president shall cause to be prepared and laid before each house of the National Assembly at any time in each financial year, estimates of the revenues and expenditure of the federation for the next following year. Thus, base on the requirement of this section, the proposed budget will be sent to the National Assembly for approval.

**The National Assembly:** The National Assembly is divided into the upper house (the senate) and the lower house (or House of Representatives). The proposed budget becomes the annual financial bill that must be passed into law as a legal document of government financial activities.

The financial bill passes through the formal law making process. Hence the bill will be passed to the house of representatives for consideration, and this will go to the senate where it will pass through the same process and thereafter the president assent. This process includes the following,

**The First Reading.** A copy of the bill is given to each member of the house for personal digestion and consideration. The committee stage: After the first reading the bill will be considered by the various standing committee of the house. This is called the committee stage. Each committee express its opinion on the bill.

**The Second Reading:** After the committee stage, the houses meet to consider the report of the committee. It should be noted that any minister including the president could be called upon either at committee stage or the second reading to answer question on any part of the bill. The house after the second reading, leaves to consider the bill again.

**The Final Reading:** The house meet for the final reading of the bill and each member can still express his opinion and recommendation, as the bill could be amended as deemed fit by the House. Thereafter the bill is given final house approval.

**The House:** The House of Representatives will be the first to consider the bill, thereafter passing it to the senate which consider it and append the final senate approval.

**The President Assent**: The bill is thereafter passed to the president for final approval. The president approval is the final in passing the bill which becomes the financial appropriation for the year. However, where the president refuse to approve, then the provisions of section 59(4) of the constitution August hold

which states that "which the president refuse to approve the bill sent to him by the National Assembly within thirty days the bill shall be represented to the National Assembly. Sitting at a joint meeting and if passed by two third (2/3) majority of the members of both houses, the bill shall become law and the approval of the president shall be ignored.

### 3.4 Factors Influencing Government Budget

1) The personality of the personnel involved in the budget matters. The skill, knowledge and wisdom of the personnel involved counts in government budget.

2) The resources of the nation matters; whether or not he nation is looking for financial resources to execute the budget will court in the budget implementation.

3) The availability of fund to execute the budget matters. No matter how progressive a budget might be it will fail if there is no fund to execute it.

    a. Global trend

4) Where the revenue generation of the nation is subject to extended influence like inflation in the world market and other external influence, the budget projection might be difficult.

5) Continuity in government August influence budget projectiles. Where the government policy is unstable this will negatively affect the budget.

6) Global Peace: Since all nations are dependent on each other, political situation in a nation August influence the budget of another nation since no nation operations independent. The revenue generation of the nation could be impaired e.g September 11th World Trade disaster in the United States of America (USA).

**Self-Assessment Exercise (SAE) 1**

Explain the importance of budget to government

## 4.0 Summary

In this unit, you have learnt of the budgetary process in the government. The value of government budget and the approval process of the government budget

## 5.0 Conclusion

The unit provide the guide that works the student through the government budget and the process of it approval. Thus, it will be a useful tool to enhancing the ability of the student preparing the budget in the government department.

## 6.0 Tutor-Marked Assignments

1. Discuss the factors influencing government budget in Nigeria

2. Explain the procedures in government budgeting in Nigeria

## 7.0 References/Further Reading

Tonwe, D.A (2008), *Public Administration: An Introduction,* Lagos: Amfitop Books.

Kehinde J (2011), *Strategy Financial Management*, Lagos: Rakson Nigeria Ltd

Idahosa, S. A. and Nchuchuwe, F.F (2005), "Local Government Finances in Nigeria: Issues in Generation, Utilization, Accountability and Service Delivery", *Nigerian Journal of Policy and Development*, Vol 4, pp100 -132.

Bhagwan, V. and Bhushan, V. (2006), *Public Administration,* New Delhi: S. Chand and Company Ltd.

## MODULE 6

## Unit 2: TECHNIQUES AND TOOLS FOR ACHIEVING EFFICIENT MANAGEMENT OF GOVERNMENT FINANCE


**1.0 Introduction**

**2.0 Objectives**

**3.0 Main Contents**

**4.0 Summary**

**5.0 Conclusion**

**6.0 Tutor-Marked Assignments**

**7.0 References/Further Reading**


### 1.0 Introduction

In the last unit, you have leant the nature of financial management and control in the public sector and the importance of budget to government. In this unit, you will learn the techniques and tools for achieving efficient management of government finance

### 2.0 Objectives

The objectives of this unit include Understand the tools for efficient management of government finance

(1)To know various approaches to budget implementation in Nigeria

(2)To understand the Pillars of a Financial Management and Control Framework

## 3.0 Main Contents

### 3.1 Techniques and Tools for Achieving Efficient Management Of Government Finance

Finance and its prudent management are the bedrock of effective functioning of government. No one can doubt the need for efficient financial management in any modern system. According to Tonwe (2004), governments require finance to perform their statutory provisions which border on provision of services and bringing about development in their delimited areas. Availability of adequate fund, coupled with efficient financial management constitutes the required catalyst necessary for timely execution and completion of development projects by local government.

In recent time, lack of funds has often been attributed as the major problem which had hindered effective and successful execution and completion of many public projects. However, experience has shown the contrary that poor finance management, rather than inadequate finance is the bane of governments' inability to achieve substantial development in their domain.

The aim of this section is to examine the various methods and techniques that could be applied for effective and efficient finance management in the government system. In other words, this chapter attempts to give decision makers in government options to consider as they deal with the complex and ever changing questions of financing for the local community.

Financial management encompasses many aspects. When working in this field, it is evident that many factors play a role and need to be considered. This guide gives government officials quick access to a framework of ideas and suggestions that work within the hierarchy of financial management.

The funds of the government councils are managed by the key officers of respective councils. Financial management has to do with efficient use of funds. It is a method of showing and ascertaining the financial position of government or business from time to time.

Financial Management can be envisaged as consisting of a cycle of activities. The aim of this cycle of activities is to ensure that resources are allocated and monitored in such a way that they have the greatest beneficial impact on overall service objectives.

In order to perform finance functions efficiently, the financial managers of the government have to:

1. Set the financial objectives of the government.
2. Prepare plans of action and select policies for achieving the objective.
3. Develop financial plans and incorporate these into the overall plans of the government.
4. Check the achievement of the objectives and evaluate deviations from the plan.

5. Establish causes for deviations.

6. Take corrective action and/or redesign policy or revise the objectives to start a new cycle

Traditionally, considerable importance is attached to what can be the money factor in the functioning of organizations in both public and private sectors (Adamolekun, 1983). One important issue of concern is usually the management of available financial resources. Generally speaking, a number of various approaches for efficient finance management are available. However, the approach to be adapted must take into account the peculiar nature of the project, its environment, purpose and the public it is meant to serve (Nwankwo, 2004). This is because if a "wrong" or "unpopular" approach is adapted for a particular project, it can mar the project completely.

The different approaches that can be adapted for efficient financial management of government level include the following:

**3.2 The Use of Budget**

The use of budget has been a long standing practice in government system. Budgetary control is concerned with ensuring that the financial management plan that has been agreed with the board of management is achieved. Control is effected through monitoring expenditure before and after commitment to prevent under expenditure or over expenditure. An effective use of the budget is good for achieving efficient financial management. A budget is a plan of

activity expressed in financial terms; such plans are often short term, typically covering a period of one year. When approved, the budget becomes an authority to raise the amount of revenue and incur the amount of expenditure stated therein.

Adamolekun (1983) summarized the purpose of a budget thus:

(i) a short term financial plan;

(ii) a political document couched in figures;

(iii) a management tool used for both planning and control;

(iv) a device for ensuring continuous monitoring procedures, and reviewing and evaluating

(v) performances with reference to previously established standards;

(vi) an agent to enable management to anticipate change and adapt to it;

(vii) an overall method for improving operation.

It is imperative to note that the budgetary process takes four distinct activities. These are as follows: budget preparation, budget authorization, budget execution and budget monitoring and evaluation. In many governmental arrangements, the agencies or bodies responsible for each of these activities are distinct, with varying degrees of autonomy and interdependence (Adamolekun, 1983).

## 3.2 Approaches to Effective Budget Implementation

### Rational Approach

The rational approach is a popular decision-making model. It is usually applied where effective and efficient allocation of resources is needed. The rational approach is generally known as

"The Modern Financial Resources Allocation and Control Model" within the financial management circle. Using rational approach for proper financial management entails the following:

1) Determination of available resources;
2) Determination of objectives for which the resources will be allocated;
3) Determination of the alternative courses of action for the achievement of objectives;
4) Evaluation of the alternative courses of action for the achievement of objective(s);
5) Establishment of decision criteria;
6) Allocation of resources;
7) Establishment of control measure and feedback mechanism necessary or required
8) performance evaluation;
9) Adjustment of future plans and objectives for purposes of future allocation.

### Incremental Approach

Many organizations adopt an incremental budgeting method to produce budget estimates. Incremental approach to financial management involves introduction of gradual changes or adjustment in the allocation and control of financial resources of an organization in order to achieve the desired objectives. Once a system of financial management and control are adopted, only minor or gradual changes or adjustments are required in order to put the system into perfect working condition (Nwakwo, 2004).

Incremental approach takes as its starting point the current year's budget and arrives at next year's budget by a series of adjustments to this. The adjustment process is sometimes referred to as rolling forward an existing budget.

Incremental method has some advantages. It is a relatively straight forward process; only marginal changes to the existing budget need to be understood and agreed, thereby minimizing the amount of time that need be spent on budget preparation. Hence, it is a relatively inexpensive method of estimating a budget. Additionally, it is easy to operate and allows some degree of flexibility and discretion in the use and management of funds.

### Zero-Based Budgeting (ZBB)

The Zero-base budgeting (ZBB) approach involves preparing a comprehensive budget anew, that is, from a zero base. The novelty of ZBB is that each year an organization should begin its budgetary process with a clean sheet of paper. In other words, ZBB prepares something 'fresh'.

It starts from zero or from the scratch. The construction of a new budget for each service from basic principles is referred to as zero-based budgeting. This approach has the effect of focusing attention on such issues as waste, unnecessary performance, leasing versus purchasing of equipment, and so on.

In Zero based budgeting individual cost centre managers are asked to estimate the cost of providing various levels of services, which are then passed up through the organizational hierarchy. At each level in the hierarchy, managers are asked to decide upon the order of the decision packages as a way of ensuring that spending is linked to priorities (Rose and Lawson, 1999).

One of the major strengths of ZBB is that there is a specific link between budget and activity.

The budget process involves specifying objectives and considering cost-effective methods of achieving these objectives. In this way, ZBB eliminates waste, extravagancy, mismanagement of finances of a local government.

The major drawback of ZBB as a finance management tool is that it is time demanding. In other words, it takes lot of time to construct a budget from zero each year.

**Planning-Programming and Budgeting System (PPBS)**

As the name implies, the three main features of PPBS are planning, programming and budgeting; the emphasis here is upon a programmatic approach to both planning and budgeting.

PPBS is an approach to budgeting which is intended to provide a system that relates expenditure at each stage of the budget to the purposes of that expenditure.

The application of PPBS as a finance management tool allows for weighing the alternatives, analysing of cost and benefits of any project or programme before the commitment of financial resources to the project. A further advantage is that programme budgeting looks beyond the immediate future and is concerned with the long-term effects of activities.

PPBS has a number of drawbacks. Technically speaking, PPBS requires information on costs and benefits that is not readily available, and it is also a time-consuming budgetary method.

**Audit Alarm**

Audit alarm is a precautionary method of alerting the appropriate authority or the public about illegal financial transactions or misappropriations that August lead to loss of funds or revenue meant for a project. Audit alarm can be raised by a member of the executive or the general public. This is usually done at any time irregularity is noticed in the management of funds meant for public use. Whenever audit alarm is raised it usually attracts full-scale audit-exercise to ascertain the magnitude of the fraud or irregularity. This method serves as a precautionary warning to those entrusted with the responsibility of the finances.

**Auditing Approach**

The regular audit method complements the good efforts of audit alarm. Audit is more or less a practice which could be called a technique for ensuring a more effective internal check on financial management. There should be regular and independent examination of the books of accounts by appointed qualified auditors to ensure that the statement of account as recorded represents a true and fair-view of all the transactions as during the period under investigation. Regular auditing of account would ensure sanity, prudence and probity in the use and management of finances.

### 3.3 The Pillars Of A Financial Management And Control Framework

The pillars of comptrollership advocated by the Independent Review Panel and later by the Modern Comptrollership team at the Treasury Board Secretariat can be summarized as follows:

1. Performance Information – financial and non-financial information

2. Risk Management

3. Control Systems

Each of these pillars fit well with the financial management and control framework:

**Linking financial and non-financial information**

The key objective of this pillar is to link resources to results. In my view, the reason why this objective has been so hard to achieve is because of a lack of cost management, a critical element of financial management. Expressed in simplest terms, cost management is a responsibility for managing the factors that cause costs; specifically what causes the work (the activities in the MAF) that consumes resources. When the factors that cause costs are understood and managed, it is much easier to achieve sound resource management.

Factors that cause the costs of activities (resources consumed) August include many things, such as: the volume of client demand; service standards (e.g.,

accuracy and timeliness); the type of clients; and the complexity of governing rules and systems. This is the non-financial information that needs to be linked to the financial information in order to link resources to results. A good cost management structure within the financial management and control framework will provide clear cost policies and principles, costing methodologies, and an activity dictionary that truly reflects the actual work that is done to achieve results. It will also have a costing module in its financial management and control system to enable expenditures to be linked to activities, and the resulting activity costs to be assigned on a causal basis to performance targets (outputs and outcomes in the MAF) and to other cost objects, such as clients and services.

While the concepts in cost management are fairly straight forward, they appear to be extremely hard to apply in the public sector. I believe one of the main reasons for this is that an expenditure culture still exists. The primary interest appears to be in how much has been spent by a department or program, rather than what it costs to deliver its services and outputs.

In the federal government this culture will be difficult to change as long as appropriations continue to be authorized and managed on an expenditure rather than an accrual basis.

A good cost management framework not only enables the linking of resources to results for accountability purposes, but also provides better information for

planning, alternative service delivery analysis, pricing of services, and other critical decisions.

**Risk Management**

This second pillar is clearly related to financial management and control, particularly to control. This is because control is a function of risk. The only reason for having controls is to guard against unacceptable things happening.

Thus, we have the FAA and TB policies and regulations. These only exist to help alleviate the possibility of Ministers and public servants doing the wrong things, such as misappropriating or overspending funds.

Financial management Controls are costly, and this is why they should be subjected to risk management techniques before being implemented. A key requirement is to size the risk.

Financial management and control also uses risk management to help in the analysis of decisions, such as how to minimize the risk of unfavourable downstream financial consequences. A good example of this would be where the financial specialist, using life-cycle costing methods, is able to show that the best acquisition price for a major capital acquisition August not in fact be the least costly option over the long term.

It is important to remember that risk management is also to alleviate the risk of opportunities being missed. This involves anticipating new technologies or new

pieces of legislation to ensure that the organization will be ready to take advantage of them as soon as they are available or take effect.

## Control Systems

Financial management and control systems reflect mandatory controls such as those required for expenditures and revenues under the FAA and TB policies, and those that stem from risk management techniques where there is discretion by the senior executive or a board of management to decide what areas of management and accountability need protective or facilitative control measures.

Protective controls are meant to protect public funds from being spent improperly or imprudently and public assets from loss, theft and damage. Facilitative controls are controls that enable the achievement of program objectives. Expressed another way, protective controls are input-oriented and facilitative controls are output oriented.

Protective control systems are exemplified by financial, appropriation and commitment accounting systems as well as inventory and asset systems. Because they are costly, these systems should be as efficient as possible, for example, through the use of expert systems.

These systems can make the work associated with protective controls user-friendly. They prompt the user to make selections from a menu on the computer screen so that no essential control steps are missed. They also advise

the user of the authority to consult with in the event that difficulties are encountered.

Facilitative control systems are exemplified by financial planning and forecasting systems, and integrated financial and non-financial performance systems. They alert managers of the need to revise plans and take actions to correct identified problems, or to take advantage of newly identified opportunities.

**Self-Assessment Exercise (SAE) 1**

1. Explain the various ways of performing finance functions efficiently

## 4.0 Summary

Public sector financial management is crucial to a country's economic development. Issues such as extravagance, wastage, embezzlement, and corrupt practices will affect the development of a country. As taxpayers, who are the providers of funds, citizens expect their Government to provide value-for-money services to them. Public officials and their offices are therefore accountable for the efficient and effective management of funds provided by these taxpayers to achieve the intended outcomes of the specified activities.

## 5.0 Conclusion

Given the rather elaborate constitutional, statutory, administrative and other provisions put in place to ensure probity, accountability and transparency by public functionaries, the popular belief of many people in this country and abroad that there is a serious problem of accountability and transparency in Nigeria is very instructive.

## 6.0 Tutor-Marked Assignments

1. Explain the approaches to effective implementation of government budget

2. Discuss the Pillars of A Financial Management And Control Framework

## 7.0 References/Further Reading


Adamolekun, L. (1983), *Public Administration: A Nigerian and Comparative Perspective*, Lagos: Longman Nigeria. Ltd.

Tonwe, D.A (2008), *Public Administration: An Introduction,* Lagos: Amfitop Books.

Kehinde J and Abiola, S (2006), *Financial Management and Strategy*, Lagos: Rackson Nigeria Ltd

Idahosa, S. A. and Nchuchuwe, F.F (2005), "Local Government Finances in Nigeria: Issues in Generation, Utilization, Accountability and Service Delivery", *Nigerian Journal of Policy and Development*, Vol 4, pp100 -132.

Bhagwan, V. and Bhushan, V. (2006), *Public Administration,* New Delhi: S. Chand and Company Ltd.