NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF MANAGEMENT SCIENCES

COURSE CODE: BFN 303

COURSE TITLE: FINANCIAL MANAGEMENT

COURSE GUIDE

COURSE CODE: BFN 303

COURSE TITLE: FINANCIAL MANAGEMENT

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Introduction

BFN 303: Financial Management is a semester work of three credit units. It will be available to all students taking the B.Sc. programme in the School of Management. This course of 18 units involves financial management as an aspect of management and finance which will be useful at both micro and macro organisational levels.
The course guide tells you what this course BFN 303 is all about, the materials to ensure you get the best and how to achieve success in your studies. Other pieces of information contained in the course include how to make use of your time and how to tackle your tutor- marked assignments. There will also be tutorial classes. Full details concerning all these will be conveyed to you at the appropriate time.

What you will Learn in this Course

This course consists of different theories of management. These are finance and financial management, types of business financing and sources, fund flow, cash flow analysis, risk analysis, investment appraisal, cash and treasury management and debt and receivables management. All these will help you in appreciating the importance of
this course in managing funds and finances in organisations.

Course Aims

This course will expose you to the theories of financial management so that they can be applied to our various businesses, enterprises and organisations.
The course will help you to value financial management as an aspect of management and finance. It is beneficial to small, medium and large scale organisations.
You will learn how to handle finances in different organisations and manage funds acquired in various organisations.

The aim will be achieved in the following ways.

- Explaining the concept of financial management.
- Identifying and discussing the theory of financial management
- Discussing the various ways of financing and explaining types like short, medium and long term business financing.
- Highlighting ,the various sources of financing in business
- Describing the fund flow, cash flow and risk analysis and its application to organisations.
- Evaluate methods of investment appraisal
- Explaining the concept of capital rationing
- Explaining cash and treasury management and debt and receivables management.

Course Objectives

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

- explain the objectives of management
- highlight the purposes and sources of finance
- fully list the objectives and scope of financial management
- state and explain short-term, medium-term and long-term business financing
- explain other sources of business financing.

- give a detailed analysis of fund flow, cash flow and risk analysis
- explain the various Investment appraisal techniques with their merits and demerits
- give the meaning, situations of and factors leading to capital rationing
- discuss sources and forms of working capital finance
- discuss the meaning of shares and how shares can be valued.
- explain the different types of finance discussed – mortgage finance, banking system and industrial finance

.

Course Materials

- The Course Guide
- Study Units
- Textbooks
- The Assignment File

Study Units

There are 18 units of this course which you should study carefully:

MODULE I

Unit 1 The Nature, Scope and Purpose of Financial Management
Unit 2 Sources and Costs of Short Term Finance
Unit 3 Sources and Costs of Medium Term Finance
Unit 4 Sources and Costs of Long Term Finance
Unit 5 Sources and Problems of New Financing

MODULE II

Unit 1 Basic Financial Statement
Unit 2 Analysis and Interpretation of Basic Financial Statement
Unit 3 Capital Budgeting
Unit 4 Business Mergers and Takeovers
Unit 5 Determination and Implications of Dividend Policy

MODULE III

Unit 1 Valuation of Shares
Unit 2 Working Capital Management
Unit 3 Risk of Finance
Unit 4 Methods of Avoiding Risks

MODULE IV

Unit 1 Banking Systems
Unit 2 Industrial Finance
Unit 3 Mortgage Finance
Unit 4 Capital Structure of Nigerian Firms

The Assignment File

There will be an assignment in each unit. The exercises are tailored to help you have a full understanding of the course. Practise these assignments carefully, it will help you assess the course critically, consequently increasing your knowledge of the course.

Tutor-Marked Assignment

In doing the tutor-marked assignments, you should apply what you have learnt in the content of the study units. These assignments, which are four in number, are expected to be turned into your tutor for grading. They constitute 30% of the total score.

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 score to be 100%.

Summary

BFN 303: Financial Management treated some of the objectives and the needs and benefits of financial management. Also, the course delved into how to handle finances and how to manage them no matter how small. At the end of the course, you would have learnt how to make proper use of funds and finances of an organisation so as to achieve maximum results whether in small scale, medium scale and large scale enterprises.

COURSE CODE: BFN 303

COURSE TITLE: FINANCIAL MANAGEMENT

CREDIT UNIT: 3 CREDIT UNITS

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MODULE IV

MODULE I

Unit 1 The Nature, Scope and Purpose of Financial Management
Unit 2 Sources and Costs of Short Term Finance
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Unit 5 Sources and Problems of New Financing

UNIT 1 THE NATURE, SCOPE AND PURPOSE OF FINANCIAL

MANAGEMENT

CONTENTS

1.0 INTRODUCTION

Production by definition is the changing of raw-materials to usable forms called finished goods. Four (4) essential factors are joined together to form a complete process - these are land, labour, capital and entrepreneur. Among these factors, we submit that capital (money/fund) is pivotal. Little wonder that the Bible made it clear to us that "money answereth all things". In basic principles of finance, it is clear that as an entrepreneur or a shareholder of firms, you may not necessarily use only your money to do business, but other external funds. However, one point is very clear, whether yours or others, capital is essential to the birth and survival of any venture. Financial management principle is based on the fact that there is a **project**.

Financial Management therefore, is an essential element of project analysis. It is important to mention that an organised financial decision is very important otherwise we may fall into the mistakes of our forefathers many centuries past, where monies were borrowed to marry

many wives or for burial ceremonies at the expense of good projects like education of children etc. It can therefore be conveniently advised that it is better to plan what you want to do before searching for money to do it. Do not wait till funds come before planning what to do with it. Hence financial management function involves five (5) basic steps.

Step 1 Investment Decision - plan what you want to invest in. What exactly do you want to do? Where exactly are you going? What are your dreams/visions and aspirations?

Step 2 Financial Decision - Having planned what you want to do, where you want to be, etc, the next step is to decide the best type of funds, or capital structure to meet up. It is important to understand the nature, size, life span, preparation period/gestation, the scope and other essential factors of the project you want to venture in, so as to plan for adequate financing. A mistake here can lead to a 'mismatch' i.e. financing wrong project with a right capital/fund, or financing right project with a wrong capital, e.g. sourcing for short term capital to finance a medium or long term project.

Step 3 Profit Decision - as in normal theory of firms in economics, businesses are set up to make profit and as much as possible maximise returns, enhancing shareholders wealth/value; except in public projects where social objective (provision of social benefits for the populace) is the main purpose. All private projects and investments are for commercial reasons, making and maximising returns to owners. As a result, it is important to plan the extent of the need to make up costs to arrive at selling prices of goods and services, what margin will be sufficient to take care of other overheads, government taxes, shareholders expectations, growth and aspirations and yet remain competitive in the market with adequate market share?

Step 4 Dividends and Retention Decision The firm's dividend policy is very crucial, subject to different kinds of shareholders, their beliefs and value judgment. Determination of dividend pay-out ratio in the light of the objective of maximising shareholders wealth and ploughing back part of earnings for expansion and enhancing future values is essential and should be carefully handled.

Step 5 Liquidity Decision A company with all the long term assets needed but without working capital may not survive. It is therefore essential to determine what portion of the firms' earnings/capital to be kept in liquid form i.e. short term asset-mix to meet day-to-day current obligations. Keeping excess funds in liquid form may amount to capital tied down which may increase operating costs, while keeping too little may lead to illiquidity with its associated costs/implications. Financial Management therefore has to do with the study about the process of procuring financial resources and making judicious use of them

with a view to maximising the value of the firm or the value of the owners i.e. equity shareholders in a company.

2.0 OBJECTIVES

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

- define the scope of financial management
- explain the goals of the firm
- explain the financial objectives of a firm

3.0 MAIN CONTENT

3.1 Definition of Financial Management

Management is concerned with decision making and smooth running of an enterprise. Financial Management involves acquisition of assets needed for the operation of a firm and financing such asset acquisitions through dealings in the financial market. It is also concerned with the issue of what to do with the profits being made in the firm-plough it back into the business or return it to the shareholders. The success or failure of any firm is mainly linked with the quality of financial decisions. The focus of financial management is on efficient and

judicious use of resources to attain desired objectives of the firm. Investment decisions entail ensuring that various tangible assets needed by the firm are available at the right time. These assets include office accommodation, plant, machinery, factories, farmland etc. Plans or budget are normally made to ensure that these items are acquired when needed. Procuring funds for the acquisition of needed assets often poses variety of problems for business organisations. Dividend policy decision is a hybrid of two other financial management activities. It involves that profits are either retained for reinvestment purpose to aid the growth of the firm or they are declared as dividends to shareholders or both.

3.2 Goals of the Firm

There is little agreement in the literature about what the objectives of firms are or what they ought to be. Firms are known to pursue diverse objectives at the same time, but a few central ones stand out as major. These include profit maximisation, wealth maximisation and ensuring generation of a good public image as a corporate citizen of the community.

3.2.1 Profit Maximisation

The model at perfectly competitive market postulates that private firms should behave primarily with the profit maximisation motive. To maximise profit, the firm must maximise output of a given set of scarce inputs or expressed equivalently, minimise the cost of producing a given output. The goal of profit maximisation emanated from the argument that the shareholders are the owners of the firm which therefore should be operated for their benefit by trusted managers.

3.2.2 Maximisation of Shareholders Wealth

This is stressed due to some practical problems that arise in the use of the pure profit maximisation criterion. For operational use, profit maximisation does not take account of risk, the time value of money and it is ambiguous. For these reasons, wealth maximisation has replaced profit maximisation as the operational criterion for financial management decisions. By measuring benefits in terms of cash flows, we would avoid much of the ambiguity of profits. By discounting those cash flows over time using concepts of interest compounding we can take account of both risk and time value of money. It is important t note that maximisation of shareholders' wealth is as explained an extension of profit maximisation to a scenario that is uncertain and multi period in nature. Where the time period is short and the degree of uncertainty is not great, wealth maximisation and profit-maximisation

almost amount to essentially the same thing. You may start wondering at this point on how exactly wealth maximisation is determined. In the final analysis, wealth maximisation is tantamount to maximisation of the price of a firm's shares in the capital market (Stock Exchange). The price of the shares is determined by the firm's present earnings and expected future earnings which in turn is determined by its overall cash outflow and can be inflows from investment projects. We can conclude that wealth maximisation is equivalent to stock price maximisation. Hence, what managers do to maximise the shareholders wealth is to take decisions that positively enhance the firm's stock price.

The following factors will affect a firm's stock price:

a) Estimated earnings per share

b) Risks attached to projected earnings

c) Timing of the earnings stream

d) The various combinations of securities used in financing the firm

e) Cost of capital

f) Dividend policy

It has been found that the shareholders benefit more when share prices appreciate in the market. This way there is a lock-in of capital gain when they sell their shares to other investors.

3.2.3 Other Relevant Objectives

These ensure that whatever goals are pursued would bring out results that do not differ substantially from the profit maximisation objective. The question of management of many firms, being separate from owners (shareholders) has made writers to suggest pursuit of goals that management favours. These would include the followings:

i) Improving employers' welfare

ii) Creating a good community relationship

iii) Improving welfare of the management team by increasing emoluments and the pre requisites and devoting money to even recreational facilities like golf or tennis. We may not be able to rule out the possibility of management pursuing other objectives apart from profit maximisation conceding the reason of management independence from shareholders. Many firms do tie management compensation to the company performance and there are indications that this motivates managers to operate in a manner consistent with stock maximisation.

3.2.4 Social Programmes

Business organisations with normal or super normal profit can and do engage in community welfare programmes. These social services increase costs, however in highly competitive industry; there would be a minimisation of such efforts. It is conceivable also that those who have companies shares would prefer those of companies that increase values of shareholders' wealth than those of social "do-gooders" who reduce shareholders' wealth. So, social cost increasing action may have to be put on mandatory rather than on voluntary basis, at least initially. This is to ensure that the burden of such actions falls uniformly across business organisations. For this reason, and the deficiencies of the invisible-hand philosophy that we

saw earlier, government legislation and regulations are introduced for:

i) minimum wage rules

ii) industrial training fund laws

iii) regulation on standard and qualities of industrial output

iv) workmen safety regulations

v) environmental pollution regulations, etc

There are other regulations to ensure that the social responsibility of business organisation becomes constraints. Firms would normally strive to maximise shareholders' wealth subject to the constraint.

4.0 CONCLUSION

In this unit, we have learned the definition of financial management, the scope of financial management and the goals of the firm with respect to profit maximisation, maximisation of shareholders wealth, other relevant objectives and social programmes.

5.0 SUMMARY

Finance is the life blood of a business. Financial management involves acquisition of assets needed for the operation of a firm and financing such asset acquisitions through dealings in the financial market.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define financial management.
2. State the types of decisions in financial management

iii. List the major goals of the firm.

7.0 REFERENCES/FURTHER READING

Akintoye, I. R. (2011), Adaptation from MBF 711, *Financial Management 1,* (First Edition) Lagos: NOUN Publishers.

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UNIT 2 SOURCES AND COSTS OF SHORT TERM FINANCE

CONTENTS

1.0 INTRODUCTION

In previous units, we identified five broad decision areas in financial management namely:

1. investment decision
2. financing decision
3. profit decision
4. dividend and Retention decision
5. liquidity decision

In this unit, we will focus our attention on the financing of short term businesses with a view to exposing you to the different sources for short term investments.

2.0 OBJECTIVES

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

- define short term business financing
- explain the types of short term business financing
- explain the essence of short term business financing to an organisation.

3.0 MAIN CONTENT

3.1 Definition of Short Term Business Financing

Short term financing has to do with using funds with maturity/repayment period of between One (1) day and twelve (12) calendar months. Short term methods of finance are suitable for funding projects of short term nature and can also be attributed to shortages in working

capital. They should not as a matter of policy be used to finance long term investments to avoid a mismatch (Akintoye 2008). It is prudent to have some current assets financed by long term capital on a roll-over basis to create assets; otherwise the company will have a negative working capital.

3.2 Types of Short Term Business Financing

The main sources of short term financing are the followings:

i. Bank credit/bank overdraft
ii. Commercial papers
iii. Trade credits
iv. Debt factoring
v. Invoice discounting
vi. Bill discounting
vii. Accruals
viii. Acceptance credits/bankers acceptances
ix. Accommodation finance

3.2.1 Bank Credit/Bank Overdraft

Commercial Banks sometimes allow their customers to overdraw their accounts up to certain limits; overdraft interest is charged on the day-today overdrawn position. The bigger customers may be charged "Prime Rates" (a little above the bank's base rate) while smaller customers may be required to pay a premium over and above the prime rate. Bank overdrafts are usually available for up to 12 calendar months (1 year), but can be rolled over on a mutual agreement. The main cost of bank overdraft is the interest charge.

3.2.2 Commercial Paper

This is an instrument used by big companies to raise short term funds from the money market. It is usually issued on behalf of the company by a bank as the issuing house. The issuing house does not guarantee the notes but assists in finding investors to buy them. The investors are therefore effectively lending directly to the company issuing the notes not the issuing house. The issuing house charges a commission for the intermediate service. Commercial papers usually carry a stated coupon rate, and the maturity date of between 30 and 270 days. The costs of commercial papers are made up of the following two components:

i. The coupon rate e.g. 12% per annum

ii. An issuing house commission e.g. 0.5% flat on the amount raised. Costs of various alternative funds are always considered before a choice is made.

3.2.3 Trade Credits

Buying today and paying tomorrow is a credit. The credit from suppliers is a major source of business finance, especially to small companies. This source of finance could be very expensive where cash discounts are offered and such an offer is not taken.

The effective cost of not taking a discount can be calculated as follows:

Cost = % Age discount X 365

100 - % Age discount Maximum payment period less Maximum discount period

It can be rolled over and therefore will become a continuous source of finance. The other intrinsic costs associated with trade credits are:

i. pressures from suppliers

ii. reduction in credit rating and loss of goodwill if payment is delayed beyond maturity date.

3.2.4 Factoring

Factoring means the act of selling the company's debt for cash.

Factoring involves raising funds on the security of the company's debt so that the cash is received earlier than if the company waited for the debtors to pay. This is only easy for a company that is well known and debtors who are well known to be of high integrity.

3.2.4.1 Types of Factoring

There are two main types of factoring.

(a) Service Factoring

Service factoring has to do with the factor buying from the company its debt. In effect, the company passes to the factor all the work of the company's debt collection and debtors' account. Payment to the company by the factor for the debt is made on an average settlement date based on the maturity date of the debt. The charge for this service is usually based on debt turnover.

Disadvantages of Service Factoring

1. The debtor is always aware of the existence of the factor since all invoices and statements will be sent out by the factor and payments made to the factor.
2. Payment is made by the factor to the company on the average date of which the debts fall due for settlement.

Key:

□□Client sells goods to debtor

□□Client sells debt to factor

□□Factor makes payment to client

□□Debtor makes payment to factor

b. Service and Finance Factoring

This type of factoring involves not only the provision of accounting facilities but also of immediate finance, since the factor buying the debt makes an immediate payment to the company of up to 90% of the face value of the debt in addition to paying the service charge, the company must also pay the finance charge to the factor.

Steps:

□□Client sells goods to debtor

□□Client sells debts to factor

□□Factor makes payment to the company up to 90% of the face value of debts

□□Debtor makes payment to factor

3.2.5 Invoice Discounting

In spite of the fact that by accepting a company, a factor will thoroughly investigate the company's affairs in order to satisfy himself that the business is properly managed. There is still a fear that the use of a factor indicates financial instability. Consequently, many potential users of debt factoring have refrained from using the facilities available, this reluctance has given rise to a method of confidential invoice factoring which has become known as invoice discounting.

Under this method, debts are sold to the factor who makes an immediate payment of an agreed percentage of the face value of the debt sold. No accounting (sales) service is supplied by the factor, rather only finance is supplied for which interest is charged. In effect, a factor buys the debt and appoints the company as agent to collect those debts.

□□Client sells goods to debtor

□□Client sells debts to factor

□□Factor makes immediate payment to the company up to 80% of the face value of debts.

□□Client collects debts as agent for factor

□□Client repays advance from factor

3.2.6 Bills Discounting

A bill of exchange is normally prepared by the supplier of goods (creditor) for endorsement / acceptance by the customer (debtor). This is common with export sales. The supplier (seller) can obtain immediate cash after the goods have been dispatched by discounting the bill with
the bank/discount house.

3.2.7 Accruals

Deferment of tax payments and wages is the common example in this method. Tax laws provide that tax liabilities should be due for payment after one year. Also employees would work for a period of one month before receiving their pay. These form interest-free sources of short term finance. The cost of postponing tax payment is normally a penalty or a fine, while the cost of postponing wage payments will be to dampen employee's morale. Employees may respond with absenteeism, reduced efficiency or seek employment elsewhere. A firm must use this source of finance carefully and only as a last resort.

3.2.8 Acceptance Credit/Bankers Acceptance

This source of finance is similar to bills of exchange. The only difference is that it is a bank which undertakes to liquidate the debt of maturity in case of a default. Such bill becomes readily discountable in the money market because it has been accepted by a bank. The evaluation carried out by the provider of the fund (discount house) will normally cover the credit worthiness and reputation of the bank providing the guaranteed acceptance. Banker's acceptances (Acceptance Credits) are issued for period varying between 2 months and 12 months.

3.2.9 Accommodation Finance

In this method, two bills of exchange are drawn. The first is on the principal debtor and fully accepted by him. The second is on the bank (based on the strength of the first bill) and fully accepted by the bank. The first bill has an early maturity. The client company takes the second bill and discounts it in the money market.
On maturity, the bank (in possession of the first bill) collects the debt book, thus providing enough funds to settle the other finance house with whom the second bill was discounted. Obviously the client company incurs two costs. In this regard, a bank that participates effectively in the discounting market can derive double income as it charges commissions for its acceptance and also receives discount for the discounting service.

3.2.10 Franchising

Franchising is a method of expanding a business on less capital thanotherwise needed. For suitable business, it is an alternative to raisingextra capital for growth. Under a franchising arrangement, a franchisee pays a franchisor for the right to operate a local business under the franchisor's trade name. The franchisor must bear certain costs (possibly for architect's work, establishment costs, legal costs, marketing costs and the cost of other support services) and will charge the franchisee an initial franchise fee to cover set-up costs relying on the subsequent regular payments by the franchisee for operating profit. These regular payments will be a percentage of the franchisee's turnover.

The advantages of franchisee to the franchisor are as follows.

i. The capital outlay needed to expand the business is reduce substantially.

ii. The image of the business is improved because the franchise will be motivated to achieve good results and will have the authority to take whatever action they deemed fit to improve results.

The advantage of a franchisor to the franchisee is that he obtains ownership of a business for an agreed number of years (including stock and premises, although premises might be lent from the franchisor) together with the backing of a large organisation's marketing effort and experience.

4.0 CONCLUSION

Short term methods of finance are suitable for funding shortages in working capital. They should not be used to finance long term investments otherwise, there would be a mismatch.

5.0 SUMMARY

Short term business financing has to do with funding investments. It also helps to source for fund through bank credits, commercial papers, trade credits, debt financing, invoice discounting, bill discounting, accruals, and acceptance credits etc.

6.0 TUTOR-MARKED ASSIGNMENT

1. Why would an enterprise prefer short term financing to long term financing?
2. Distinguish between bills discounting and bankers acceptance.

7.0 REFERENCES/FURTHER READING

Akintoye,I.R. (2011). Adaptation from MBF 711, *Financial Management 1,* (First Edition). Lagos: NOUN Publishers.

Akintoye,I.R.(2008). *Investment Decisions, Concept, Analysis & Management,* (Third Edition). Lagos: Glorious Hope Publishers.

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UNIT 3 SOURCES AND COSTS OF MEDIUM TERM FINANCE

CONTENTS

1.0 INTRODUCTION

There are several sources of financing businesses. In this unit, our focus is on medium term business financing.

2.0 OBJECTIVES

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

· define medium term business financing

· explain the sources of medium term funds

· explain the essence of medium term business financing to an organisation.

3.0 MAIN CONTENT

3.1 Medium Term Sources

These are sources for funding larger and credit worthy companies. These funds are repayable within 1-5 years or sometimes 1-10 years.

3.2 Bank Term Loans

This is similar to bank overdraft except that it is available for a longer period. Also, it carries a higher interest charge because of the longer period covered. The collateral security required for bank term loan is often higher than the bank overdraft, and banks would also

carry out a more stringent evaluation of the company and the project for which the fund is required. In short, the degree of control over bank term loan is higher than bank overdraft.

3.3 Venture Capital

Venture Capital represents funds invested in a new enterprise. There are several stages. Seed money is needed to develop a product or service – and a business plan. Although, usually these needs are small (several hundred thousand naira or less) and funded by the entrepreneur, or his/her family, or friends. On rare occasions, venture capitalists can provide such financing. The next stage is start-up or first-round financing. This financing is used to fund further research and development and to formulate initial marketing and production plans. Typically, second round financing is used to get production and selling efforts launched. Although this could occur with first round financing, it often falls in the second round. Third-round and perhaps subsequent round financings are used when a company is producing and selling products or services but where cash flow breakeven is yet to occur.

3.4 Project Finance

This is a self-liquidating facility with the following characteristics.

· The financial standing of the borrower is not important

· The proceeds from project should be sufficient to repay the capital together with the interest.

· The project/property financed will serve as security.

3.5 Equipment Leasing

This is a financial arrangement to finance the purchase of an asset through a finance company or a leasing company or a bank. There are two types of lease, namely finance lease and operating lease.

3.5.1 Finance Lease

This is where the risk and benefit of ownership have been substantially transferred to the leasee.

3.5.2 Operating Lease

This is the lease where the risk and benefit of ownership remain with the leasor.

3.6 Sale and Leaseback

This is a situation where an asset previously owned by a company is disposed off and immediately repossessed through a leasing control.

3.7 Hire Purchase

This is an arrangement under which the hirer, in return for the use of an asset, undertakes to make periodic payments to the owner of the asset. He is expected to assume ownership of the asset after the payment of the last instalment.

3.8 Mortgage

An alternative to sale and lease-back is mortgaging. It may be possible for a company to arrange to borrow money by means of a mortgage on freehold property. The most likely institutions that are prepared to lend on the platform mentioned are insurance companies, investment companies, and pension funds. Building societies are reluctant to lend to companies and there are limitations on the amount they can lend in any year to corporate borrowers. They may be more willing to grant mortgages to the proprietors of small incorporated businesses. Repayments of principal plus interest may be spread over a long period of time. The rate charged is somewhat in excess of base interest rate.

4.0 CONCLUSION

Medium term business financing helps in funding larger companies and investors as this will enable investors to finance their investments.

5.0 SUMMARY

The above mentioned sources of finance to the medium term business financing are also available to the large scale businesses. A business enterprise is at liberty to select any of the sources that is believed to have overall long-run benefit and has the potential of enhancing the objective of the business to finance its projects.

6.0 TUTOR-MARKED ASSIGNMENT

List and explain three sources of medium term business financing.

7.0 REFERENCES/FURTHER READING

Akintoye, I. R. (2011), Adaptation from MBF 711, *Financial Management 1*, (First Edition) Lagos: NOUN Publishers.

Akintoye, I.R. (2008). *Investment Decisions, Concept, Analysis & Management*, (Third Edition). Lagos: Glorious Hope Publishers.

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UNIT 4 SOURCES AND COSTS OF LONG TERM FINANCE

CONTENTS

1.0 INTRODUCTION

The previous two units have discussed short and medium term business financing. In this unit, we focus our attention on long term business financing.

2.0 OBJECTIVES

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

· define long term business financing
· state the sources of long term business financing
· explain the importance of long term business financing to an organisation.

3.0 MAIN CONTENT

3.1 Definition of Long Term Business Financing

Long term business financing involves funding larger and functional companies. The company can either be private or public and it is usually available for a period of 10 years or longer.

3.2 Long Term Sources

The main sources of long term funds are:

1. equity capital
2. debenture stock capital
3. preference share capital

3.3 Equity Capital/Ordinary Share Capital

The traditional form of capital is equity capital. The holders of this capital are the owners of the business. They therefore have a general primitive right to anything of value that the company may wish to distribute as well as the ultimate control of the company's affairs. They bear a huge portion of the entire risks associated with the company; hence they expect a higher rate of return than most other providers of finance. Other features are that they expect and are entitled to a share of the profits of the company in the form of dividends, subject to the recommendation of the directors and after all prior claims have been met. The ordinary shareholders have voting powers of right attached to their investments. They cannot redeem or reclaim their investment except by selling their shares or in the event of liquidation. Ordinary shares could take the form of preferred, deferred or founders' ordinary shares. Preferred ordinary share usually receive a fixed rate of dividend, before the other ordinary shareholders. They may also be entitled to a further share of profit after their fixed entitlements (dividend). Deferred ordinary shares are usually residual recipients after all claims including preferred ordinary shareholders have been settled.

Deferred shares could be given to the sellers (owners) of a company acquired by another company. These serve as deferred payment for the purchase of the company held back until enough profits emerge. These types of deferred ordinary shares are called founders' shares.

3.3.1 Raising Of Equity Capital

The methods of raising equity funds or putting a company in a position for raising equity finance in future which are particularly available to quoted companies include the followings.

1. **Placing of Shares:** In this method, the shares are offered to a specific group of investors usually insurance companies, pension funds or any other institutional investors.
2. **Offer for sale**: In this method, the shares are offered to the public including the existing shareholders through the agency of an issuing house. This is the method being used by the Technical Committee on Privatisation and Commercialisation (TCPC) now known as Bureau of Public Enterprises (BPE) to sell Federal Government's shares in the privatised

enterprises. At the end of an offer for sale, the nominal share capital of the company remains unaltered and the proceeds of sales to the vendor (existing shareholders) and not the company. Offer for sale is not a fresh issue of shares, but sale of existing shares by existing shareholders.

3. **Offer for subscription**: In this method, fresh issues are offered to the public by the company itself through the agency of an issuing house. The idea here is to raise supplementary capital for the company. The proceeds of issue go to the company and the number of shares outstanding at the end of the exercise will increase.

4. **Stock Exchange Introduction**: This is not a method of raising new capital, but of getting permission to "deal" i.e. introducing the shares of the company to the market. The company, after quotation, will have access to finance in the capital market in the future.

5. **Offer for sale by Tender**: Here, the company offers the shares for sale at a minimum price level. Applications are then requested for the sale of the shares at prices determined by the various investors. The final price will be the price that will clear all available shares; this is called the striking price. The stock exchange will ensure that all shares are finally taken up at the same price.

6. **Right Issues:** In this method, additional finance is obtained from the existing shareholders. This method avoids issuing costs if finance is to be obtained from the public. It confirms the financial stability of the company and the price at which the shareholders buy the rights is usually below the market price of the company after the right issue.

3.4 Debenture Stock: These are loans of a long term nature. These could be secured or unsecured. Debenture represents the document which acknowledges the indebtedness to the company. In practice, the term "debentures" may be restricted to secured loans. The main features are the followings.

· They are not entitled to voting rights

· They are fixed interest securities entitled to annual interest payments

· The interest elements are tax deductible

· They could be redeemable, irredeemable or convertible

· The principal amounts are usually secured on the assets of the company and could have:

a. floating charge or

b. fixed charge or

c. a combination of (a) and (b)

A floating charge covers all the assets as they exist from time to time excluding assets subjected to fixed charge. A floating charge does not prevent the company from buying and selling assets in the normal course of its business.

A fixed charge is one or more specific assets, if the company fails to pay interest, or the principal, or attempts to dispose of an asset charged, then a receiver may be appointed to take possession of the asset and sell it for the benefits of the debenture holders.
Debentures could be redeemable or irredeemable. The date for redemption is usually written in form of a range (e.g. 2001-2010). The date will be agreed upon at the time of negotiating the loan. Some debentures are irredeemable. In this case, no date is set for redemption but the borrower can redeem the debt whenever he wishes and force the debenture holders to settle.
A borrower may redeem a debenture earlier than the due date because of any of the following reasons:
1. To take advantage of falling interest rates.
2. To make use of surplus fund.
3. To release assets covered by a fixed charge for usage as a collateral.
Debenture stocks could also be convertible. I this case, the holder has an option to convert the debenture within a given time period into equity stock at a specific price. If this option is not exercised then the debenture will continue its normal term to redemption.

3.5 Preference Stock

Preference stock is usually a more expensive source of finance than debenture stock. This is because debentures are less risky and usually have tax shield (benefits). Other features of preference shares are that they are not entitled to any voting rights normally, and their interest in the company is represented by dividend payment and principal repayment.
Preference shares could be preferred or deferred, cumulative, participating or redeemable.
Cumulative preference shares would have their dividend income accumulated and paid at future dates if the company has liquidity problems.
Participating preference shareholders are entitled to a fixed dividend income per year (this may be cumulative) plus a further share of many other profits. In some cases, this further share could be after the ordinary shareholders have been paid a certain dividend. Preferred and deferred preference stock have characteristics similar to preferred and deferred ordinary shares.

3.6 Advantages and Disadvantages of Convertible Loan Stock

(a) From the point of view of a borrower, convertible loan stock has the following advantages:

(i) Provided the company has good prospects, it will be possible to offer convertible loan stock at a lower interest rate than debentures.

(ii) If the company is just starting up or is developing a new product, so that returns will initially be small, convertible loan stock provides cheap fixed interest funding and the conversion date can be planned to coincide with the growing availability of profit sufficient to pay acceptable dividends.

(iii) When money is in short supply, the incentive of a future share in profits may encourage lenders who would not otherwise invest in the company.

(b) From the point of view of the lender, by taking convertible loan stock, he ensures a fixed income in the early years while he wants to see whether the business is successful. If it prospers and the price of the ordinary shares rises then he can take advantage of both favourable conversion terms and also the opportunity of participating in the available profits. If the business is not successful, then he will accept redemption of his loan stock, or will be able to sell it at a price which at least reflects its fixed interest earning power.

3.7 Factors Affecting a Company's Choice of Finance

(b) **Length of the Project**. The general rule in financing is that the maturity of the finance should match the length of the project it is to be used. Therefore, a long term investment requires long term finance and a short term investment requires short term finance. If short term finance is used for a long term project then the company would be in a vulnerable position if that finance is withdrawn. If a long term finance is raised when a company only requires it for a short term period, it may then have idle cash around.

(c) **Pattern of Cash flow.** This generally means how long the investment period lasts before cash flow commences. A long period, during which a company has to spend money without generating any revenue, will present problems in terms of liquidity. This will be alleviated by using financing which pattern of repayment fits the project cash flow. The best source of finance in terms of liquidity is equity since the annual dividend can be small or zero and can be varied according to circumstances.

(d) **Level of Risk.** A project with a high level of risk will probably require some form of equity finance, the use of debt with the burden of interest and capital repayment. However, the outcome of the project would substantially increase the risk of insolvency.

(e) **The Cost of Finance.** Clearly a company should see to minimise the cost of finance it raises. This is important because the cost of finance would affect the weighted average cost of capital (WACC) and by extension the value of the company.

(f) **Debt Capacity.** The ability to use debt finance for a new project can be valuable in terms of the tax savings on debt's interest. An important feature of the project, which in fact determines debt capacity, is the type of asset involved and their values as security for loan.

(g) **Control.** Existing shareholders will only maintain their level of control over an organisation if retained earnings or right issues are used for finance. Any other external finance, will to a certain extent, involve loss of control. Even debt finance, where voting control is not affected, the creditor may take charges on asset or enforce restrictions on a company in other aspects.

(h) **The Need for Future Finance**. Many projects do not just need capital initially but require additional finance for future expansion. The use of convertibles may be attractive in these

situations.

4.0 CONCLUSION

Companies, whether public or private, obtain long term funds from variety of sources such as new issues of equity shares, preference shares, shares, loan stocks or bonds, retained profit, etc.

5.0 SUMMARY

Long term business financing aids investors through equity financing, loan stock and bonds in order to finance their business. Equity finance is not a single source of finance but a group of alternative ways of raising risk-bearing funds. Other sources of long term business financing include share warrants, return on securities, government grants etc.

6.0 TUTOR-MARKED ASSIGNMENT

1. Explain the term debentures and list their features.
2. Explain at least one of the sources of long term business financing.

7.0 REFERENCES /FURTHER READING

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UNIT 2 SOURCES AND PROBLEMS OF NEW FINANCING

CONTENTS

1.0 INTRODUCTION

This unit will focus on the other sources of business financing. It will also emphasise other sources of finance having explained the short, medium and long term business financing.

2.0 OBJECTIVE

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

· explain new sources and problems of business financing.

3.0 MAIN CONTENT

3.1 Other Sources of Finance

These include management buy-outs, management buy-ins and leveraged buy-outs.

3.2 Management Buy-Outs

A management buyout (MBO) is the purchase of all or part of a business from its owners by its managers e.g. Pfizer Limited now known as Neimeth Nigeria Limited. For example, the directors of a subsidiary company in a group might buy the company from the holding company, with the intention of running it as proprietors of a separate business entity.

3.3 Management Buy–Ins

Buy-in is the term used when a team of outside managers, as opposed to managers who are already running the business, mount a takeover bid and then run the business themselves. A management buy-in might occur when a business venture is running into trouble and outside managers see an opportunity to take over the business and restore its profitability.

3.4 Leveraged Buy-Outs

Going private can be a straight transaction, where the investor group simply buys out the public stock–holders, or it can be a Leveraged Buy- Out (LBO), where there are third and sometimes fourth party investors.

As the name implies, a leveraged buy-out represents an ownership transfer consummated primarily with debt. Sometimes called asset based financing, the debt is secured by the assets of the enterprise involved. While some leveraged buy-outs involve the purchase of a division of a company or some other sub units, frequently, the sale is to the management of the division being sold, the company having decided that the division no longer fits strategic objectives. Another distinctive feature is that leveraged buy-outs are based on cash purchases, as opposed to stock purchases. Finally, the business unit involved invariably becomes a privately held company as opposed to a publicly held company.

4.0 CONCLUSION

In this unit, the discussion perhaps has indicated that other sources of business financing also provide funds for investors to invest in their businesses.

5.0 SUMMARY

In this unit, we discussed other sources of business financing and provided explanations on the followings:

· Management Buy-outs

· Management Buy-ins

· Leveraged Buy-outs.

6.0 TUTOR-MARKED ASSIGNMENT

1. List and explain new sources of business financing.
2. What are the problems of new financing ?

7.0 REFERENCES/FURTHER READING

Akintoye, I. R. (2011), Adaptation from MBF 711, *Financial Management 1*, (First Edition) Lagos: NOUN Publishers.

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MODULE II

UNIT 1 BASIC FINANCIAL STATEMENT

CONTENTS

1.0 INTRODUCTION

The information that is used in valuation and corporate finance, comes from financial, comes from financial statement. An understanding of the basic financial statement is very important and a necessary first step to take. The three basic financial statements are the income statement, the balance sheet and the statement of cash flows.

2.0 OBJECTIVES

After studying this unit, you should be able to:

- Understand how the financial statements – income statement, balance sheet, and statement of cash flows are constructed.
- Understand the general accounting principles
- Explain how the accounting principles influence the preparation of financial statement

3.0 MAIN CONTENT

3.1 Income Statement

An income statement provides information about a firm's operating activities over a specific period of time. It measures the revenues and expenses of the firm i.e net income of a company equals its revenues minus expenses; revenues arise from selling goods and services, and expenses measure the costs associated with generating these revenues.

An example of an income statement format

XYZ PLC

INCOME STATEMENT FOR THE PERIOD ENDED xxx----------

	Revenues (Turnover)	xx
-	Cost of Goods sold	xx
-	Depreciation	xx
-	Selling Expenses	xx
-	Administrative Expenses	xx
-	Earning before Interest and Taxes (EBII)	xx
-	Interest Expenses	xx
-	Taxes	xx
=	Net Income Before Extraordinary Items	xx
+	Gains (Losses) From Discontinued Operations	xx
+	Extraordinary Gains (Losses)	xx
=	Net Income After Extraordinary Items	xx
-	Preferred Dividends	xx
=	Profit to Ordinary Shareholders	xx

Generally Accepted Accounting Principles are Principles that govern the construction of financial statement and help determine accounting rules. Income can be generated from a number of different sources; generally accepted accounting principles require that income statement be classified into four sections:

1. Income from continuing operations.
2. Income from discontinued operations.
3. Extraordinary gains or losses
4. Adjustments for changes in accounting principle

A typical income statement starts with revenues and adjusts for the cost of the goods sold, depreciation assets used to produce revenues, and any selling or administrative expenses to

arrive at an operating profit. The operating profit, when reduced by interest expenses, yields the taxable income, which when reduced by taxes yields net income.

Accrual versus Cash – Based Income Statement

Firms most times expend resources to acquire materials or manufacture goods in one period but do not sell the goods until the following period. After natively they often provide services in one period but do not get paid for these services until the following period.

In accrual –based accounting, the revenue from selling a good or service is recognized in the period in which the good is sold or the service is performed. A corresponding effort is made on the expense side to match expenses to revenues.

Under cash –based system of accounting, revenues are recognized when payment is received white expenses are recorded when paid. As there is no matching of revenues and expenses, GAAP requires that firms use accrual –based accounting system in income statement.

3.2 Balance Sheet

Unlike the income statement which measures flows over a period of time, the balance sheet provides a summary of what the firm owns in terms of assets and what it owes to both its lenders and its equity investors. The balance sheet is built around equality.

Assets = Liabilities + Shareholders' Equity Assets and Liabilities are broken down into current and non-current portions.

Assets	**Liabilities**
Current Assets:	Current Liabilities
Cash and Marketable Securities	Accounts Payable (Creditors)
Accounts Receivable (Debtors)	Short Term Borrowing
Stocks	Other Current Liabilities
Other Current Assets	Long Term Debt
Investments	Other non-Current Liabilities
Property Plant and Equipment (Fixed Assets)	Shareholders' Equity
Intangible Assets	Preference Shares
	Ordinary Shares
	Retained Earning
	Treasury Stock

From the above, you can see that the balance sheet is a snap shot of the firm. It is better way of organizing and summarizing what a firm owns (its assets), what a firm owes (its liabilities, and the difference between the two the firm's equity) at a given point in time.

Assets: The Left – Hand Side

Assets are classified as either current or fixed. A fixed asset is one that has a relatively long life. Fixed assets can be either tangible (such as truck, machines, building, land) or intangible (such as trade mark, good will, copy right). A current asset will convert to cash within 12 months. For example stock would normally be purchased and sold within a year and is thus classified as current asset. Also cash itself is a current asset. Debtors (money owed to the firm by its customers) are also a current asset.

Liabilities and Owners' Equity: The Right Hand Side the firms' liabilities are the first thing listed on the right hand side of the balance sheet. These are also classified as either current or long term. Current liabilities. Current liabilities, like current asset have a life of less than one year (meaning they must be paid or settled within one year) and they are listed before long term liabilities. Creditors (money the firm owes to its suppliers) is one example of a current liability.

A debt that is not due within one year is classified as a long – term liability. A loan that the firm will pay off in fire years is one referred to as long –term debt. Firms borrow in the long term from a variety of sources.

Lastly, by definition, the difference between the total value of the assets (current and fixed) and the total shareholders' equity , also called ordinary shares or sheet below is intended to reflect that, if the firm were to sell all of its assets and use the money to pay off its debts, then whatever residual value remained would belong to shareholders.

Total Value of Assets Total Value of Liabilities and Shareholders' Equity

Current Assets	Current Liabilities
1. Cash, 2. Stock	1. Creditors
3. Debtors	2. Overdraft
Fixed Assets	Long – term debt
1. Tangible Fixed Assets	
2. Intangible Fixed Assets	

Generally accepted accounting principles in almost all countries require the valuation of fixed assets at historical costs, adjusted for any depreciation changes on these assets. Because of this fact, fixed asset is strongly influenced by both its depreciable life and the depreciation method used. For stock, GAAP allows for three basic approaches to be used in valuation of stock first –in first –out (FIFO), last –in first – out (LIFO), and weighted average.

For an obligation to be recognized as a liability, it must meet three requirements – it must be expected to lead to a future cash outflow or the loss of a future cash inflow at a specified date.

3.3 Concept of Cash Flows

The statement of cash flows is based on a reformulation of the basic equation relating assets to liabilities.

Assets = Liabilities + Shareholders' Equity

By cash flow, we simply mean the difference between the number of dollars that came in and the number that went out. For example, if you are the owner of a business, you may be very interested in how much cash you actually took out of your business in a given year.

How this is determined is one of the things to discuss next we will discuss how to calculate cash flow from Nigerian corporation and point out how the result differs from standard financial statement called the statement of cash flows. The statement of cash flow is a different issue and should not be confused with what is discussed in this unit.

The accounting statement of cash flow will be discussed in unit 5 of this same module.

From the balance sheet equation stated above, it is similar to say that cash flow from the firm's asset must equal the sum of the cash flow to creditors and the cash flow to shareholders (owners).

Cash flow from assets = cash flow to creditors + cash flow to shareholders

Cash flow from assets

Cash flow from assets involves three components:

Operating cash flow, capital spending, and change in net working capital.

1. Operating cash flow: This refers to the cash flow that results from the firm's day to day activities of producing and selling. Expenses associated with firm financing of its assets are not included because they are not operating expenses.

To calculate operating cash flow (OCF), it is revenues minus costs, but we don't want to include depreciation because it's not a cash outflow, not also include interest because it is a financing expenses but we do want to include taxes, because taxes are paid in cash. The result is calculated thus:

Table 1: ABC Nig.

2005 Operating Cash Flow

	'000
Earnings before interest and taxes	694
+ Depreciation	65
Operating Cash Flow	212
Grand Total:	**547**

The importance of operating cash flow is that it tell us on a very basic level whether or not a firm's cash inflows from its business operations are sufficient to cover its everyday cash outflows.

2. Capital Spending: Net capital spending is just money spent on fixed assets less money received from sale of fixed assets. At the end of 2004, net fixed assets of ABC Nig were N1,644.000 during the year, ABC wrote off depreciation N65,000 worth of fixed assets on the income statement so, if the firm didn't purchase any new fixed assets, net fixed would have been N1,644,000- N65,000 =N1,579,000. The 2005 balance sheet shows N1, 709,000 in net fixed assets. Therefore the net capital spending could be calculated thus:

Table 2 ABC Nig.

2005 Capital Spending

	'000
Ending net fixed assets	N1,709
- Beginning net fixed assets	N1,644
+ Depreciation	N65
Net Capital Spending	N130

3. Change in Net Working Capital: In addition to firm investing in fixed assets, a firm will also invest in current assets. For example, ABC Nig incurred N1,403,000 in 2005 as spending on current assets. At the end of 2004. Current assets were N1,112,000, so during the year, ABC Nig invested N1,403,00-1,112,000 =N291,000 in current assets. As the firm changes its investment in current assets, its current liabilities will usually change as well. To determine the change in net working capital, the easiest approach is just to take the difference between the beginning and ending net working capital figures. Net working capital at the end of 2005 was N1,403,000 -389,000 (current liabilities) =N1,014,000 similarly at the end of 2004, net working capital was N1,112,000 –N428,000 (current liabilities) = N584, 000. So, given these figures, we have.

Table 3 ABC Nig

Change in Net Working Capital

	'000
Ending NWC	N1,014
-Beginning NWC	N684
Change in NWC	N330

Note: NWC = Net Working Capital

Given the figures we have come up with, we can then calculate the cash flow from assets. The total cash flow from assets it given by operating cash flow less the amount invested in fixed assets and net working capital. So, for ABC Nig, we have:

Table 4 ABC Nig.

2005 Cash Flow from Assets

	'000
Operating cash flow	N547
-Net Capital Spending	N130
-Change in Net Working Capital	N330
Cash Flow From Assets	N87

Remember, from the equation given earlier, cash flow from assets equals the sum of cash flow to creditors and cash flow to shareholders. We will consider that next.

Cash Flow to Creditors and Shareholders

The cash flow to creditors and shareholders represent the net payment to creditors and owners during the year. Their calculation is similar to that of cash flow from asset cash flow to creditors is interest paid less net new borrowing; cash flow to shareholders is dividend paid less net new equity raised.

1. **Cash flow to Creditors:** Suppose ABC Nig paid N70,000 interest to creditors. Long term debts rose by N454,000 –N408,000 =N46,000. So, ABC Nig. Paid Out N70,000 in interest, but it borrowed an additional N46,000. Net Cash Flow to creditors is thus:

Table 5 ABC Nig

2005 Cash Flow to Creditors

Interest paid	N70,000
-Net new borrowing	N46,000
	N24,000

2. Cash flow to shareholders: Supposing that dividends paid to shareholders amounted to N103, 000. To get now equity raised, we need to look at the ordinary share and paid –in surplus account. This account tells us how much stock the company has sold. During the year, this account rose by N40,000, so N40,000 is net new equity was raised. Given this, we have:

ABC Nig.

2005 Cash Flow to Shareholders

	‘000
Dividend Paid	N103
-Net new equity raised	N40
Cash flow to stockholders	N63

The last thing we need to do is to verify that the cash flow identify holds, to be sure that we didn’t make any mistakes. From the previous section, we known that cash flow from asset is N87,000. Cash flow to creditors and shareholders is N24,000 + N63,000 =N87,000, so every checks out.

Self Assessment Exercise

1. List the three major financial statements.
2. Which financial statement provides a summary of what the firm owns in terms of assets and what it owes to both its lenders and equity holders?
3. Assets and liabilities are broken down into what and what.

4. Payment to owners of business at the end of the business operation where a gain is made is known as?
5. What principle governs the construction of financial statement?

4.0 CONCLUSION

This unit has introduced you to some of the basics of financial statement; income statement, balance sheet and cash flow. In it we saw that the book values on an accounting balance sheet can be very different from market values. The aim of financial management is to maximize the market value of the stock not its book value.

5.0 SUMMARY

Financial statement remains the primary source of information for most investors and analyst. This unit attempts to explain the basics of financial statement and the generally accepted accounting principles that underlie their construction. As long as there is recognition that financial statement is a means to an end- which is understanding and valuing the firm – it is useful.

6.0 TUTOR MARKED ASSIGNMENT

1. Under what conditions will switching from cash based to an accrual –based accounting statement increase or decrease income why?
2. In company accounting net income and operating cash flow, name two items you typically find in net incomes that are not in operating cash flow.
3. Suppose a company's cash flow from asset was negative for a particular period. Is this necessarily a good sign or a bad sign?

Answers to Self-Assessment Exercise

1. Income statement, Balance sheet cash flow
2. Balance sheet
3. Current and Non-current
4. Dividend
5. Generally Accepted Accounting Principles (GAAP)

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UNIT 2 ANALYSIS AND INTERPRETATION OF BASIC FINANCIAL MANAGEMENT

CONTENTS

1.0 INTRODUCTION

In creating financial projections, we will refer to the financial statements created as pro forma financial statements. You may read about pro forma statements in the financial press and it is key to understand that pro forma statements are statements based on projections and they do not represent actual financial results. As with the cash budget, the sales estimate is a key element in the preparation of financial forecasts. Another key element is the prior year's financial statements. Along with these two key elements, you will need a long list of assumptions to support your financial statements projections. A very simple method of preparing an income statement projection is to base all items as a percentage of sales. This would involve using he prior year's income statement and calculate what each item is as a percentage of total sales. You would then use these calculated percentages to estimate your future expense amounts. As we work through the pro forma statements, we will use Ikwenoc Enterprise as our sample organization.

The income statement and balance sheet for Ikwenoc Enterprise are as follows:

Ikwenoc Enterprise

Income Statement

For the year ended 31st December, 2009

	N	N
Sales		50,000
Cost of Goods Sold:		
Direct labour	17,000	
Direct materials	7,000	
Overhead	3,000	
Total cost of Goods Sold		27,000
Gross Margin		23,000
Operating expenses		19,500
Operating income		3,500
Interest expenses		2,080
Net Income before tax		1,420
Tax Expense		568
Net Expense		852
Dividends		426
Transfer to Retained Earnings		426

Ikwenoc Enterprise

Balance Sheet

As at 31st December, 2009

	N
Debtors	1,500
Fixed Assets	7,000
Total Assets	9,000

2.0 OBJECTIVES

After studying unit, you should be able to:

- Sales estimates are crucial for preparing pro forma financial statement
- Percentage of sales method is an approach to preparing pro forma income statement
- A judgmental approach is used for the preparation of pro forma balance sheet

3.0 MAIN CONTENT

3.1 Pro forma Income Statement

If we use the simple approach of basing all projections on a percentage of sales basis, the first step in our forecast would be to convert the income statement above to the percentage of sales. The next step would be to obtain the sales forecast information in order that you can determine your sales figure for the coming year. With these two steps completed; you can then prepare your pro forma statement for the next year. Converting the above income statement to a percentage of sales gives you the following percentages and forecasted amounts for 2010 based on 12% increase in sales:

		2010
Sales	100%	56,000
Cost of Goods Sold:		
Direct Labour	34%	19,040
Direct Materials	14%	7,840
Overhead	6%	3,360
Total Cost of Goods Sold	54%	30,240
Gross Margin	46%	25,760
Operating Expenses	39%	21,840
Operating Income	7%	3,920
Interest Expense	4.16%	2,330
Net Income Before Tax	2.84%	1,590
Tax Expense	1.14%	636
Net Income	1.70%	954
Dividends	0.85%	477
Transfer to Retained Earnings	0.85%	477

This is a very straight forward method and is often used in organizations with some modifications. One of the key problems with this method, though, is that it assumes that all costs vary with sales and therefore ignores any fixed component of your expenses.

Organizations will normally identify those costs that are fixed and estimate the rate of change for these costs based on indicators such as inflation or expected rate increases. For example, if you plant rent is known to increase by 2% in the coming year, then your estimate for rent would be the current year rent expense plus an additional 2% and you would not calculate rent based on a percentage of sales.

It should also be noted that percentage of sales is not appropriate for certain specific expenses such as:

- Amortization /depreciation: This should be calculated from the current balances for capital assets plus the projected expenditures for the forecast year. Projected expenditures should be consistent with sales forecasts, as you need this capital to handle sales production.
- Interest income and expense: These items should be calculated on forecast future borrowing /investments.
- Dividends paid: This should be based on outstanding shares and projected dividend payout rates.

3.2 Pro forma

In preparing a pro forma balance sheet, there are several items for which using a percentage of sales is not appropriate, for example:

- Cash
- Capital assets
- Borrowings both short and long term
- Common and Preferred
- Retained earning

A better approach to prepare a balance sheet forecast is to use what is referred to as a judgmental approach what this involves is assessing how to best estimate each item on the balance sheet using a combination of methods for estimating. In preparing the balance sheet, there will need to be a 'plug' amount. This is an amount required to balance the balance sheet using the basic accounting equation that is assets = liabilities + shareholders equity.

If more assets are required to balance your statement then the plug figure is excess cash. If more liabilities are needed, then the plug figure is called external financing. We will extend our example of Ikwenoc to preparing a pro forma sheet for 2002 using the following assumptions:

1. No capital investments will be made in 2002

2. The amortization of capital assets for 2002 is projected to be and 500.
3. A new issue of shares will produce net proceeds of N1,000 in 2002.
4. Sales will increase by 12% in 2002 bringing a corresponding increase in accounts receivable
5. Net income in 2002 is forecast to be N954
6. The dividend payout rate is estimated to be 5% of net income

The process for solving this problem is:

a. Calculate the values of the assets and liabilities where you have the data to do it.
b. Determine the value of the line of credit (LOC) based upon the balance sheet equation.

The calculations under @ are as follows:

Debtors = 1.12 x 1,500 = 1,680

Fixed Assets =2001 balance + capital expenditure in 2002 –amortization in 2002 = 7,500 + 0- 500 = 7,500

Shares = shares at 2001 + net proceeds of new shares = 1,000 = 2,000

Dividend = net income x dividend rate = 954 x 0.5 = 477

Retained Earnings for 2002 = retained earnings for 2011

+ net income for 2002 – dividend = 5,500 +954 (net income)

- 477 (dividend) = 5,977

At this point we complete the blanks for the 2002 column as follows:

PRO FORMA BALANC SHEET

	2001	2002
Debtors	1,500	1,680
Fixed Assets	7,500	7,000
Total Assets	9,000	8,680
Creditors	2,500	?
Shares	1,000	2,000
Retained Earnings	5,000	5,977
Total liabilities and Equities	9,000	?

Applying balance sheet equation LOC = Total Assets – shares – retained earnings = 8, 680 – 2,000 – 5,977 = 703

We then add liabilities to equity = 703 + 2,000 + 5,9777 = 8,680, which equals the assets total.

We can then go back to completed the missing number in the balance sheet to achieve the finished result below.

PRO FORMA BALANC SHEET

	2001	2002
Debtors	1,500	1,680
Fixed Assets	7,500	7,000
Total Assets	9,000	8,680
Creditors	2,500	703
Shares	1,000	2,000
Retained Earnings	5,000	5,977
Total liabilities and Equities	9,000	8,680

It is important to note that judgment needs to be used throughout the preparation of your financial forecast. Historical data and ratios are not always an indication of what the future hold. Therefore, when preparing financial forecast, you should assess the impact of expected future events on the historical results before simply applying the historical rates.

Self-Assessment Exercise

1. Under the judgmental approach for developing a pro forma balance sheet, the 'plug' figure required to bring the statement into balance may be called the ?
2. The most common cash disbursement are?

4.0 CONCLUSION

In this unit, we have discussed that the percentage of sales method is a simplistic approach to preparing pro forma income statement. It is used in a modified manner where the historic percentage of sales is the default estimation if better information is not available while a judgmental approach is used for the preparation of pro forma balance sheet each line item

on the balance sheet is assessed individually rather than a blanket approach applied to all items

5.0 SUMMARY

We have in this unit given an insight of how, financial statement projections can be created. We have also explained how estimates could be used in the preparation of income statement and balance sheet. We concluded that the simplistic method is the best approach for preparing pro forma income statement while judgment approach is best used for preparing pro forma balance sheet.

6.0 TUTOR MARKED ASSIGNMENT

Use the following information to complete the balance sheet and sales information in the table that follows for medium industries using the following data.

Debt ratio: 65%

Quick ratio: 1.1 x

Total assets turnover: 2.5 x

Receivables turnover: 8.333

Gross profit margin on sales: 30%

Inventory turnover: 5x

Medium Industries

Balance Sheet

As at 31st December 2004

Cash _____	Creditors	_____
Debtors_____	Long Term debt	N300,000
Stock_____	Shares	_____
Fixed Assets_____	Retained Earnings	N225,000
Total Assets N1,000,000	Total Liabilities and Equity	_____
Sales_____	Cost of Goods Sold	_____

Answer to Self-Assessment Exercise

1. Cash purchases, dividends, and creditors
2. External financing required

7.0 REFERENCES / FURTHER READINGS

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Ross, S.A. Westerfield, R.W., Jordan B.D., and Roberts, and Gordon S. (1993) Fundamentals of Corporate Finance. First Canadian Edition. Irvin.

UNIT 3 CAPITAL BUDGETING

CONTENTS

1.0 INTRODUCTION

When firms consider projects, often they also have to consider the opportunities that these projects may create in the future in terms of opening up of new markets or expanding existing ones; thus. Options are embedded in these projects. When firms consider financing choices, they have to examine the consequences of such choices for their flexibility, which can be viewed as the option to take on projects. When firms are valued, the products patents they own which are options on these products have to be valued as well.

2.0 OBJECTIVES

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

- Explain what are the options embedded in capital budgeting.
- Explain how these options can be valued using option pricing models
- Identify how these values can be used in conjunction with traditional capital budgeting analysis.
-

3.0 MAIN CONTENT

3.1 Caveats on Applying Option Pricing Models

The opinion pricing models described in the preceding chapter can be used to value any asset that has the characteristics of an opinion, with some caveats. In this section, we apply

option pricing theory in a variety in a variety of cortexes. In man of the cases described below, the options being valued are not on financially traded assets (such as stocks or commodities) but are real options (such as those on projects or natural or natural resources reserves). We begin by offering a few caveats on the application of option pricing models to these cases and suggesting some adjustment that might need to be made to these models.

Real Option: A real option is an option on a non – traded asset, such as an investment project or a gold mine.

The Underlying Asset is not traded

Option pricing theory, as presented in both the binomial and the Black – Scholes models, is built on the premise that a replicating portfolio can be created using the underlying asset and riskless lending and borrowing. Although this is a perfectly justifiable assumption in the context of listed options on traded and arbitrage is therefore not traded, the values from option pricing models have to be interpreted with caution.

The Price of the Asset Follows a Continuous Process

As we mentioned in Chapter 27, the Black – Scholes option pricing model is derived under the assumption that the underlying asset's process is continuous (i.e., there are no price jumps). If this assumption is violated, as it with most real options, the model will underestimate the value of deep out – of –the – money options and lower variance estimates for at –the – money or in- the – money options. Another solution is to use an option pricing model that explicitly allows for price jumps, although the inputs to these models are often difficult to estimate.

The variance is known and does not change over the life of the options

Option pricing models assume that the variance is known and does not change over the option lifetime: this assumption is not unreasonable when option pricing theory is applied to long – term real options however, problems arise with this assumption, for the variance is unlikely to remain constant over extended periods of time and may in fact be difficult to estimate in the first place. Again, modified versions of the option pricing model exist that allow for changing variances, but they require that the process by which variance changes be modeled explicitly.

Exercise is instantaneous

The option pricing models are based on the premises that the exercise of an option is in stantaneous. This assumption may be difficult to justify with real options, however; exercise may require building a plant or constructing an oil rig, for example, actions that do not

occur in an instant. The fact that exercise takes time also implies that the true life of a real option is often less than the stated life. Thus, although a firm may own the rights to an oil reserve for the next 10 years, the fact that it takes several years to extract the oil reduces the life of the natural resource option the firm owns.

3.1.1 The Option to Delay a Project

Projects are typically analyzed based on their expected cash flows and discount rates at the time of this analysis. The net present value computed on that basis is a measure of its value and acceptability at that time. Expected cash flows and discount rates change over time, however, as does the net present value. Thus, a project that has a negative present value now may have a positive net present value in the future. In a competitors in taking projects, this may not seem significant. In an environment in which a project can be taken by only one firm (because of legal restrictions or other barriers to entry to competitors), however, the changes in the project's value over time give it the characteristics of a call option.

In the abstract, assume that a project requires an initial investment of X (in real dollars) and that the present value of expected cash inflows computed right now is *PV*. The net present value of this project is the difference between the two:

$$NPV = PV - X$$

Now assume that the firm has exclusive rights to this project for the next n years and that the present values of the cash inflows may change over that time because of changes in either the cash flows or the discount rate. Thus, the project may have a negative net present value right now, but it may still be a good project if the firm waits. Defining V as the present value of the cash flows, we can summarize the firm's decision rule on this project as follow:

If $v > x$ Project has positive net present value

$V < x$ Project has negative net present value

This relationship can be presented in a payout diagram of cash flows on this project, as shown in Figure 28.1, assuming that the firm holds out until the end of the period for which it has exclusive rights to the project.

Note that this payoff diagram is that of a call option – the underlying asset is the project; the strike price of the option is the investment needed to take the project; and the life of the option is the period for which the firm has rights to the project. The present value of the

cash flows on this project and the expected variance in this present value represent the value and variance of the underlying asset.

3.1.2 The Option to Expand a Project

In some cases, firms take projects in order to take on other projects or to enter other markets in the future. In such cases, it can be argued that the initial projects are options allowing the firm to take other projects, and the firm should therefore be willing to pay a price for such options. A firm may accept a negative net present values on future projects.

To examine this option using the same framework developed earlier, assume that the present value of the expected cash flows from entering the market or taking the new project is V, and that the total investment needed to enter this market or take this project is X, Furthermore, assume that the firm has a fixed time horizon, at the end of which it has to make the final decision on whether or not to take advantage of this opportunity. Finally, assume that the firm cannot move forward on this opportunity if it does not take the initial project. This scenario implies the option payoffs shown in figure 28.4. As you can see, at the expiration of the fixed time horizon, the firm will enter the new market or take in the new project if the present value of the expected cash flows at that point in time exceeds the cost of entering the market.

3.1.3 The Option to Abandon a Project

The final option to consider here is the option to abandon a project when its cash flows do not measure up to expectations. In our discussion of decision trees in Chapter 11, we noted that having the option to abandon will generally increase the value of a project and make it more acceptable. To illustrate the option to abandon, assume that V is the remaining value on a project if it continues to the end of its life, and L is the liquidation or abandonment value for the same project at the same point in time. If the project has a life of n years, the value – if it is higher, the project should be continued; if it is higher, the project should be continued; if it lower, the holder of the abandonment option could consider abandoning the project.

Payoff from owning an abandonment option = O if V >;

=L if V ≤ L

These payoffs are graphed in Figure 28.5, as a function of the expected project value. Unlike the prior two cases, the option to abandon takes on the characteristics of a put option.

To illustrate, assume that a firm is considering taking a 10- year project that requires an initial investment of $100 million in a real estate partnership, and where the present value of expected cash flows is $110 million. Although the net present value of $ 10 million is small, assume that the firm has the option to abandon this project anytime (by selling its share back to the other partners) in the next 10 years; if abandoned, the net salvage value of the project is $ 50 million. The variance in the present value of the cash flows from being in the partnership is 0.06.

The value of the abandonment option can be estimated by determining the characteristics of the put option:

Value of the underlying asset (s) =PV of cash flows from project
=$110 million
Strike price (k)= Salvage value from abandonment =$50 million
Variance in underlying asset's value =0.06
Time to expiration = Life of the project = 10 years
Dividend yield = 1/Life of the project = 1/10 (we are assuming that the project's present value will drop by roughly 1/n each year into the project)

Assume that the 10 – year riskless rate is 7%. The value of the put option can be estimated as follows:

Call Value = 110 exp (0.10) (10) (0.8455)-50 exp (-0.07) (10) (0.5961) =$ 19.41 million Put Value =$19.41-110exp(-.10)(10) +$3.77 million

The value of this abandonment option has to be added on to the net present value of the project of $10 million, yielding a total net present value with the abandonment option of $13.57 million. Note, however, that abandonment becomes a more and more attractive option as the remaining project life decreases, since the present value of the remaining cash flows will decrease.

Practical considerations: In the above analysis, we assumed, rather unrealistically, that the abandonment value was clearly specified up front and that it did not change during the life of the project. This may be true in some very specific cases, in which an abandonment option is built into the contract. More often, however, the firm has the option to abandon, and the salvage value from doing so can be estimated with noise up front. Furthermore, the abandonment value may change over the life of the project, making it difficult to apply the abandonment value may change over the life of the project, making it difficult to apply traditional option pricing techniques. Finally, it is entirely possible that abandoning a project may not bring in a liquidation value but may create costs instead; a manufacturing firm may have to pay severance to its workers, for instance. In such cases, it would not make sense to abandon, unless the cash flows on the project are even more negative.

Implications: The fact that the option to abandon has value provides a rationale for firms to build the flexibility to scale back or terminate projects if they do not measure up to expectations. Firms can do this in a number of ways. The first, and most direct way, is to build in the option contractually with those parties that are involved in the project. Thus, contracts with suppliers may be written on an annual basis rather than long term, and employees may be hired on a temporary basis rather than permanently. The physical plant used for a project may be leased on a short-term basis rather than bought, and the financial investment may be made in stages rather than as an initial lump sum. Building in this flexibility carries a cost, but the gains may be much larger, especially in volatile businesses.

4.0 CONCLUSION

In this unit, we considered three options embedded in investment project: the option to delay a project, the option to expand a project and the option to abandon a project. In all these cases, the underlying asset was the project and the options added value to the project. We then posed the argument that equity could be viewed as a call option on the firm and that equity would have value even when the firm value was less than the outstanding claims on it.

5.0 SUMMARY

We have discussed in details how decision made by firm in choosing projects can in turn create opportunities in the future in terms of opening up new markets or expanding existing ones.

6.0 TUTOR MARKED ASSIGNMENT

1. In a normal option, it almost never pays to exercise early. Why, in the case of a project option, might this not hold true.
2. Why is it so important that the firm have rights to the project in order to apply the option pricing approach to valuing the option to delay?

7.0 REFERENCES /FURTHER READING

Nnanna F. E. (2012) Adaptation from ACC, 405 Corporate Finance, (First Edition), Lagos: NOUN Publishers

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UNIT 4 BUSINESS MERGERS AND TAKEOVERS

CONTENTS

1.0 INTRODUCTION

Firms merge with or acquire other firms for a number of reasons. In the 1960s and 1970s, firms such as Gulf and Western, and ITT built themselves into conglomerates by acquiring firms in other lines of business. In the 1980s, firms such as time, Beatrice, and RJR Nabisco were acquired by other firms, their own management or wealthy raiders who saw potential value from restructuring or breaking up these firms. Through time, firms have also acquired or merged with other firms to gain the benefits of synergy, either in the form of higher growth, as in Disney's acquisition of Capital Cities, or lower costs.

2.0 OBJECTIVES

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

- Explain how widely used is synergy as a motive for acquisitions? What are the different forms synergies can take? How should synergy be valued?
- Explain if diversification is a good motive for acquisition.
- Explain what is the value of controlling a firm? How should the value of control be estimated?
- Explain what the empirical evidence tells us about the prices paid in acquisitions and the motives for such acquisitions?

3.0 MAIN CONTENT

3.1 Classification of Acquisitions

There are a number of ways in which one firm can acquire another. In a merger, the boards of directors of two firms agree to combine and seek stockholder approval for the combination. In most cases, at least 50% of the shareholders of the target and the bidding firm have to agree to the merger. In a purchase of assets, one firm acquires the assets of another, although a formal vote by the shareholders of the firm being acquired is still needed. In a tender office, one firm offers to buy the outstanding stock of the other firm at a specific price and communicates this offer in advertisements and mailings to stockholders. By doing so, it by passes the incumbent management and board of directors of the firm. Consequently, tender offers are used to carry out hostile takeovers.

Tender Offer: This is an offer to buy the existing shares of a company at a specified price, with the intent of taking over the company.

Another difference between mergers and tender offers is that, in a merger, the acquired firm often ceases to exist as a separate entity after the acquisition. In a tender offer, the acquired firm will continue to exist as long as there are minority stockholders who refuse to tender. From a practical standpoint, however, most tender offers eventually become mergers, if the acquiring firm is successful in gaining control of the target firm.

3.2 Motives Behind Acquisition

A number of motives have been proposed for acquisitions. The simplest rationale is undervaluation – that firms that are undervalued by financial markets, relative to their true value, will be targeted for acquisition by those who recognize this anomaly. Another rationale, used widely to explain the significant premiums paid in most acquisitions. Is synergy, which refers to the potential additional value from combining two firms, either from operational or financial sources? Yet another explanation is based on a market for corporate control, in which poorly managed firms are taken over and restructured by the new owners, who lay claim to the additional value. Finally, it has been suggested that managerial self –interest and hubris are the primary, though unstated, reasons for many takeovers.

Synergy: This is the increase in value from combining two firms into one entity; that is, it is the difference in value between the combined firm and the sum of the individual firm values.

3.3 Historical Perspective of Mergers and Acquisition

Merger and takeover activity in the United States has occurred in waves, with difference motives behind each wave. The first wave occurred in the early part of this century, when companies like U.S. Steel and Standard Oil were created by acquiring firms within an industry with the explicit objective of dominating these industries and creating monopolies. The second wave coincided with the bull market of the 1920s, at which time firms again embarked on acquisitions as a way of extending their reach into new markets and expanding market share. During this period, firms like General Foods and Allied Chemical came into being. The third wave occurred in the 1960s and 1970s, when firms such as Gulf and Western focused on acquiring firms were acquired primarily with the intent of restricting the firms. In some cases, the acquisitions were financed heavily with debt and were initiated by the managers of the firms being acquired. This wave reached its zenith with the acquisition of RJR Nabisco, but wanted toward the end of the decade, as deals became pricier and it became more difficult to find willing lenders.

Interestingly, merger activity seems to increase in years in which the stock market does well, which is counter to what one would expect if the primary motive for acquisitions were undervaluation. Mergers involved oil companies, whereas the focus shifted to food and tobacco companies in the latter half of the decade and shifted again to media and financial service firms in the early 1990s.

3.4 Empirical Evidence on Value Effects of Takeovers

Substantial empirical evidence exists concerning the effects of takeovers on the value of both the target and bidder firms. The evidence indicates that the stockholders of target firms are the clear winners in takeovers –they earn significant excess returns not only around the announcement of the acquisitions but also in the weeks leading up to it. Jensen and Ruback (1983) reviewed 13 studies that look at abnormal returns around holders in successful tender offers and 20% to target stockholders in successful mergers. Jarrell, Brickley, and Netter (1988) reviewed the results of 663 tender offers made the 1970s, and 30% between 1980 and 1985. Many of the studies report a run –up in the stock price prior or the takeover announcement; this finding suggests either a very perceptive financial market or leaked information above prospective deals.

Some attempts at takeovers fail, either because the bidding firm withdraws the offer or the target firm fights it off. Bradley, Desai, and Kim (1983) analyzed the effects of takeover failures on target firms are taken over within 60 days of the first takeover failing, earning significant abnormal returns (50% to 66%).

The effect of takeover announcements on bidder firm stock prices is not as clear cut. Jensen and Ruback report abnormal returns of 4% for bidding firm stockholders around tender offers and no abnormal returns around mergers. Jarrell, Brickley, and Netter, in their examination of tender offers from 1962 to 1985, note a decline in abnormal returns to bidding firm stockholders from 4.4% in the 1960s to 2% in the 1970s to -1% in the 1980s. Other studies around the announcement of takeovers; thus, shareholders may be skeptical about the perceived value of the takeover in a significant number of cases.

When an attempt at a takeover fails, Bradley, Desai, and Kim (1983) report negative abnormal returns of 5% to bidding firm stockholders around the announcement of the failure. When the existence of a rival bidder in figured in, the studies indicate significant negative abnormal returns (of approximately 8%) for bidder firm stockholders who lose out a rival bidder within 180 trading days of the announcement and no abnormal returns when no rival bidder exists.

4.0 CONCLUSION

Valuing a firm for a takeover is not an easy task. In addition to all the complexities associated with standard valuation, other roadblocks have to be negotiated before arriving at a final answer. The first is the effect of synergy, assuming it exists and can be described in sufficient detail to be built into the valuation. The second is the impact on value of management changes the firm: the potential increase in value is much larger for badly managed firms. The third is the effect on value of managed firms. The third is the effect on value of additional leverage that may be taken on, to finance a takeover.

5.0 SUMMARY

The entire question of valuation in takeovers is framed by the strong biases in the process to justify decisions that have already been made. The use of multiples and comparable firms provides plenty of opportunity for biases to enter the process. Finally analysts doing a valuation for a takeover do not have the luxury of drawing on the law of large numbers to bail them out, unlike portfolio managers, who can choose to create portfolios of undervalued firms and hope that, on average, they come out ahead.

6.0 TUTOR MARKED ASSIGNMENT

1. In a merger of two firms – one with excess cash/poor projects, and the other with great projects/cash shortages – which firm will get the larger share of the synergy benefits? Explain
2. Which of the three types of mergers is most likely to spark government intervention or regulation, and why?

7.0 REFERENCES /FURTHER READING

Nnanna F. E. (2012) Adaptation from ACC 405, Corporate Finance, (First Edition), Lagos: NOUN Publishers

Ross S.A et al (2006), Fundamental of Corporate Finance, USA: Mc Graw – Hill Inc.

Damodaram A. (1997), Corporate Finance: Theory and Practice, USA: John Wiley and Sons Inc.

UNIT 5 DETERMINATION AND IMPLICATIONS OF DIVIDEND POLICY

CONTENTS

1.0 INTRODUCTION

In this unit, we would provide a frame work that considers how cash generated from projects should be returned to shareholders and the form this cash should take.

2.0 OBJECTIVES

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

- Explain when a firm should be pressured to increase its payout to stockholders and how such a firm should defend it.
- Explain when a firm be pressured to reduce its payouts to stockholders and what are the consequences of excessive dividends.
- Explain what types of firms have the most flexibility in setting dividend policy?

- Explain how firms should measure their dividend policies against comparable firms.

3.0 MAIN CONTENT

3.1 Trade offs

A firm has to walk a tightrope when it established its dividend policy. On the one hand, paying too much in dividends creates several problems: the firm may find itself short of funds for new investments and may have to incur the cost associated with new security issues or capital rationing, and the investors receiving the dividends may face a much larger tax liability. On the other hand, paying too little in dividends can also create problems. For one, the firm will find itself with a cash balance that increases over time, which can lead to investments in ''bad'' projects, especially when the interests of management in the firm are different from are different from those of the stockholders. In addition, praying too little in dividends may transfer wealth from stockholders to bondholders to bondholders, especially if bond prices are set on the assumption that the firm will maintain a reasonable dividend payout.

3.2 Determinates of Dividend Policy

Concerning the tradeoff noted above, we would argue that a firm's dividend policy should be determined by the following characteristics

Investment Opportunities: Other things remaining equal, a firm with more investment opportunities should pay a lower fraction of its earnings as dividends than should a stable firm. As a practical measure, the quality of a firm's projects (can be measures by comparing its returns on equity (or capital) to its cost of equity (or capital).

Stability in Earnings: Firms with unstable earnings tend to pay out a much lower fraction of their earnings as dividends because they are concerned about their ability to maintain these dividends. Conversely, firms with stable and predictable earnings typically pay out a much larger proportion of their earnings as dividends.

Degree of Financial Leverage: Higher financial leverage may reduce dividends for two other reasons, as well. First, as firms borrow more, they are much more likely to face covenants on dividend policy, restricting not only the dollar dividends but crates a commitment to making interest payments. Which reduces the free cash flow available to managers? Because increasing dividends accomplishes the same goal, it can be argued that high financial leverage and high dividends are all tentative approaches to keeping managers disciplined.

Signaling Incentives: Increases in dividends generally operate as positive signals of future cash flows, resulting in increases in value, whereas cut in dividends Operate intends are costly to the firm (by increasing their dependence on external financing) and to its stockholders (by creating a tax liability), it can be argued that alternative signals may be available to the firm which convey the same information at much less cost.

Stockholder Characteristics: A firm whose stockholders like dividends will generally pay a much higher proportion of its earnings as dividends than will one without such stockholders.

3.3 Framework for Analysing Dividend Policy

In applying a rational framework for analysing dividend policy, a firm will attempt to answer two questions:

1. How much cash is available to be paid out as dividends, after meeting capital expenditure and working capital needs to sustain future growth, and how much of this cash is paid out to stockholders?
2. How good are the projects that are available to the firm?

In general, firms that have good projects will have much more leeway on dividend policy, since stockholders will expect that the cash accumulated in the firm will be invested in these projects and eventually earn high returns. By contrast, firms that do not have good projects will find themselves under pressure to pay out all of the cash that is available as dividends.

3.3.1. How much can a firm pay out or return Shareholders

To estimate how much cash a firm can afford to return to its stockholders, we begin with the net income – the accounting measure of the stockholders earnings during the period – and convert it to a cash flow as follows. First, any capital expenditures are subtracted from the net income, because they represent a cash outflow, Depreciation, on the other hand, is added back in because it is a noncash charge. The difference between capital expenditures and depreciation is referred to as net capital expenditures and is usually a function of the growth characteristics of the firm. High –growth firms tend to have net capital expenditures relative to earnings, whereas low – growth firms tend to have high net capital expenditure (because depreciation is offset by capital expenditures). Second, since increases in working capital drain a firm's cash flows. While decreases in working capital increase the cash flows available to equity investors, firms that are growing fast, in industries with high working capital. Because we are interested in the cash – flow effects, we consider only

3.3.2 What kind of Projects Does the firms have?

The alternative to returning cash to stockholders is reinvesting the funds back into the firm. Consequently, a firm's investment opportunities provide another dimension for analyzing dividend policy. Other things remaining equal, a firm will better projects typically has more flexibility in setting dividend poly and defending it against stockholders.

3.3.3 Poor Projects and Low Pay Out

In this section, we examine the consequences of paying out much less in dividends than a firm has available in cash flows, while facing poor investment opportunities. We also discuss stockholder reaction and management response to the dividend policy.

Consequence of Low Payout

When a firm pays out less than it can afford to in dividends, it accumulates cash. If a firm does not have good projects (now or in the future) in which to invest this cash, it faces several possibilities. In the most benign case, the cash accumulates in the firm and is invested in financial assets. Assuming that these financial assets are fairly priced, these investments are zero net present value projects and should not negatively affect value. However, the firm may find itself the target of an acquisition. Financed in part by its large holding of liquid assets.

As the cash in the firm accumulates, the managers may be tempted to take on projects that do not meet their hurdle rate requirements, either to reduce the likelihood of lower the value of the firm. Another possibility, and one fraught with even more danger for the firm, is that management may decide to use the cash to finance an acquisition and that such an acquisition will result in a transfer of wealth to the stockholders of the acquired firm. Although managers will argue that such acquisitions make sense from a strategic and synergistic viewpoint, history is replace with cases of firms that used large cash balances, acquired over years of paying low dividends while generating high free cash flows to equity, to finance takeovers that detract from stockholder value.

Stockholder Reaction

Given the range of possible outcomes described above, it is not surprising that the stockholders of firms that pay insufficient dividends and do not have ''good'' projects put pressure on managers to return more of the cash back to them. In fact, this is the scenario that originally led to the development of the ''free cash flow'' hypothesis. Under this hypothesis, which is described more fully in Chapter 16, managers cannot be trusted with

large cash flows that they can spend at their dissertation. Consequently, it is argued, firms should borrow more and create the commitment to making interest and principal payments, thereby forcing managers to be more disciplined in their investment choices. An alternative to taking on debt is to force firms to disgorge more of these cash flows as dividends.

Management's Defense

Not surprisingly, managers of firms who pay out less in dividends than they can afford to argue that this policy is in the best long –term interests of the firm. They maintain that although the current project returns may be poor, future projects will be both more plentiful and lucrative (in terms of returns). This argument may work initially when presented, but it will become progressively more difficult to sustain if the firm continues to post poor returns on its projects. Managers may also argue that the cash accumulation is needed to meet demands arising from future contingencies. For instance, cyclical firms will often argue that large cash balances are needed to tide them over the next recession.

3.3.4 Good Projects and Low Pay Out

Although the outcomes for stockholders in firms with poor projects and low dividends payout ratios range from neutral to terrible, the results may be more positive for firms that have a better selection of projects and whose incumbent management has had a history of earning high returns for the stockholders.

Consequences of Low Payout

The immediate consequence of paying out less in dividends than is available in free cash flow to equity is the same for these firms as it is for firms with poor project choice: the cash balance of the firm increases to reflect the cash surplus. The long – term effects of cash accumulation are generally much less negative for these firms, however, for the following reasons:

1. The presence of projects that earn returns greater than the hurdle rate increases the likelihood that the cash will be productively invested in the long term.
2. The high returns earned on internal projects reduce both the pressure and the incentive to invest the cash in poor projects or in acquisitions.
3. Firms that earn high returns on their projects are much less likely to be targets of takeovers, reducing the need to reduce the cash balance quickly.

To summarize, firms that have a history of taking good projects and that expect to continue to have a ready supply of such projects may be able to sustain a policy of retaining cash rather than paying out dividends. In fact, they can actually create value in the long term by using this cash productively.

Stockholder Reaction

Stockholders are much less likely to feel a threat to their wealth in firms that have historically shown good judgment in picking projects. Consequently, they are more likely to acquiesce when managers in those firms withhold cash rather than pay it out. This suggests that, although the free cash – flow hypothesis has a solid basis for arguing that managers cannot be trusted with large cash balances, it does not apply equally across all firms. The managers of some firms earn the trust of their stockholders because of their capacity to deliver extraordinary returns on both their projects and their stock over long periods of time. This discussion helps resolve the tradeoff firms face between satisfying their long-stockholders force firms with great projects to return too much cash too quickly is not based in fact. Rather, stock older pressure for dividends or stock repurchases is greatest in firms whose projects yield marginal or poor return, and least in firms whose projects have high returns.

Management Responses

Managers in firms that have posted stellar records in project and stock returns clearly have a much easier time convincing stockholders of the desirability of withholding cash rather than playing it out. The strongest argument for doing this is that the cash will be used productively in the future and earn above market returns for the stockholders. Not all stockholders will buy this argument; however, some will argue that future projects may be less attractive than past projects, especially when the industry in which the firm is operating is maturing. For example, many specialty retail firms, such as the Limited, as margins and growth rates in the business declined.

Thus far, we have assumed that good returns on projects and good returns on stocks go hand in hand. Although this may be true in general

3.3.5 Poor Projects and High Pay Out

In many ways, the most troublesome combination of circumstances occurs when firms pay out much more in dividends than they can afford while posting less – than –seller returns on

their projects. These firms have problems cannot be solved adequately without addressing the investment problem.

Consequences of High Payout

When a firm pays out more in dividends than it has available in free cash flows to equity, it is creating a cash deficit. The deficit has to be funded by drawing on the firm's cash balance, issuing stock to cover shortfall, or borrowing money to find its dividends. If the firm uses the first approach, it will reduce equity and raise its debt ratio.

The second approach allows the firm to neutralize the drop in equity created by the excess dividends with new stock issues; the downside is the issuance cost of the stock.

The third approach forces the firm to increase its debt while reducing equity, accentuating the increase in the debt ratio. Because the free flows to equity are after capital expenditures, it can be argued that this firm's real problem is not that it pays out too much in dividends, but that it invests too much in bad projects. Cutting back on these projects would therefore increase the free cash flow to equity and eliminate the cash shortfall created by paying too much in dividends.

Stockholder Reaction

The stockholders of a firm that pays much more in dividends than it has available in free cash flow to equity are faced with a quandary: On the one hand, they may want the firm to reduce its dividends to eliminate the need for additional borrowing or equity issues each year. On the other hand, the firm's record in picking projects does not evoke much trust that the management is using funds wisely, and it is entirely possible that the funds saved by not paying the dividends will be used on other poor projects as well. Consequently, these firms will first have to address their investment problems and then cut back on dividends.

It is therefore entirely possible, especially if the firm is underleveraged to begin with, that the stockholders will not push for lower dividends but will try to get managers to improve project choice instead. It is also possible that they will push the firm to eliminate enough poor projects so that the free cash flow to equity covers the expected dividend payment.

Management Response

The managers of firms with poor projects and dividends that exceed free cash flows to equity may contest the notion that they have investment problems rather than dividend problems. They may also disagree that the most efficient way of dealing with the problem is to eliminate some of the capital expenditures. In general, their arguments will mirror those

used by any firm with a poor investment track record: the period used to analyze project returns was not representative; it was an industry wide problem that will pass; or the projects have long gestation periods.

Overall, it is unlikely that these managers will convince the stockholders of these good intentions on future projects. Consequently, there will be a strong push toward cutbacks in capital expenditures, especially if the firm is borrowing money to finance the dividends and does not have much excess debt capacity.

3.3.6 Good Projects and High Pay Out

The costs of trying to maintain unsustainable dividends are most evident in firms that have a selection of good projects to choose from. The cash that is paid out as dividends could well have been used to invest in some of these projects, lending to a much higher return for stockholders and higher stock prices for the firm.

Consequences of High Payout

When a firm pays out more in dividends than it has available in free cash flow to equity, it is creating a cash shortfall. It this firm also has good projects available currently that are not being taken because of capital rationing constraints, it can be argued that the firm is paying a hefty price for its dividend policy. Even if the projects are passed up for other reasons. It can be argued that the cash this firm is paying out as dividends would earn much better returns for it if left to accumulate in the firm.

Dividend payments also create a cash deflect that now has to be met by issuing new stock carries a potentially large issuance cost, which reduces firm value. On the other hand, if the firm issues new debt, it might become overleveraged, and this may reduce value.

Stockholder Reaction

Rationally, the stockholders' best option in this case is to insist that the firm pay out less in dividends and take on better projects. This may not happen, however, if the firm has paid high dividends for an extended period of time and has acquired stockholders who value high dividends even more than they value the firm's long –term health. Even so, stockholders may be much more amenable to cutting dividends and reinvesting the cash in the cash in the firm has a ready supply of good projects at hand.

Management Response

The managers of firms that have good projects, while paying out too much in dividends, have to figure out a way to cut dividends and at the same time differentiate themselves from those firms that are cutting dividends owing to declining earnings. The initial suspicion with which markets view dividend cuts can be overcome in part by providing markets information on project quality at the time of the dividend cut. If the dividends have been paid for a long time, however, the firm may have acquired stockholders who like the high dividends any may not be particularly interested in the projects that the firm has available. If this is the case, the initial reaction to the dividend cut, no matter how carefully packaged, will be negative. However, as disgruntled stockholders sell their holdings, the firm will acquire new stockholders who may be more willing to accept the lower dividends and higher investment policy.

4.0 CONCLUSION

In this unit, we expanded on many of the concepts introduced in the previous one and developed a general framework for analyzing dividend policy. Here, we emphasized the link between investment, financing, and dividend policy by noting that firms with a history of talking on good projects and the potential for more good projects in the future acquire much more control over their dividend policy. In particular, they can pay much less in dividends than they have available in cash flows and hold on to the surplus cash, because stockholders trust them to invest the cash wisely. In contrast, stockholders in firms with a history of poor project choice may be much less sanguine about retention of cash, because of the fear that the cash will be invested in poor projects.

Some firms set dividends based on the actions of comparable firms. We examined an analysis based on a narrow definition of comparable firms. We examined an analysis based on a narrow definition of comparable firms (firms in the same line of business) and one based on a broader definition. (The determinants of dividend policy were examined in the entire population).

There is one point worth reemphasizing here. In this chapter, we have developed a framework designed to answer the question of how much cash should be returned to stockholders. Although dividends may be the most widely used approach to returning cash to stockholders, alternatives are available to most firms. Some of these alternatives are examined in the next chapter.

5.0 SUMMARY

Some firms set dividends based on the actions of comparable firms. (Firms in the same line of business) and one based on broader definition. (The determinants of dividend policy were examined in the entire population). In this unit, we have developed a framework designed to answer the question of how much cash should be returned to stockholders. Although dividends may be the most widely used approach to returning cash to stockholders, alternatives are available to most firms.

6.0 TUTOR MARKED ASSIGNMENT

Assume that you are a stockholder in a firm that has had a good history of project choice but has also accumulated a substantial amount of cash. What are some actions that would lead to reassess your willingness to allow the firm to retain cash moving forward?

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MODULE III

UNIT 1 VALUATION OF STOCKS AND BONDS

CONTENTS

1.0 INTRODUCTION

Unit 2 Mathematics of finance where concept of value of money was discussed is designed to lunch us into understanding the concept of valuation of stock and bonds. We shall in this unit discuss the relationship of risks and returns as they affect the values of stock and bonds.

2.0 OBJECTIVES

By the end of this unit you should be able to explain:

- Basic concepts of stock and bonds valuation
- Various stock and bond valuation techniques and their and their
- implications on financial decision.

3.0 MAIN CONTENT

3.1 Stock and Bonds Valuation Concepts

There are many concepts of value stocks and bonds that are used for different purposes. These concepts are:

a. Book Value:

This is the historical accounting value of a given asset or security less its accumulated depreciation over the years. For instance, the value of a corporation is equal to the Naira difference between the corporation's total assets and its liabilities and preferred stock as reflected on its balance sheet. Since book value is based on historical values, it maybear little relationship to an asset's or corporation's market value.

b. Market Value:

This is the current market price of a given asset or security at which it is being sold or purchased. Generally market value per share is expected to be higher than the book value per share for growing profitable companies.

c. Replacement Value:

This is the amount that a company would be required to spend if it were to replace its existing assets in the current condition.

e. Going Concern Value:

This is the amount that a company could be sold for as a continuing operating business. Generally going concern value is higher than liquidation value. Most of the valuation models we will discuss in this chapter assume going concern values of companies' rather than liquidation value.

f. Intrinsic Value:

This is the price a security ought to be if properly priced based on all factors bearing on valuation such as assets, future prospects, earnings, spread of risk and management. When capital market is highly informed and efficient, the current market price of a security should fluctuate closely around its intrinsic value. The intrinsic value of a security should always be compared with market price of a security for a rational decision to be made. Whenever the intrinsic value of a security is greater than the market price of the security, the security is said to be under valued as such it is worth buying and vice-versa.

g. Liquidation Value:

This is the amount that a company could realize if it sold its asset separately from its operating organization. When a company decides to terminate its business operation, the assets of the company are said to have liquidation value if they are to be sold. Generally, present value, which reveals the intrinsic value, is the real concept of value, which will be discuss in this unit, It should be noted that Equity stock is another name for common stock.

3.2 Common/Equity Stock Valuation

The returns of a common stock consist of cash dividends and capital gains that are highly uncertain. The uncertainty associated with returns

from common stock makes the valuation of common stock difficult. Generally returns on preferred stocks and bonds are fixed and predictable, whereas the returns on common stock are variable depending on the performance of the enterprise. Notwithstanding the variability of returns on common stocks, the expected returns in forms of dividends and capital gains are the major variables employed in common stock valuation.

Since common stocks have no maturity date, unlike bonds, we begin by assuming a one– year holding period. This can be determined by using the following formula.

$$Ke = \frac{E(D_1) + (E(P_1) - Po)}{Po}$$

Where
- Ke = Cost of common/equity stock
- $E(D_1)$ = Expected dividend per share in period 1
- $E(P_1)$ = Expected market price per share in period 1
- Po = current market price of share.

Example One

Assuming that Mohammed Plc's common stock has an expected dividend per share, E(D), of N6, the current price of a share (Po) is N65, and the expected price at the end of the year, E(P1), is N73, determine the expected return on the share, (Ke), for a one – year holding period.

$$Ke = \frac{E(D_1) + (E(P_1) - Po)}{Po}$$

$$Ke = \frac{N6+(N73-N65)}{N65} = 0.2154 = 21.54\%$$

This implies that the expected return on the security holding for one – year period, (ke) is 21.54%. Therefore, depending on the

investor's required rate of return (IRR), if Ke > RRR, he should go for this investment and vice versa.

Equation above can be used to determine current price of the share if we are given investor's forecast of dividend and price, and the expected return of other equally risky shares. Thus,

$$Po = \frac{ED_1 + E(P_1)}{1 + Ke}$$

The above formula is achieved by making current price (Po) the subject of the fomula.

Example Two

Assuming that Mohammed Plc's shares in the above example one is= E (P_1) = N73 and E(D_1) = N6. If the expected returns for securities in the same risk class, as Mohammed Plc are 21.54 percent, determine current price of the share.

Solution

$$Po = \frac{N6+N73}{(1 + .2154)} = \frac{N79}{1.2156} = N65$$

Whenever the estimated value of the share, which is the intrinsic value, is greater than the actual market price, the share is said to be undervalued, investors will want to buy more of the shares. For instance if the market of price of Mohammed Plc share is less than N55, which is calculated value, investors would like to buy more of the shares of Mohammed Plc, and vice versa.

If the holding period is for a longer period more than one year, as it is with most investor, then equation can be expressed as follows:

$$Po \quad \frac{E(D_1)}{(1 \quad Ke)} \quad \frac{E(D_{12})}{} \qquad \frac{E(D_{n3}) \quad E(Pn)}{(1 \quad Ke)^2}$$

$$= \sum_{t=1}^{n} \frac{E(Dt)}{(1+Ke)^t} + \frac{E(Pn)}{(1+Ke)^n}$$

Where

E(Dt) = Expected dividend at the end of period t

Ke = Expected return on a share or cost of equity

E(Pn) = Market price expected to prevail at period n. Po = Current market price

= Sum of the discounted dividends from period 1 to n

Ke will be assumed constant in a multi period model.

Example Three

Assuming that Mohammed Plc shares in the above example expected dividend after a year, E(D1), is N6, and it is expected to grow at a rate of 10 percent per annum, the expected dividend after two years, E(D2), will be N6 (1.10) = N6.60; after three years. N6.0 $(1.10)^2$ = N7.26 and so on. Assume that the expected return on the share is 24 percent, whereas the expected price of the share at the end of 5 year is N75, calculate the current market price of the share.

Solution

$$Po \quad \frac{N6}{(1.24)} \quad \frac{N6.60}{(1.24)^2} \quad \frac{N7.26}{(1.24)^3} \quad \frac{N7.99}{(1.24)^4} \quad \frac{N8.78}{(1.24)^5} \quad \frac{N75}{(1.24)^5}$$

= N16.09 + N25.58 = N41.67

The value of dividends in N16.09 and value of the price at the end of five years is N25.58.

If the holding is infinite ( ) i.e., n approaches to infinity, the present value of the future price will approach zero. Thus, the price of a share today is the present value of an infinite stream of dividends.

$$Po \quad \frac{E(D_1)}{(1 \quad Ke)} \quad \frac{E(D_{12})}{(1 \quad Ke)^2} \qquad \frac{E(D_n \quad)}{(1 \quad Ke)^n}$$

$$= \sum_{t \ 1}^{n} \frac{E(Dt)}{Ke)^t}$$

The above equation relies on dividends as its foundation as such it is called Dividend Capitalization Model. If common stock dividends do not grow over time but remain constant, that is E(D1) – E(D2) = --- E(D), then equation will become:

$$Po = \frac{E(D)}{Ke}$$

Example Four

Zaco Inc. is currently paying N8.0 dividend per share. This level of dividends is expected to be maintained into the future. If the capitalization rate, i.e. cost of equity is 16 percent, determine the current market price per share.

Solution

$$Po = \frac{N8.0}{0.16} = N50$$

However, if dividends are expected to grow, but at a constant rate, the equation will become.

$$Po \quad \frac{Do(1 \quad g)^t}{(1 \quad Ke)^t} \quad \frac{Do(1 \quad g)}{(1 \quad Ke)} \quad \frac{Do(1 \quad g)^2}{(1 \quad Ke)^2} \quad \ldots \quad \frac{Do(1 \quad g)}{(1 \quad Ke)}$$

Where:

Do = dividend at time zero (that is a current dividend).

g = constant growth rate of dividend

If Ke is greater than g (a reasonable assumption since a dividend growth rate which is always greater than the capitalization rate would imply an infinite stock value), the equation can be expressed as follow:

$$Po = \frac{E(D_1)}{Ke - g}$$

Where: ED_1 = the expected dividend per share at time 1.

The above equation is the perpetual growth model in which the relationship between Ke and g is assumed to be constant and perpetual.

To obtain the investor's required rate of return, Ke, we can rearrange equation as follows:

$$Ke = \frac{E(D_1)}{Ke - g} + g$$

Example Five

Assuming the Mohammed Plc has recently paid N7.5 each dividends and it is expected to grow at an 8 percent rate per annum forever, the dividend per share expected at t = 1 is N7.5 (1.08). If the market capitalization rate is 20 percent; determine the present value of the share.

Solution:

$$Po = \frac{N8.10}{.20 - .08} = N67.50$$

For most companies in the mature stage of their life cycle, the perpetual growth model is often reasonable.

3.3 Preferred Stock Valuation

Generally, preferred stock can be issued with or without maturity period. The holders of preferred stock get dividends at a fixed rate and have a preference over common stockholders.

When preferred stock has maturity period, the market price of the stock, Po, can be determined by the foll0owing formula:

$$Po = \frac{PD_1}{(1+K_P)} + \frac{PD_2}{(1+K_P)^2} + - - - + \frac{PD_n + P_n}{(1+K_P)^n} = \sum_{t=1}^{n} \frac{PD_t}{(1+K_P)^t} + \frac{Pn}{(1+K_P)_n}$$

Where:

PDt = the preference dividend per share in period t,

Kp = the required rate of return on preferred stock,

Pn = the value of the preferred stock on annuity.

If the preferred stock has not maturity date i.e. it is irredeemable, the market price of the stock, Po, can be determined by the following formula.

$$Po = \frac{PD}{K_P}$$

Rearranging the above equation to determine the yield on an irredeemable preferred stock would be given as follows:

$$Po = \frac{PD}{Po}$$

Example Six

Felix Limited has issued 13 percent stocks with a nominal value of N30. This type of preferred stock is currently yield 11 percent. Determine the market price if: the preferred stocks have seven years to maturity. The preferred stocks are irredeemable.

Solution:

(i) $Po = \sum_{t=1}^{n} \frac{PD_t}{(1+K_P)^t} + \frac{Pn}{(1+K_P)^n} = PD_t \left[\frac{1-(1+Kp)^{-n}}{Kp}\right] + \frac{Pn}{(1+Kp)^n}$

PD_t = 13% x N30 = N3.90

Kp = 11 percent

Pn = N30

n = 7 years

$:.Po = N3.90 \frac{1-(1.11)^7}{0.11} \quad \frac{N30}{(1.11)^7}$

= #18.38 + N14.45

= #32.83

(ii). $Po = \frac{PD_t}{Kp} \quad \frac{N3.90}{0.11} \qquad N35.45$

Example Seven

Assuming in the above example (ii) we know the dividend preferred stock, PD, is N3.90 and the market price, Po, is N35.45. if we do not know the current yield of the stock, it can be determined as follows:

$$Kp \quad \frac{PD}{Po} \quad \frac{N3.90}{N35.45} \quad 11\%$$

3.4 Valuation of Bonds

A bond is a long term debt instrument that generally earns a fixed amount to the investor, period after period, until it is finally retired by the issuing firm. The claims of bondholders are senior to all other securities holders in terms of earnings and assets distribution in case of liquidation. Because of this seniority in terms of claims by bondholders, usually the return of bonds in the name of interest is lower than the returns on other securities. Generally bonds are redeemable, i.e. they have maturity date, but there are instances where perpetual bonds are issued, as such they are irredeemable.

To determine the market price of a bond, Po, which has a finite maturity we have to discount the values of cash flows expected from the debt instrument i.e., the annual interest payment plus its terminal, or maturity value. The discounted value of the cash flows will be calculated using the present value concept. By comparing the market price with its present value, it can be determined whether the bond is undervalued of the instrument.

The following formula can be used to determine the market value of a bond with finite maturity.

$$Po = \frac{I}{(1+Kd)^1} + \frac{I_2}{(1+Kd)^2} + - - - + \frac{I_n + Pn}{(1+Kd)^n} = \sum_{t=1}^{n} \frac{I_t}{(1+Kd)^t} + \frac{Pn}{(1+Kd)^n}$$

Where:

Po = Market of price of the bond at time zero

I = Annual Coupon or interest payment

Pn = Maturity value of the bond

Kd = Cost of debt or yield to maturity or required rate of return or assumed reinvestment rate or internal rate of return.

n = Number of years to maturity

If the coupon (or interest) payments are paid for more than once a year (like semi annual), then equation (8-14) will become as follows:

.

$$Po = \sum_{t=1}^{mn} \frac{I/m}{\left(1 + \frac{Kd}{m}\right)^t} + \frac{Pn}{\left(1 + \frac{Kd}{m}\right)^{mn}}$$

Example Eight

Find the market value of a bond with a 12 percent annual coupon rate, a seven year maturity and a N10,000 face value., the market yield on bonds in the same risk class is 15 percent.

Solution

$$Po = \sum_{t=1}^{n} \frac{I_t}{(1+Kd)^t} + \frac{Pn}{(1+Kd)^n} = nI\,\frac{1-(1+Kd)^{-n}}{Kd} + \frac{Pn}{(1+Kd)^n}$$

I_t = 0.12 x N10,000 = N1,200

Kd = 15%

Pn = N10,000

$$\frac{1-(1.15)^{-7}}{0.15} \quad \frac{N10,000}{(1.15)^7}$$

n = 7 years

:.Po = *N*1,200

= N4992.50 + N3,759.37

= N8,751.87

In rare occasions bonds could be issued without a maturity date, such bonds are referred to as perpetual bonds. The present value of a perpetual bond would simply be the discounted value of an infinite stream of interest payments. The following formula can be used to determine the market value of a bond that has infinite life:

$$Po \quad \frac{I}{Kd}$$

Example nine

If a bond with an annual coupon rate 12 percent and a face value of N10,000 has an infinite life, calculate its market value of the bond is yield is 15 percent.

Solution

$$Po \quad \frac{I}{Kd} \quad \frac{N1,200}{0.15}$$

=N8,000.

Sometimes firms do issue a zero-coupon bond, which is a bond that pays no interest to the holders but sells at a higher discount from its face value; it provides compensation to the investors in the form of price appreciation. The valuation of zero-coupon bond is solely being determined by the present value of principal payment at maturity. The market value of a zero – coupon bond can be determined as follows:

$$Po \quad \frac{Pn}{(1 \quad Kd)^{n}}$$

$$\frac{N10{,}000}{(1\ \ 15)^{12}}$$

=N1,869.07

This implies that if the investor purchases this bond for N1,859.07 and redeems at 12 years later for N10,000, his initial investment would thus provide him with a 15 percent compound annual rate of return.

Sometimes one may be interested in determining the returns on a bond. There are three measures of returns for a bond that are usually considered.

(i) The coupon rate, which is the return on the normal value, par value, or face value of the bond which is generally a fixed rate throughout the tenure of the instrument, except in some rare occasions.

(ii) The current yield, which is the rate of actual investment of a bond. It is determined by the ratio of annual interest payment to the bonds market price as follows:

$$CY = I/Po$$

Where CY = the current yield

I = Annual interest payment

Po = the market price of the bond.

(iii) The yield to maturity, which is the rate of return on the nominal or face value of the bond, adjusted for the amortization of the premium (paid) or the discount saved at the time of purchase of the bond. If the market price of the bond is lower than the nominal value, then the bond is selling at a discount, whereas if the market price is higher than the nominal value, it is selling at a premium. The yield to maturity is also referred to as the interest

rate of return of a bond, which equates the present value of the coupon and principal payments with the current market price of the bond.

The yield to maturity can be determined precisely by using equation (8 – 14). The following formula provides an approximation of the yield to maturity (YTM).

$$YTM = Kd = \frac{I \quad \frac{FCV \quad Po}{n}}{\frac{1}{2}(FCV \quad Po)}$$

Where:

YTM = Kd = Yield to maturity or internal rate of return
FCV = Face value or terminal value of the bond
I = Annual coupon or interest payment
n = numbers of years to maturity
Po = market price of the bond at time zero.

Example Eleven

Fati Enterprise issues a 13 percent bond having a 10 year maturity and a face value of N10,000. If the bond is currently selling at N7,500, determine its:

(i) Current yield and
(ii) Approximate yield to maturity

Solution

(i) CY = I/Po
I = 0.13 x #10,000 = N1,300
Po = N7,500

PCV = N10,000
n = 10 years

:. CY = N1,300 / N7,500 = 0.1733 = 17.33%

(ii) YTM = Kd = $\dfrac{I \quad \dfrac{FCV \quad Po}{n}}{\dfrac{1}{2}(FCV \quad Po)}$

$$= \frac{N1300 \quad \dfrac{N10{,}000 \quad N7{,}500}{10}}{\dfrac{1}{2}(N10{,}000 \quad N7{,}500)}$$

$$= \frac{N1{,}550}{N8{,}750}$$

= 0.1771

= 17.71%

SELF ASSESSMENT EXERCISE

i. Explain five concepts of value that are used in a firm.
ii. What are the major determinants of valuation of common stocks?
iii. What do you want understand by capitalization rate of a stock?
iv. What is the different between valuation of preferred stocks and bonds?

4.0 CONCLUSION

Concept of valuation of stocks and bonds has been discussed. Their computational methods demonstrated as well as their implication on financial decisions.

5.0 SUMMARY

The value of a long-term security depends on the returns expected from such a security. The main concepts of value include book value, market value, replacement value, going concern value, intrinsic value and liquidation value. The present value concept, which measures the intrinsic value, is the price a security ought to be worth based on hard facts like future prospects and spread of risk. Common stocks, which are the real ownership capital, whose returns are not fixed, are more difficult to value. The expected returns from dividends and capital gains due provide the basis to the valuation of common stock. Preferred stocks and bonds whose returns are generally fixed particularly where the security has a fixed maturity date are simpler to value than common stock. Even where preferred stocks and bonds are issued to perpetuity, there values are simpler to measure than that of common stocks, because non-

maturity of the instruments implies that the redemption value approaches zero. This unit has vividly explained all these.

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6.0 TUTOR - MARKED ASSIGNMENTS

1. Isah Inc's stock has an expected dividend per share of N10, the current market price is N100 and the expected end of the year's price is N130. Determine the expected return on shares.

2. Danlami Ltd issued a 10% preferred stock with nominal value of N40, which currently yields 9%. Determine the market price of the stock if:
   a. The stock has 10 Years to maturity b.
      the stock is irredeemable.

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UNIT 2 CAPITAL ASSET PRICING MODEL

CONTENTS

1.0 INTRODUCTION

In this unit we shall discuss capital asset pricing {CAPM) and their implications on security evaluation.

2.0 OBJECTIVES

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

- Explain the concept of Capital Asset Pricing Model
- State the use of CAPM in security pricing.

3.0 MAIN CONTENT

3.1 Capital Assets Pricing Model (CAPM)

Capital assets pricing model shows the relationship between expected return on a security and its avoidable risk. It provides a framework for the evaluation of securities. It can also be used to determine the cost of

company's equity. The CAPM was developed by Sherpe (1954). Lintner (1965) and Mossin (1986).

3.2 Assumptions of the Model

The followings are the assumptions of CAPM

Investors are risk averse individual who maximize the expected utility of their end of period wealth i.e. one period model Investors are risk takers and have homogeneous expectations about securities or assets returns. There exists a risk free security or asset such that investors may borrow or lend unlimited amounts at the risk free rate. The quantities of securities (or assets) are fixed. All securities (or assets) are marketable and perfectly divisible. Securities (or asset) markets are frictionless. Information are costless and simultaneously available to all investors. There are not market imperfections such as taxes, regulations or transaction costs.

CAPM is an extension of portfolio theory. It is based on the concept that the expected return from investing in security is made up of two parts.

The risk free rate interest and

A premium to compensation for the particular risk of the security.

The security market line equation is given by

$$E(Ri) \quad Rf \quad (E(Rm) \quad Rf)Bi$$

Where Bi = $\frac{COV(RiRm)}{^{2}m}$ = COV(A,B) – $_{AB} \quad _{A} \quad _{B}$

$_{AB}$ = $\frac{COV(A,B)}{_{A} \quad _{B}}$

Where E(Ri) = Expected return on security

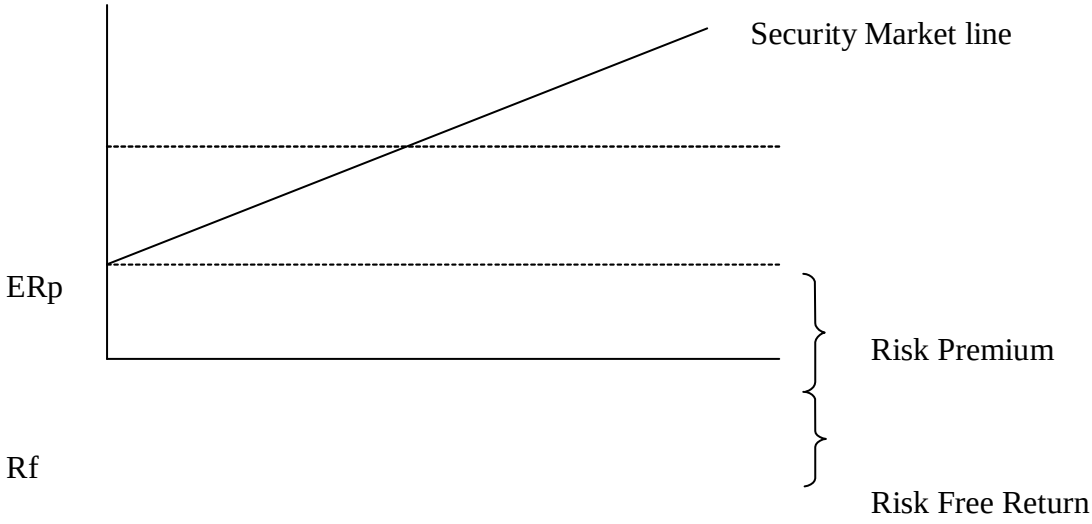
Rf = Risk free rate

Rm = Expected return on a market portfolio

COV (RiRm) = Covariance of return on security with the returns of market portfolio.

Bi = Beta of security

^{2}m =Variance of returns on the market portfolio



3.3 Classification of Security Risk

Risk of any security can be divided into:

1. Systematic risk: Undiversifiable risk: this is the market risk which is the risk of the economy as a whole. It is due to overall market risk such as changes in economy tax reform, exchange rate fluctuations, interest rate fluctuations, etc. these risks affect all securities and consequently cannot be diversified away by any investor.
2. Unsystematic Risks:- Diversifiable risks. They are caused by factors that are unique to a particular company e.g. strike in company, changes in management, competition, shortage of raw materials, changes in technology et. Since these risk do not affect all securities, by diversification they can be reduced or even eliminated.

Example

Manila plc currently has a bet of .6, is currently priced to yield and expected return of 20%. The issued free rate is 12% and the expected return on market portfolio is 18%. Is Madela plc stock currently priced?

Solution

Using CAPM

$E(R_1) = R_f + [E(R_m) – R_{fj}B_i$

$= 0.12 + [0.18-0.12]\ 1.6$

$= 0.216$

$= 21.6\%$

Since 21.6% >20%, Mandela plc stock is under priced

3.4 Problems of Applying CAPM to Capital Budgeting

Greatest practical problems with the use of CAPM lie in difficulty of estimating accurately not only information and results internal to the company but also those expected by the company that are very much outside its control.

CAPM is a single period model: capital budgeting involves multi-period investments

SELF ASSESSMENT EXERCISE

i. List the assumptions of CAPM
ii. Discuss the problems of applying CAPM in capital budgeting

4.0 CONCLUSION

CAPM have been demonstrated as valuable tools in pricing of securities. Their usefulness in financial decisions was also discussed. Difficulty in their applications, not withstanding, the two models could provide basis for financial decisions.

5.0 SUMMARY

In this unit, you learnt about the concept of CAPM, its computational process and way it could influence financial decision.

6.0 TUTOR - MARKED ASSIGNMENTS

The following relates to Kawu inc show whether the following portfolio are currently priced if the risk-free rate is 12%, expected ration in market is 18% and the standard deviation of the ratio on the market portfolio is 13%

Portfolio	Return	Standard Deviation
P	35%	24%
K	25%	15%

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UNIT 3 WORKING CAPITAL MANAGEMENT

CONTENTS

1.0 INTRODUCTION

Working capital is the money used to make goods and attract sales. The less the working capital used to attract sales, the higher is likely to be the return on investment.

In this unit, effort will not only be made on looking at just what working capital means, but also on the optional amount of working capital that a firm should maintain, the optional cash balance of a firm, the determinate of optional inventory balance and the determinants of a firm's credit policy.

2.0 OBJECTIVES

After studying this unit, you should be able to:

- Explain what working capital means
- Highlight on the basic trade-offs on working capital
- State the benefits and costs of holding cash
- State the benefits and costs of holding inventory
- Explain the determinate of a firm's credit policy

3.0 MAIN CONTENT

3.1 Meaning of Working Capital

Working capital is the difference between a firm's current assets and current liabilities. The current assets of a firm are those that either are in the form of cash in the short term working capital is managerial accounting strategy focusing on maintaining efficient levels of both components of working capital, current assets and current liabilities in respect to each other. Working capital management ensures a company has sufficient cash flow in order to meet its short term debt obligations and operating expenses.

Implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspects of working capital management are ratio analysis and management of individual components of working capital.

The current assets of a firm generally include:

a. Cash and marketable securities: These are the most liquid assets a firm possesses such as government bonds.

b. Stock: Stocks or inventory of a firm usually turn out frequently and can readily be converted into cash.

c. Debtors: When a firm sells goods on credit, it creates accounts receivable; as it receives payment on these credit sales, debtors are converted into cash.

The current liabilities of a firm include those that are expected to come due within the yea and they are:

a. Creditors: When a firm buys goods or services on credit, it creates creditors (accounts payable) which come due in the short term.

b. Accrued wages, salaries and taxes: In the normal course of doing business, firms accrue wages and salaries to their employees and taxes to the government.

c. Current portion of long – term debt: Any long term debt (bonds, bank debt) that is expected to come due within the year is classified as current liability. It is not the same with creditors because it is usually financed with new long – term debt.

3.2 Basic Tradeoffs on Working Capital

In most corporate organizations, the decision on how much working capital to hold involves a tradeoff – having a large net working capital (i.e current assets that significantly exceed current liabilities) may reduce the liquidity risk faced by the firm, but it can have a negative

effect on cash flows. Therefore the net effect on value should be used to determine the optimal amount to be held in working capital.

Changes will greatly depends on the following:

i. **Magnitude of working capital investment needed for operations:** The effects of working capital changes on cash flows are likely to be larger, at least relative to over all cash flows and value, for time that have to maintain large investments in working capital relative to operating cash flows and sales. For instance, a car dealer is likely to experience much larger changes in cash flows as a consequence of increases or decreases in his or her inventory than with a service business.

ii. **Make up of a working capital:** Not all working capital items are created in terms of their effects on cash flows. Increases in marketable securities, for instance, have a less negative impact on cash flows because they earn a positive return while they are held.

b. **The liquidity effect and operating effect:** The traditional view of working capital as a measure of liquidity risk suggests that increasing working capital will generally reduce the liquidity risk faced by the firm, whereas decreasing working capital will generally increase the liquidity risk. The effects of working capital charges on liquidity risk depend on a number of factors such as:

i. **Access to financing:** A firm with ready access to external financing is much less exposed to liquidity risk than a firm that does not have access, because it can tap these external sources if it needs to cover liabilities coming due.

ii. **State of the economy:** Other factors remaining constant, firms experience changes in liquidity risk as a result of working capital changes when the economy is in recession than when it is doing well.

iii. **Uncertainty about future cash flows:** Firms often plan on using cash flows from operations to meet current liabilities that come due. To the extent that these cash flows are predictable and stable.

Maintaining high working capital is its potential effect on revenues and future growth. Although increasing stock will tie up more cash, it will also enable a firm to increase sales.

c. **An optimal level of working capital:** Given the tradeoff between the negative effects on cash flows of increasing working capital and the positive effects of reducing liquidity risk and potentially increasing revenues and operating cash flows, it can be argued that working capital should be increased if, and only if, the benefits exceed the costs. Initially, increases in working capital lead to increases in firm value, because the marginal benefits exceed the costs. At some level of working

capital investment the firm value should be maximized. This is the optional level for working capital investment.

3.3 Managing Cash and Cash Equipment

Every business has to maintain a cash balance to meet needs that can be managed only with cash. The convenience and liquidity associated with keeping cash also carries a clear cost if cash does not earn a return for the business. Some businesses hold cash equivalents such as treasury bills, which provide almost all of the convenience of cash but also earn a return for the holder.

Motivations for holding cash: There are three motives for holding cash as suggested by Keynes:

1. A transactional motive, to meet the needs of the day to day running of a business.
2. A precautionary motive, to meet unexpected contingencies that may arise.
3. A special a time motive, to take advantage of profit – making opportunities that may develop. On each of these motives, firms differ significantly in terms of their needs.

3.4 Managing Inventory (Stock)

Most firms build up and maintain inventories in the course of doing business. For manufacturing firms, the inventories may be of raw materials, inter mediate goods and finished products. Marketable securities from the inventories of financial service firms.

Motivation for holding inventory: The motivation for holding inventory varies depending on the type of inventory. As said earlier, a manufacturing firm may have inventories at different stages in the production process.

a. Inventories of raw materials are held to ensure that the production process is not stymied by a shortage of these materials.
b. Inventories of intermediate goods (semi – finished) goods arise in the process of production.
c. Inventories of finished goods arises because of the time involved in the production process and the need to meet customer demand promptly.
d. The time it takes to fill an order from a customer: If order are not filled quickly and at low cost, the firm will need to maintain a higher finished goods inventory

e. The diversity of product line: Firms that sell a wide variety of goods generally need to invest more in finished goods inventory than firms that do single or few lines of goods.

f. The strength of the competition: When competitors offer close or perfect substitutes at similar prices, the firm is much more likely to suffer from lost sales if it does not have sufficient inventory.

3.5 Managing current liabilities

Currents assets are financial partially using current liabilities and short term financing. Trade credit arises as a result of purchase of goods and services. Trade credit reduces working capital investment and provides butter against growth. It saves the firm resources and reduces the interest forgone in working capital investments. There may be a cost, however: there is often a discount on the price the firm forgoes when it uses trade credit.

3.6 Determinants of a Firm's Credit Policy

The decision of whether or not to offer credit and how much to liberalize credit can be evaluated by looking at the overall costs and benefits to the firm, the decision to offer credit will generally have to be followed by additional decisions responding which customers will be offered credit and on what terms. In making these decisions firms generally rely on credit analysis, which is intended to evaluate the credit worthiness of individual customers. The question of whether or not to do a credit analysis will depend on the size of the credit. Because an administrative cost is associated with it, it might not pay to do a credit analysis if the credit being offered is small or if the risk of default is very low.

Self-Assessment Exercise

1. State the three reasons for holding cash
2. State the examples of current assets you know
3. Give an example of cash equivalent
4. What do firms use in financing current assets, apart firm long –term liabilities?

4.0 CONCLUSION

In this unit, we have discussed a very trivial aspect of financial management the management and financing of working capital needs. In our discussion, we have realized that different industries adopt different approaches in working capital management. This is also soley dependent on high cash flows, restriction on incremental risk etc.

5.0 SUMMARY

In this unit, we have discussed about the meaning of working capital, trade off on working capital, how current assets and current liabilities can be managed and what determines a firm's credit policy.

6.0 TUTOR MARKED ASSIGNMENT

1. What do you understand by working capital management?
2. State the determinate for firm's credit policy
3. How can current liabilities be managed?
4. What are the reasons for holding cash?

Answers to self-assessment exercise

1. Transactionary, Precautionary and speculative motives
2. Cash, stock, debtors and cash equivalents
3. Treasury bills
4. Current liabilities

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UNIT 4 RISK OF FINANCE

CONTENTS

1.0 INTRODUCTION

The treatment of risks in all its ramifications involves financial considerations. Indeed, as observed in the previous topics, risk avoidance and risk reduction decisions should not be taken without regard to their financial costs and benefits. Moreover, loss reduction measures interact with the financing of risk costs through either the purchase of insurance, the use of contingency (self-insurance) funds, or the charging of losses against current operating costs as they arise. If loss reduction measures are a success in cutting loss expectancies, then there will be smaller losses to finance in the future. (CII, 1985)

2.0 OBJECTIVES

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

explain what risk financing means assess the ability of an organization to finance risk evaluate the essence of the use of capital funds discuss the various forms of risk financing available to an organization.

3.0 MAIN CONTENT

3.1 Risk of Finance

3.1.1 Risk Financing

Risk financing is concerned with selecting the cheapest method commensurate with the degree of financial security desired by the organization. Given the stochastic, or random, nature of loss events, it will usually be necessary to use some methods will which spread the cost of losses more evenly over time in order to avoid the sudden, possibly financially crippling, effect of a large loss occurring. Therefore, risk financing decisions have to take account of the time element.

3.1.2 The Ability to Finance Risks

According to the Chartered Institute of Insurance (1985), how a firm decides to handle its risks depends not only upon its attitude to risk and corporate objectives but also upon its financial situation. Essentially, financial considerations affect what a firm may like to do and what it can afford to do. To take an extreme case, the owner of a small firm may have a highly developed sense of responsibility for the safety and security of his employees and for the welfare of customers and other persons affected by his activities. He may also be averse to taking risks, so that given the choice he would do everything possible to reduce the risks associated with his business. If, however, he is operating on a financial knife-edge, only barely managing to cover operating costs, then in order to survive he may have no choice but to take chances, spending nothing on risk reduction or insurance, and just hopes that nothing untoward happens. Normally choices are not as brutal as that, but every organization has to operate within certain budgetary constraints.

Two types of decisions in particular are bound by financial considerations:

- the commitment of capital funds to finance either capital expenditure on loss reduction, or the setting up of a contingency fund;
- he form of risk financing to be employed. (CII, 1985)

3.1.3 The Use of Capital Funds

Before committing funds to loss reduction projects, management will require some idea as to the possible return on the outlay. Unless mandatory safety, pollution control or other regulations are involved, a project that offers no prospect of showing a positive return normally is unlikely to receive approval. Likewise, capital is unlikely to be made available to finance a contingency fund unless it can show a sufficiently high expected saving compared with the cost of insuring. However, in both cases something more than just a positive rate of return may be required.

Given that in every organization there are usually insufficient capital funds available at any one time to finance all possible project, rules have to be devised for deciding which projects, shall be financed. It is a rationing problem which technically can be handled in various ways but it will suffice here to say that only exceptionally will projects be considered that require more finance than the organization currently has available, or can easily borrow. After deciding the rationing problem, those projects which qualify for consideration may be ranked in order of priority according to their expected rates of return, starting with the highest. That however, may still leave the organization with difficult rationing problems; for example if N100,000 was available and there are three possible projects:

Project	**Capital Requirement**	**Expected rate of return per annum**
A	30, 000	15%
B	80, 000	13%
C	65, 000	12%

It could not proceed with A and B which together would cost more than the N100,000 available. A and C are possible and would give a better return than B alone, however that would leave N5,000 unused and the abandoning of B in favour of the lower yielding C.

3.4 The Form of Financing

The following are three major ways of financing risk cost:

- the charging of losses to current operating costs;
- making ex ante provision for losses through insurance or a contingency fund;
- arranging loans to spread the cost of losses as they occur over the next few months or year.

The method(s) chosen by an organization will partly depend on its financial position, for reasons that are examined below:

a) The Financing of Risks from Operating Budgets

The cost of risks can be carried as a charge against operating budgets, either in the form of insurance premiums or by the charging of losses as they occur. The latter form of financing is suitable for those small to medium sized losses which are an inevitable, regular expense on a company. Provided such losses can be identified and quantified, then their costs can be budgeted for: they may range from accidental damage to vehicles, which normally all but the smallest companies can accept, to perhaps stock shrinkage, theft, or fidelity losses which may lead companies such as multiple stores to reserve several hundred thousand naira each year.

In fact, irrespective of whether one is considering the absorption of losses within monthly cash budgets or over a longer planning period, it is not sufficient that the expected losses during the period can be accommodated within the budget. It is only safe to handle risks in this way if the possible variation in both the size of individual losses and the aggregate losses during the period also all within the budget limits.

If those two conditions are met, then the charging of losses to operating budgets yields certain benefits, notably:

- Cash flow improvements resulting from the fact that whereas insurance premiums have to be paid at the inception of the period of insurance, no

charge will accrue for retained risk until losses actually occur and have to be paid for;

- The limitation of costs to actual losses, thus excluding insurer's expenses and profit;
- The application to risk costs of normal in-house budgetary control measures. It is normal practice for commercial and other organizations to have budget control departments which analyse actual results against budgets. The analysis may be broken down into both timing and size of variations and the causes of those variations. Thus, loss experience due to the occurrence of retained risks would be subject to automatic monitoring as part of the budgetary control system.

The system for administering a policy of charging losses to operating budgets is a matter of individual choice. In a large organization divided into separate profit-and/or cost centres those choices are essentially either to deal with losses as part of central overheads or for each centre to charge its losses directly against its own operating budget. The former system has the advantage of enabling larger losses to be retained in that

it enjoys some benefit from risk combination, but there is then the problem of allocating total risks costs to individual profit centres, with the possible loss of incentives for local management to control their own risks. A system which makes each centre responsible for financing its own losses has the reverse effects, and may necessitate different retention levels in different parts of the organization.
Whatever method is employed, it is likely that a combination of both internal financing and insurance will be used for many risks. If each profit centre is made responsible for financing its own losses, then it may be necessary to allow local management more freedom in selecting the level of insurance protection it requires.

b) Contingency Funds

Usually, the administration of an internal contingency fund is kept as simple as possible. If it is desired to retain internally risks which give rise to losses that

are too large and unpredictable in occurrence to be charged against operating costs, the solution may be to set up an internal contingency fund so that the costs of losses can be spread over a longer period of one or more years. Such a fund can be financed by either the transfer of a capital sum to the fund or by paying in periodic contributions like the payment of premiums for insurance though, unlike premiums, payments into an internal contingency fund is not usually tax deductible.

As a contingency fund needs to be kept in readily realizable assets, the transfer, of a capital sum to a fund means foregoing other ventures that could have been financed by those reserves, notably their use to finance an expansion of the organization's business. Therefore, the amount that an organization will be willing to set aside to establish a contingency fund will depend upon the size of its existing liquid reserves and the returns that it can expect from alternative uses.

How much an organization can afford to contribute to a contingency fund each year, or pay out in insurance premiums, will depend upon its annual net cash flow – that is, the surplus of earnings over costs (including depreciation and interest payable on loans).

In order to simplify the administration of internal funds, normally only losses are debited against the fund, with no charges being levied for the management expenses or other overheads involved in the administration of the fund. This aspect of management involvement has serious implications in the event of substantial funds accruing, because not only may the handling of claims be fairly accruing, because not only may the handling of claims be fairly time – consuming but also investment

portfolio management for the fund, the maintenance of adequate liquidity, and the control of foreign currency exposures may all require highly skilled management involvement. If no allowance is made for administrative expenses, then funding may appear to be cheap compared with the cost of insurance.

Also, if annual net cash flows vary substantially from year to year, the internal funding of risks has the advantage over insurance that the sizes of the annual contributions to the fund can be varied accordingly, whereas insurance premises have to be paid regardless of the current financial position.

The use of internal contingency funds, may, however be limited by the following factors:

Tax considerations and rules. The inadmissibility of contributions to contingency funds as tax deductible items means that such funds can only be built up out of taxed profits, a factor that has given a considerable impetus to the establishment of captive insurance companies.

If a central fund is set up to include the risk of overseas subsidiaries, further difficulties may be encountered such as exchange control restrictions on remittances of monies either to or from the fund, and the additional involvement of overseas tax authorities and regulations;

If substantial use if made of internal funding procedures it is possible that significant fluctuations may occur in a firm's overall profitability, due not to normal trading activities but because of either exceptionally good or bad loss experience.

(c) Risk Financing by Borrowing

A large orgainsation may choose to finance retained risks by resort to borrowing which may take three possible forms:

- losses suffered by one division may be covered by borrowing from central funds.
- Ad hoc loans may be obtained from external sources;
- Contingency loans may be arranged in advance of losses occurring.

Internal Borrowing

The dangers of relying on funds that one hopes will be available internally to cover necessary payments when losses occur are that (a) they simply may not be available at that time and (b) even if available they may not be in a liquid assets having to be sold quickly. Moreover, if reserves have to be used to finance losses some desirable investment opportunities may have to be foregone.

Ad hoc Loans

Reliance on raising loans when losses occur is equally dangerous. After a loss the value of an organization's assets will be diminished and its demands for cash will be urgent. Even if its gearing ratio is low so that it can offer good security, the immediacy of its needs may mean that it has to accept a loan on very disadvantageous interest and/or repayment terms. An organization with poor credit standing before a loss occurs is unlikely to be able to obtain a loan on any terms.

Contingency Loans

If the possibility of financing losses by borrowing is seriously considered, the best solution may be to try to negotiate contingency loan arrangements before any loss occurs. Then, when the loss-producing event happens, funds will be immediately available and repayment can take place over the agreed term, so spreading the risk over time.

The advantages of risk financing through loans rather than by buying insurance are that it avoids having to pay the often substantial loading element of premiums and the risk costs are certain to be based on one's own loss experience. On the other hand, a financial institution is unlikely to be prepared to commit itself to making loans available at some future date, even subject to a limit on amount, without the payment of either a commitment fee or a higher than normal rate of interest.

Moreover, as the rate of interest payable is likely to be related to the market rates current at the time the loan is made, the potential borrower cannot be sure of the risk financing cost. Also, unless there can be some moratorium period between the granting of the loan and the time when interest and repayment charges start to become payable, the borrower may have difficulty in meeting his commitment if earnings have been severely depressed temporarily because of an interruption to his business due to the occurrence of the loss producing event.

Clearly, the spreading of losses by means of borrowing is not a method suitable for every organization but it might be a partial alternative to insurance.

SELF ASSESSMENT EXERCISE

Explain what you understand by risk financing

4.0 CONCLUSION

In view of the various importance of risk financing in effectively managing organizational risks, the discussion in this unit has sought to find out the liability of organization to finance risk and the use to which the capital funds are put and whether the forms of financing adopted are contingent and tenable in contemporary financial services sector as a veritable tool in effective management of risks of organizations.

5.0 SUMMARY

In this unit, we have systematically analysed the ability to finance risk, the use of capital funds and the various forms of risk financing an organization can adopt to adequately manage its risk exposures.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the implication of risk financing by borrowing.

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UNIT 5 METHODS OF AVOIDING RISK (RISK CONTROL)

CONTENTS

1.0 INTRODUCTION

In the three previous units, we looked at risk identification and the various methods/techniques of detecting the risk exposures of an organization. We observed that risk identification is the first step in risk management process. Thus, it is after risks have been identified that they could be measured/evaluated for possible treatment with much emphasis

on risk avoidance and risk reduction.

2.0 OBJECTIVES

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

1. explain what is meant by treatment of risk.
2. discuss the various methods of treating risk
3. describe the main strategies of loss prevention/reduction
4. discuss how to prevent/control fire loss.

3.0 MAIN CONTENT

3.1 Risk Control

3.1 Treatment of Risk

After risks have been identified and measured, the next step in their handling or management is treatment. This is the most crucial stage as it requires careful analysis and appraisal of the cost and benefit of the several alternatives possible (Oluoma, 1999: 22)

Four major methods of treatment of risk are discernible, viz:

a.) Avoidance

b.) Reduction

c.) Retention and

d.) Transfer

3.1.1.1 Avoidance

One of the most obvious ways of treating risk is to avoid as many risks as conceivable. One tries to shun the responsibilities or cost that the risk impacts. Take for instance, a man faced with possible financial loss of a car to thieves may decide not to buy a car. By this act he can put his money in a more profitable venture and travels by public transport only. He may even discover that this alternative is inconvenient to him socially and economically, and also expensive since the fares could be arbitrarily fixed, and it might even be unsafe since most public transport vehicles are prone to accidents. Faced with this kind of situation, the risk

avoider can decide to trek. By trekking, certain other risk situation exists; he can only trek a short distance and cannot meet up social, economic or other engagements in distant places; he might easily be knocked down by a motorcycle or cycle rider or might even be hit by another person in the traffic resulting in bodily injury or death. He may also decide to sit entirely indoors, in an effort to protect his life. This decision also creates its own disadvantages; he may cease to be economically, socially and politically active; he may also lose his life because even at home he can still be killed by an event traceable to act of God or man.

On the other hand, a person can in a bid to avoid the possible loss of a house to fire, rent a flat instead of building a house. Also a person can avoid air plane accidents by not traveling by airplanes.

It is apparent from the discussion above that some risks could be avoided but the majority cannot. It indeed portrays the impossibility of avoiding risk completely by man. Risk avoidance may not be the practical solution to the many risks which are involved in normal activities as it carries with it some lost opportunities.

3.1.1.2 Reduction

Risk reduction or prevention involves actions aimed a reducing, if not eliminating, the chances of loss. The actions could be taken prior to, during, or after the occurrence of loss. For instance, car maintenance is a step taken to prevent accident on the road either as a result of collision with other vehicle, or fire by electrical or mechanical faults etc. This is loss reduction prior to the occurrence of loss. Where however, the car has sustained loss due to fire, the use of fire extinguisher could be helpful to reduce the impact of the loss. This is loss prevention/reduction during the occurrence of loss.

On the hand, actions could be taken to salvage some properties from further damage in a burning building. This is risk reduction after occurrence of loss.

Loss prevention or reduction methods and agencies abound in various developed countries of the world with relative high level of efficiency. In the Nigerian scene, a lot of such techniques and agencies exist but of much concern is their organization and level of efficiency which are far from being adequate.

3.1.2 Main Strategies/Stages of Loss Prevention/Reduction

Loss prevention embraces the action taken prior to, during, and after the occurrence of loss. Such action or activities are aimed at checking, lessening, or curtailing the existing loss from being further aggravated (Oluoma, 1997).

Indeed the first strategy in loss prevention is to try and forestall the occurrence of an anticipated loss. It involves the taking of precautionary measures aimed at stifling the loss producing event from happening. For instance, to avoid mechanical breakdown of a plant or machinery, it requires regular servicing and maintenance; the same could be said of any electronic, electrical or mechanical devices including motor vehicles. More so, to ensure that a building is shielded from fire damage, all flammable materials should be kept away from the building. Indeed, the watchword here is that to highly treasure an item is to ensure its jealous preservation.

On a second note, a loss could be lessened extensively, if it could not be effectively prevented or checked from occurring. This loss reducing device need be in place constantly to be able to serve its role usefully and not to be belated when in need. Commonest examples here are the installation and use of fire extinguishers, the services of fire Brigades (to reduce the impact of fire); installation and use of burglary proof, use of security men, strict internal financial control in an organization (to reduce, where the incident could not be prevented, the impact of theft or fraud).

Lastly, where a loss has occurred, actions could be taken to safeguard or preserve the savaged items from further losses, for instance, in a situation where fire is ravaging a business premises, it may be possible that some items of stock may be saved from the fire. It is necessary that the items saved should be properly kept to avoid their theft or further losses from water damage, frost and others.

Thus, in line with the foregoing strategies, risk reduction has been subdivided by Mow bray and Blanchard (1959) into four types:

- preventive to eliminate the cause of loss;
- protective or quasi preventive, to protect things or persons exposed to damage or injury;
- minimizing, to limit loss to as small a compass as possible;
- salvaging, to preserve as much as possible of the value of damaged property or the ability of injured persons.

Indeed, the first two types fall under the first strategy of loss prevention/risk reduction.

3.1.3 Need for Loss Prevention/Reduction

(a) large scale destruction of property by fire causes absolute economic loss of wealth to the society;

(b) properties destroyed by fire cannot be retrieved back even though compensation is paid for its replacement/reinstatement;

(c) resources are scarce and difficult to get, thus, the destruction of such resources means utter deprivation of present and further enjoyment or use by the owner.

(d) The loss of property by theft/burglary or accidental means reduces the wealth or resources of the individual concerned and he /she may lack the financial ability to recoup the loss.

(e) More importantly, apart from the loss of material resources, the loss of human lives by disaster creates long standing agonies and pains on the survivors and the society at large.

(f) Besides direct losses incurred, indirect losses are also enormous.

(g) The need to prevent loss may arise equally by legal obligation e.g. Health and safety at work; workmen compensation; standard factory operation requirements, etc.

Due to the ugly consequences of various categories of losses on the individual, corporate bodies and the community as a whole, a responsibility lies virtually on all to try to mitigate and as far as possible to prevent loss in every field of their operation or endeavors.

Indeed a great responsibility lies on the individual, corporate bodies, employers and employees, Government, insurers, other agencies, etc.

3.1.4 Fire Risk Loss Prevention

Perhaps, the best way of defining fire that readily comes to mind is that given by the court in the case of Western Woolen mills Company v. Northern Assurance Co. 139 Feb 637. Defining 'fire' the court said; "Spontaneous combustion is usually a rapid oxidation. Fire is oxidation which is so rapid as to produce either flame or a glow. Fire is always caused by combustion, but combustion does not always cause fire. The word 'spontaneous' refers to the origin of the combustion. It means the

internal development of heat without the action of an external agent. Combustion or spontaneous combustion may be so rapid as to produce fire but until it does so combustion cannot be said to be fire". (Bickelhaupt (1974))

Thus, the presence of heat, steam, or even smokes is evidence of fire, but taken by itself will not prove the existence of fire. Unless accompanied by ignition, heat sufficient to cause charring or scorching does not constitute fire. To constitute fire, Combustion must proceed at a rate sufficiently fast to produce a flame, a glow, or incandescence.

Regardless of the amount of heat there can be no fire until ignition takes place.

In other words, for there to be fire the following three factors must be present

(a) An oxidizing agent –oxygen (supporter of combustion)
(b) Combustible material (which may be in solid, liquid or gaseous state - Textiles, wood, papers, kerosene, petrol, oil, hydrogen, butane etc.
(c) Heat-ignition source sufficient to raise the temperature to ignition point e.g. Welding & cutting operation, hot pipes etc.

These three factors represent what is called the triangle of combustion.

3.1.4.1 Control/Prevention of Fire Risk

Risk control is an essential element of the risk management process especially as it encompasses other areas like the identification and the eliminating of the dangers, hazards or conditions that are likely to produce losses. It basically involves:

(a) The avoidance of the loss exposure or the elimination of the possibility of loss;
(b) The prevention of loss which includes any action aimed at reducing the likelihood of a loss occurring; and
(c) Loss reduction which takes the form of reducing loss severity (Irukwu, 1991).

In essence, risk control covers all those measures aimed at avoiding, eliminating or reducing (or preventing) the chance of loss producing events occurring or limiting the severity of the losses that do happen. (C11, 1985: 3/1).

This will lead us to assess the strategies adopted in fire prevention/reduction.

3.1.4.2 Fire Prevention Devices

On the basis of devices adopted, measures aimed at reducing the severity of loss can be divided into three categories.

(a) **Physical Devices:** It is aimed at reducing either the probability or size of loss. In respect of fire risk, this may take the form of fire proof doors or sprinkler systems, or fire break walls, or smoke vents, etc.

(b) **Procedural Devices:** The poor standard housekeeping and poor maintenance of plants and machineries had been the major cause of fires and industrial / occupational accidents. This could be remedied by prompt clearing and disposal of flammable wastes, adequate separation of dangerous processes, installation of safeguards on dangerous machineries, effective supervision and inspection, and security checks on the employees.

(c) **Education and Safety Training:** Human errors, acts and omissions as related to security and safety enhance loss. Proper education on cause and consequences of loss need be impacted on all categories of employees. (Akinjobi (2005: 30); Banjo (2000: 39).

3.1.4.3 General Fire Prevention Measures

(a) Adequate preventive educational measures
(b) Good housekeeping
(c) Periodical checking/inspection of electrical and mechanical

installations

(d) Cigarette ends should be properly extinguished before disposing of them.

(e) Avoid placing of lighted candles and mosquito coils on window blinds and under beds.

(f) Disconnection of electrical appliances when not in use.

(g) Prohibition of bush burning and burning of refuse in public places.

(h) Maintenance of fire fighting equipment like fire extinguishers, water sprinklers, fire alarm.

(i) Adherence to fire safety standards and measures (Oluoma, 1997: 27-28).

SELF ASSESSMENT EXERCISE 2

Can Risk be avoided?

4.0 CONCLUSION

We have discovered in this unit that treatment of risk is very vital as it unravels the possible options an organization can adopt in handling the risk. We have also seen that while some risks may be avoided, others are inevitable or cannot be avoided, thus, effort should always be made to reduce the frequency of occurrence or the impact of such risks that cannot be avoided.

5.0 SUMMARY

In this unit we have dealt with treatment of risk especially as it related to risk avoidance and risk reduction/prevention. We have equally argued that a responsibility lies on all to try as much as possible to adopt positive strategies towards minimizing losses especially fire and ancillary losses.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the main strategies of loss prevention.

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MODULE IV

UNIT 1: BANKING SYSTEMS

CONTENT

1.0. INTRODUCTION

The countries of the world practice different banking systems. The type of banking system practice by any country depends on the banking rules and regulations, the size of the economy and the level of development of the banking and the financial system of the economy among other factors. The most common banking systems in most developed and developing countries of the world includes the Unit banking, Branch banking and Corresponding banking. Others include Universal banking, Group banking, and Chain banking among others. You shall also learn about the essentials of a sound baking system in this Unit.

2.0. OBJECTIVES

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

· Identify and explain each banking system

· Mention and explain the advantages and disadvantages unit banking

· Enumerate and explain the advantages and disadvantages of branch banking

· List and discuss the essentials of a sound banking system

3.0. Systems of banking and essentials of a sound banking system

3.1. Systems of Banking

3.1.1. Unit Banking

Unit banks are independent, one-office- banks. Their operations are confined to a single office. The unit banks operate in small towns, cities and rural areas in Nigeria. Examples of Unit banks in Nigeria are the community banks and other banks that exists only in particular communities that established them without any branch anywhere. The existence of unit banking in the USA is due to legal restrictions which prevent the growth of monopoly in banking. Some unit banks have grown to large sizes but they operate under severe restrictions which limit or prohibit the establishment of branches particularly in the U.S.A.

A. Advantages of Branch Banking

Unit banks, being independent and one-office-banks, posses certain advantages which include:-

i) The provision of prompt and efficient services to customers

ii) Personal relations with the people (Since its organizers and staff are local people)

which help in mobilizing large resources for the bank.

iii) Meeting the financial needs of the people promptly and efficiently because of the usual on-the-sport decision making by the banking management.

iv) Enjoying the advantages of branch banking as they are connected with a big bank through correspondent banking system.

B. Disadvantages of Unit Banking

Some of the disadvantages of unit banking include;

i) Failure to spread risks as the unit banking operations are localized in a particular area, the failure of customers to repay loan in time may bring disaster to the bank.

ii) Limited resources at its deposal which always leads to bank failure during financial and economic crisis.

iii) Non-diversified banking services to its customers because of its inability to establish branches and higher cost.

iv) Absence of economies of large scale operations. The unit banking system cannot have advantages of large scale banking in that it cannot recruit more efficient and highly paid staff, and cannot enjoy the economies of large scale and intensive specialization and division of labour.

3.1.2. Branch Banking

Under this banking system, a big bank has a number of branches in different parts of the country and even outside the country. The branch banking is the most prevalent banking system in most of the countries of the world. In Nigeria, all the commercial banks quoted in the stock exchange market have at least a branch in almost all the 36 states of the federation including the Federal Capital Territory Abuja.

A. Advantages of Branch Banking

The branch banking system has many advantages which make this system supervisor to the unit banking system. Some of the advantages of this system include;

i) Advantage of spreading risks geographically and industrially. If branches in particular area suffers losses due to recession in industries located there, the losses can be offset by profits from prosperous areas.

ii) Enjoys the advantage of large scale organization because a large bank is able to recruit efficient and trained staff and pay better than unit banks. It also enjoys the advantage of specialization and division of labour.

iii) Under this system, the bank enjoys the advantage of diversification of banking operations. Big banks can provide banking facilities to trade, industry, businessmen and the common man at cheaper rates and more efficiently than unit banks because they posses larger financial resources.

iv) The central bank of the country can control the banks more effectively under the branch banking system than under the branch banking Unit banking system. It is easier to control the credit policies of a few banks than those numerous unit banks.

B. Disadvantages of Branch Banking

The branch banking system has also some disadvantages which include the following;

i) Delayance in decision taking under the branch banking system: there are bureaucratic procedures in decision making and the management of all the branches is under the control of the head office. This leads to delay in taking prompt decision by the branch managers. They have to refer all cases above certain limit for advance to the head office.

ii) Inability to meet the need of local business communities: The branch managers are not able to meet the borrowing needs of the local business community as efficiently and sympathetically as the unit banks. This is because the branch bank managers stays in one locality and have to operate under rules set by the head office. He may not know the needs of the customers at different branches and also may be concentrating more on bigger industries at the detriment of small scale businesses in the rural areas.

iii) Fear of loss: When branch banking spreads on a large scale, some of the branches may run under losses due to bad debts and low mobilization of deposits. Such situation may leads to huge loss to the bank thereby leading to its failure.

iv) In adequate supervision: As the big bank has a number of branches spread throughout the country, it is difficult to manage and supervise them effectively and efficiently. The control become relax, the banking services suffer and the clients are hit hard.

v) Unhealthy competition: Branch banking leads to competition among different banks in establishing branches at various places. This tendency leads to unnecessary increase in expenses.

Self- Assessment Exercise1

Define Unit Banking and discuss its advantages and disadvantages.

3.1.3.Group Banking

Group banking is part of the banking system in Nigeria. It is a type of multiple office banking consisting of two or more banks under the control of a holding company, which itself may or may not be a bank. The parent company controls and manages the operating banks under the group but each bank continues to keep its separate entity or name. The parent company pools the resources of the group and helps the group banks to make large loans and advances. An example of group banking in Nigeria is the Union Group which is made up of Union Bank of Nigeria Plc (Banking), UBN Merchant Bank (Merchant Banking), Union Assurance Co. Ltd (Insurance), Union Trustees (Trusteeship), and Union Homes Savings and Loans (Mortgage).

3.1.4 Chain Banking

Chain banking is a system where some individuals or group of individuals control one or more banks, as against control by a holding company under group banking. Chain banking results when an individual, family or some other close association of persons controls the operations of two or more banks. That is, it occurs when a syndicate or other small group of individuals with common interest own more than two banks. Chain banks are controlled through directors, and a recognized organization hierarchy beyond that of individual banks. A principal "key" bank frequently coordinates the management of the entire group and also serves as the depository for required reserves of state chartered holding company banks.

3.1.5.Correspondent Banking

It is a bank which acts as agent for another bank in a place where the latter has no office, or for some reasons, is unable to conduct certain operations for itself. All banks with overseas business require correspondent banks abroad, and the arrangements are usually reciprocal with each party maintaining balances with the other. Correspondent banking is a familiar banking feature in the U.S.A and Nigerian financial systems. The U.S.A is geographically a big countr where there are thousands of banks which operates in restricted areas. The various types of banks are able to operate efficiently through a correspondent relationship with one another. The country banks have deposits with city banks and city banks have deposit in the state banks in the same and other cities. The centre of correspondent banking is the New York city, followed by Chicago and other regional centres in big America cities. Many banks have deposits in more than one centre and correspondent banks in one centre have correspondent relations with banks in other centres.

When a small bank maintains its deposits with a big correspondent bank having a network of branches, the later provides such services to the former as extending large credit facilities, facilitating foreign exchange transactions, cheque clearing and collection, purchase and sale of securities etc. It also provides a wide range of other services to small banks which include reports on the state of the economy, advice on portfolio management, etc. In Nigeria, this kind of relationship between banks may exist between big commercial banks and Peoples Banks on one hand and between commercial banks and Community Banks on the other hand. The peoples Banks and the Community banks are not commonly found everywhere, so they resort to the use of some commercial banks as their corresponding banks.

Self-Assessment Exercise2

Describe Branch Banking and explain its advantages and disadvantages.

3.1.6.Universal Banking

Globally, Universal Banking (UB) is increasingly becoming the major route to doing banking as there appears to be a shift in the mind set from providing customers with only isolated banking services to that of providing them with a supermarket where all financial services are available. Universal banking refers to the combination of deposit-taking, the making of advances and the conducting of stock exchange business all under the same roof. Banks involved accept deposits of all sizes for the most varied terms, grant short, medium and long-term credit to the business sector and private customers, and at the same time carry on securities business on a more or less wide scale; handle payment transactions; finance imports and exports, and deal in foreign exchange, notes and coins.

The central bank of Nigeria in its draft guideline for the adoption of universal banking practice in August 2, 2000, defines universal banking as “the business of receiving deposits on current, savings or other accounts paying or collecting cheque drawn or paid in by customers, provision of finance, consultancy and advisory services relative to corporate and investment matters, making or managing investments on behalf of any person and the provision of insurance marketing services and capital market business or such other services as the Governor of the CBN may by regulation designate as banking business”. Banks under the universal banking programme can choose to undertake one or a combination of the following; clearing house activities, underwriting/issuing house business and insurance services. Universal banking simply connotes collapsing the various regulatory divides that separate commercial and merchant banking activities. In other word, it is all about creating a level playing field for both commercial and merchant banks. Historically, commercial

banking, in line with its retail orientation, involves general commerce and by implication, a credit policy that favours short-term finance. On the other hand, merchant banking or investment banking is about wholesale banking involving provision of long-term finance to fund users. On this basis of specialization, banks concentrate on one of wholesale banking, retail banking, private banking, savings and loan mortgage among others. However, under universal banking, authority is given to banks to decide on their portfolios of business, select appropriate delivery channels and infrastructure within an applicable regulatory framework. The distinction between money, capital market and insurance business is removed. The most important issue in this system is the fact that the statutory / regulatory dichotomy between commercial and merchant banking activities is dismantled and the difference between banks in terms of functions and activities will only exist as a matter of choice rather than by reason of regulatory barriers. The concept of universal banking came into operation in Nigeria in November, 2000. The universal banking system introduced in Nigeria was meant to result into huge finance conglomerates where any or all of the following services may be offered. Retail (Commercial banking) Cheque clearing Funds management, investment (Merchant) banking services. Financial advisory services including; Financial consulting; Unit trusts; Mutual funds; Mortgage finance, Securities trading including derivation, under writing business, Insurance (life and general), Trusteeship accounts, Pension funds, and Credit cards.

3.1.7.Electronic Banking

Electronic banking more commonly called the electronic funds transfer system (EFTS) refers to the application of computer technology to banking especially the payments (Deposit transfer) aspects of banking. The major distinct pieces of hardware that comprises it are the Automated letter Machine (ATM), the point of scale (POS) system, and the automated clearing house (ACH).

An ATM can perform most of the routine banking functions that are now done by bank tellers deposits can be made, funds withdrawn, funds transferred between savings and current account etc. The customer operates the ATM by using a plastic card plus a personal identification number (PIN) know only to himself.

The POS involves a computer terminal in retail stores that will transfer funds instantly from the bank deposit of the customer to the bank deposit of the store in which he is making purchase. In the process, the computer will verify that the customer has sufficient funds to cover the purchase, and will inform the customer of the new bank balance. The customer can

also arrange for overdrafts at the bank, so that "instant loan" (Up to a preset limit) can be made.

On the other hand, the ACH is largely designed to transfer funds among banks electronically, although customers may also become involved. For example, a company may, with the authorization of its employees record its monthly pay roll on electronic tape. The company then takes this type to its bank and that bank then uses the tape to deposit (In other banks) salaries directly to the credit of the employees. The ACH can also be used for preauthorized payments of a recurring nature, e.g. instance premiums. The major merit of electronic banking lies in its ability to reduce costs given the number of cheques written in the economy each year.

3.2. Essentials of a sound Banking System

The essentials of a sound banking system are regarded, as its liquidity and profitability. The secret behind any successful banking business is to distribute resources between the various forms of assets in such as way as to get a sound balance between liquidity and profitability, so that there is cash (at hand or quickly realizable) to meet every claim, and at the same time enough income for the bank to pay its wages and earn profits for its shareholders. In addition, some of the essential issues modern banks also consider for a sound banking system include the following:

3.2.1. High degree of Liquidity

One of the essentials of a sound banking system is to have a high degree of liquidity. The bank holds a small proportion of its assets in cash. Therefore, its other assets must possess the criterion of liquidity so that they may be turned in to cash easily. This is only possible if the bank possess such securities which can be easily liquidated. The CBN has made it mandatory for commercial banks to keep a certain proportion of their assets in cash to ensure liquidity.

3.2.2. Safety of Bank's Money

Safety of banks' money is another essential of a sound banking system. Since the banks keep the deposit of the people, it must ensure the safety of their money. Therefore, the banks are expected to make safe loans and investments and avoid unnecessary risks. If the debtors of the banks do not repay the loans on time and the banks loss their investments, the banks in the system will become insolvent. As a result, depositors in the system lose money and suffer hardship. Thus, the banks must ensure the safety of deposits in the system

3.2.3. Profitability

A sound banking system should be able to earn sufficient profits for the shareholders. Profits are essential for individuals and the entire system to be viable. Individual banks should be able to pay corporation tax like any other company, pay interest to its depositors, dividend to shareholders, salaries to the staff and meet other expenses. Therefore, unless the banks earn, they may not operate soundly in the system. For this purpose, it must adopt judicious loan and investment policies.

3.2.4. Stability of the System

A sound banking system must be stable. It should operate rationally. There should neither be undue contraction nor expansion of credit. If the banks restrict the creation of credit when trade and industry need it most, it will affect the interests of the business community negatively. On the other hand, if it expands credit when the economic conditions do not permit such, it will lead to boom and inflation. The CBN help in achieving stability in the banking operations of the commercial banks by a judicious credit control policy.

3.2.5.Efficient Reserve Management

A sound banking system should be able to possess efficient reserve management ability. A bank keeps some amount of money in reserve for meeting the demand of its customers in case of emergency. Though the money kept in reserve is idle money, yet the bank cannot afford the risk of keeping a small amount in reserve. There are however, some statutory limits laid down by the Central Bank in maintaining minimum reserves with itself and with the central bank. However, how much reserve money should a bank maintain is governed by its own wisdom, experience and the size of the bank. The bank should manage its reserve policy effectively and efficiently without keeping too much or too little cash. It has to balance between profitability and safety.

3.2.6 Expansion

A sound banking system must be spread throughout the country. It should not be concentrated only in big towns and cities but also in rural and backward localities. It is only by widespread expansion of the banking system that the deposits can be mobilized and credit facilities can be made available to trade, industry, agriculture, etc. This is especially in

developing countries where the banking system must provide these facilities through its expansion in all areas.

3.2.7 Sufficient Elasticity

The elasticity of banking operations should have sufficient elasticity, in its lending operations. It should be in a position to expand and contract the supply of loanable funds with ease in accordance with the directives of the Central Bank of Nigeria.

4.0 CONCLUSION

The countries of the world practice different banking systems and the soundness of the banking sector of the countries varies from country to country. This unit highlights systems of banking varying from unit banking, Branch banking etc to electronic banking. It also discusses essentials of a sound banking system.

5.0 SUMMARY

In this unit, you have learned about,

· Systems of banking
· Advantages and disadvantages of unit banking
· Advantages and disadvantages of branch banking
· Essentials of a sound banking system

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the essentials of sound banking system.

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UNIT 2 INDUSTRIAL FINANCE

CONTENTS

1.0 INTRODUCTION

The Nigerian government itself is a major financial institution through the borrowing and lending activities of its agencies. These agencies are principally concerned with reducing the cost of funds and/or increasing the availability of funds to two sectors of the economy-agriculture and housing-although government agencies exist for other purposes also. The principal justification for these government lies in the fact that certain activities in the US economy, particularly farming and providing adequate housing are regarded as vital to the nation's well-being and deserving of special treatment. Moreover, it is widely argued that, left to itself, the financial market place would not provide an adequate volume of credit at reasonable cost to support these vital activities.

2.0 OBJECTIVES

After studying this unit, you will be able to:

- Define federal credit agencies
- Describe the functions and operations of these types of organisations
- Discuss the trends affecting each of these institutions
- Identify the assets and liabilities of these financial organisations

3.0 MAIN CONTENT

3.1 Federally Sponsored Agencies

These are technically private organisations but in many ways can be considered public. They include the Federal National Mortgage Association, the Federal Mortgage bank, the Federal Home Loan Corporation, all of which are concerned with the support of the housing industry, and the Farm Credit system with its three component parts. Each of these agencies borrows in the financial markets by selling debt securities of various maturities and denominations and in turn makes loans to participants in the designated sectors of the economy or acquired securities from those participants. The debt issues sold by the sponsored agencies do not carry the guarantee or backing of the government. The sponsored agencies themselves are self-supporting and receive tax money from the country's Treasury. Their revenues come from the interest received on their loans and other fees.

3.2 Mortgage Credit Agencies

These are account for most of the debt of the federally sponsored agencies. The Federal National Mortgage Association (known as Fannie Mae) was established in the 1930s to improve the liquidity of the mortgage market by creating a secondary market for the US government and guaranteed mortgages. Fannie Mae has provided this liquidity by purchasing mortgages from mortgage bankers, savings and loan associations, and other originators of mortgages from mortgage bankers, savings and loan associations, and other originators of mortgages. Although, in concept, Fannie Mae should serve both as a buyer (in periods of excess supply of mortgages, reflecting recent problems in the mortgage market. As a result, the mortgage pool of FNMA has grown enormously and exceeded N19 billion by late 1992. This portfolio is financed by the sale of debt instruments in the financial markets. The Federal Home Loan Bank system and the Federal Home Loan Mortgage Corporation are two closely related federal agencies involved in the support of housing. These loans usually increase in periods of diminished private sources of funds at the private sources of funds (usually during periods of low interest rates) and decrease in periods when private sources of private sources of funds (usually period of low interests rates) are more adequate. The volume of lending by the Federal Home Loan Bank system to savings and loans expanded sharply in the late 1970s through the 1980s; however, lending was curtailed in the 1990s due to the serious financial

problems within the savings and loan industry. These loans are financed by borrowings in the financial markets. The Federal Home Loan Mortgage Corporation also plays a role as a direct housing lender.

3.3 Agriculturally Related Agencies

A smaller but quite significant part of the debt of federal agencies is issued by the Farm Credit system. This organisation is composed of three lending agencies, each serving a different role within the financing of agricultural production. The Federal Land Banks make loans to production credit associations, which in turn, make loans directly to farmers and ranchers. In contrast to the Federal Land Bank loans, which tend to be quite long term in nature, the loans of the Federal Intermediate Credit Banks generally carry a shorter maturity. The banks Cooperatives provide loans to agricultural marketing and cooperative organisations. These loans are generally short term in nature. At one time each of the components of the Farm Credit system financed itself separately. Beginning in the late 1970s, however, the Farm Credit system began to issue debt instrument on behalf of its three agencies. The debt instruments of the farm sector reduced the demand for credit and as the system experienced substantial credit quality problems. A related organisation, the Farm Credit Financial Assistance Corporation (FACCO), was established by congress in 1987 to issue debt to cover defaults on farm loans affecting the Federal Farm Credit Bank System.

3.4 Federally Owned Agencies

These are in many ways quite distinct from the federally sponsored agencies. In contrast to the federally sponsored agencies, which are self-supporting, the federally owned agencies usually receive direct support from the government's Treasury. This difference in funding reflects difference in purpose. The federally sponsored agencies provide and indirect subsidy to the sectors of the economy that they serve. This indirect subsidy comes primarily from their ability to borrow at lower rates as a result of the market's perception of implied Nigerian government support. The lower borrowing costs are then passed through to their customers in the form of lower lending rates. In contrast, the subsidy provided by the federally owned agencies is a direct one. As such, it is generally impossible to cover the total costs of the

program, with the result that a portion of those costs must be financed from congressional appropriations.

The federally owned agencies provide direct loans to various sectors of the economy. These include loans by the Agency for International Development (as a part of foreign aid). Commodity Credit Corporation loans to farmers as a part of agricultural price supports, loans by the Farmers Home Administration to individuals to rural areas to finance the purchase of homes. Small Business Administration loans, Export-Import Bank loans, and a variety of loans from other units of the federal government. These loans have a direct impact on the flow of credit, as does ant loan by a private or public financial institution. In addition, many of these agencies provide extensive government guarantees of loans made by private organisations. These guarantees do not directly provide government funds until and unless there is a default by the borrower, although the impact on the flow of funds may be as important as through direct-lending programs.

4.0 CONCLUSION

This unit has dealt on some aspect of specialized financial institutions – federal credit agencies. These financial institutions are quantitatively of minor importance in the financial system. Yet they play important roles within their specialised components of the economy. More so, each of these financial institutions has shown considerable growth in recent years. The federal government has stimulated the flow of credit into selected portions of the economy-primarily agriculture and housing – through its federally sponsored agencies. This stimulation has taken the form both of direct loans at attractive terms and guarantees of loans made by other financial institutions.

5.0 SUMMARY

We can end by saying that most government borrowing has been done by sponsored agencies rather than by the government-owned agencies, although, in either case, the agencies obtain their funds primarily through borrowing from the financial markets, either directly or indirectly, and then lend these funds to economic participants in the sector they serve.

6.0 TUTOR MARKED ASSIGNMENT

1. Distinguish between a federally owned and federally sponsored agency.
2. What do the agriculturally related agencies do?

7.0 REFERNCES/FURTHER READINGS

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UNIT 3 MORTGAGE FINANCE

CONTENTS

1.0 INTRODUCTION

In this unit, we will be looking at an aspect of a financial institution who perform the function of acquiring mortgage securities arising from the construction of new homes, apartments and business firms and eventually place those mortgages with long term lenders (such as insurance companies, pension funds and savings banks).

2.0 OBJECTIVES

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

- Explain what you understand as mortgage finance
- Highlight the various functions of mortgage bank
- Explain whether the mortgage bank generally act as a principal or as an agent in financial transaction
- Discuss the sources of income to mortgage bank
- Explain the dimensions of the mortgage banking

3.0 MAIN CONTENT

3.1 Meaning of Mortgage Bank

Mortgage bank (mortgage companies, as they are frequently called) are not easy firms to define because the industry encompasses firms that differ greatly in both size and function. In recent years, there has been observed rapid growth in mortgage banking and the reason could be attributed to comparative absence of regulation. In the broadest sense, a mortgage bank is any firm that both lends money on improved real estate securities, and offers securities to other investors as a dealer and is an investor real estate security or serves as an agent of an insurance company or other purchaser of first – mortgage securities. This definition covers a multitude of individual corporations, but in its essence, the basic function of the mortgage bank is to originate and service mortgage loans for institutional investors (such as insurance companies, pension funds and savings banks).

Mortgage banking firms must be greatly concerned with finding sources of demand for mortgage loans and simultaneously with finding a source of funds to meet that demand. Funds are obtained from life Insurance companies, savings banks, savings and loans associations and other long-term investors. After the loans have been originated and financed, the mortgage banker provides (for a fee) the servicing function of collecting loan payments, insurance, and taxes for the institutional investor.

3.2 Functions of Mortgage Bank

3.2.1 Origination

The mortgage banker is first and foremost concerned the mortgage origination of the loan. As such, prospective borrowers must be found. The successful mortgage banker usually will develop close relationship with real estate brokers and builders, both of whom are likely to have intimate knowledge of the needs of individuals for financing real properties. In this regard, mortgage bankers employ solicitors whose function (either on a commission or a salary basis) is to obtain loan applications for the firm. After loan applications have been obtained, the financing loan must be secured.

3.2.2 Sale

Mortgage bankers may place a loan with an institutional investor in one of several different ways. First, the loan may be made only after the investor has approved the transaction. Although this is the safest approach from the perspective of the investor, it is also the most cumbersome. Because the process is quite slow, it risks loss of the borrower to another lender. As another possibility, the mortgage bank may make the loan out of its own funds (usually borrowed from commercial banks and then offer the loan for sale to one or more institutional customers. Obviously, the latter approach provides the customer with a more rapid decision on the credit application, although with limited funds the mortgage banker generally cannot handle all its operations in this manner. In either case, the mortgage banker must be quite careful of the credit quality of the prospective customer.

3.2.3 Service

Once the loan is closed, the mortgage banker handles all the details of the loan until the financial instrument reaches maturity (called mortgage servicing). Such details involve processing current payment, maintaining escrow accounts for taxes and insurance, inspecting the property at reasonable intervals, changing records when property is sold, and protecting the owner of the mortgage in case of a delinquency. For this service, the mortgage banker receives what is referred to as a servicing fee, the principal source of income for many of these companies.

3.3 Sources of Income

The mortgage banking firms generally obtains its income from three sources. First, as already mentioned. It earns a servicing fee on loans placed with institutional investors. Often located at a considerable distance from the property financed, institutional investors have neither the expertise nor the inclination to service loans and would prefer to see the mortgage banker engage in this necessary function. Mortgage banking firms argue that they can perform this function more efficiently than institutional investors because of economies of scale and because they have sources of income in addition to the servicing fee. Fee income is cyclical due to increased delinquency and fore closure costs in economic recessions.

Mortgage bankers may also earn from selling mortgages to an institutional investors (on those mortgages for which the mortgage company acts as a principal) at a higher price than the mortgage banker may obtain income from the sizeable fees associated with change of

title, commissions from writing insurance on property management fees. Intense competition in mortgage banking has tended to decrease fees in recent years. Consequently, cost efficiency in operations is essential to profitmaking in today's market place.

3.4 Dimensions of the Industry

The dimensions of the mortgage banking industry are difficult to determine. The firms range in size from one person operations to national firms with branches in most major cities of the nation. Some mortgage banking firms are indeed very large with assets in the N10 to N30 billion ranges. Perhaps the most striking of the industry is its recent growth.

One of the most significant recent developments in the mortgage banking industry has been its penetration by commercial bank. Many commercial banks have owned mortgage banking subsidiaries for some years. But with the development of the bank holding company movement and the approval by the Federal Reserve Board of mortgaging banking activities for bank holding companies, many commercial banks shifted their mortgage banking firms from bank subsidiaries to holding company subsidiaries. Also, many bank holding companies have acquired independent mortgage banking firms and have started de novo mortgage banks. Bank holding companies today are estimated to control a substantial fraction of the naira volume to mortgage serviced by the largest mortgage banking firms.

4.0 CONCLUSION

Mortgage banking firms play a role somewhat comparable to securities brokers and dealers, although they specialize in the mortgage market. Their principal function is to originate mortgages, to place them with a permanent investor, and to earn fees for servicing the mortgages. Mortgage bankers also take an ownership position in mortgages (although the position is usually temporary) and perform a number of other real estate related functions.

5.0 SUMMARY

This unit has delved into the activities carried out by mortgage banks or firms, the various sources of income and the dimensions of the industry.

6.0 TUTOR MARKED ASSIGNMENT

1. What are the functions of a mortgage bank?
2. Enumerate the various sources of income to mortgage bank

3. Does the mortgage bank generally acts as a principal or as an agent in financial transactions?

7.0 REFERENCES/FURTHER READINGS

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UNIT 4 CAPITAL STRUCTURE OF NIGERIAN FIRMS

CONTENTS

1.0 INTRODUCTION

Capital structure is referred to as the ratio of different kinds of securities raised by a firm as long – term finance. The capital structure involves two decision:

a. Type of securities to be issued are equity shares, preference shares and long term borrowings (Debentures).

b. Relative ratio of securities can be determined by process of capital gearing. On this basis, the companies are divided into two:

i. Highly geared companies: Those companies whose proportion of equity capital dominate total capitalization.

ii. Low general companies: Those companies who proportion of equity capital dominates total capitalization.

Every business enterprise, whether big, medium or small, needs capital to carry on its operations smoothly and to achieve its targets. However, the actual capital should be neither more or less than the amount which is needed and gainfully employed. It is called capital structure of a business enterprise capital structure of a business enterprise is related to the long –term financial requirements of the business enterprise. It is determined by the long – term debt and equity capital used by the business enterprise. As a matter of fact, the capital structure of a business enterprise should be ideal, i.e. according to the requirement of the business enterprise.

2.0 OBJECTIVES

After studying this unit, you should be able to:

- State the meaning of capital structure
- Enumerate the factors determining capital structure
- Evaluate a company's capital structure
- Explain the benefit of capital structure

3.0 MAIN CONTENT

3.1 Meaning of Capital Structure

The following are the determinant or factors which determine the capital structure of a business enterprise:

a. Cost of Fixed Assets: The fixed capital of a business enterprise is invested in fixed assets. The fixed assets are not fixed in value; in fact, their value may record an increase or decrease in course of time. They are fixed in the sense that without them the business cannot be carried on. Further, they remain in business for a longer time. Hence, while making an assessment of the capital requirement the cost of fixed assets also be kept in mind.

b. Size of the Business Enterprise: The capital structure of a business enterprise is also influenced by the size of sized business enterprise requires much more capital as compare to a small – sized business enterprise.

c. Nature of the Business Organization: The capital structure of a business enterprise is also influenced by nature of business organization. It may be manufacturing, financing, trading or public utility type.

d. Retraining Control of the Business Enterprise: The capital of the business enterprise is also influenced by the intention of the promoters of having effective control. This is also a very important factor in deciding the capital of money by issuing debentures and preference shares which hardly enjoy and voting rights.

e. Legal Requirements: One has to comply with the issue of the law in regard to the issue of different types of securities. For instance, in India, banking companies are not allowed by the banking companies act to issue any type of securities except shares.

f. Period of Finance: Period of finance i.e short, medium or long term is also another factor which determines the capital structure of a business enterprise. For example, short term finances are raised through borrowings as compared to long –term finance which is raised through issues of shares, stocks etc.

g. Purpose of Financing: The purpose of financing should also be kept in mind in determining the capital structure of a business enterprise. The funds may be required either for betterment expenditure or for some productive purposes. Funds for productive purposes may be raised through borrowings.

h. Requirements of the Potential Investors: The capital structure of a business enterprise is also affected by the requirement of the potential investors. Different classes of investors go for different types of securities. Investors who are interested in the stability and safety and regularity of income prefer debentures and preference shares.

3.2 Evaluating a Company's Capital Structure

For stock investors that favour companies with good fundamentals, a ''strong'' balance sheet is an important consideration for investing in a company's stock.

The strength of a company's balance sheet can be evaluated by three broad categories of investment quality measurements: working capital adequacy, asset performance and capital structure. In this article, we will look at evaluating balancing sheet strength based on the composition of a company's capital structure.

A company's capitalization (not to be confused with market capitalization) describes the composition of a company's permanent or long – term capital, which consists of a combination of debt and equity. A healthy proportion of equity capital, as opposed to debt capital, in a company's capital structure is an indication of financial fitness.

Clarifying Capital Structure Related Terminology

The equity part of the debt – equity relationship is the easiest to define. In a company's capital structure, equity consists of a company's ordinary and preferred shares, plus retained earnings, which are summed up in the shareholders' equity account on a balance sheet.

This invested capital and debt, generally of the long term variety, comprises a company's capitalization, i.e. a permanent type of funding to support a company's growth and related assets.

A discussion of debt is less straight forward. Investment literature often equates a company's debt with its liabilities – it is the latter that forms the debt component of a company's capitalization –but that's not the end of the debt story.

Among financial analysts and investment research services, there is no universal agreement as to what constitutes a debt liability. For many analysts, the debt component in a company's capitalization is simply a balance sheet's long – term debt. This definition is too simplistic. Investors should stick to a stricter interpretation of debt where the debt component of a company's capitalization should consist of the following: short –term borrowings (notes payable), the thirds (rule of thumb) of the principal amount operating leases and redeemable preference shares. Using a comprehensive total debt figure is a prudent analytical tool for stock investors. It's worth noting here that both international and U.S. Financial accounting standards boards are proposing rule changes that would treat operating leases and pensions '' Projected – benefits'' as balance sheet liabilities.

The new proposed rules certainly alert investors to the true nature of these off – balance sheet obligations that have all the earmarks of debt.

3.3 Ways of Raising Financing

Firms have historically raised funds from a variety of sources – debt, equity and hybrid securities – but their dependence on these sources differs from country to country and period of time in question. In Nigeria for instance, firms have generally raised external financing debt issues rather than equity issues and have primarily raised funds internally from operations.

In every year, the dependence on internal financing to meet funding needs is clear. Furthermore, when external financing is used, it is more likely to be new debt rather than new equity or preference shares. Not only can firms choose among debt, equity or some hybrid of the two, but they can also choose how to raise the funds. Private companies generally have fewer choices than public firms – they can raise funds either internally, from operations or externally, from venture capitalists and the owner's own resources. In this section, we will examine the options available to private firms to raise funds.

Internal Versus External Equity Financing

Internal equity refers to the earnings (and cash flows of a firm that are plowed back into the firm instead of being paid out as dividends. Using the reasonable presumption that the

earnings of a firm belong to its stockholders, it can be argued that any portion of these earnings that is not paid out as dividends is still equity being reinvested back in the firm.

External equity, on the other hand, refers to funds raised by issuing common stock, warrants, contingent value rights or other equity instrument in financial markets.

A firm may prefer internal to external financing for a number of reasons. For private firms, external equity is difficult to access and even when it is available, the tradeoff is a loss of control and flexibility. For publicly traded firms, external equity may be easier to tap into, but it is still costly in terms of transaction cost and potential price impact. Internal equity on the other hand, can be used to finance operations without incurring large transactions costs and loss of flexibility. There are some cautions to the use of internal equity for funding projects. Firms have to know that internal equity has the same cost as external equity before factoring in the transactions cost differences. Thus, the cost of equity, computed using the capital asset, applies as much to internal as it does to external equity. This implies that the projects taken with the internal equity should pass mister and earn a return for equity for investors that is greater than the cost of equity. Secondly, internal equity is clearly limited to the cash flows generated by the firm for its stock holders. Even if the firm does not pay dividends, there cash flows may not be sufficient to fund the firms project. Depending entirely on equity can therefore result in project delays or their possible loss to competitors. Thirdly, managers should not make mistake of thinking that just because they use internal equity for financing projects that the stock price does not matter. In reality, stockholders in firms whose stock prices have dropped are much less likely to trust their managers to reinvest their cash flows for them than are stockholders in firms with rising stock prices.

4.0 CONCLUSION

We have discussed that firms have a number of options when it comes to financing. In this unit, we have differentiated between debt and equity, pointing out that any financing approach that results in fixed cash flows has prior claims in the case of default. That also within the broad category of debt, firms have to make a number of ranging long versus short term debt to the interest rate.

5.0 SUMMARY

A company's reasonable, proportional use of debt and equity to support its assets is a key indicator of balance sheet strength. A healthy capital structure that reflects a low level of debt and a corresponding high level of equity is a very positive sign of investment quality. We

also examine that there is a limit to which a firm can use debt financing to generate tax shields because firms do not use great amount of debt but they pay substantial taxes.

Self-Assessment Exercise

What are the important factors in making capital structures decisions?

6.0 TUTOR MARKED ASSIGNMENT

1. Why should financial managers choose the capital structure that maximizes the value of the firm?
2. What is an optimal capital structure?

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