DEPARTMENT OF MANAGEMENT

COURSE TITLE: FINANCIAL MANAGEMENT I

COURSE OUTLINE

Contact hours: 42

Pre-requisites: BBM 125

The Financial Management course, in particular, exposes the student to the nature, scope and role of financial management in business and in an economy. The course further seeks to equip the students with financial analysis skills for effective financing and investment decisions analysis.

Purpose: Develop learners understanding of financial management and apply financial management tools in decision making for business.

Course Objectives

As a result of this course unit, the student should:

1. Understand the nature, scope and role of financial management in business and in an economy;
2. Gain an understanding of the functioning of financial markets;
3. Acquire knowledge and skills in financial planning, analysis and control.

COURSE CONTENT

Lesson One

1.0 Introduction.

Nature and scope of financial management

Role and functions of a finance manager

Objectives of a firm; profit maximization; wealth maximization, social responsibility

Lesson Two

2.0 Sources of company finance

Short term sources of fund; short term leases, bank overdraft

Lesson Three

Long term sources of funds; ordinary share capital, preference shares, debentures, long leases hire purchase

Lesson Four

3.0 Financial markets and financial intermediaries

Stock markets; primary and secondary markets;

Other types of financial markets;

Lesson five

Terminologies used on the stock market; Central Depository systems (CDS);

New developments in financial markets

Lesson Six

4.0 Financial statement analysis and financial forecasting

Users of ratios

Lesson Seven

Classifications of ratios; liquidity; profitability; dividend; shareholders

Continuous Assessment Test (CAT)

Lesson Eight

5.0 Capital Budgeting

Time Value of Money; Compounding and discounting of cash flows

Capital investments; types of capital investments projects

Lesson Nine

Methods of capital investment appraisals

Non-Discounted Cash Flow Methods: payback period, accounting rate of return

Lesson Ten

Discounted Cash Flow Methods: Net present value, Internal rate of return, profitability index

Lesson Eleven

6.0 Cost of Capital

Importance of cost of capital

Lesson Twelve

Weighted average cost of capital (WACC); Specific cost of debt, equity, preference shares

Lesson Thirteen

Marginal cost of capital

Teaching / Learning Methodologies: Lectures and tutorials; group discussion; demonstration; Individual assignment; Case studies

Instructional Materials and Equipment: Projector; test books; design catalogues; computer laboratory; design software; simulators

Course Assessment

Examination - 70%; Continuous Assessment Test (CATS) - 20%; Assignments - 10%; Total - 100%.

Recommended Text Books:

i) Manas'seh, P. N. A Text Book of Business Finance, Kijabe Printing Press, 2007.

ii) Pandey, I. M. Financial Management 9th Edition, Vikas publishing house, 2009.

iii) Arnold Glen. Corporate Financial Management, Prentice Hall, 2008.

Text Books for further Reading:

i) Chandra P. Fundamentals of Financial Management (3rd Edition), McGraw Hill, 2000.

ii) Van Horne J.C. Fundamentals of Finance Management (9^{th} Edition), Prentice-Hall, 2003.

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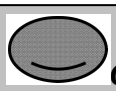
CHAPTER ONE.

NATURE AND SCOPE OF FINANCIAL MANAGEMENT



General objectives

a) Explain the scope of finance

Specific objectives.

a) Define financial management

b) Describe the roles and a finance manager

c) Focus on the objectives of a firm

d) Illustrate the finance functions

1.0 Introduction

Financial management is that managerial activity which is concerned with the planning and controlling of the firm's financial resources. It involves the decision of the three decisions of the firm i.e.

a) Investment decision

b) Financial decision

c) Dividend decision

Together they determine the value of the firm to its shareholders. The finance manager makes use of certain analytical tools in the analysis, planning and control activities associated with the major decisions of the firm.

1.1 Role of the Finance Manager

A financial manager is a person who is responsible in a significant way to carry out the finance functions.

i) Interaction with the financial markets

In order to raise finance knowledge is needed of the financial markets and the way in which they operate.

ii) Investment

Decisions have to be made concerning how much to invest in real assets and which specific projects to undertake (capital budgeting decisions).

iii) Treasury management

Many firms have large sums of cash which need to be managed properly too obtain a high return for shareholders. Other areas of responsibility might include inventory control, creditor management and issues of solvency and liquidity.

iv) Risk management

Exposures to interest rates changes and commodity price fluctuations can be reduced by using hedging techniques. These often employ instruments such as futures, options, swaps, and forward agreements.

v) Strategy

Managers need to formulate and implement log term plans to maximize shareholders wealth. This means selecting markets and activities in which the firm given its resources has a competitive edge.

1.2 Functions of a Finance Manager

Financial manager is concerned with;

A. Investment decision or long term asset mix

A firm's investment decisions involve capital expenditures. Therefore referred to as capital budgeting decisions. It involves the decision of allocation of capital or commitment of funds to long term asset that would yield benefit (cash flows) inn the future.

B. Financing decision

The mix of debt and equity is known as the firm's capital structure. The finance manager must strive to obtain the best financing mix or the optimum capital structure for his/ her firm. Broadly he/ she must decide when, where from and how to acquire funds to meet the firm's investment needs.

C. Dividend decision

The finance manager must decide whether the firm should distribute all profits, or retain them, or distribute a portion and retain the balance. The proportion of profits distributed as dividend is called the dividend payout ratio and the retained portion is known as the retention ratio.

D. Liquidity decision.

Investment in current assets affects the firm's profitability and liquidity. Current assets should be managed efficiently for safeguarding the firm against the risk of illiquidity. The profitability liquidity trade off requires that the financial manager should develop sound techniques of managing current assets.

1.3 Objectives of a Firm.

A. Profit maximization

A company is an entity which invests its resources so as to gain maximum profit –this is a traditional objective of business or cardinal objective. The business must make profits;

i. To give a return to its owners(shareholders)
   The return must be satisfactory i.e. higher than the bank rate on savings account.
   The owners may pull out of the company if it is making losses.
ii. It must give a reasonable reward to employees –good salaries and benefits.

The company must make profits some of which should contribute to social causes. Nevertheless this objective cannot be fully achieved under perfect competition as a number of fir s will compete for a limited number of customers; also maximization of profits must not be done at the expense of customer welfare i.e. the firm should not achieve this objective by exploiting its customers as it owes them a duty of care.

B. Wealth maximization/maximization of the net worthiness of a business.

This is achieved through retention of earnings and subsequent reinvestment of these earnings in the business or other viable ventures .this will boost the value of the company's share as shareholders or owners will receive better returns from such ventures. In this case the net worth should be taken to be the total assets less its liabilities.

C. Social responsibility

i) **Maximization of the welfare of its employees**

Happy (contented) body of employees will boost the company's production thus sales and profits. The company must provide its employees with:-

- Reasonable salaries commensurate with the employees' qualification, competence, experience and nature of the job.
- Transport facilities for those people performing sensitive jobs i.e. jobs which can hold others
- E.g. cashiers, accountants, storekeepers, etc.
- Medical facilities for employees and their families. (To the employee such facilities will
- facilitate a healthy employee who can work better and avoid absences). To their families this
- is an incentive for the employees.
- Assurance of terminal benefits e.g. pension schemes or other retirement benefits- to ensure
- steady employees and boost their morale towards the company.
- Recreation facilities e.g. playgrounds, clubs- lower grade employees enjoy mixing with
- management which facilitates unity and harmony in the company and facilitates attainment

- of the company's goals.

ii) **Interest of customers**

A business must be mindful of its customers and must seek to retain them and for this reason a business should:-

- Provide quality products
- Fair prices for the goods purchased i.e. customers should get a good value for their money.
- Have an honest dealing with customers i.e. to avoid bouncing them/il l treatments of customers should be avoided as these contribute to the company's profitability.

iii) **Welfare of the society**

A business owes a social responsibility to the society in such forms as:-

- Maintaining sound industrial relations with the society around it
- Avoiding harmful production processes e.g. avoiding pollution of environment.
- The company should contribute to the social cause e.g. in form of:- harambee donations ,building public clinics, recreational centers ,schools e.t.c.
- The company must identify itself with the society in as much as it must understand the problems of the society around it e.g. be aware of the society's development needs and contribute to its attainment

iv) **Fair dealing with suppliers of goods and finance**

The company must:-

- Meet its obligations as and when they fall due.
- Avoid dishonor of any obligation and also double dealings in procurement of goods.
- The creditors also need assurance of the company's ability not only to service the current obligations but also to be able to raise more internal equity to back their finances.

v) **Duty to the government**

The company must:-

- Pay corporation taxes as and when they fall due.
- Operate within the government development plans e.g. banks and financial institutions which should operate within boundaries required by the central bank so as to facilitate development.
- Operate within legal system i.e. adhere to industrial requirements and ensure safety standards to its employees.

Review Questions

i) Explain the functions of a finance manager

ii) Identify the roles of a finance manager

iii) Discuss the objectives of a business

References

Manas'seh, P. N. A Text Book of Business Finance, Kijabe Printing Press, 2007.

Pandey, I. M. Financial Management 9th Edition, Vikas publishing house, 2009.

CHAPTER TWO
SOURCES OF COMPANY FINANCE

General objectives

a) Explain the methods of venture financing and factors that affect finance sought

Specific objectives

a) Explain the features of company finance

b) Explain the similarities and differences of company finances

c) Discuss the advantages and disadvantages of company finances

d) *Evaluate the best source of company finance*

2.0 Introduction

Companies have different alternatives for obtaining funds that is used to finance investment project. They can issue debt or equity securities to archive this goal. Some times lease is also used as an alternative for long term financing. The source of finance has an implication on cost of funds. To this end this chapter discusses the different sources of finance including their merits and demerits.

A company can raise finance in the following ways:

A. From finance classified according to the relationship to the party giving the finance, e.g.

I. **Equity Finance**- This is finance provided by real owners of the business i.e. ordinary shareholders. Equity securities represent ownership interest in a corporation. These securities include common stock and preferred stock. These two forms of securities provide a residential claim on the income and assets of a corporation. Thus, this section discusses these two sources of long-term finance.

II. **Quasi equity**- This is finance provided by quasi-owners of the business i.e. preference shareholders.

III. **Debt finance**- This is finance provided by outsiders i.e. creditors: thus it include loans, overdrafts, trade creditors, bills of exchange, debentures, hire-purchase, leases, mortgages, etc.

B. Classified according to the duration i.e. term of finance i.e. how long the finance will be in the business.

I. **Permanent finance**- This is finance which cannot be refunded to the owners in the short-run. Examples of this finance are:

i) Ordinary share capital

ii) Irredeemable preference share capital

iii) Irredeemable debentures

These are only refunded in the event of the company's liquidation.

II. **Long term finance**- If finance is in the business for a period of 7 years and beyond, this finance is long-term, e.g. long-term debt finance. However, this term is relative because for a kiosk a 2 years loan is long-term, and for a limited company a 2 years loan is short term.

III. **Short term finance**- this is finance due to be refunded to lenders after a short period i.e. a period between one year and three years, e.g. overdrafts, short term loans, etc.

C. Classified according to the origin of finance:

Internal sources of finance- these are such finances as generated within the business, i.e. from the businesses' own operations. Examples of such finances are

- Retained earnings
- Provision for depreciation

- Provision for taxation
- Adjustment in working capital

items The above finances are used as follows:-

i) Undistributed profits transferred to the business i.e. ploughed back into the business.

ii) Provision for depreciation if a company has created a sinking fund to replace an asset after useful economic life. This finance can be used and replaced later when the asset is due to be replaced.

iii) Provision for taxation is a source of finance in as much as the tax liability falls due a bit later than when it is appropriated from the current profits, e.g. a company will provide for taxation in December and pay it at the end of March or thereafter. i.e. can be used up to the end of March.

iv) Adjustment in working capital serves as a source of finance in as much as the company will reduce the levels of working capital items to release finance which would have otherwise been tied up in those items.

v) Sale of an asset; this is a source of finance under the following conditions:-

i) If the asset is obsolete

ii) If the asset is sensitive to technology e.g. computers, aircrafts.

iii) If the asset cannot meet the company's contemplated expansion programme.

iv) If the asset is not sensitive/ central of the company's operations, and its sale will not substantially affect he productive capacity of the business.

D. Classification according to the rate of return i.e. in relation to the cost of that finance.

I. **Finance with variable rate of return VRT)**. In this case the return on such finance will vary with the profits made by the company; e.g. ordinary share capital and participative preference share capital are VRT.

II. **Fixed rate of return capital (WFR)**. This will refer to the finance whose rate of return is fixed regardless of the profits made, e.g. preference share capital, loan finance, debenture finance etc

2.1 Equity Finance

This is the largest source of finance to any limited company and usually forms the base on which other finances are raised. Equity is the total sum of the company's ordinary share capital plus the company's retained earnings also known as revenue reserves.

Ordinary Share Capital

It is that finance contributed by the ordinary shareholders of a business. This is raised through the sale of the company's ordinary shares. It is finance contributed by real owners of the company. This finance is only raised by limited companies. It is permanent finance to the company and can only be refunded in the event of liquidation, i.e. in Kenya; a company cannot buy back its own shares (ordinary shares).

This finance is paid ordinary dividends as return to the shareholder's investment. Ordinary shares carry rights and usually each share is equal to one vote exercised in Annual General Meetings.

Ordinary shares are quoted at the stock exchange where they are sold and bought by the public through brokers. Ordinary share capital carries the highest risks in the company because it gets its return after other finances have got theirs, and also in the event of liquidation it is paid last (their voting right is assumed to be used wisely to minimize these risks.)

Ordinary dividends are not a legal obligation on the part of the company to pay. If the company's profits are good, ordinary shareholders get the highest return because their dividends are varied. This is the only type of finance that grows with time and this growth is technically called growth in equity which is facilitated by retention of earnings.

Rights to Ordinary Shareholders

They have a right to vote. This right is given to them by the company's Act. They are also entitled to vote by Proxy in absentia

They have a right to inspect corporate books e.g. Articles of association, Memorandum of Association and books of accounts.

They have a right to sell their shares to other parties i.e. to transfer their ownership in shares of a company.

They have a right to share in residual assets of the company during the company's liquidation.

They have a right to approve the purchase of capital assets.

They have a right to amend the charters and by laws of the company (Articles and Memorandum of Association)

They have a right to approve the sale of the company's assets.

They have a right to approve mergers, acquisitions and take-over's.

They have a right to appoint directors.

They have a right to appoint/remove auditors of the company who will oversee the company's affairs.

Features of Ordinary share Capital

It is a permanent finance to the company which can be refunded only during liquidation.

It is the largest source of finance to the Ltd Company.

This finance has a residual claim on profits and assets during liquidation.

Ordinary share capital is entitled to voting powers, each share usually being equal to one vote.

This finance carries a varied return i.e. its dividends will vary with the profits made.

Ordinary share capital carries no nominal cost to the company. i.e. dividends on ordinary share capital are not a legal obligation to the company to pay.

It is the only finance which will grow with time as a result of retention.

This finance cannot force the company into liquidation i.e. it does not increase its gearing; on the contrary, it decreases the gearing.

It can be raised by limited companies only.

Advantages of Using Ordinary Share Capital by a Company

Being a permanent finance the company will invest it in long term ventures without inconveniencies of paying it back.

Dividend payment (to ordinary shareholders) is not a legal obligation to the company, thus no threat to liquidity of the company.

This type of finance contributes valuable ideas towards the running of the company during the Annual General Meeting.

This finance is available in large amounts in particular if the company is quoted on the stock exchange in which case it can raise substantial amounts of money to finance the company's operations.

Ordinary share capital forms a base and thus a security on which other money can be raised.

Common stock does not obligate the firm to make payments to stockholders. A firm can not be obliged to pay divided when there are financial constraints. Had it used debt, it would have incurred a legal obligation to pay interest regardless of operating condition and cash flows.

Common stock has no fixed maturity date. It never has to be rapid as would a debt issue.

Common stock protects creditors against losses and hence, the sale of common stock increases the creditworthiness of the firm. This in turn raises it bond rating, lowers its cost of debt and increases its future ability to use debt. One of the costs of issuing debt is the possibility of financial failure. This possibility does not arise when debt is used.

The cost of underwriting and distributing common stock is usually higher than that of preferred stock or debt

If the firm has more equity than required in its optimal capital structure, its cost of capital will be higher than necessary. Therefore, a firm would not want to sell stock if the sale would cause its equity ration to exceed optimal level

Under current tax laws, dividends on common stock are not deductible for tax purposes, but interest is deductible. This raises the relative cost of equity as compare to debt.

Disadvantages of Using Ordinary Share Capital to a Company

The cost of ordinary share capital (ordinary dividend is paid in perpetuity).

This finance may disorganize a company's policy in case shareholders' votes are cast against the company's present operations and policies.

It does involve a lot of formalities in its raising and it may take a long time to raise as the company has to obtain permission from the capital market authority and other regulators.

It is very expensive to raise as it involves a lot of costs commonly known as floatation costs e.g. printing the prospectus and share certificates, advertising expenses, cost of underwriting the issue, brokerage costs, legal fees, auditor's fees, cost of communication.

The issue of ordinary share capital means that the company's secrets will be exposed to the public through published statements which may be dangerous from competitors point of view.

2.2 Quasi Equity/ Preference Share Capital

This is finance contributed by quasi-owners or preference share holders. It is so called quasi-equity because it combines features of debt finance and those of equity finance.

Preferred stock differ form common stock because it has preference over common stock in the payment of dividends and in the distribution of corporation assets in the event of liquidation. Preference means only that the holders of the preferred shares must receive a dividends (in the case of an ongoing firm) before holders of common share are entitled to anything. Preferred stock is a form of equity form a legal and tax stand point. It is important to note. However, the holders of preferred stock sometimes have no voting privilege. Preferred stock is sometimes convertible in to common stock and is often callable. So we can say that preferred stock is a hybrid form of financing combing features of debt and common stock.

It is called preference share capital because it is accorded preferential treatment over ordinary shareholders in:-

(a) Sharing in dividend- It receives its dividend before those of ordinary shareholders. Thus it is said to be preferred to dividends.

(b) It is accorded preferential treatment in sharing of assets in the event of liquidation. Preference shareholders get their claims on asset before ordinary shareholders get theirs. Thus it is said to be preferred to assets.

In order for a share to be called a preference share it must be accorded the above preferential treatment over and above ordinary share capital.

Advantages of Preferred Stock

By using preferred stock a firm can fix its financial cost and still avoid the danger or bankruptcy if earnings are too low to meet these fixed charges. This is because preferred stock earners a dividend but the company has discretionary power to pay it. The omission of payment doesn't result in default.

Disadvantages of Preferred Stock

It has a higher after tax cost of capital that debt. The major reason for this higher cost is taxes preferred dividends are no deductible for tax purpose, whereas interest expense on debt is deductible.

Similarities between Ordinary and Preference Share capital

Both finances earn a return in form of dividends

If the preference shares are irredeemable then both will be permanent sources of finance to the company.

In case the preference share capital is irredeemable both will receive dividends in perpetuity.

Both form the company's share capital/ share finance

Both are difficult to raise due to a lot of formalities the company must go through to raise this finance.

Both claim on assets and in profits after debt finance has had its claim.

Payment of dividend to both is not a legal obligation for the company i.e. neither the ordinary shareholder nor the preference shareholder can sue the company to claim their dividends.

Both finances are not secured i.e. no security is attached to such finance.

Both finances are raised strictly by limited companies.

Both finances are long-term finances to the company.

Differences between Ordinary and Preference Share capital

Ordinary share capital carries voting rights whereas preference share capital does not except if it is convertible, and is converted.

Ordinary share capital carries variable rate of dividends whereas preference dividends are fixed except for participative preference share capital.

Ordinary share capital receives its dividends after preference share capital has been paid theirs.

The share prices of ordinary shares will be higher if the company is doing well than those of preference shares.

Preference share capital increases the company's gearing level whereas ordinary share capital reduces the gearing level.

For cumulative preference shares these may receive dividends in arrears ordinary shares cannot.

Raising finance by way of ordinary share capital is easier than raising preference share capital as in the latter case the company has to be financially strong.

Preference share capital is usually secured by the company's financial soundness whereas ordinary share capital is not.

Preference share capital cannot qualify for a bonus issue, while ordinary share capital can, i.e. preference shares cannot receive bonus issues.

Ordinary shares have a chance to receive a rights issue whereas preference shares cannot get rights issues.

2.3 Debt Finance – Loan

In this section we will discuss debt financing by describing in some detail the basic features and advantages of bond financing.

Features of Bonds

Bonds are a major source of financing for corporations and government. A bond is a long term contract under which a borrower agrees to make payments of interest and principal on specific dates to the holders of the bond.

Most corporate bonds contain a **call provision** which gives the insuring corporation the right to call the bonds for redemption. The call provision generally states that are called some other types of bonds have **convertible features**. A convertible bond is a debt instrument that is convertible in to shares of common stock at a fixed price at the option of the bond whereas a convertible features on a bond benefits the bondholders.

A callable bond will generally require a higher interest payment than non callable bond because the investor will not be willing to buy a callable bond unless he receivers a better interest payment. When the market price of the bond of increases or equivalently, the market interest rate decreases, the issuer of the bond will call the bond and issue a new bond at a lower interest rate. This puts the buyer of the bond at a disadvantage because when the bond gets attractive it will be taken away from the investor.

A convertible feature on a bond as stated before, benefits the bondholders. Thus investors would generally require the issuing corporation a higher interest payment on non convertible bonds than convertible bonds. The holders of convertible bonds have the option to convert these bonds to common stock any time they choose. Typically, the bonds are exchanged for specified number of common shares with no cash payment required. Because convertible have this option, they require a lower payment than non-convertibles.

This is the type of finance which is obtained from persons other than actual owners of the company i.e. creditors to the company. This finance can be in any of the following forms:

Loans

Debentures

Bank overdrafts

Trade creditors

Borrowing against

bills of exchange

Lease finance

Mortgage finance

Hire purchase finance

All the above finances have a legal claim or charge against the company's resources or assets.

Classification of Debt Finance

A. Short term finance

This ranges from 1 month up to 4 years and is given to customers known to the bank or to lenders. The agreement of this loan will mention both the repayments of principal and interest, and for interest it must identify whether it is simple or compound interest. For principal, it has to be paid over some time. This finance is usually secured and the terms of the loan will be restrictive e.g. to be invested in an area acceptable to the bank or lender. Usually, this finance should be used to solve short-term liquidity problems.

B. Medium-term finance

This finance will be in the business for a period ranging between 4-7 years. This term is relative and will depend upon the nature of the business. This type of loan is used for investment purposes and is usually secured but the security should not be sensitive to the company's operations. The finance obtained must be invested while respecting the matching approach to financing i.e. the term and payback period must

be matched. This type of finance is the most popular of all debt financing because most of the busineses will need it both in their growing stages and also in their mature stages of development.

C. Long-term finance

This is a rare finance and is only raised by financially strong companies. It will be in the business for a period of 7 years and above. This finance is used to purchase fixed assets in particular during the early stages of a company's development. It is always secured with along term fixed asset, usually land or buildings. Its investment, however, must obey the matching approach. In all, the companies needing such finance do not have to be known to the lenders.

Advantages and Disadvantages of Debt Financing

In the previous section we noted the advantage of equity financing relative to debt financing. Though it may be a repeat let's summarize the key advantages and disadvantages of debt financing relative to equity financing.

The corporation payment of interest on debt is considered a cost of doing business and is fully tax deductible. Dividends paid to stockholders are not tax deductible. This makes debt financing a cheaper source of finance than equity financing.

Unpaid debt is a liability of the firm. If it is not paid, the creditors can legally claim the asset of the firm. This action can result in liquidation or reorganization tow of the possible consequences of bankruptcy. Thus one of the costs of issuing debt is the possibility of financing failure. This possibility does not exist when equity is issued.

2.4 Other forms of Debt Finance

I. Overdrafts

These are very short-term sources of finance to the company and are usually used to finance the company's working capital or solve its liquidity problems. This finance is usually not secured and is more costly than long-term loans as much as its interest is 1-2% higher than bank rates. Interest on overdrafts is computed on a daily basis although it may be paid monthly. Overdrafts are usually given to very well known customers of the bank although over-reliance on overdrafts is a sign of poor financial management policies and as such they should not be used often.

II. Bills of Exchange

As a source of finance, bills of exchange can be:-

- Discounted
- Endorsed
- Given as securities for loans

A bill of exchange us defined as an unconditional order in writing addressed by one person to another signed by the person giving it, requiring the person to whom it is addressed to pay on demand at a fixed or determinable future date a certain sum of money to the order of the person or to bearer. Most of the bills mature between 90-120 days although they could be sight bills i.e. payable on sight or issuance i.e. payable in the future. In order for a bill to be valid and to serve as a source of finance it should be:-

Signed by the drawer;

Accepted by the drawee;

Be unconditional;

Bear appropriate revenue stamp.

III. Debenture Finance

It is a document that is evidence of a debt which is long-term in nature, and confirms that the company has borrowed a specific sum of money from the bearer or person named in the debenture certificate. Most debentures are irredeemable thus forming a permanent source of finance to the company. If these are redeemable then these will be long-term loans which range between 10-15 years. They can be endorsed, negotiated, discounted or used as securities for loans. They carry a fixed rate of interest which is payable after six months i.e. twice a year.

Classification of Debentures

a) Classification according to security

i) Secured debentures- these are secured against the company's assets or have a fixed charge against the company's assets. In the event of the company's liquidation such debentures will claim from that particular asset. They could be secured against a floating charge in which case the holder can claim on any or all of the company's assets not yet attached by other secured creditors. A debenture holder with a floating charge has a status of a general creditor. However, the floating charges debentures are rare and they are sold by financially strong companies.

ii) Unsecured (naked) debentures- these carry no security whatsoever and such they rank as general creditors. They carry a residual claim to the first class creditors but a superior claim over ordinary shareholders. These are rare sources of finance and are sold by financially strong companies with a good record of dividend payment to the shareholders.

ii) Classified according to redemption.

i) Redeemable debentures- these are bought back by the issuing company. Like preference shares, these have two redemption periods. This is usually between 10-15 years, i.e. the company has the option to redeem these after 10 years but before expiry of 15 years. In most cases redeemable debentures are secured against specific assets e.g. land or buildings (mortgage debentures). Their interest is a legal obligation on the part of the issuing company.

ii) Irredeemable debentures (perpetual debentures)- these can never be bought back by the issuing company except in the event of liquidation and as such they form a permanent source of finance to the company. These debentures are rare and are only sold by financially strong companies which must have had some good dividend history. They are unsecured and thus are known as naked perpetual debentures.

c) Classified according to convertibility

i) Convertible Debentures- These are the type of debentures which can be converted into ordinary share capital and this conversion is optional as follows:

i. At the option of the company i.e. at the company's option.
ii. At the option of both parties i.e. debenture holder and the company.
iii. At the option of the holder.

However, the conversion price of the debenture is given by:-

Conversion Price = Nominal value of the debentures

Conversion Ratio = Nominal value of the debentures

Nominal value of the shares to be converted

In all, convertible debentures are never secured.

ii) Non-convertible debentures- These cannot be converted into any shares be it ordinary or preference shares and are usually secured.

d) Subordinate debentures (naked)

These are issued with a maturity period of 10 years and above, and usually they carry no security and depend upon the goodwill of the company. They are so called subordinate because they rank last in claims after all classes of creditors except trade creditors. Nevertheless their claims are superior to those of shareholders both preference and ordinary shares.

IV. Hire Purchase

This is an arrangement whereby a company acquires an asset by paying an initial installment usually 40% of the cost of the asset and repays the other part of the cost of the asset over a period of time. This source is more expensive than bank loans. Companies that use this source of finance need guarantors as it does not call for collateral securities to raise. The company hiring the asset will be required to honor all the terms of the arrangement which means that if any term is violated then the hire may repossess the asset. This finance is kind and the hirer will not get a good title to the asset until he clears the final installment and an optional charge in some cases. Companies that offer this finance in Kenya are:- National Industrial E.A. Ltd., Diamond Trust(K) Ltd., Kenya Finance Corporation, Credit Finance Co. Ltd. They avail hire purchase facilities for such assets as: Plant and machineries, vehicles, tractors, heavy transport machines, aircrafts, agricultural equipments.

V. Lease Financing

Leasing is an important source of equipment financing. For some equipment, the financing is long term in nature. This section discusses the features of a lease their types and advantages and disadvantages of lease financing.

A lease is a contract whereby the owner of an asset (the leaser) grants to another party (the leasee) the executive right to use the asset in return for the payment of rent (i.e. lease payment). In other words, through leasing, a firm can obtain the use of certain fixed assets for which it must make a series of contractual periodic payments form the lease points of view; this lease payment is tax deducible. Here we discuss lease as an alternative source of financing and hence we shall see the effects of leasing on the lease business.

Types of Leases

Leases can be basically classified in to two; **operating lease** and **capital or financial lease**. An operating lease is relatively short term in length and is cancelable with proper notice. The term of this type of lease is shorter than the assets economic life. Operating leases for instance may include the leasing of copying machines certain computer hardware and word processors. In contrast to an operating lease a financial lease is longer term in nature and is non cancelable. The lessee is obligated to make lease payments until the lease term expires which approaches the useful life of the asset.

If an operating lease is held until the term of the lease, at the maturity date will return the leased asset to the owner (leassor) who may lease is again or sell the asset. However, if the leasee decides to return the asset before maturity (i.e. cancel the lease) it may be required to pay a predetermined penalty for cancellation.

In case of financial lease the leasee can not cancel the lease contract and is obligated to make leasee payment over the term of the lease regardless of whether the leasee needs the service of the asset or not. But at the maturity date, the lease may transfer ownership of the asset to the lessee or the may have the opportunity to purchase the leased asset at a bargain price. For capital (or financial) lease the value of asset along with the corresponding lease liability must be shown

on the balance sheet. Capital leases are commonly used for leasing land, buildings and big equipment.

More specifically, a lease is considered as a capital (or financial) lease if it meets any one of the following conditions:

i) The lease transfers title to the assets to the leasee by the end of lease period

ii) The lease contains on option to purchase the asset at a bargain price.

iii) The lease period is equal to or greater than 75 percent of the estimated economic life of the assets.

iv) At the beginning of the lease the present value of the minimum lease payments equal or exceeds 90 percent of the value of the leased property of the lessor.

If any of the above condition is not met, the lease is classified as an operating lease.

Essentially, operating leases give the leasee the right to use the leased properly over a period of time, but they do not give leasee all the benefits and risks associated with the asset.

Advantages of Leasing

a) Leasing allows the lease to deduct the total payment as on expense for tax purposes.
b) Because leasing results in the receipt of service from an asset possibly with out increasing the liabilities on the firm's balance sheet, it may results in favorable financing rations.
c) Leasing provides 100 percent financing as opposed to loan agreement where the purchase of the asset (borrower as well) is required to pay a portion of the purchase price as a down payment.
d) In a lease arrangement, the leasee may avoid the cost of obsolescence if the lessor fails to accurately anticipate the possibility for obsolescence of the asset and set the less payment too low.

Disadvantage of Leasing

a) A lease does not have a stated interest cost. Besides at the end of the term of the lease agreement, the salvage value of an asset, if any, is realized by the leaser. Thus in many of the leases, the return to the lessor is quite high.

b) In a lease of an asset that subsequently becomes obsolete, under a capital lease the leasee still makes lease payments until maturity.

Summary

Firms have different alternative sources of long term finance including equity debt and lease. Equity financing could simply mean raising long term funds by selling common or preferred stock. Debt financing can be through the issuance of debt securities like bonds. In lease financing the leasee agrees to pay the periodically for the use of leaser's assets. Because of this contractual obligation leasing is regarded as a method of financing similar to borrowing. There are two types of lease agreements. These are operating lease and capital (or financial lease).

The principal factor affecting the decision to use equity or bond financing is tax. Dividends on equity are not tax deductible whereas interest on debt is deductible. This raises the relative cost of equity compared to debt.

Review Questions

i) Describe the characteristics of various sources of finance

ii) Explain the similarities and differences of company finances

iii) Discuss the advantages and disadvantages of company finances

iv) *Evaluate the best source of company finance*

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CHAPTER THREE
THE FINANCIAL SYSTEM IN PERSPECTIVE

General objectives

a) Explain the concept of financial markets

Specific objectives

a) Highlight the developments in the stock markets

b) Understand the role of stock exchange

c) Discuss the features of capital markets

d) Explain the types of financial markets

3.0 Introduction

Saunders and Cornett (2001) define financial markets as structures through which funds flow. This definition off course encompasses both financial institutions (FIs) and capital markets as structures through which funds flow. Financial markets can be distinguished along two major dimensions

1. Primary markets Vs Secondary markets

a) primary markets

This are markets in which users (firms) rise funds through new issues of financial instruments such as stocks and bonds

Most such issues are arranged through investment banks-who serve as intermediaries between funds suppliers and users. Such intermediation is usually in the form of underwriting – (guaranteeing the issuing firm of a fixed price by buying the whole or part of the lot and selling it to investors at a higher price)

Primary markets financial instruments include equity issues by firms to be traded by the public for the first time (IPOs or initial public offers).

b) Secondary markets

Once financial instruments such as stocks are issued in the primary markets they are often traded in the secondary market. New investors buy from original investors. Examples include NYSE, AMEX, NASDAQ EASDAQ, LSE, NSE, JSE etc

Buyers of secondary market securities are economic agents (consumers, businesses & governments) with excess funds and sellers are economic agents with need for funds.

Exchange of funds between the sellers and buyers is usually through a securities broker who acts as an intermediary. In this case the original issuer of the security is not involved

In addition to stocks, secondary markets also offer bonds, mortgage backed securities, foreign exchange futures and options (derivatives) etc .Secondary markets offer investors liquidity and diversification benefits to investors and also lower transaction costs

Though security issuers are not involved directly in the transfer of funds in the secondary market they obtain information on the current market value of their instrument, this information allows issuers to evaluate how well they are using funds generated from the issue and provides information on how well subsequent offerings might fare in terms of raising additional money (and at what cost)

2. Money markets Vs Capital markets

a) Money markets

They trade in debt securities with maturities of one year or less. The short term nature of this nutriments means that fluctuations is their prices in the secondary market is quite minimal

They are usually traded is over the counter (OTC) – this markets have no specific location, rather transactions occur via phone lines, wire transfers and computer trading.

FIs & depository institutions e.g. commercial banks are required by central banks to maintain cash reserves as such excess is traded in these markets

Money market instruments examples - commercial paper, Treasury bills, Negotiable certificates of deposits etc

b. Capital markets

They trade in equity (stocks) and debt (bond) instruments with maturities in excess of one year. Given their longer maturities, these instruments experience wide price fluctuations in the secondary market than do money market instruments.

Examples of capital market instruments are corporate stocks, residential mortgages, commercial mortgages, corporate bonds; federal and local government bonds bank and consumer loans etc.

3.1 Characteristics/ Features of Financial Assets

i) Moneyness

Money is used as a medium of exchange or for settlement of transactions. Assets that can be transformed into money at little cost delay or risk (e.g. time and savings deposits and government securities) are referred to as near money. This property is the moneyness of the asset. It is a desirable property for investors.

ii) Divisibility and Denomination

This refers the minimum size in which a financial asset can be liquidated and exchanged for money. The smaller the size the more the financial asset is divisible. A deposit may be divisible to the last cent, but other financial assets have varying degrees of divisibility depending on their denominations (the dollar/ birr value that the assets will pay at maturity). In the US bonds come in $1000 denominations while commercial paper comes in $25000 denominations. Divisibility is desirable for investors but not borrowers.

iii) Reversibility

This refers to the cost of investing in a financial asset then getting out of it into cash again. It is commonly referred to as the turnaround cost or round-trip cost. This cost comes in the form of commissions for market makers, bid-ask spread and the time and cost of delivery of the asset if any. The bid-ask spread is mainly determined by the thickness or thinness (frequency of the transactions) of the market. A low turn around cost is clearly desirable property of a financial asset.

iv) Cash flow

The return on an investment depends upon the cash distributions (e.g. dividends and expected selling price on shares; and the principle and coupons on bonds) that the asset will pay. Non cash payments (e.g. bonus shares and options) and inflation are also accounted for. When inflation is factored in, we have the real rate of return; otherwise we have the nominal rate of return if the effect of inflation is unaccounted for.

v) Term to maturity

This is the length of the period until the date at which the asset is scheduled to make it final payment or the owner is entitled to demand liquidation. Assets in which the creditor can demand payment at any time are called demand instruments, while those with no maturity e.g. the British Consul are called perpetual instruments. Financial assets may have various provisions that may either extend or shorten their maturity

vi) Convertibility

This is the ability if the financial asset to convert into other assets (either in the same or different classes) a bond may be converted into another bond, a corporate convertible bond into equity shares or preferred stock into common stock. The timing, costs and conditions for conversion are usually spelt out in the legal descriptions of the convertible instrument at the time it is issued

vii) Currency

Due to globalization and increasing integration of global financial system, and in the light of the freely floating and often volatile exchange rates among major currencies, the currency in which the financial asset will make cash flows is very important for investors.

Most assets are dominated one currency, the $, € or ¥ and investors must chose the assets with the currency feature in mind. Some issuers in an attempt to reduce the currency risk are issuing dual-currency instruments, which pay the interest and the principal in different currencies. The $ and the ¥ are the usually paired currencies in this cases.

viii) Liquidity

If the market for a financial asset is extremely thin and one must search for one in a very few suitable buyers, then the asset is said to be illiquid. Less suitable buyers including speculators and market makers may be easily located but will have to be enticed to invest in an illiquid asset

by an appropriate discount in the price. For many financial assets liquidity is determined by the contractual arrangements. This depends not only on the type of financial asset at also on the quantity involved. Large quantities usually have liquidity problems.

ix) Return predictability

Assuming that investors are risk averse, the riskiness of an asset can be equated with the uncertainty or unpredictability of its return. Return predictability is a basic feature of financial assets, in that it is a major determinant of their value. The value of a financial asset depends on the future cash flow and on the discount rate used to discount these cash flows. The cash flow may be contractual be the discount rate is a function of factor such as prevailing interest rates which are hard to predict as time increases. Another factor that makes returns unpredictable to predict is inflation.

x) Complexity

Some financial assets are complex in the sense that they are a combination of two or more simpler assets. To find the true value of such assets one must break them down into their component parts and price them separately and the sum of those prices becomes the value of the complex asset. An example is a callable bond (the issuer is entitled to repay the bond prior the maturity date), the true value of such a bond is therefore the price of a similar non callable bond, less the issuers right to retire the bond early. The extent of complexity is large; many callable bonds are also convertible.

xi) Tax status

Government regulations about taxing income from ownership or sale of financial assets vary widely. Tax rates also differ from year to year from country to country and from one asset to another depending on the issuer, length of time the asset is held nature of ownership etc. The tax status of a financial status affects its value. Clearly an investor will require a higher return for a taxable financial asset of the same risk class as that of a non taxable financial asset.

3.2 Role of the Financial System in the Economy

A financial system is composed of financial institutions and financial markets. When you talk of the financial systems role in an economy you are indirectly addressing the role that financial institutions and financial markets play in an economy

I. Transmission of monetary policy

Because deposits are a significant component of the money supply, which in turn impacts on the rate of inflation, depository institutions particularly commercial banks play a key role in the transmission of monetary policy from the central bank. This may be through variation of the reserve ratio (in order to increase or lower money supply)

II. Credit Allocation

A financial system offers the economy with a unique service as a major conduit of credit to sectors of the economy that need special financing such as farming and real estate (Residential specifically). Authorities in such cases may require that a significant portion of FIs assets be in the areas identified.

III. Time intermediation intergenerational wealth transfer

Most countries offer relief and subsidies to encourage investments by savers in life insurance and pension funds to enable the older generation to transfer wealth to the younger one.

IV. Payment services

Depository institutions and thrifts are special in that the efficiency in which they provide payment services directly benefits the economy. Any breakdown in the payment systems (check clearing of wire transfers) would result in harmful effects to the economy.

Other services to users and suppliers of funds

i) Monitoring costs- Aggregation of funds in FIs provides greater incentive to collect a firm's information and monitor its actions (economies of scale)

ii) Liquidity and price risk - Insurance firms etc offer liquid investments and diversify away risk for funds providers and may even guarantee a fixed return

iii) Reduced transaction costs - Similar to economies of scale in information production, FIs tremendously reduce transaction costs

iv) Maturity intermediation - By maturity matching FI can offer new products such as mortgages, similarly FIs can better bear the risk of mismatching the maturities of assets and liabilities

Denomination Intermediation - FIs offer small investors a chance to overcome constraints of buying assets imposed by a minimum denomination size

3.3 Definition of a stock market

It is a market where securities are bought and sold. Securities refer to shares, debentures, treasury bonds, treasury bills etc. Stock refers to capital detained by a company through the issue of shares.

Bonds are debt instruments used to borrow money from the public.

Members of the stock exchange

1. Stock jobbers

These are members who buy and sell securities in their own names.

They sell securities at a profit called a 'turn'

They buy shares in wholesale and hold them for speculative purposes

2. Stock brokers

These are middle men between the investing public and the stock exchange.

They are agents who earn a commission from the buyers and sellers.

Members of the stock exchange must pass through them for technical advice

Similarities between Jobbers and Brokers

They both operate in the stock market

Both don't hold shares for investment purposes

Activities of both are regulated by the rules of stock market.

Types of jobbers

i) Bull- this is a speculator in the stock exchange who buys shares in expectations of a rise in their prices.

ii) Bear- speculator in the stock exchange who sells shares in the anticipation of a fall in their prices.

iii) Stag- a speculator in the stock market who purchases large block of new issues of shares in anticipation in the rise of market price. They buy their shares directly from the companies selling them.

Functions of Stock Exchange

Provides a ready market for stock, shares, bonds, debentures

etc. facilitates the flow of new capital into the industry

Facilitates savings (encourages savings by individuals)

Protects investors by reasons of the rules of the stock exchange.

Companies seeking capital are advised and guided by all stages.

Shows the trend of business in the stock exchange provides an important barometer for business throughout the country.

Investors are able to obtain capital from the public.

It enhances the inflow of foreign capital.

The title to any quoted security is transferred speedily and cheaply.

Disciplines the company's management by ensuring that the companies fulfill certain requirements and follow certain rule before securities are listed in the stock exchange.

Quotations in the Stock Exchange

Quotation is consent by the stock exchange for companies' securities to be dealt with in the stock market i.e. to be bought and sold in the stock market.

Requirements of quotation

A company must be a public limited company

It must be registered with the registrar of companies and must submit a certification of registration.

The company must provide details of the current directors, company lawyes, company secretary, company auditors, financial year end and subsidiaries (branches) of the company.

Such a company must inform the stock exchange the current distribution of the shares.

Such a company must be willing to offer the public a minimum number of shares.

Such a company must pay a clearing fee.

Such a company must issue a prospectus to the stock exchange.

Such a company must issue a statement of dividends and bonds issued in the previous 5 years.

Advantages of Quotations

A quoted company is able to raise finances quickly and easily.

A quoted company is considered to be financially stable.

A quoted company can easily obtain a loan.

A quoted company can compare itself with other companies.

There is prestige associated with quoted companies.

Quoted companies are forced to operate within certain guidelines

Disadvantages

Loss of secrecy- means the company losses its secrecy through the publication of the company's shares. The secrecy is also lost by inspection of the books of accounts by the shareholders or by the public.

In case the company's profits decline this will be revealed to the public and will lower the share prices of such a company.

There is loss of control to incoming shareholders.

It is expensive because of the fee payable to the stock market.

The formalities of quotation are tedious and tiresome.

Immediately after quotation the prices are likely to be low.

A quoted company can easily be taken over by people buying shares in the stock exchange.

Terms Use in the Stock Exchange

1. Par value: it is the value of shares printed on the face of the share certificate.

2. Dividends: it is the profit that is distributed to the shareholders

3. Market value: it is the price that is quoted at the stock exchange i.e. the price at which the company's shares are traded at the stock exchange.

4. Speculation: it is the expectation about the future changes I the share prices.

5. Blue chips- they are shares with a good dividend history e.g. shares of KPLC, Barclays bank.

6. Rights issued- it is an opportunity given to an existing shareholder to purchase additional shares from the company usually at a lower price before they are issued to members of the public.

7. Bonus issued: it is where the existing shareholder is issued with free shares out of the retained earnings.

8. Ex-dividends: It is where the person buying shares doesn't receive the right to buy additional shares from the company at a lower price if such an opportunity is made available.

9. Cum-dividends: It implies the shares that have been sold to the buyer give the buyer rights to receive dividends if they are declared.

10. Ex-rights: Means the person buying shares doesn't receive the right to buy additional shares from the company at a lower price if such an opportunity is made available.

11. Cum-rights: Situation where the person buying shares receives

3.4 The Central Depository System

The Central Depository & Settlement Corporation Limited (CDSC) is a limited liability Company approved by the Capital Markets Authority under Section 5 of the Central Depositories

Act, 2000 to establish and operate a central depository system and provides central clearing, settlement and depository services for securities initially in Kenya in respect to securities listed on the Nairobi Stock Exchange. The central depository system provides a centralized system for the transfer and registration of securities in electronic format without the necessity of physical certificates

The Central Depository & Settlement Corporation Limited (CDSC) was incorporated on 23rd March 1999 under the Companies Act, 2000. It commenced its operations as a central depository on 10th November 2004.

Advantages of CDS

i) It shortens the registration process in the stock exchange

ii) It improves the liquidity of stock exchange than increase the turnover of the equity shares in the market

iii) It lowers the clearing and settlement cost

iv) It's faster and less risky settlement of securities which make the market more attractive to investors

v) It will lead to an efficient and transparent securities market to adhere to international standards for the benefit of all stakeholders

Review Questions

i) *Explain the advantages and disadvantages of quotation in the Stock Exchange*

ii) *Explain the functions of the Stock Exchange*

iii) *Describe the Requirements of quotation in the stock exchange market*

iv) *Define various terms used in the Stock Exchange*

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CHAPTER FOUR

FINANCIAL STATEMENT ANALYSIS.

 ***General objectives***

a) *Highlight the utility of ratios in credit analysis and competitive analysis as well as determining the financial capability of the firm.*

Specific objectives

a) *Explain the users of financial statements and their information needs*

b) *Show the importance of ratio analysis*

c) *Recognize the use and limitations of ratios*

d) *Understand the classification, computation and interpretation of ratios*

4.0 Financial Analysis

Financial analysis is a process by which an accountant or finance manager or any other interested party identifies the financial strength or position of a company by comparing the relationship between items in the balance sheet and those in the profit and loss account.

Thus financial analysis is of paramount importance to all parties with a financial stake in the company as they will use such analysis to gauge the profitability and safety of their stake in the company. These parties can be grouped into the following classes;

a) Shareholders who are the real owners of the company on credit
b) Creditors who supply goods to the company on credit
c) Lenders who supply the company with loan finance
d) Directors and management of the company
e) Potential investors who may want to invest in the company
f) The general public who may include customers
g) Competitors
h) The government

4.1 Ratio Analysis

Another way of avoiding the problems involved in comparing companies of different sizes financial ratios is used to calculate and compare financial ratios. Such ratios are ways of comparing and investigating the relationships between different pieces of financial information. We cover some of the more common ratios namely;

a) Short-term solvency, or liquidity, ratios
b) Long-term solvency, or financial leverage ratios
c) Asset management or turnover, ratios
d) Profitability ratios
e) Market value ratios

We will consider each of these in turn. In calculating these ratios for XYZ, we will use the ending balance sheet (2000) figures unless explicitly stated. Also notice that the various ratios are italicized to indicate which numbers come from the income statement and which come from the balance sheet

XYZ Company Limited

Balance Sheets as of December 31, 1999 and 2000

(Ksh in millions)

Assets	**1999**	**2000**
Current assets		
Cash	84	98
Accounts receivable	165	188
Inventory	393	422
Total	642	708
Fixed assets		
Net plant and equipment	2,731	2,880
Total assets	3,373	3,588
Liabilities and Owners' Equity		
Current liabilities		
Accounts payable	312	344
Notes payable	231	196
Total	543	540
Long-term debt	531	457
Owners' equity		
Common stock and paid-in surplus	500	550
Retained earnings	1799	2,041
Total	2,299	2,591
Total liabilities and owners' equity	3,373	3,588

4.1.1 Short-Term Solvency, or Liquidity, Measures.

These are used to gauge the company's ability to settle its currents obligations as and when they fall due. Thus they try to ascertain the relationship between the company's current assets and its current liabilities.

As the name suggests, short-term solvency ratios as a group are intended to provide informati n about a firm's liquidity, and these ratios are sometimes called liquidity measures. The primary concern is the firm's ability to pay its bills over the short run without undue stress. Consequently, these ratios focus on current assets and current liabilities.

For obvious reasons, liquidity ratios are particularly interesting to short-term creditors. Since financial managers are constantly working with banks and other short-term lenders, an understanding of these ratios is essential.

I. Current Ratio

This is used to gauge the company's quantity o its current assets to its current liabilities. The current ratio is defined as:

$$\text{Current Ratio} \quad \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

For XYZ, the 2000 current ratio is:

$$\text{Current Ratio} \quad \frac{Ksh\ 708}{Ksh\ 540} 1.31 times$$

Because current assets and liabilities are, in principle, converted to cash over the following 12 months, the current ratio is a measure of short-term liquidity. The unit of measurement is either Ksh or times. So, we could say XYZ has Ksh1 .31 in current assets for every Ksh1 in current liabilities, or we could say XYZ has its current liabilities covered 1 .31 times over.

To a creditor, particularly a short-term creditor such as a supplier, the higher the current ratio, the better. To the firm, a high current ratio indicates liquidity, but it also may indicate an inefficient use of cash and other short-term assets.

The above ratio is a test of the company's quantity of current assets rather than quality. This means that items in the current assets aside should be critically analyzed before they are assumed to cover current liabilities well.

II. Quick (or Acid-Test) Ratio

This ratio measures the quality of the company's current and its current liabilities. An asset is said to be liquid if it is either in cash form or can be converted into cash without any loss in value whatsoever.

Inventory is often the least liquid current asset. Relatively large inventories are often a sign of short-term trouble. The firm may have overestimated sales and overbought or overproduced as a result. In this case, the firm may have a substantial portion of its liquidity tied up in slow-moving inventory. The quick, or acid-test, ratio is computed just like the current ratio, except inventory is omitted:

$$\textit{Quick Ratio} \quad \frac{\textit{Current Assets} \quad \textit{Inventory}}{\textit{Current Liabilities}}$$

Notice that using cash to buy inventory does not affect the current ratio, but it reduces the quick ratio. Again, the idea is that inventory is relatively illiquid compared to cash. For XYZ, this ratio in 2000 was:

$$\textit{Quick Ratio} \quad \frac{\textit{Ksh } 708 \quad 422}{\textit{Ksh } 540} \quad 0.53 \textit{ times}$$

The quick ratio here tells a somewhat different story than the current ratio, because inventory accounts for more than half of XYZ current assets.

III. Cash Ratio

A very short-term creditor might be interested in the cash ratio:

$$\textit{Cash Ratio} \quad \frac{\textit{Cash}}{\textit{Current Liabilities}}$$

You can verify that this works out to be 0.18 times for XYZ.

4.1.2 Long-Term Solvency Measures

Long-term solvency ratios are intended to address the firm's long-run ability to meet its obligations, or, more generally, its financial leverage. These ratios are sometimes called financial leverage ratios or just leverage ratios. We consider three commonly used measures and some variations.

I. Total Debt Ratio

The total debt ratio takes into account all debts of all maturities to creditors. It can be defined in several ways. The easiest of which is:

$$\textit{Total Debt Ratio} \quad \frac{\textit{Total Assets} \quad \textit{Total Equity}}{\textit{Total Assets}}$$

$$\textit{Total Debt Ratio} \quad \frac{3{,}588 \; 2{,}591}{3{,}588} \quad 0.28 \; \textit{times}$$

In this case, an analyst might say that XYZ uses 28 percent debt. Whether this is high or low or whether it even makes any difference depends on whether or not capital structure matters. XYZ has Ksh.28 in debt for every Ksh1 in assets. Therefore, there is Ksh.72 in equity (Ksh1 - .28) for every Ksh.28 in debt. With this in mind, we can define two useful variations on the total debt ratio, the debt-equity ratio and the equity multiplier:

$$\textit{Debt - Eqiuty Ratio} \quad \frac{\textit{Total Debt}}{\textit{Total Equity}}$$

$$\textit{Debt - Eqiuty Ratio} \quad \frac{0.28}{0.72} \quad 0.39 \; \textit{times}$$

$$\textit{Eqiuty Multiplier} \quad \frac{\textit{Total Assets}}{\textit{Total Equity}}$$

$$\textit{Eqiuty Multiplier} \quad \frac{1}{0.72} \quad 1.39 \; \textit{times}$$

The fact that the equity multiplier is 1 plus the debt-equity ratio is not a coincidence:

Equity multiplier = Total assets/Total equity = Ksh.l/Ksh.72 = 1.39

= (Total equity + Total debt)/Total equity

= I + Debt-equity ratio = 1.39 times

The thing to notice here is that given any one of these three ratios, you can immediately calculate the other two, so they all say exactly the same thing.

II. Times Interest Earned

Another common measure of long-term solvency is the times interest earned (TIE) ratio. Once again, there are several possible (and common) definitions, but we'll stick with the most traditional:

$$\textit{Times Interest Earned Ratio} \quad \frac{EBIT}{Interest}$$

$$\textit{Times Interest Earned Ratio} \quad \frac{691}{141} \quad 4.9 \ \textit{times}$$

As the name suggests, this ratio measures how well a company has its interest obligations covered, and it is often called the interest coverage ratio. For XYZ, the interest bill is covered 4.9 times over.

III. Cash Coverage

A problem with the TIE ratio is that it is based on EBIT, which is not really a measure of cash available to pay interest. The reason is that depreciation, a non- cash expense, has been deducted out. Since interest is most definitely a cash outflow (to creditors), one way to define the cash coverage ratio is:

$$\textit{Cash Coverage Ratio} \quad \frac{EBIT \quad Depreciation}{Interest}$$

$$\textit{Cash Coverage Ratio} \quad \frac{691\ 276\ 967}{\textit{141}\qquad 141} \quad 6.9\ \textit{times}$$

The numerator here, EBIT plus depreciation, is often abbreviated EBDIT (earnings before depreciation, interest, and taxes). It is a basic measure of the firm's ability to generate cash from operations, and it is frequently used as a measure of cash flow available to meet financial obligations.

4.1.3 Asset Management, or Turnover, Measures

We next turn our attention to the efficiency with which XYZ uses its assets. The measures in this section are sometimes called asset utilization ratios. The specific ratios we discuss can all be interpreted as measures of turnover. What they are intended to describe is how efficiently, or intensively, a firm uses its assets to generate sales. We first look at two important current assets, inventory and receivables.

I. Inventory Turnover and Days' Sales in Inventory During the year, XYZ had a cost of goods sold of Ksh1,344. Inventory at the end of the year was Ksh422. With these numbers, inventory turnover can be calculated as:

$$\textit{Inventory} \quad \frac{\textit{Cost of goods sold}}{\textit{Inventory}} \qquad \frac{1{,}344}{422} \quad 3.2\ \textit{times}$$

In a sense, XYZ sold off, or turned over, the entire inventory 3.2 times. As long as we are not running out of stock and thereby forgoing sales, the higher this ratio is, the more efficiently we are managing inventory.

If we know that we turned our inventory over 3.2 times during the year, then we can immediately figure out how long it took us to turn it over on average. The result is the average days' sales in inventory:

$$Day's\ Sale\ in\ Inventory \quad \frac{365\ days}{Inventory\ turnover} \quad \frac{365}{3.2} \ 114\ days$$

This tells us that, roughly speaking, inventory sits 114 days on average before it is sold. Alternatively, assuming we used the most recent inventory and cost figures, it will take about 114 days to deplete current inventory.

II. Receivables Turnover and Days' Sales in Receivables Our inventory measures give some indication of how fast we can sell products. We now look at how fast we collect on those sales. The receivables turnover is defined in the same way as inventory turnover:

$$Re\ ceivable\ Turnover \quad \frac{Sales}{Accounts\ Receiable} \quad \frac{2{,}311}{188} \ 12.3\ times$$

Loosely speaking, XYZ collected our outstanding credit accounts and reloaned the money 2.3 times during the year. Here we have implicitly assumed that all sales are credit sales. If they were not, then we would simply use total sales in these calculations, not total sales. This ratio makes more sense if we convert it to days, so the days' sales in receivables is:

$$Days\ Sales\ in\ Re\ ceivables \quad \frac{365\ days}{Receivables\ Turnover} \quad \frac{365}{12.3} \ 30\ days$$

Therefore, on average, XYZ collects credit sales in 30 days. For obvious reasons, this ratio is very frequently called the average collection period (ACP). Also note that if we are using the most recent figures, we can also say that XYZ has 30 days' worth of sales currently uncollected.

III. Total Asset Turnover

Moving away from specific accounts like inventory or receivables, we can consider an important "big picture" ratio, the total asset turnover ratio. As the name suggests, total asset turnover is:

$$\textit{Total Assets Turnover} \quad \frac{\textit{Sales}}{\textit{Total Assets}} \quad \frac{2{,}311}{3{,}588} \; 0.64 \; \textit{times}$$

In other words, for every Ksh in assets, we generated Ksh.64 in sales. A closely related ratio, the capital intensity ratio, is simply the reciprocal of (that is, 1 divided by) total asset turnover. It can be interpreted as the Ksh investment in assets needed to generate Ksh1 in sales. High values correspond to capital intensive industries (such as public utilities). For XYZ, total asset turnover is .64, so, if we flip this over, we get that capital intensity is Ksh1/.64 = Ksh1.56. That is, it takes XYZ Ksh1.56 in assets to create Ksh1 in sales.

4.1.4 Profitability Measures

A company operates on funds contributed by its owners and lenders. These parties need sufficient return on their money. For this reason the efficiency of any company is measured by the amount of profits it makes in a given period of time.for purposes of analyzing these rartios the profitability of a company can be related to: its investment in assets and sales generated.

The three measures we discuss in this section are probably the best known and most widely used of all financial ratios. In one form or another, they are intended to measure how efficiently the firm uses its assets and how efficiently the firm manages its operations. The focus in this group is on the bottom line, net income.

I. Profit Margin

This ratio gauges the efficiency with which the company can generate a given level of profits out of its sales activities.

Companies pay a great deal of attention to their profit margin:

$$\textit{Profit Margin} \quad \frac{\textit{Net Income}}{\textit{Sales}} \quad \frac{363}{2{,}311} \quad 15.7\%$$

This tells us that XYZ, in an accounting sense, generates a little less than 16 cents in profit for every Kshs in sales. All other things being equal, a relatively high profit margin is obviously

desirable. This situation corresponds to low expense ratios relative to sales. However, we hasten to add that other things are often not equal.

For example, lowering our sales price will usually increase unit volume, but will normally cause profit margins to shrink. Total profit (or, more importantly, operating cash flow) may go up or down; so the fact that margins are smaller isn't necessarily bad.

II. Return on Assets

Return on assets (ROA) is a measure of profit per Ksh of assets. It can be defined several ways, but the most common is:

$$\textit{Return on Assets} \quad \frac{\textit{Net Income}}{\textit{Total Assets}} \quad \frac{363}{3{,}588} \quad 10.12\%$$

III. Return on Equity

Return on equity (ROE) is a measure of how the stockholders fared during the year. Since benefiting shareholders is our goal, ROE is, in an accounting sense, the true bottom-line measure of performance. It gauges the management's efficiency in utilizing both creditors and owner's money. It also indicates the return a company will give to both owners and creditors. ROE is usually measured as:

$$\textit{Return on Equity} \quad \frac{\textit{Net Income}}{\textit{Total Equity}} \quad \frac{363}{2{,}591} \quad 14\%$$

For every Ksh in equity, therefore, XYZ generated 14 cents in profit, but, again, this is only correct in accounting terms. Because ROA and ROE are such commonly cited numbers, it is important to remember they are accounting rates of return. For this reason, these measures should properly he called return on book assets and return on book equity. In addition, ROE is sometimes called return on net worth. Whatever it's called, it would be inappropriate to compare the result to, for example, an interest rate observed in the financial markets. The fact that ROE exceeds ROA reflects XYZ use of financial leverage.

4.1.5 Market Value Measures

These ratios try to portray the company's dividend policy and thus its abilities to pay reason ble dividends to its shareholders.

The final group of measures is based, in part, on information not necessarily contained in financial statements-the market price per share of the stock. Obviously, these measures can only be calculated directly for publicly traded companies. We assume that XYZ has 33 million shares outstanding and the stock sold for Ksh 88 per share at the end of the year. If we recall that XYZ net income was Ksh 363 million, then we can calculate that its earnings per share were:

$$EPS \quad \frac{Net\ Income}{Shares\ outstanding} \quad \frac{363}{33}\ Ksh\ 11$$

This ratio indicates how much a share will earn if there was no retention. It will indicate the potential return to the shareholders.

I. Price-Earnings Ratio

This indicates how long the company will take to pay back the original cost of investment if there were no retention

The first of our market value measures, the price-earnings, or PE, ratio (or multiple), is defined as:

$$P\ E\ Ratio \quad \frac{Pr\ ice\ per\ Share}{Earnings\ per\ Share} \quad \frac{88}{11}\ 8\ times$$

In the vernacular, we would say that XYZ shares sell for eight times earnings, or we might say that XYZ shares have, or "carry," a PE multiple of 8.

Since the PE ratio measures how much investors are willing to pay per Ksh of current earnings, higher PEs are often taken to mean that the firm has significant prospects for future growth. Of course, if a firm had no or almost no earnings, its PE would probably be quite large; so, as always, care is needed in interpreting this ratio.

II. Market-to-Book Ratio

A second commonly quoted measure is the market-to-book ratio.

$$\textit{Market - to - Book Ratio} \quad \frac{\textit{Market Value per Share}}{\textit{Book Value per Share}} \quad \frac{88}{2{,}591 / 33} \quad \frac{88}{78.5} \; 1.12 \; \textit{times}$$

Notice that book value per share is total equity (not just common stock) divided by the number of shares outstanding. Since book value per share is an accounting number, it reflects historical costs. In a loose sense, the market-to-book ratio therefore compares the market value of the firm's investments to their cost. A value less than I could mean that the firm has not been successful overall in creating value for its stockholders.

Summary

The only meaningful yardstick for evaluating business decisions is whether or not they create economic value .We recognize that accounting numbers are often just pale reflections of economic reality, but they frequently are the best available information. For privately held corporations, not-for-profit businesses, and smaller firms, for example, very little direct market value information exists at all. The accountant's reporting function is crucial in these circumstances.

Clearly, one important goal of the accountant is to report financial information to the user in a form useful for decision making. Ironically, the information frequently does not come to the user in such a form. This chapter is a first step in filling this gap by providing means of evaluating financial statements.

References

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Continuous Assessment Test (CAT)

1. (A) Distinguish between the goals of profit maximization and shareholder wealth Maximization (4MKS)

(C) Critically explain the roles of the CMA as the chief regulation of financial markets in Kenya (6MKS)

2. (A) Explain reasons that may drive a company to raise equity finance than debt finance (6MKS)

(B) Describe the categories of the managerial role of a finance manager (6MKS)

3. The following information was obtained from the final accounts of ABC Limited:

Current assets =1900, 000

Average stock=780,000

Quick assets=1,120,000

Over draft= 750,000

Cost of goods sold= 4,475,000

Required;

Calculate the following financial ratios for ABC Limited:

Current ratio

Acid test

Adjusted acid test ratio

Average stock turnover (8MKS)

CHAPTER FIVE
CAPITAL BUDGETING (PROJECT APPRAISAL)

General objectives

a) Understand the nature and importance of capital decisions.

Specific objectives

a) Definitions and characteristics of capital budgeting

b) Project evaluation techniques including their accept/ reject criteria.

c) Show the implications of NPV and IRR

d) Characteristics of a sound evaluation techniques

5.0 Introduction

Any prudent financial manager will be concerned as to how efficiently he can allocate funds at his disposal to various ventures available in the investment market. to a company , investment should be a continuous process if it is to survive in the future. it is important because it affects ;

a) The size of the company.

b) The risk of the finance invested.

c) The company's growth prospects.

The most important characteristics of these capital budgeting decisions are;

a) They are long-term, i.e. extend beyond one financial period and they are expected to generate benefit [returns] for a long period in the future.

b) The benefits from these investments are supposed to be in cash. It is important to note that this decisions are supposed to make by the top management with the assistant of external consultants sol as to ensure sound investment decisions.

c) Such ventures must yield a return acceptable to both owners and creditors and this return acceptable to both owners and creditors and this return should not bank rates on fixed deposits.

5.1 Importance of capital budgeting

I. Capital budgeting decisions are very important because if they result in a viable venture it will have the effect of increasing the value of the company's shares in the stock exchange and thus the value of shareholders' investment.

II. These decisions expose the company's money to a risk which will depend upon the nature of the investment and if they are badly made they can in the extreme lead the company into receivership and consequently liquidation.

III. These decisions are reversible in that once the venture has been undertaken liquidating it or changing its nature is either difficult or not possible. This therefore calls for prudent financial management attitudes towards all investment decisions.

5.2 Classification of Investments.

I. mutually exclusive investments

These are alternative options which serve the same purpose and compete with each other. if the firm is for instant considering three mutually project and one of them is undertaken the other two will automatically be rejected irrespective of their profitability,

II. Independent investments.

These projects serve different purposes and do not compete with each other. If the firm is considering five independent projects, all of them can be undertaken subject to their profitability and availability of funds.

III. Contingent / complementary investments

These are dependent projects. One project is required in the implementation or operation of another. This implies that the functioning of each project requires an input from the other complementary project.

5.3 Capital budgeting methods.

Methods used to assess the viability of an investment in capital budgeting.

Any appraisal method to be used to assess the viability of a venture must fulfill the following requirements;

1. It should appreciate that bigger returns are preferable to small ones and early returns are preferable to later benefits.
2. The method should be able to rank various ventures available in the investment market in order of their profitability
3. The method should distinguish which investment ventures are acceptable and which ones should be rejected and why
4. The method should be able to be used for gauging the viability of any other investment ventures as and when they arise.

Features of a sound investment evaluation method

(i) It should be consistent with the overall objective of the firm- shareholders wealth maximization; maximize the net present value.
(ii) It should be a measure of the projects over all profitability and hence should consider all cash flows.
(iii) It provide a means of distinguishing between acceptable and non-acceptable projects
(iv) It should provide a ranking of projects in order of economic importance
(v) Should be rational and consistent
(vi) Should be applicable to any conceivable investment project

There are two methods of evaluating cash flows:

I. Traditional methods/ Non-discounted cash flow methods

   a. The payback period approach (PBP)
   b. The accounting rate of return approach (ARR)

II. Modern methods or discounted cash flow techniques.

   a) The net present value method (NPV)
   b) The internal rate of return method (IRR)
   c) Profitability index or cost benefit ratio method

5.3.1 Non-Discounted Cash Flow Methods (a)

Accounting (average) rate of return (ARR)

This method utilizes information obtained in financial statements in particular from the profit and loss account and the balance sheet is to access the viability of an investment proposal. This method divides the average income after taxes by average investment, i.e. average book value of investment after allowing for depreciation.

The rate obtained should then be compared with the rates given by banks on savings account on savings or fixed deposit etc a specific investment. If the rate obtained from a given investment is greater than the above rates, then such a venture is deemed to be viable; otherwise, if it less, such a project should be rejected. It many be noted that for analysis purposes, any investment should not yield a return lower than the bank rates otherwise it may be more prudent to save such money with a bank where it is more secure than to invest in a risky venture

In all it is important to note the following; -

i. ARR uses average profits after depreciation, except in the above case where it would have given negative figures.
ii. Profits may be before or after tax.

iii. Capital may be initial or average capital investment.

iv. Capital may or may not include working capital.

In any case, ARR should not be used alone to gauge the viability of an investment but should be supplemented by two or more other methods in identifying a viable project.

$$ARR \frac{Averageannualprofits}{Averageinvestiments} x100$$

Where average investment = ½ (cost of project + salvage value)

Illustration:

Assume 900,000 Br is invested in a project with the following after tax net profits.

Year	1	2	3
Net profit	20,000	10,000	30,000

The life of the project is 3 years and no salvage value, compute ARR of the project

$$Average\_profits \quad \frac{20,000\ 10,000\ 30,000}{3} 20,000$$

Average investment = ½ (90,000 +0) = 45,000

$$ARR \quad \frac{20,000}{45,000} x100 \ \ 44\%$$

Advantages of ARR

i. Easy to compute and use

ii. Computed from readily available accounting information

iii. This method is simple to understand and use in practice.

iv. It is conveniently compared from accounting, data that is readily available in financial statements of a business organization.

v. It uses the entire return from a given investment and thus it may give a fairly accurate picture of the profitability of a venture unlike the PBP, which ignores the income earned after PBP.

vi. It does not entail the use of computers or other sophisticated computations, which makes it cheaper to use.

Disadvantages of ARR

i. It ignores time value of money like PBP because it lumps different cash flows together regardless of their timing.

ii. There is no universally acceptable way of computing ARR and this means that different parties can come up with different rates depending on the formula used.

iii. The method uses accounting profits rather than cash flows (in-flows) thus it ignores the fact that profits have subjective elements, e.g. accounting conventions and the company's own ways of treating items in the profit and loss account.

iv. It ignores the fact that intermediary profits can be re-invested and generates the company extra return, and thus may lead to understatement of profits.

1) That except for investment made in phases otherwise all investments is made at the beginning of the period or year zero.

(b)Non-discounted pay back period

This is the number of year taken to recover the original (initial) investment from annual cash flows. The lower the pay back period the better the project is

Illustration:

Assume the company wants the invest in two mutually excusive projects of 1000 Br each generating the following cash flows

Year	A	B	Cumulative frequency of A	Cumulative frequency of B
1	500	100	500	100
2	400	200	900	300
3	300	300	1200	600
4	400	400	1300	1000
5	-	500	1300	1500
6	-	600	1300	2100

Pay back for A = $2 \quad \frac{100}{300} \quad 3.33 years$

Pay back for B = 4Years

The management should undertake project A since it has a lower pay book period

***Homework: Calculate the payback period for the previous asset expansion and asset replacement examples.** *check 2.7 years each

Advantages of using payback period approach

i. Payback period approach is simple to understand and easy to use in evaluating the viability of a venture and due to this it has been relied upon to gauge the viability of an investment by most traditional financial managers.

ii. As opposed to modern methods, which may call for the use of computers, this approach does not entail any cost on the part of the company and thus it is cheaper to use to gauge the viability of a venture.

For companies operating in high risk areas it is a powerful tool asset will choose the venture that pay back earliest which minimizes the risks associated with returns which will be generated some time in future and which may be uncertain.

iii. It allows the company to identify those ventures, which can pay earlier, which will improve the liquidity position of the company.

iv. Payback period will be realistic for those companies which wish to re-invest intermediary returns as it will choose those ventures that generate big returns earlier and such early returns can be re-invested to generate some profits to the company before they are paid back to their lenders.

v. Payback period is also consistent with the most prudent method of financing the company's activities via matching approach – and will thus choose those ventures which are self-liquidating, thus avoiding any unnecessary costs of further borrowing to pay off the existing loans.

Disadvantages of using pay back period

i. The biggest draw back in the use of PBP to evaluate the viability of an investment is the fact that it ignores time value of money.

ii. It ignores all returns generated after the payback period as these are not part of the pay-back; thus it is more lenders oriented, because the investor does not only want to pay back the cost of then in vestment but also wants to ear n a profit on such an investment while the (PBP) method caters for the former and ignores the latter which is the most important concern of any investor.

iii. It may pose problems of setting a yardstick as to which should be the standard payback period.

iv. In case a project does not yield uniform returns its payback period will not be accurate, as it will assume that the last inflows/returns needed to pay off the cost of the investments will be generated on a uniform basis, which is highly unrealistic and may lead a business to fail to repay the loan in time. This may occasion the company unnecessary penalties from lenders and this may lead in extreme to low credit rating on the part of the company using such method.

v. Despite the above disadvantages (PBP) still remains a useful technique in assessing the viability of an investment both by traditional financial managers and also companies operating in high-risk ventures.

5.3.2 Discounted Cash Flow Methods

Modern Methods also known as time Adjusted or Discounted Cash Flow Methods. Unlike the traditional methods, modern methods of assessing the viability of an investment consider the time value of money and appreciate the fact that a shilling received now is more valuable than a shilling received in five years time and that the two can only be compared if they are of the same value i.e. after discounting them. However when using the modern methods of investment appraisal the following assumptions should be made. (Most of which are unrealistic); -

i. That uncertainty does not exist.
ii. That appropriate rate to discount cash flows is known.
iii. That the company operates under financial constraints, i.e. in a financial market where the amount of finances necessary for all viable ventures cannot be available to the company due to internal or external forces.
iv. That the company operates in a situation where inflation does not exist.
    1) That the cash flows or returns generated at the end of the year are strictly in cash form.

(a) Net Present Value (NPV) Method

NPV can be defined as the process of computing the present value of future cash inflows (returns) from a project, less its cost or investment. This NPV is computed following the steps below:

1) A rate of interest, which is usually, the cost of the funds used or the return investors expect from their investments is used to discount future cash inflows.
2) The present value of future cash inflows or returns is then computed by using the rate of interest in (1) above.
3) The NPV should be computed by subtracting the present value of future cash outflows from the present value of cash inflows from the project using discounted figures.

$$NPV \sum_{t=1}^{n} \frac{C_t}{(1+K)^t} - Io$$

Where; C = cash flow at the end of period

K = required rate of return

n = useful life of project

Io = initial cost of project

NPV = present value of cash flow – present value of initial cost

Decision criteria for NPV

NPV > 0, Accept the project – it maximizes should holders wealth

NPV < 0, Reject the project

NPV = 0, Indifferent

Illustration:

A firm is considering investing in a project which costs 6,000 Br and has the following cash flows

YR	1	2	3	4
C.F	1500	3000	2000	2500

The cost of capital is 10% and the project has no salvage value. Using the NPV method advise the firm on whether to invest in the project

YR	CF	PVIF (10%)	P.Vs
1	1500	0.9091	1363.65
2	3000	0.8264	2479.20
3	2000	0.7513	1502.60
4	2500	0.6830	1707.50
		Total P.Vs =	7053.00
		Less project cost	(6000.00)

NPV = 1053.00

Decision: Accept the project since NPV >0

Using NPV method a company will accept all those ventures whose NPV is positive and highest rating will go to ventures with the highest NPV. Thus the company may accept all ventures whose NPV >0 and will reject all projects whose NPV is less than zero or is negative.

***Homework: Calculate the NPVs for the project expansion and replacement example. Assume a required rat of return of 9%**

Advantages of using NPV to assess the viability of a venture.

1) It recognizes the time value of money in that it compares different amounts coming in at different periods in time .
2) It takes into account all the entire inflows or returns generated from a given project and as such it is realistic in gauging the profitability of a project.
3) It can rank projects according to their profitability whereby the highest rank will be given to that project with the highest NPV which will be the most profitable project.
4) It uses cash flows and not profits which makes it a reasonable assessment of the investments viability.

Disadvantages of NPV

1) It is more difficult to use than the traditional methods as it will involve tedious computations in assessing the viability of a venture.
2) it uses the cost of finance to discount the cash inflows, but it ignores the fact that the cost of finance is not
3) Gives absolute values which cannot be used to compare project of different sizes

B) Internal Rate of Return (IRR)

IRR of a project is that rate which equates the present value of cash inflows to the present value of cash outflows .i.e. that rate internal to the project at which the present value of cash inflows and present value of costs are equal or it is that rate at which the NPV of a project is zero. IRR is

the discount rate that equates the NPV of a project to zero. It is the project rate of return (Yield)

$$\sum_{t=1}^{n} \frac{C_t}{(1+R)^t} - I_o = 0$$

Where; R = IRR

IRR can be computed in two ways:

a) Using the trial and error approach

b) Using interpolation and extrapolation

Using the trial and error

Steps in the IRR trial and error calculation method

(i) Compute the NPV of the project using an arbitrary selected discount rate

(ii) If the NPV so computed is positive then try a higher rate and if negative try a lower rate.

(iii) Continue this process until the NPV of the project is equal to zero

(iv) Use linear interpolation to determine the exact rate

Linear interpolation is given by: $LR + (HR - LR)\frac{NPV_{LR} - 0}{NPV_{LR} - NPV_{HR}}$ Where; LR = Lower rate

and HR = higher rate

Illustration:

A project has the following cash flows

YR	1	2	3	4
C.F	300	400	400	900

The cost of the project is 1500 Br. Determine whether project is acceptable if the cost of capital is 18% using the IRR method.

1. We first select an arbitrary discount rate say 9% and compute the NPV

YR	C.F	PVIF (9%)	P.Vs
1	300	0.9174	275.22
2	400	0.8417	336.68
3	700	7722	540.54
4	900	7084	637.56
		Total P.Vs=	1790.00
		Less cost	(1500.00)
		NPV at 9%=	290

2. Since, NPV at 9% is positive and large we select another discount rate larger than 9%, say 15%

YR	C.F	PVIF (15%)	P.Vs
1	300	0.8696	260.88
2	400	0.7561	302.44
3	700	0.6575	460.25
4	900	0.5718	514.62
		Total P.Vs	1538.19
		Less cost	(1500.00)
		NPV at15%	38.19

3. Since, NPV at 15% is positive but not large; we select a slightly higher rate, say, 18%

YR	C.F	PVIF (18%)	P.Vs
1	300	0.8475	254.25
2	400	0.7182	287.28
3	700	0.6086	426.02
4	900	0.5158	462.22
		Total P.Vs	1431.77

Less cost	(1500.00)
NPV at 15%	- 68.23

Since NPV at 15 is negative, IRR therefore lies between 15% and 18%, and since zero NPV will the between -38.23 and 38.19, to get the correct (exact) IRR we have to interpolate between 15% and 18% using interpolation formula

$$IRR \quad 15 \quad (18 \quad 15)\frac{38.19 \quad 0}{38.19 \quad (\ 68.23} \quad 16.08\%$$

Decision: Reject the project since IRR is less than the required rate of return (cost of capital)

***Homework: Calculate the IRRs for the project expansion and replacement example.**

Using interpolation and extrapolation

a) Choose a rate at random and compute the present value of cash inflows or returns which should be above the cost of the project

b) Choose another rate and compute the present value of cash inflows. such rate should get a present value which is below the cost of the investment; then take a higher present value of cash inflows in (a), let it be x and let the rate used in (b), be r. let the amount in (b) above be y and let rate in (b) above be w, and take c to represent the cost of the venture and let z represent the unknown rate between the cost of the venture and the figure for the highest present value figure.

It should be noted that IRR is computed using a trial and error method. However, financial calculators are programmed to compute IRR

Advantages of IRR

i) It takes into account the time value of money and thus gives a sound measure of the viability of a project as it lumps inflows together at their present values.

ii) It considers all the inflows or returns generated by a given venture and as such it will gauge the company's profitability with more accuracy

iii) It indicates the minimum rate of return at which the company will break even and any rate above such a rate will yield a return to the company to boost its profitability.

iv) In the absence of cost of capital which is usually the yardstick to gauge the viability of a venture.

v) Can be used to compare projects of different sizes

vi) Considers time value of money

vii) Uses project cash flows

Disadvantages of IRR

(i) Some project have multiple IRRs if their NPV profile crosses the x-axis more than once (project cash flow signs change several time)

(ii) Some project may theoretically have no IRR if their NPV profile doesn't cross the x-axis (no negative cash flow)

(iii) Assumes re-investment of cash flows occurs of project's IRR which could be exorbitantly high

(iv) Doesn't provide a decision criteria

(v) It may involve tedious computations in particular if the returns are earned for quite sometime

(vi) In some cases it may yield multiple and negative rates which may not have any meaning and a lot of assumptions will have to be made

(vii) It may not give a good measure of the viability of investments which differ in their economic life and returns

(C) Profitability Index (PI) / Cost Benefit Ratio.

This is the ratio of the present value of cash inflows or returns at a required rate of return to the cost of the investment. It can be computed using the following formula:

PI/CB=present value of cash inflows (returns)

Cost of the investment

It is also referred to as the present value index (PVI). It is the relative measure of project's profitability and can used to compare project of different sizes

PI = present value of cash flows/Initial cost

Decision criteria:

If, PI >1, Accept project

PI < 1, Reject project

PI = 1, Indifferent

Illustration: A project has the following cash flows

YR.	C.F.
1	300
2	400
3	700
4	400

If the required rate of return is 9% and the project initial cost is 1500 Br, calculate the PI of the project and advice if the project is acceptable

YR	CF	PVIF 9%	PVs
1	300	0.9174	275.52
2	400	0.8417	336.68
3	700	0.7722	540.54
4	900	0.7084	637.46
		Total PV =	1790.00

$$PI \quad \frac{PVofC.F}{\text{int } ial \text{ cost}} \quad \frac{1790}{1500} \; 1.193$$

Decision: The project is acceptable since PI > 0

Advantages of PI

(i) Recognized time value of money

(ii) Consistent with shareholders wealth maximization objects

(iii) Compares projects of different sizes

(iv) Gives a decision criteria disadvantages

Disadvantages of IRR

(i) Inapplicable for projects with no negative cash flows

Review Questions

i) Explain the ways of evaluating investment projects

ii) Identify the characteristics of capital budgeting

iii) Discuss the implications of NPV and IRR

iv) Explain the Characteristics of a sound evaluation technique

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CHAPTER SIX
COST OF CAPITAL (BASIC EVALUATION MODELS)

General Objectives

a) Explain the valuation of ordinary shares, preference shares and bonds

Specific Objectives

a) Fundamental characteristics of ordinary shares, preference shares and bonds

b) Definition and importance of valuation

c) Show the uses of present value concepts in the valuation of shares and bonds

d) General Features of Bonds and the uses of shares and bonds

e) Understand the procedures of calculating WACC

6.0 Introduction

One of the key components of capital budgeting decision is the cost of capital. Capital is the term for fund that firm uses. Capital can be raised from creditors and owners. To properly evaluate potential investment firms must know how much their capital cost. The cost of capital is the compensation investor's demand from the firm that uses their fund. It refers to the minimum rate of return required by the firm's investors. It is the weighted average of the minimum rate of return required by investors in common equity capital, preference share capital and long term debt. It is a combined cost.

6.1 The component cost of capital

I. The cost of equity capital

This is the minimum rate of return required by investors in common equity capital. It is the minimum rate of return required on all projects financed by common equity capital so as to maintain the market value of the shares at the current level. It is the discount rate that equates the present value of the expected divided to the current price of the shares.

$$Po = \frac{ke - g}{Po} = \frac{D1}{Po}$$

D1= (1+g) Do

When account is taken of the floatation costs, the cost of equity (ke) would be calculated as follows;

$$Ke = \frac{D1}{Po - f} + g$$

Where ke, cost of equity capital

D1, expected dividend

g, growth rate in divided

Do, current dividend

Po, current market price of ordinary shares

f, floatation cost

II. Cost of retained earning (kre)

There are two sources of common equity capital namely; external and retained earnings. Both are first provided by the ordinary shareholders and their costs are calculated in the same way. The only difference is that cost of retained earning does not involve floatation cost.

$$Kre = \frac{D1}{po} + g$$

$$=Do \frac{1+g}{po} +g$$

III. Cost of preference shares.

This is the minimum rate of return required by investors in preference capital. It is the discount rate that equates the present value of cash inflows expected from the preference shares to the current market price of the shares.

a) Irredeemable preference shares

$$Po= \frac{pDIV}{kp}$$

$$kp = \frac{pDIV}{po}$$

Where kp, cost of preference capital

PDIV, amount of preference dividend paid each year

Po, current market price of preference shares

If the current market price of the preference shares is the same as the par value, cost of preference capital would simply be equal to the dividend rate.

$$kp= \frac{pDIV}{po} = \frac{pDIV}{par} = \text{dividend rate}$$

b) Redeemable preference shares

Po= PDIV*PVAF nyears, kp +Pn* PVF nyears, kp

Where Pn= redemption value of shares after n years

a) If the preference shares are selling at par cost of preference capital would simply be equal to the dividend rate.

b) If the preference shares are selling at a discount or premium, the shot cut method used in calculating the before tax cost of debt issued at a discount of premium can be applied to calculate the cost of preference capital.

IV. Cost of debt

This is the minimum rate of return required by the providers of debt finance. It is the discount rate that equates the present value of cash inflows expected from the debt instrument to the current market price of the debt security.

a) Irredeemable debt Bo=

$$\frac{INT}{kd}$$

$$Kd = \frac{INT}{Bo}$$

If the bonds are selling at par, the before tax cost of debt (kd) would simply be equal to the coupon rate.

b) Redeemable Bond/ Debt BO=INT*PVAFnyrs,

kd+ Bn*PVFnyrs, kd

Where BO, present value of the bonds

INT, amount of interest paid each year

N, number of years to maturity of the bonds

Bn, redemption value of the bond after n years

kd, cost of debt

a) If the bonds are selling at par, the before tax cost would simply be equal to the coupon rate.

b) If the bonds are selling at a discount or premium, the before tax cost (kd) would be determined through trial and error method.

Kd= 

c) Bond Valuation and Yield on a Bond

What is a bond?

A bond is an "I owe you" (IOU). It is a promise by a borrower to a lender to pay a stated rate of interest for a defined period and then repay the principle at the specific maturity date. Bonds are referred to as senior debts because they take procedure over junior debts due to their legal obligations. Junior debts include general creditors.

General Features of Bonds

Bond interest: - usually paid semi-annually but for some it may be annual. It is also referred to as coupon rate

Coupon rate: - interest paid on the face value of the bond. Zero coupon bonds don't pay serialized interest.

Yield: - the rate of return on the bond which largely depends on risk.

Market value: - the prevailing price of a bond which could be equal higher or lower than the face value. If selling lower it is said to be selling at discount and if higher it is said to be selling at a premium.

An indenture: – the agreement between the bond holder and the issuer.

Call provision: – a provision on the indenture for the issuer to redeem the bond at a specified amount before the maturity date.

d) Bond Prices and Yields

The price of a bond is the percent value of the expected income i.e.

$$PV \quad \frac{1}{(1 \quad r)^{n}}$$

The price of a bond with semi annual payments is therefore:

$$P_b \quad \sum_{t\ i}^{2n} \frac{C/2}{(1 \quad r/2)^{2t}} \quad \frac{P_p}{(1 \quad r/2)^{2n}}$$

Where: P_b= price of bond

C_i = coupon (interest) rate

P_p = par value of the bond

n = time to maturity

Illustration:

(i) Find the price of bond with a coupon rate of 12% having 5 years to maturity. Its par value is 10,000 Br and the discount rate is 12%.

(ii) Supposing interest rates rise to 14% what will be the price of the bond?

(iii) Supposing interest rates fall to 8% what will be the price of the bond?

$$C \ ^{12\%of\ 10000}/_{2} \quad 600 , r \ _{12}\not{2} \quad 6\% , t \ 5 \ 2 \ 10$$

i) $P_b = 600 \times PVIFA_{6\%, 10} + 10{,}000 \times PVIF_{6\%, 10}$

$= 600 \times 7.3601 + 10000 \times 5.584$

$= \underline{10{,}000.06}$

ii) $P_b = 600 \times PVIFA_{7\%, 10} + 10{,}000 \times PVIF_{7\%, 10}$

$= 600 \times 7.0236 + 10000 \times 0.5083$

$= \underline{9297.16}$

iii) $P_b = 600 \times PVIFA_{4\%, 10} + 10{,}000 \times PVIF_{4\%, 10}$

$= 600 \times 8.1109 + 10000 \times 0.6756$

$= \underline{11622.54}$

*What do the calculations reveal about the relationship between bond prices and interest?

Calculating Future Bond Prices

$$P_f \sum_{t=i}^{2n\ 2hp} \frac{C_i/2}{(1\ r/2)^{2t}} \quad \frac{P_p}{(1_r\ /_2)^{2n\ 2hp}}$$

Where: P_f = Future price

hp = Holding period

Illustration:

Assume you bought a 10%, 25 year bond at 842 Br with a promised yield to maturity of 12%. You expect the bond's yield to maturity to decline 8% in 5years. What will be the price of the bond in 5 years, if the bonds par value is 1000Br?

$C_i = 10\% \times 1000 = 100$, $C_i/2 = 50$. n = 25yrs, 2n = 50 yrs. hp = 5yrs, 2hp = 10 yrs. r = 8%, r/2 = 4%

$$P_f \sum_{t=i}^{n\ 40} \frac{50}{(1\ 0.04)^{t}} \quad \frac{1000}{(1\ 0.04)^{40}}$$

$= 50 \times (PVIFA_{4\%, 40}) + 1000 \times (PVIF_{4\%, 40})$

$= 50 \times 19.7928 + 1000 \times 0.2083$

$= 1197.64$

e) Yield on a Bond

The yield on a bond should reflect the coupon interest that will be earned plus any plus any capital gain or loss realized from holding the bond to maturity. The yield to maturity (YTM) is therefore the formally accepted measure of return/yield on a bond. It is the interest rate that equates the present value of cash flow from a bond to the bonds market price. Alternatively it's the bond's interest rate of return (bond's IRR).

It is found by solving for 'y' m the following mathematical expression

$$P \quad \frac{C_1}{(1\ y)} \quad \frac{C_2}{(1\ y)^2} \quad \frac{C_3}{(1\ y)^3} \quad \ldots\ldots\ldots \quad \frac{C_n\, M}{(1\ y)^n}$$

Where: P = Market price of a bond

C = Coupon interest

M = Maturity value

n = Maturity period

The IRR (YTM) of a bond is calculated using a trial and error process whose steps are as follows:

i) Select an arbitrary interest rate and use it to calculate the present value of the cash flow from the bond.

ii) If the present value of the cash flow equals the price of the bond, the arbitrary interest selected in step 1 is the bond's YTM.

iii) If the present value is higher than the price of the value select a higher interest rate and if the present value is less than the price, select a lower interest rate. Continue this process until the present value equals the bonds price.

iv) Use linear interpolation to get an exact rate of interest.

Illustration 1:

An 18 year bond with 6% coupon and a par value of 1000Br paying interest semiannually is selling for 700.89Br. Calculate the yield on the bond.

$C_i = 6\% \times 1000 = 60$, $C_i/2 = 30$. $n = 18$, $2n = 36$

Note that if bond pays annual coupon, that $n = 18$ and $C_i = 60$

Trial and Error Process:

1. Interest rate chosen is 4%

   PV at 4% = $30 \times (PVIFA_{4\%, 36}) + 1000 \times (PVIF_{4\%, 36})$

   $= 30 \times 18.90828195 + 1000 \times 0.243668721$

   $= 810.92$

2. Since 810.92 is higher than 700.89 we chose a higher rate e.g. 5%

   PV at 5% = $30 \times (PVIFA_{5\%, 36}) + 1000 \times (PVIF_{5\%, 36})$

   $= 30 \times (16.54685171) + 1000 \times (0.172657414)$

   $= 669.06$

3. Since 669.06 is lower than 700.89, we now know that the correct YTM lies between 4% and 5% we can now interpolate to get the right figure

To interpolate we use the following expression:

$$LR \ (HR \ LR) \frac{\quad}{LR \quad HR}$$
$$PV \qquad PV$$

Where: LR = Lower interest rate

HR = Higher interest rate

PV = Present value

D = Desired present value = Price

Thus the exact YTM will be:

$$4 \ (5 \ \ 4) \frac{810.92 \ \ 700.89}{810.92 \ \ 669.06}$$

= 4+0.7756

= 4.7756 since this is semiannual we double it to get 9.55%

Illustration 2:

Assuming the bond in the illustration above was paying annual payments rather than semiannually the YTM will be:

$C_i = 6\% \times 1000 = 60, \ n = 18$

PV at 8% = $60 \times (PVIFA_{8\%, 18}) + 1000 \times (PVIF_{8\%, 18})$

= 562.31 + 250.56

= 812.56

Since the PV is higher than 700.89 we choose a higher rate

PV at 10% = $60 \times (PVIFA_{10\%, 18}) + 1000 \times (PVIF_{10\%, 18})$

= 492.08 + 179.86

= 671.94

Actual rate lies between 8% and 10% we therefore interpolate

$$8 \ (10 \ \ 8) \frac{812.56 \ \ 700.89}{812.56 \ \ 671.94}$$

= 8 + 1.5882

= 9.59%

*An approximation formula for YTM in given as

$$YTM \quad \frac{C_i \ \frac{Pb\ Pp}{n}}{\frac{PbPp}{2}}$$

Where: C_i = Coupon rate

P_p = Price of bond

N = Time to maturity

P_b = Par value of bond.

Using illustration above for example, Approx YTM will be:

$$YTM \quad \frac{60 \quad \frac{1000\ 700.89}{18}}{\frac{1000\ \ 700.89}{2}}$$

= 9%

One can then use the approx YTM as the starting point of the trial and error method if an exact YTM is required.

6.2 Weighted Average Cost of Capital (WACC)

This is the weighted average of the cost of equity capital, cost of preference capital and cost of debt. It is the cost of funds already raised by the firm to finance its existing projects. It is therefore a historical cost.

Procedure for calculation of the WACC

Compute the components cost or the costs of the specific sources of funds

i) Determine the proportion or weight of each capital component in the capital structure. This is done by dividing the amounts of funds raised from each source by the total of the long term funds.

ii) Multiply the weight of each capital component by its cost. This gives a weighted component cost.

iii) All the weighted component costs are added together. Their total is the firms weighted average cost of capital.

6.3 Marginal Cost of Capital (MCC)

This is the cost of raising additional or incremental new funds to finance new projects. It is therefore a future cost. It is the weighted average of the additional capital. Marginal weights are used to calculate the marginal cost of capital. Marginal weights are the proportions of the capital components in the optimal capital structure. The optimal capital structure is that long term capital mix that the firm intends to maintain in the long run. It is the long term capital mix that minimizes the firm's cost of capital and maximizes the value of the firm.

Illustration.

Thika ltd wishes to raise funds amounting to s. 10million to finance a project in the following manner:

Sh. 6million from debt;

Sh. 4 million from floating new ordinary shares

The present capital structure of the company is made up as follows:

1. 600,000 fully paid ordinary shares of sh. 10 each

2. retained earnings of sh. 4 million

3. 200,000, 10% preferences shares of sh. 20 each

4. 40,000 6 % long term debenture of sh. 150 each

The current market value of the company's ordinary shares is sh. 60 per share. The expected ordinary share dividend in a year's is sh. 2.40 per share. The average growth rate in both dividends and earnings has been 10% over the past ten years and this growth rate is expected to be maintained in the foreseeable future.

The company's long term debentures currently change hands for sh. 100 each. The debentures currently change for sh. 100 each. The debentures will mature in 100 years. The preference shares were issued four years ago and still change hands at face value.

Required;

i. Compute the component cost of: ordinary share capital, debt capital, preference share capital

ii. Compute the company's current weighted average cost of capital

iii. Compute the company's marginal cost of capital if it raised the additional sh. 10 million as envisaged (assume a tax rate of 30%)

Solutions

i. cost of ordinary share capital(kre)

$$= \frac{Do(1+g)}{po} + g = \frac{(D1))}{po} + g$$

$$= \frac{2.40}{60} + 10\% = 0.14 = 14\%$$

ii. Cost of debt capital (kd)

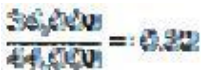
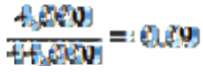
$$Kd = \frac{int + \frac{1}{n}(F - Bo)}{\frac{1}{2}(F + Bo)}$$

$$= \frac{9 + \frac{1}{100}(150 - 100)}{\frac{1}{2}(150 + 100)} = \frac{9 + \frac{1}{100} * 50}{\frac{1}{2}(250)} = \frac{9.5}{125} = 0.076*100 = 7.6\%$$

iii. Cost of preference share capital (kp)

$$kp = \frac{pDIV}{po} = \frac{pDIV}{par} = 10\%$$

IV. WACC

Source	market value	weight	cost	weighted cost
Ordinary Shares +retainedearnings	600,000shares @sh.60=36,000		14%	0.82*14=11.48%
Preference shares	200,000 shares @sh.20=4000		10%	00.9
Debentures	40,000debentures *100=4,000		5.32 %	00.479

WACC=11.48 + 0.9 + 0.479 =12.86%

V. MCC

Source	Source	weight	after tax cost	weighted cost
Debt	6,000	0.6	5.32%	3.192
Ordinary shares	4,000	0.4	14%	5.6

MCC = 3.192 + 5.6=8.79%

References

i) Manas'seh, P. N. A Text Book of Business Finance, Kijabe Printing Press, 2007.

ii) Pandey, I. M. Financial Management 9th Edition, Vikas publishing house, 2009.

SAMPLE PAPERS

Mount Kenya University

UNIVERSITY EXAMINATION

SCHOOL OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF BUSINESS & SOCIAL STUDIES

UNIT TITLE: FINANCIAL MANAGEMENT

UNIT CODE:DBM 215

TIME: 2 HOURS

Instruction: Answer all questions in section I and any two questions in section II.

SECTION I:

1 a.) Discuss the functions of a finance manager (9mks)

b.) List 3 reasons why the goal of wealth maximization is superior to that of profit maximization (3mks)

c.) Give 3 advantages of the payback period method of project appraisal (3mks)

d.) ‘’Despite the large investment in the stock exchange and the various government activities, only a few companies are listed at the stock exchange of the three East African Countries’’. This was that opening remark by the guest speaker in a seminar whose theme was ‘’Developing out capital market’’.

Required:

(i) The advantages of being listed at the stock exchange [7 mks]

(ii) Highlight four factors that may hinder companies from being used at the stock exchange [8mks]

SECTION II:

1.) The following information relates to machines A and B.

Year	**Machine A**	**Machine B**
0	(100,000)	(120,000)
1	60,000	50,000
2	40,000	50,000
3	20,000	50,000

Find the Internal Rate of Return (IRR) of the project at rates 10% and 15% (20mks)

2 a.) Explain 2 limitations of a Weighted Average Cost of Capital (WACC) (2mks)

b.) Using the Capital Asset Pricing Model (CAPM).determine the required rate of return on equity for the following situations (15mks)

Situation	**Expected return on market portfolio (R_m)**	**Risk free rate (R_f)**	**Beta (β)**
1	15%	10%	1.0
2	18%	14%	0.7
3	15%	8%	1.2

4	17%	11%	0.8
5	16%	10%	1.9

What generalization can you make? (1mk)

3. a.) Name and explain 3 participants in the money markets (6mks)
   b.) Differentiate between activity ratios and profitability ratios (4mks)
   c.) Explain two uses of financial ratios (4mks)
   d.) Describe the categories of the managerial role of a finance manager (6mks)

4.) Write short notes on the following:

- social responsibility (4mks)
- hire purchase (5mks)
- preference shares (5mks)
- types of capital projects (6mks)

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Mount Kenya University

UNIVERSITY EXAMINATION

SCHOOL OF APPLIED SOCIAL SCIENCES

DEPARTMENT OF BUSINESS & SOCIAL STUDIES

UNIT TITLE : FINANCIAL MANAGEMENT 1

UNIT CODE :BBM 215

Instruction: Answer all questions in section I and any two questions in section II.

SECTION I:

QUESTION ONE

(a) Explain reasons that may drive a company to raise equity finance than debt finance

[12mks]

(b) Describe the advantages of capital budgeting [8mks]

(c) Critically explain the roles of the CMA as the chief regulation of financial markets in Kenya. (10mks)

SECTION II:

QUESTION TWO

Paul was recently appointed to the post of investment manager of Masada limited, a quoted company. The company has raised sh. 8,000,000 through a right issue.

Paul has a task of evaluating two mutually exclusive projects with unequal economic lives. Project x has 7 years and project y has 4 years of economic life. Both projects are expected to have zero salvage value. Their expected cash flows are as follows:

Project	**x**	**y**
Year	**cash flows (sh)**	**cash flows (sh)**
1	2,000,000	4,000,000
2	2,200,000	3,000,000
3	2,080,000	4,800,000
4	2,240,000	800,000
5	2,760,000	-
6	3,200,000	-
7	3,600,000	-

The cost of equity of the firm is 20%

Required:

a) the net present value of each project (7mks)

b) the internal rate of return (IRR) of the projects (rediscount cash flows at 24% for project x and 25% for project y) (11mks) c) briefly comment on your results in (a) and (b) above (2mks)

QUESTION THREE

(a) Identify the fundamental features that distinguish preference shares from ordinary shares [10mks]

(b) Although profit maximization has long been considered as the main goal of a firm, shareholder wealth maximization is going acceptance amongst most companies as the key goal of a firm.

Required:-

(i) Distinguish between the goals of profit maximization and shareholder wealth maximization [6mks]

(ii) Explain the two limitations of the good of profit maximization [4mks]

QUESTION FOUR

(a) Write short notes on the following:-

(i) Bills of exchange

(ii) Debentures

(iii) Central depository system

(iv) Lease [12mks]

(b) Several methods exists for evaluating investment projects under capital budgeting. Identify and explain four features of an ideal investment appraisal method [8mks]

QUESTION FIVE

(a) You are provided the following information about ABC Ltd

Number of ordinary shares	100,000
Nominal value per ordinary share	50
Market price per ordinary share	80
Net profit before corporation tax	5,000, 000
Rate of corporation tax	30%
Dividend rate	10%

Required: Calculate

a) Dividend yield

b) Earning per share

c) Dividend cover

d) P/E ratio (8mks)

b) Discuss the uses and limitations of ratios (12mks)

REFRERENCES

i) Manas'seh, P. N. A Text Book of Business Finance, Kijabe Printing Press, 2007.

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Text Books for further Reading:

i) Chandra P. Fundamentals of Financial Management (3rd Edition), McGraw Hill, (2000).

ii) Van Horne J.C. Fundamentals of Finance Management (9^{th} Edition), Prentice- Hall, 2003.

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