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# CBAT, KUSHTIA

**SUB: Principles of Finance- 2101**

## **Class Note**

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**B**

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**A**

## 1<sup>st</sup> Chapter

### 1. Function of financial ?

- (a) **Financial planning:** It is the duty of finance manager to estimate the finance requirement and determine the sources from where it can be raised.
- (b) **Identification of sources:** It is the second most important duty of a financial manager to identify the different alternative sources of required or planned financing.
- (c) **Raising of funds:** Funds must be procured from single or multiple sources under the laws and regulations.
- (d) **Investment of funds:** Business firms require funds for investment in various fixed and current assets.
- (e) **Protection of funds:** Investments are always uncertain.
- (f) **Distribution of profit:** Finance should make a better co-ordination between reinvestment and consumption of profit.

### 2. Definition of Business Finance.

Generally, finance which is concerned to meet all the financial needs of business enterprise is called business finance. Alternatively, business finance is the field of study with the help of which one can understand formulation of financial planning, organizing, and controlling activities and their application in business.

**Prof. Gloss and Backer-** "Business finance is concerned with the sources of funds available to enterprise of all sizes and the proper use of money or credit obtained from such sources."

**E.W Walker-** "Activities of a business concern relevant to financial planning, coordination, control and their application is called business finance."

### 3. Financial management:

Financial management is an appendage of the finance function. Financial management is that part of management which is concerned mainly with raising funds in the most economic and suitable manner using these funds as profitably as possible, planning future operations.

**James C Vanhorn-** "Financial management is concerned with the acquisition, financing, and management of assets with some over all goal in mind. Thus the decision function of financial management can be broken into three major areas: the investment decision, financing decision and asset management decision."

### 4. Functions of a Financial Manager.

Financial manager has to perform the function of both managerial and routine functions. Financial managers are the planning and controlling device of an organization where they have to perform many functions like managerial and routine.

#### (1) Managerial Functions:

- (a) Investment / Asset Mix Decision
  - (i) Working Capital Management
  - (ii) Capital Budgeting
- (b) Financing Decision
- (c) Dividend Decision

#### (2) Routine Functions.

### 5. Managerial Function.

Managerial or executive finance functions include all those financial decisions of importance which requires specialized administrative skill. Some of the managerial functions are given below:

(1) **Investment Decision:** Investment in assets can be categorized into two ways:

#### (a) Working Capital Management:

Company should have to invest in working capital along with its fixed assets to perform its operation efficiently.

#### (b) Capital Budgeting:

Capital budgeting is the process or technique of selecting project that generates income for several years in future.

(2) **Financing Decision:** Second most important function of financial manager is to identify the requirements and sources of finance to attain the desire project.

(3) **Dividend Decision:** After paying all taxes, the available net profits of the firm can be allocated for three purposes-

- i) for paying dividends to the shareholders of the company as a return upon this investment,
- ii) for distributing bonus to the employees and company's contribution to other profit sharing plans, and
- iii) retention of profit for the expansion of business in future.

### 6. Routine Function.

Routine finance functions are those functions of clerical nature which are necessary for the execution of decisions taken by the executives. Some of the important routine functions of financial manager are discussed below:

- (a) Supervision of cash receipts and disbursements and safe guarding of cash balance
- (b) Proper custody and safeguarding of the important and valuable papers, securities and insurance policies.
- (c) Taking care of all mechanical details of financing.
- (d) Record keeping and recording.
- (e) Cash planning and credit management. The above routine functions are self explanatory and require no explanation.

### 7. Principles of Business Finance.

In order to take efficient decisions it is very essential for a financial manager to consider the principles of finance. Some of the important principles of finance are discussed below:

**(a) Principles of Risk and return:**

Return is the income received on an investment plus any change in market price, and risk is the variability of returns from those that are expected.

**(b) Principle of time value of money:** Most financial decisions, personal as well as business, involve time value of money consideration.

**(c) Principle of cash flow:** In finance, the returns from projects are evaluated as net cash inflow.

**(d) Principle of profitability & liquidity:** There is an inverse relationship between profitability and liquidity.

**(e) Principle of hedging:** According to the principle of hedging each asset should be offset with a financing instrument of the same approximate maturity.

**(f) Principle of diversification:** The principle of diversification is of vital importance in asset management.

**(g) Principle of business cycle:** The principle of business cycle suggests any kind of financial decision should be taken keeping in consideration of the business cycle.

## 8. Classification of Finance.

There are basic two types of finance

**(1) Private Finance:** When individuals and organizations are dealing with finance, it is known as private finance. Furthermore, private finance can be classified into three heads:

**(a) Personal finance:** This financing is used to perform day to day business operation, when an individual makes planning, using of funds to carry out regular business efficiently then it is known as personal financing.

**(b) Business finance:** Financing that is done to perform the function of business organization very efficiently is known as business finance. On the other hand business finance can be classified into three categories, like:-

**(i)** Financing of sole trader-ship, partnership or joint venture company

**(ii)** State owned business finance

**(iii)** Autonomous business finance

**(c) Non-business finance:** Financing activities done by non-profit motive firm is known as non business finance.

**(2) Public Finance:** When government or local government itself performs the function like identification of sources of funds, determining the requirement and raising of that funds and proper utilization of those funds is known as public financing.

## 9. Objective of Business Organization or Goal of a Firm.

To make a wise decision a clear understanding or objectives which are sought provides a framework for optimum financing decision making. It should be noted at the outset that the term 'objective' is used in the sense of a goal of three decision's criterion-

**(i)** Investment decision

**(ii)** Financing decision

**(iii)** Dividend decision.

The objective of a firm is to maximize the economic welfare of owners of the firm. There are two widely discussed approaches:

**(i)** Profit Maximization Approach

**(ii)** Wealth Maximization Approach.

## 10. Profit Maximization Decision Criterion Y.

According to this approach, action that increases profit should be undertaken and those that decrease profits are to be avoided. At first we can define 'Profit' as follows: When income is higher/greater/excess than expenditure, then that is called profit. The term profit can be used in two senses:

**(i) Owners Oriented Concept:** As a owner oriented concept profit refers to the amount & share of income which is paid to the owner's of the business.

**(ii) Operational Concept:** As operational concept profitability refers to a situation where output exceeds input.

## 11. Wealth maximization decision criterion.

The alternative to profit maximization is, wealth maximization. This is known as value maximization or net present value maximization.

The wealth of the corporate owner is measured by the share price of the stock, which in term based on the

**(i)** Timing of returns

**(ii)** Cash flows and most important on

**(iii)** Risk

Operational features of wealth maximization satisfy all the three requirements of suitable operational objective of financial process of action. Namely-

**(i) Exactness:** The Value of an asset should be viewed in terms of the benefits its can produce.

**(ii) Quality of benefits:** Wealth maximization criterion considers both the quality & quantity dimensions of benefit.

**(iii) Time value of money:** Wealth maximization criterion considers the time value of profit.

## 12. Other Advantages of Wealth Maximization.

There are some other reasons for which the objective 'wealth maximization' should be the 'goal of an organization. They are as follows:

**(i)** Wealth maximization is a clear term.

**(ii)** The concept of wealth maximization is universally accepted, because it takes care of interest of financial institution,

owners, employees & society at large.

(iii) The concept of wealth the maximization considers the impact of risk factor.

(iv) The great advantage of f the wealth maximization is 'to raise the share price in the market.

### 13. Career in Finance.

Generally career opportunity in finance is related in three areas such as

#### (1) Financial market:

- (a) Senior VP finance
- (b) Corporate Banking Manager
- (c) Credit Manager
- (d) Management trainee officer
- (e) Probationary officer.

#### (2) Career in investment:

- (a) Security Analyst
- (b) Corporation Analyst
- (c) Pension fund and portfolio manager
- (d) Stock broker
- (e) Mutual fund manager
- (f) Credit union manager.

#### (3) Career in financial management:

- (a) Chief Financial Officer
- (b) Vice-president of Finance
- (c) Project Finance Manager
- (d) Financial Analyst
- (e) Capital Budget Analyst
- (f) Credit. The following figure depicts the various arenas of job opportunities in finance.

### 14. Finance and Related Subjects/ Disciplines.

Since financial management is an inseparable part of overall management, it has linkage with other discipline and fields of study such as economics, accounting, marketing, production and quantitative methods.

(1) **Finance and Economics:** The knowledge of economics is very important because it, has relevance in the arena of finance.

(a) **Micro economics:** Micro economics is concerned with the economic decision of individuals and organizations.

(i) Demand and Supply Relationship

(ii) Profit maximization technique/ strategies

(iii) Pricing of product and its techniques

(iv) Utility, Risk and Valuation.

(b) **Macro economics:** Micro economics cover the over all institutional environment.

(i) How monetary policies affect the availability of fund?

(ii) How fiscal policy affect economy?

(iii) Different financial institutions and their activities.

#### (2) Finance and Accounting:

(i) Accounting and finance are closely related to the extent that accounting, is an important input in financial decision making, and

(ii) There are some key differences in viewpoints between them.

There are some key differences between finance and accounting. These are discussed below:

(a) **Decision making:** The purpose of accounting is collection and presentation of financial data.

(b) **Treatment of funds:** The view w point of accounting related to funds of the firm is different from that of finance.

(i) **Accrual Basis:** recognizes sales revenue and expenses incurred to make sale at time of sale.

(ii) **Cash Basis:** recognizes revenues and expenses as they occur.

### 15. Finance and other related discipline.

Finance is not only related with accounting and economics but also with other disciplines such as marketing, production and quantitative methods.

The marketing, production, and quantitative methods are indirectly related to day to day decision making by financial manager and are supportive in nature.

### 16. Factor Influencing Financial Decisions.

For the convenience of analysis let us classify these factors into two factors-

#### (1) Internal Factors:

(i) **Size of the firm-** to implement the future plan as well as the daily activity and to implement the financial decision the organization management accounting, budgeting and financial management strategies.

(ii) **Nature of business-** we can find the nature of business of an organization from their normal activities.

(iii) **The forms of legal organization-** financial decision also influenced by the form of legal organization.

(iv) **Situation of business cycle-** The financial decision is also influenced by the business cycle. The boom or depression situation of the economy has controlled the business velocity.

(v) **Assets structure-** The financial decision influences in determining the types of asset structure and how the assets should be financed or whether it be financed.

**(vi) Regularity and adequacy of income-** if the income of any business is regular and adequate then it won't face any kind of difficulties to collect further loan.

**(vii) Economic life of business-** The business, which has long economic life, has got high priority in getting loan.

**(viii) Terms of credit-** The financial activities of any business are influenced by the rules and regulation or the terms of credit.

**(ix) Management philosophy-** In this case, management implies the board of directors and the top level manager of an organization.

**(2) External Factors:** The most influential external factors are given below-

**(i) Government regulation:** Business finance activities are influenced by government rules and regulations.

**(ii) Tax system:** The tax system of a country can influence the function of financial management.

**(iii) Economic condition of the country:** The economic condition of a country influences the financial decision taken by the financial manager.

**(iv) Condition of money market and capital market:** The economic condition of a country highly depends on the condition of money market and capital market.

## 17. Importance of Financial Management.

The importance of financial management can be discussed under following heads-

**(i) Successful promotion depends on financial administration:** One of the most important reasons of failures of business promotion is a defective financial plan.

**(ii) Smooth running of enterprise:** Money is to an enterprise, what oil is to an engine.

**(iii) Financial administration co ordinated various functional activities:** Financial administration provides complete coordination between various functional areas such as marketing, production etc.

**(iv) Focal point of decision making:** Every decision in the business is taken in the light of its profitability.

**(v) Determinants of business success:** The financial managers present important facts and figures regarding financial position and the performance of various function of the company in a given period before the top management.

**(vi) Measure of performance:** The performance of the firm can be measured by its financial results, i.e., by its size or earnings.

## 18. Distinction between Business Finance and Non-business Finance.

### Business Finance

(i) The main purpose of business finance is to maximize share owners wealth.

(ii) The medium of business finance is to sell share and debentures.

(iii) In case of business finance local sources of funds are used.

(iv) The profit of the business finance is to distribute among the share holder.

### Non-business Finance:

(i) Providing service is the main purpose of that kind of organization.

(ii) Non business finance can't be created by selling shares or debentures rather it collecting by grant, custody or other resources.

(iii) In case of non-business finance local as well as foreign sources of funds are used.

(iv) In non business finance if income is more than expense then extra money will spend on ' development or extra service provided of that organization.

## 19. Distinction between Public Finance and Private Finance.

### Public Finance:

(i) Collection and proper allocation of fund for the purpose of the state and local government is called public finance.

(ii) Maximization of social-economic welfare of the citizens.

(iii) Government can collect fund for public finance from both local and sources.

(iv) Income is adjusted for expenditures.

(v) In case of public finance it is possible to borrow from both local and foreign sources.

### Private Finance:

(i) Planning, collection and proper utilization of, fund by any individual or organization to achieve any desired objective is private finance.

(ii) Maximization of wealth and meeting individual need.

(iii) Only local sources of fund are available for private finance.

(iv) Expenditure is adjusted for income.

(v) In case of private finance only local sources are available for borrowing. It is usually difficult to borrow from foreign sources.

## 20. Basic Forms of Business Organization.

Business units differ in form of ownership and in the way they are organized for operation. A person, who wishes to start a new business, has many forms of organization to choose from.

In the point of view of ownership, there are and in the private sector, four main forms of organization to run a business unit. They are as follows :

**(i) Individual or sole proprietorship**

**(ii) Partnership**

**(iii) Joint stock company**

**(iv) Cooperative undertaking.**

## 21. Distinction between a Company and a Partnership Firm.

The distinction between a company and a partnership firm is discussed below:

- (1) **Legal Person:** A company, being a legal entity, is a person distinct from its members.
- (2) **Limited liability:** The liability of shareholders is invariably limited, while that of partners is unlimited.
- (3) **Registration:** A company is formed by registration under the Companies Act.
- (4) **Number of Members:** A private company can have a maximum number of 50 members and a public company has no limit.
- (5) **Transferability of shares:** The shares in a company are transferable, with the result that shareholders can go on changing.
- (6) **Continuity of existence:** A company has perpetual succession.
- (7) **Capital requirements:** A company raises its financial resources from the savings of a large number of people, usually in small amounts.
- (8) **Management:** The shareholders, who supply the capital, cannot as shareholders, manage the affairs of the company.
- (9) **Change of objects:** A company can change its objects and powers only with the permission of the Court.
- (10) **Government control:** The Government that creates a company reserves the right to regulate its actions more closely than those of partnerships.
- (11) **Majority rule:** In a company, the right of the majority to decide is the cardinal rule.
- (12) **Compulsory audit:** A company is required by law to have its accounts audited once a year by a Chartered Accountant in practice.

**Advantages:** Vast amount of capital/ Greater scope for expansion./ Diffused risk/ Democratization of ownership/ Transferability of shares/ Stability/ Organized intelligence/ Dominant financial advantage/ Definite standing/ Limited liability/ Social advantage/ Tax relief.

**Disadvantages:** Difficulty and cost of formation/ Incapable or fraudulent management/ Reckless speculation encouraged/ Waste and inefficiency associated with indirect management/ Clash of interests between members and management/ Bureaucratic approach/ Excessive regulation by law/ Social ill-effects of a large company.

## 2<sup>nd</sup> Chapter

### 22. Definition of Short Term Financing.

A major portion of a firm's financing is normally derived from short-term source. In the conducts of its business, a firm obtains its funds from a variety of sources. Some capital is provided by suppliers, creditors and owners, while other funds arise from earning retained in the business.

"Funds available for a period of one year or less are called short-term finance". **I.M. Pandey**

"Short-term credit is defined as any liability originally scheduled for payment within one year." **J. Fred and Eugene**

### 23. Characteristics of Short term Financing .

- (1) **Duration:** Short term financing embraces the borrowing or lending funds for a short period of time say one year or less.
- (2) **Cost of funds:** Short term financing can provide both the highest and lowest cost of funds in the firm's capital structure.
- (3) **Use of short term financing:** There is a common tendency for greater use of short term financing among small and lesser use among large concerns.
- (4) **Sources of short term financing:** Short term finance deals with the commercial bank, trade credit and other sources of funds that have to be repaid within a year or less.
- (5) **Renewal or recycling:** This occurs when short term liabilities are continually refinanced from financing must by definition be repaid in less than one year some sources provide funds that are continuously rolled over.
- (6) **Source of short term financing:** Trade credit advance from customers.
- (7) **Clean-up:** This occurs when commercial banks or other lenders require the firm to pay off its short-term obligation.
- (8) **Speed:** a short-term loan can be obtained much faster than long-term credit.
- (9) **Less restrictive:** short-term loan agreements are generally less restrictive.
- (10) **Risky-Ness:** short-term credit is riskier for two reasons: (1) if a firm uses short-term loan.

### 24. Source and Types of Short-term Financing.

Theses sources are depicted below with the held of following:

#### (1) Spontaneous Financing:

- (i) Trade Credit
- (ii) Advance from Customers & Deferred Income
- (iii) Accrued Expenses.

#### (2) Money market Credit:

- (i) Commercial paper
- (ii) Banker's

#### (3) Short-term unsecured bank:

- (i) Line of Credit
- (ii) Revolving Credit
- (iii) Single payment credit

#### (4) Secured short- Bank credit:

- (i) Inventory-backed loan
- (ii) Accounts Receivable-backed loan.

## 25. Definition of Trade Credit.

In the present business world trade credit is such a short term financing which all most every business establishment use for financing purpose. Trade credit is the sources of short term financing.

## 26. Types of trade credit.

(1) **Open account:** In this system, at the time of delivery of the products, the seller is required to send a invoice showing quantum, price, total price and condition of sales if any purchaser buy the product o account.

(2) **Notes payable:** The process of notes payable is quite same as open account, the only difference is that it ha to be properly documented and signed by the purchaser.

(3) **Trade acceptance:** If sellers don't know the purchasers or have little concerned about their creditability then the: may not send the goods in advance before making the payment.

## 27. Feature of Trade Credit.

(1) **Credit sale or purchase:** The primary concern of features of trade credit is that, it is created by credit purchasing.

(2) **Less formality:** In the trade credit, the seller and buyer do not need maintain man formalities.

(3) **Timing:** Sometimes the seller may offer special facilities like extending more than three month to increase the total sales volume.

(4) **Financing volume:** The volume of financing through trade credit depends on the volume of purchase and the time of paying price.

(5) **Cost of financing as-** a source of finance the cost of trade credit depends oil some factors.

(6) **Purpose and nature:** The purpose of trade credit is to collect necessary amount of money to buy raw materials and manufactured goods.

(7) **Security:** Trade credit does not require any security while sanctioning as sources finance.

(8) **Resale:** In case of trade credit the buyers must have to buy the goods & services with the purpose of reselling.

(9) **Availability:** In every economy almost all types of business institutions use trade credit.

(10) **Mutual trust and good relation:** The base of trade credit is the mutual trust and good relation between buyers and sellers.

## 28. Terms of Sale.

(i) **COD and CBD-** No- Trade Credit Cod means cash on delivery of goods.

(ii) **Net Period- No Cash Discount:** When credit is expended, the seller specifies the period of time allowed for payment.

(iii) **Net Period- Cash Discount:** Usually, a cash discount is offered as an incentive to the buyer to pay early, "2/10, net 30".

(iv) **Seasonal Dating:** In a seasonal business, sellers frequently use dating to encourage customer to place their orders before a heavy selling period.

## 29. Factors of Cost of Trade Credit.

Form the above equation we can figure out the following factors those may affect the decision of buyer-

(i) L Rate of cash discount

(ii) Timing of cash discount period

(iii) Timing of net credit period.

## 30. Who Bears the Cost?

We should recognize that trade credit involves a cost of the use of funds over time. This use is not free. The burden may fall on the supplier, the buyer, or both parties. The supplier may be able to pass the cost on to the buyer in the for in of higher prices. This rise in price should not be confused with other rises caused by changing supply and demand conditions in the product markets.

## 31. Commercial paper.

Commercial paper is a short-term debt instrument issued only by well known, credit-worthy firms and is typically unsecured. It is normally issued to provide liquidity or finance a firm's investment in inventory and accounts receivable.

## 32. Sale of Commercial Paper.

(i) **Direct selling:** Under this method the commercial paper is directly placed with investors by the issuer.

(ii) **Through commercial paper dealer or open market sale:** Under this method commercial is sold to dealer by the issuing company.

## 33. Merits of Commercial Paper.

(i) It is an alternative source of raising short-term finance and proves to be handy druidic, the period of tight bank credit.

(ii) It is a cheaper source of finance in comparison to the bank credit. Usually interest yield on commercial paper is less than the prime rate of interest.

(iii) A number of firms enjoy the prestige associated with being able to float theirs, commercial paper.

From the investor's point of view:

(i) It provides an opportunity to make a safe, short-term investment of surplus fund

(ii) No compensating balance requirements are associated with its issuance.

## 34. Differences between Line of credit & Revolving Credit.

**Revolving Credit:**

- (i) Revolving credit agreement is a formal legal commitment to extend credit up to some maximum amount over a stated period of time.
- (ii) The borrowers pay interest on the utilized amount of loan and pay commitment fee on the unutilized loan.
- (iii) The cost of revolving credit is high due to commitment fee.
- (iv) It is a legal and formal agreement.
- (v) It is a medium-term nature of financing.

**Line of credit:**

- (i) Line of credit is an informal agreement between a bank and its customer specifying the maximum amount of unsecured credit the bank will permit the firm to owe at any one time.
- (ii) The borrowers pay interest on the utilized amount of loan and do not pay any commitment fee on the unutilized loan.
- (iii) The cost of line of credit is low due to absence of commitment fee.
- (iv) It is an informal agreement.
- (v) It is a short-term nature of financing.

**35. Cost of Short Term Unsecured Bank Loan.**

There are some factors that affect the cost of borrowing on a short term basis. These factors are as follows:

- (i) stated interest rate,
- (ii) compensating balances and
- (iii) commitment fees.

**36. Methods of Computing Interest Rates.**

Interest rate paid on a bank loan generally is calculated in one of the three ways:

- (i) Collect basis
- (ii) Discount basis,
- (iii) Installment basis.

**37. Bank Credit VS Trade Credit.**

The following comparison summarizes the major difference between trade credit and bank credit as means of financing industrial and mercantile operations:

- (i) Purpose: Trade credit arises from goods buying & selling of goods & its motive is to raise sales. Bank credit is generally undifferentiated and can therefore, be used for a wider range of purposes.
- (ii) Extent: Usually trade creditor's accounts do not assume large dimensions. Individual clients on the other hand, bank advance may be much larger than the amount those clients owe at any time from individual trade creditors.
- (iii) Liquidation: Trade creditor's accounts are liquidated much more frequently than bank advances.
- (iv) User: Buyer or seller of the product is the user of trade credit. In case of bank loan buyer of the product uses this credit.
- (v) Nature of credit: Trade credit is given through buying or selling of goods. Bank loan is given on cash.
- (vi) Duration of loan payment: Comparatively duration is low in case of trade credit.
- (vii) Tax benefit. There is no scope of tax benefit in case of trade credit but bank loan on interest.

**38. Difference between finance by Bills Receivable and Inventory.****Bills Receivable:**

- (i) It is a current asset. It is transferred while taking credit.
- (ii) If the borrower needs money before the maturity of the bill, he can discount it to a factor.
- (iii) If the bills are not honored by the buyer of the goods, the seller will have to bear the liability of payment of loan.

**Inventory:**

- (i) It is also a current asset but not transferred to lender while taking credit. It is pledged and the lender considers the market price of inventory, perishability etc before granting loan against it.
- (ii) There is no need of discounting process.
- (iii) There is no probability of being dishonored in the case of inventory backed loans.

**39. Definition of time value of money.**

Today's Tk.100 is not the same as Tk.100 a year from now because money has time value. The change in the value of money with the change in time is called time value of money.

"Time value of money means that the value of a sum of money received today is more than its value received after a year sometime. Conversely, the sum of money received in future is less valuable than it is today." **M.Y Khan & P.Kjain**

"A dollar received a year hence is not the equivalent of a dollar received today, because the use of money has a value. The difference represents the time value." **A Martz M F. Uzry**

**40. Reasons of time value of money.**

- (1) **Opportunity cost:** With money any one can use it for different purposes.
- (2) **Inflation:** Over time the purchasing power of money reduces.
- (3) **Time preference of present consumption:** As people prioritize present consumption over future consumption.
- (4) **Risk and uncertainty:** Risk is the difference between the expected and actual outcome.

**41. Advantages of time value of money.**

- (i) Investment decision: Investment in current year and cash inflows received in future from that investment can be measured and evaluated under the concept of time value of money.
- (ii) **Higher income possibility:** The volume of income or the rate of interest varied over time.
- (iii) **Determination of the real income:** The real values of future cash inflows are not same as their face value.
- (iv) **Valuation of risk:** As the future cash inflows are subject to uncertainty and risk associated with it creates fluctuation in those cash inflows.
- (v) **Determination of loan installment:** Generally present loans or credits are rapid in future at installment basis.
- (vi) **Determination of interest rate:** Investment corporations are collecting the rate of interest on their venture and/or depositor groups are on their deposits.

#### 42. Disadvantages of time value of money.

- (i) **Changing economic & Business environment:** The economic and business environments are changing over times.
- (ii) **Complexity:** There are different methods for calculating the time value money and few of them are very complex and tedious.
- (iii) **Mistake in net present value calculation:** Net present value can be properly determined when the discount rate is perfect.
- (iv) **Mistake in future value:** As the present value, future value requires as compounding rate, which needs to be perfect in taking capital budgeting decision.

#### 43. Difference between Ordinary Annuity and Annuity Due.

##### Ordinary Annuity:

- (i) When a series of equal cash flows occur at the end of each period, is known as Ordinary Annuity.
- (ii) Total value of money is less than that of annuity due.
- (iii) No initial cash flow occurs at the date of inception.

##### Annuity Due:

- (i) When a series of equal cash flows occur at the beginning of each period, is known as Annuity Due.
- (ii) Total value of money is more than that of ordinary annuity.
- (iii) Initial cash flow occurs at the date of inception.

#### 44. Difference between Present Value and Future Value.

##### Present value (PV):

- (i) The current value of a future amount of money or a series of future payments, evaluated at a given interest rate is known as present value of money.
- (ii) It is used to find the present value of money to be received in future.
- (iii) Discounting technique is used to determine the present value of money.

##### Future Value:

- (i) The value of x present amount of money or a series of payments at some future tarried, evaluated at a given interest rate is known as future value of money.
- (ii) It is used to show how much money to be invested today to get a certain sum of money in future.
- (iii) Compounding technique is used to determine the Future value of money.

#### 45. Difference between Simple interest and Compound Interest.

##### Simple interest:

- (i) Interest calculated only oil the original amount or principal amount, is known as Simple late rest.
- (ii) Interest rate is consistent with nominal interest rate.
- (iii) Total amount is less than that of compound interest rate.
- (iv) Interest amount as well as original amount remains same in every year.

##### Compound Interest:

- (i) Interest calculated on the previous interest amount and on the original amount or principal' amount is known as .compound interest.
- (ii) Interest rate differs from nominal interest rate.
- (iii) Total amount is more than that of simple interest rate.
- (iv) Interest amount increases every year as the original amount increases with die previous interest.

4 chapter

#### 46. Definition of Valuation.

Security valuation involves the valuation of common stock, preferred stock, and bond etc. Valuation is the technique of finding value of any asset. Different scholars have given different views regarding valuation. Adcording to L. J Gitman "Valuation is the process that links risk and return to determine the worth of an asset".

#### 47. What are the Elements of Valuation?

- (i) **The expected future CF:** These cash flows include the earnings, cash flows, dividend, interest payments or capital gain during the holding period of a security.
- (ii) **Timing of CFs:** Dor practical purpose, the timing of CFs is important consideration for any valuation model.
- (iii) **Uncertainty of Returns (CF):** Because these expected cash flows are uncertain due to different market & economic Conditions.

#### 48. Security investment decision process.

- (i) Determine the CFs related to the security for valuation.
- (ii) Determine the appropriate discount rate
- (iii) Determine the maturity period.
- (iv) Use the above components to determine the intrinsic value of the stock.
- (v) Compare the intrinsic value with the market price of the security.

#### **49. Different Concepts of Value.**

- (i) Market Value:** The current price or value at which the security is traded in the market is called market value of a security i.e. common stock.
- (ii) Intrinsic Value:** The present value of a security's expected Us is discounted by the appropriate require rate or return is called the intrinsic value of a security.
- (iii) Liquidation Value :** The value of a stock calculated by is the following process.
- (iv) Replacement Value :** The value of an asset is determined on the 'basis of the value required for replaced assets is called replacement value.
- (v) Book Value:** The value of a common stock calculated on the basis of the book value of its assets minus the book value of its liabilities deviled by the no of outstanding common stock is called book value of its common stock.
- (vi) Face Value:** The price of common stock at which it is issued is called the face value.

#### **50. Why is valuation important?**

- (i) It helps investors to decide whether to invest in a security of not i.e. to take security investment decision.
- (ii) It helps an investor to find the value of a firm.
- (iii) It helps the investor to find whether the security is properly priced or not (undervalued or overvalued).
- (iv) It helps us to execute buy, hold or sell decision regarding a security.

#### **51. Common stock valuation.**

Because of the complexity the importaiaece of valuing common stock, various techniques are used. These techniques falls, under two general approaches.

- (i) Discounted CF valuation techniques- where value of stock is estimated based upon the PV of expected CFs including dividend, operating CFs and free cash flow.
- (ii) Relative valuation techniques- where the value of a stock is estimated, based upon its current price relative to variable considered to be significant to valuation i.e. earnings, CFs, book value, sales etc.

#### **52. Definition of Cost of capital.**

Cost of capital is the minimum required rate of return required by the investors form their investment of funds.

**J.O Van Horne-** Cost of capital is the required rate of return on the various types of financing".

**LJ Gitman-** Cost of capital is the rate of return that a firm must earn on the projects in which it invests to maintain its market value and attract funds"

#### **53. Significance of the cost of capital.**

- (i) Evaluating investment decision:** The primary purpose of measuring the cost of capital is its use as a financial standard for evaluating the investment projects.
- (ii) Designing a firm's debt policy:** The debt policy of a firm is significantly influenced by the cost consideration.
- (iii) Appraising the financial performance of top management:** The cost of, capital framework can be used to evaluate the financial performance of top management.
- (iv) Designing dividend policy:** Determination of percentage off dividend and proposed livid end become easy by analyzing cost of capital.
- (v) Determining the value of the firm:** The objective of financial management is wealth maximization.

#### **54. Assumptions of Cost of Capital.**

Cost of capital is a dynamic concept, It is affected by various factors like internal and external .actors. The different considerable factors to calculate weighted average cost of capital are discussed below:

- (i) Business risk to be unchanged
- (ii) Financial risk to be unchanged
- (iii) After tax cost.

#### **55. Concept of Weighted Average Cost of Capital (WACC).**

Generally the cost of capital of a firm is the weighted average cost of various source of finance used by it. If the firm uses n different sources of finance.

#### **56. Cost of preference share.**

One may, therefore, be tempted to conclude that the dividends on preference capital do not constitute cost. This is not true.

- (i) The cost of preference capital is a function of the dividend expected by investors.
- (ii) The failure to pay dividends, although does not cause bankruptcy, yet it can be a serious matter from the ordinary-shareholders' point of view.
- (iii) The non-payment of dividends on preference capital may result in voting rights and control to the preference shareholders.
- (iv) More than this, the firm's credit standing may be damaged.

(v) The cost of preference share can be calculated in two ways : Cost of perpetual preference share, Cost of redeemable preference share.

### **57. 'Cost of Equity Capital.**

Firms may raise equity capital internally by retaining earnings. Alternatively, they could distribute the entire earnings to equity shareholders and raise equity capital externally by issuing new shares.

#### **Forms of common stock financing:**

- (i) Retained earnings
- (ii) New issue of common stock.

### **58. How to Find Cost of Equity Capital?**

There are different approaches to find cost of equity capital. These approaches are

- (i) Constant growth valuation model
- (ii) Capital Asset Pricing Model
- (iii) Bond yield plus risk premium approach.

### **59. Cost of Retained Earnings.**

Dividends are paid out of a firm's earnings. Part of earnings which is retained in the business is called retained earnings. A firm's internal equity consists of its retained earnings. The opportunity cost of the retained earnings is the rate of return foregone by the equity shareholders. The shareholders generally expect dividend and capital gain from their investment. The required rate of return of shareholders can be determined from the dividend valuation model.

### **60. Cost of New Issue of Common Stock.**

The firm's external equity consists of funds raised externally through public or rights issues. The cost of a new issue of common stock is, determined by calculating the cost of common stock, net of under pricing and associated flotation cost.

### **61. The calculation of WACC.**

Once the component costs have been calculated and they are multiplied by the proportions of the respective sources of capital to obtain the weighted average cost of capital.

- (i) Calculate the cost of specific sources of funds
- (ii) Multiply the cost of each source by its proportion in the capital structure.
- (iii) Add the weighted component costs to get the WACC.

In financial decision-making, the cost of capital should be calculated on an after-tax basis. Therefore, the component costs should be the after-tax costs.

### **62. Why do managers prefer the book value weights for calculating WACC?**

Besides the simplicity of the use, managers claim the following advantages for the book value weights:

- (i) Firms in practice set their target capital structure in terms of book values.
- (ii) The book value information can be easily derived from the published sources.
- (iii) The book value debt-equity ratios are analyzed by investors to evaluate the risk of the firms in practice.

### **63. The Marginal Cost and Investment Decisions.**

Two important mechanisms whereby financing, and investment decisions can be made simultaneously are:

- (i) The weighted marginal cost of capital and
- (ii) The investment opportunities schedule.

### **64. How to determine the WMCC schedule?**

The procedure for determining the weighted marginal cost of capital schedule involves the following steps:

- (i) Estimate the cost of each source of financing for various levels of its use through an analysis of current market conditions and an assessment of the expectations of investors and lenders.
- (ii) Identify the levels of total new financing at which the cost of new components would change, given the capital structure policy of the firm.

### **65. Factors Affecting the Cost of Capital.**

The cost of capital is affected by various factors, some are beyond the firm's control, but others are influenced by its financing and investment policies.

#### **(1) Factors the firm can not control:**

- (i) **The level of Interest Rate:** If interest rates in the economy rise, the cost of debt increases because firms will have to pay bondholders a higher interest rate to obtain debt capital.
- (ii) **Market Risk Premium:** The perceived risk inherent in stocks, along with investors' aversion to risk, determine the market risk premium.
- (iii) **Tax Rates:** Tax rates, which are largely beyond the control of all individual firms, have an important effect on the cost of capital.

## **(2) Factors the firm can control:**

**(i) Capital Structure Policy:** Capital structure is the combination of debt and equity capital.

**(ii) Dividend Policy:** The percentage of earnings paid out in dividends may affect a stock's required rate of return.

**(iii) Investment Policy:** When we estimate the cost of capital, we use as the, the required rates of return on the firm's outstanding stock and bonds.

## **66. Estimating Project Risk.**

**(i) Stand-alone risk-** is the project's risk disregarding the fact that it is but one asset within the firm's portfolio of assets and that the firm is but one stock in a typical investor's portfolio of stocks.

**(ii) Corporate, or within-firm, risk-** is the project's risk to the corporation, giving consideration to the fact that the project represents only one of the firm's portfolio of assets.

**(iii) Market, or beta, risk-** is the riskiness of the project as seen by a well-diversified stockholder who recognizes that the project is only one of the firm's assets.

## **67. Definition of Capital Budgeting.**

In the term "capital budgeting" capital relates to the total funds employed in an enterprise as a whole, budgeting indicates a detailed quantified planning which guides future activities of an enterprise towards the achievement of its goals.

"Capital budgeting describes a firm's formal planning process for the acquisition and investment of capital and results in a capital budget that is the firm's formal plan for the expenditure of money to purchase fixed assets." - **John J Hampton**

"Capital budgeting may be defined as a firm's decision to invest its current funds most efficiently in long term activities in anticipation of an expected flow of future benefits over a series of years." - **I, M Pandey**

## **68. Key Motives for Making Capital Expenditures / Area of Business where Capital Budgeting can be used.**

Now we shall briefly describe motives for making capital expenditures.

**(i) Expansion:** The most common motive for a capital expenditure is to expand the level of operations --usually through acquisition of fixed assets.

**(ii) Replacement:** As a firm's growth slows and it reaches maturity, most capital expenditures will be made to replace or renew obsolete or worn-out assets.

**(iii) Renewal:** An alternative to replacement, may involve rebuilding, overhauling, or retrofitting an existing fixed asset.

**(iv) Other purposes:** Some capital expenditures do not result in the acquisition or transformation of tangible fixed assets.

## **69. Steps of Capital Budgeting.**

The capital budgeting process consists of five distinct but interrelated steps:

**(i) Proposal generation:** Proposals are made at all levels within a business organization and are reviewed by finance personnel.

**(ii) Review and analysis:** Formal review and analysis is performed to assess the appropriateness of proposals and evaluate their economic viability.

**(iii) Decision making:** Firms typically delegate capital expenditure decision making on the basis of dollar limits.

**(iv) Implementation:** Following approval, expenditures are made and projects implemented.

**(v) Follow-up:** Results are monitored and actual costs and benefits are compared with those that were expected.

## **70. Pay back period (PBP).**

How long does it take to recover initial investment? The Pay back period is the exact amount of time required for the firm to recover its initial investment in a project as calculated from cash inflows. Alternatively PBP is the period of time required for the cumulative expected cash flows from an investment project to equal the initial cash outflow.

## **71. Advantages of Payback Period.**

**(i)** Payback period is easy to understand and calculate.

**(ii)** It is less time consuming; one can take the decision in a short possible time.

**(iii)** Payback period puts emphasis on liquidity principle of the firm.

**(iv)** Payback period incurs low cost in evaluating project.

**(v)** This approach uses cash flow instead of accounting profit.

**(vi)** Risk and time is positively related.

### **Disadvantages of Payback Period :**

**(i)** Payback period considers partial cash flow of a firm.

**(ii)** It ignores the time value of money.

**(iii)** Payback period is not consistent with the goal of organization, because it measures only short-term performance.

## **72. Discounted Payback Period (DPB).**

Discounted payback period is a variant of the regular payback period. It is like regular regular Z7 payback period, except that the cash flows are discounted by the project's cost of capital. The discounted payback period is defined as the number of years

required to recover 'the investment from, discounted net cash flows.

- (i) If the calculated discounted payback period < expected payback period; accept the project
- (ii) If the calculated discounted payback period > expected payback period; reject the project.

**Advantages :**

- (i) Discounted payback period does consider the capital costs- it shows the break-even year after covering debt and equity cost.
- (ii) It considers. the time value of money.
- (iii) Discounted payback period puts emphasis on liquidity principle of the firm.
- (iv) It incurs low cost in evaluating project.
- (v) This approach uses cash flow instead of accounting profit.

**Disadvantages:**

- (i) Discounted Payback period considers partial cash flow of a firm.
- (ii) Discounted Payback period is not consistent with the goal of organization because it measures only short-term performance.

**73. Definition of Risk.**

The capital budgeting decision is based on the benefits derived from the project. These benefits are measured in terms of cash flows. These cash flows are estimates. The estimation of future returns is done on the basis of various assumptions.

**74. Measures of Risk: Standard Deviation and Coefficient of Variation.**

Assigning probabilities to cash flow estimates, as a measure of variability of future return represents a further improvement over sensitivity analysis, which, List already mentioned, was itself superior to the method which involved the estimation of future cash flows in the form of a single figure.

**75. Standard Deviation: Absolute Measure of Risk.**

In statistical terms, standard deviation is defined as the square root of the mean of the squared deviation, where deviation is the difference between an outcome and the expected mean value of all outcomes. Further, to calculate the value of standard deviation, we provide weights to the square of each deviation by its probability of occurrence.

**76. Risk Evaluation Approaches.**

Once the nature of risk is understood and its quantum estimated, it is to be incorporated within the decision-making framework. This section examines the popular techniques to handle risk. They are:

- (i) Risk-adjusted Discount Rate Approach
- (ii) Certainty-Equivalent Approach
- (iii) Probability Distribution Approach
- (iv) Decision-tree Approach.

**77. Return.**

Income received on an investment, and any change in market price, usually expressed as a percent of the beginning market price of the investment, is called return. Investment return can be expressed in two ways:

- (i) Taka returns
- (ii) Rate of return or percentage return.

**78. Component/Source of Return.**

Investment offers two potential sources of returns: income and price changes.

- (i) Income is the-periodic cash flow paid to the investor. Some investments pay no income and others pay a relatively high amount.
- (ii) The other source of investment return is price change.

**79. Expected Return & Realized Return.**

**Expected Return:**

- (i) The future return is expected by the investors over some future holding period is called expected return.
- (ii) It is an uncertain return and may or may not occur,
- (iii) It can not be used in estimating future unknown return

**Realized Return:**

- (i) The actual (ex-post) return on an investment for some previous period of time is known as realized return.
- (ii) It is a certain and gained return.
- (iii) future It can be used as the basis of forecasting of future expected return.

**80. Summarizing Returns.**

So far we have discussed calculating holding period return, real rate of return, international return from international investment. Although all are useful measures of return and can aid in investment analysis and selection, we also need summary statistics of returns over a period of time. Two such statistics are distinctively given below:

- (i) **The arithmetic mean:** The arithmetic mean is the simplification of the average of all observations in a data series.
- (ii) **The geometric mean:** Another measure of the "average" return over a period of time is called the geometric mean.

### **81. What is Risk.**

Risk is the chance or probability that some unfavorable events will occur. Risk can be defined as the variability of expected outcome from actual outcome.

"Risk may be defined as the likelihood that the actual return from an investment will be less than expected return." **Webster Dictionary**

"Risk is the chance that some unfavorable events will occur" **IF Weston & E. F Brigham**

### **82. Sources of Risk.**

#### **Sources of Risk :**

#### **(1) Firm specific risks**

- (i) Business risk
- (ii) Financial risk

#### **(2) Shareholder specific risks**

- (i) Interest rate risk
- (ii) Liquidity risk
- (iii) Market risk

#### **(3) Firm & stockholder risks**

- (i) Event risk
- (ii) Exchange rate risk
- (iii) Tax risk.

### **83. Risk-indifferent.**

The attitude toward risk in which no change in return would be required for an increase in risk. Clearly, this attitude is nonsensical in almost any business context.

(i) **Risk-averse:** The attitude toward risk in which an increased return would be required for an increase in risk.

(ii) **Risk-seeking:** The attitude toward risk in which a decreased return would be accepted for an increase in risk.

### **84. Ways of Analyzing Asset Risk.**

(i) **Stand-alone risk:** The risk an investor would face if he or she held only one asset is called stand-alone risk.

(ii) **Risk Assessment:** Risk can be assessed using sensitivity analysis and probability distributions, which provide a feel for the level of risk embodied in a given asset.

(iii) **Sensitivity Analysis:** Sensitivity analysis uses a number of possible return estimates to obtain a sense of the variability among outcomes.

### **85. Relationship between Risk & Return: Capital assets pricing model (CAPM).**

The most important aspect of risk is the overall risk of the firm as viewed by investors in the market place. Overall risk significantly affects investment opportunities and- even more important the owners' wealth. The basic theory that explains the links between risk and return for all assets is the capital assets pricing model (CAPM).

### **86. Types of Risk's.**

(i) **Diversifiable Risk:** The risk that is unique to a particular security or company, independent of economy and political risk factors, is known as Diversifiable risk.

(ii) **Market Risk:** The risks that- affect the all' securities in market, that arise from the strikes, war, change in inflation, interest rates.

(iii) **The Model: CAPM:** The capital assets pricing model (CAPM) links risk and return for all assets.

### **87. Some comments CAPM.**

The capital asset pricing model generally relies on historical data to estimate required returns. The betas, which are developed using data for the given asset as well as for the market, may or may not actually reflect the future variability of returns. Therefore the required returns specified by the model can be viewed only as rough approximations. Other users of betas commonly make subjective adjustments to reflect their expectations of the future when such expectations differ from the actual risk-return behaviors of the past.