FINANCIAL MANAGEMENT

UNIT-01:INTRODUCTION TO FINANCIAL MANAGEMENT

Introduction – Meaning of Finance, Business Finance, Finance Functions, Organization structure of Finance Department, Financial Management – Goals of Financial Management, Financial Decisions-Types of Financial Decisions, Role of a Financial Manager;Financial Planning – Principles of Sound Financial Planning, Steps in Financial Planning, Factors influencing a Sound Financial Plan.

FINANCE

Finance is mainly concerned with 1) The provision of money at the time it is required 2)Management of the flow of money through an organization 3) Application of skills in the manipulation, use, and control of money. Without finance, no activity can be carried out. Finance is known as the lifeblood of a business, and the success of a business depends on the flow of finance. It may also be defined as the administrative area of a set of administrative functions in an organization, which relates to the arrangement of cash and credit finds so that the organization may have the means to carry out its objectives as satisfactorily as possible.

MEANING OF FINANCE

Finance is a term for matters regarding the management, creation, and study of money and investments. It involves the use of credit and debt, securities, and investment to finance current projects using future income flows.

Meaning of Business Finance

It refers to the corpus(money invested for particular scheme) of funds and credit employed in a business. Business finance is required for purchasing assets, goods, raw materials, and for performing all other economic activities. Precisely, it is required for running all the business operations.

Finance Functions

Finance Function: Refers to the raising of capital funds and bringing them for generating returns and paying returns to the supplier of the

fund. [Guttmann & this is the most important of all sun gal functions since it starts with the setting up of an enterprise and remains there at all times. The inflows & outflows must be properly matched.

A managerial function.

a) INVESTMENT DECISION

b) FINANCIAL DECISION

c)DIVIDEND DECISION

d) **Liquidity Decision**

B. ROUTINE FINANCE FUNCTIONS

a) Supervision of cash receipts and payments and safeguarding of cash balances

b) Custody and safeguarding of securities, policies, and other valuable documents

c) Record keeping of financial transactions and reporting

1)Investment decision-The investment decision function revolves around capital budgeting decisions. Capital budgeting in an organization involves the analysis of investment opportunities, specifically long-term projects, and associated **cash flows**, to determine the profit potential. They revolve around making a sound investment that must yield sufficient and sometimes maximum returns for the business in the long run. Hence, these decisions are challenging and complex. Payback Period, Net Present Value (NPV) Method, Internal Rate of Return (IRR), and Profitability Index (PI) are the popular methods to carry out capital budgeting.

2)Financing decision-Expertise in forming financing decisions leads to optimized capital structure, enhanced performance, and growth. Financing functions deal with acquiring capital (like when and how) for the various functioning of the entity, like whether to use **equity capital** or **debt** to finance business events. The debt and **equity** mix of an entity are called its **capital structure**. The financing decisions always focus on maintaining good capital structure ratios.

3)Dividend decision-Companies share profits with their **shareholders** in the form of dividends. There are different types of shares, shareholder's dividends, and **dividend policies**. Furthermore, a company's dividend policy influences the company's market value and stock prices. Hence dividend decision, including the division of **net income** between **dividends** and **retained earnings**, is an important functions.

Liquidity Decision-It is very important to maintaining a liquidity position of a firm to avoid insolvency. Firm's profitability, liquidity, and risk are all associated with investments in current assets.

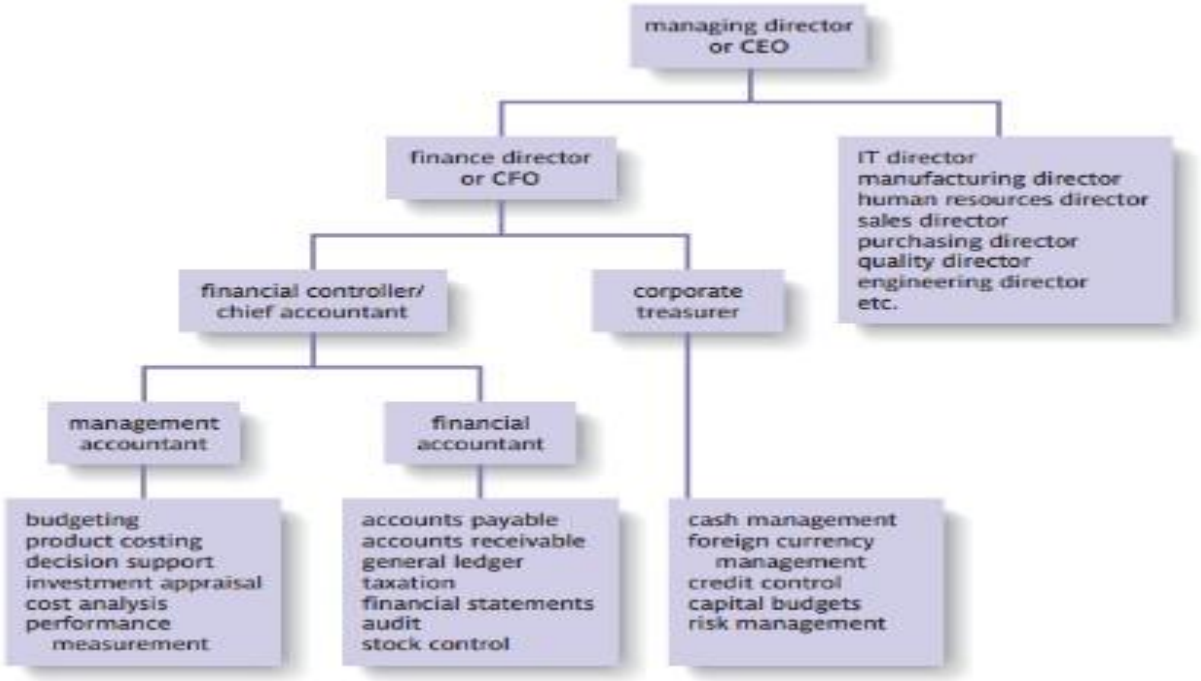
B. ROUTINE FINANCE FUNCTIONS

a) Supervision of cash receipts and payments and safeguarding of cash balances

b) Custody and safeguarding of securities, policies, and other valuable documents

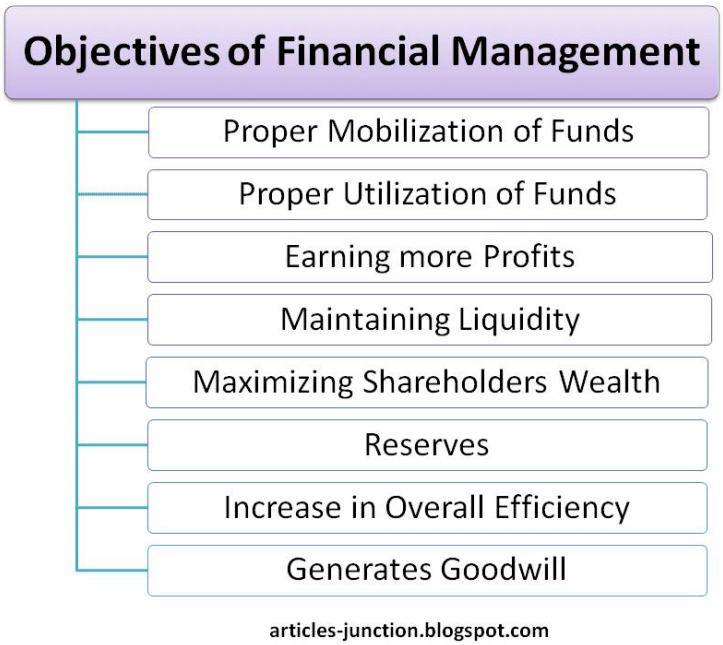
c) Record keeping of financial transactions and reporting

ORGANISATIONAL STRUCTURE OF FINANCIAL DEPARTMENT

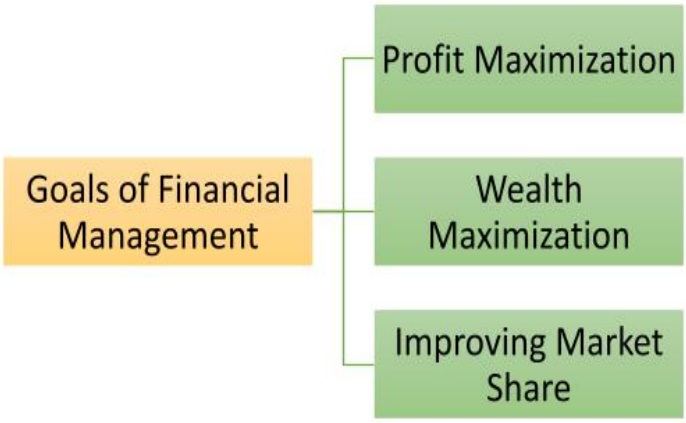


FINANCIAL MANAGEMENT

Financial management is strategic planning, organising, directing, and controlling of financial undertakings in an organisation or an institute. It also includes applying management principles to the financial assets of an organisation while playing an important role in fiscal management



GOALS OF FINANCIAL MANAGEMENT



Profit maximization-Profit is one of the most traditional yet popular goals of financial management. In economic terms, profit refers to an excess of revenues over costs. Profit is considered the fuel for a business, which keeps the engine of a business active all the time.
The term profit is subject to interpretation. There are different classes of profits we can observe in a business. For example,

- Profit before Tax (PBT),
- Profit after Tax (PAT), and
- Earnings before Interest and Taxes (EBIT).
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-
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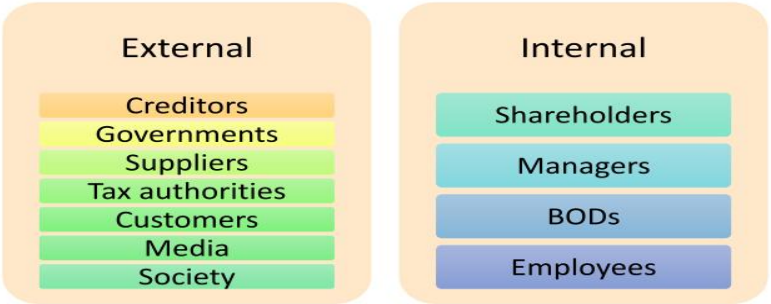
Wealth Maximisation-The second most popular goal of financial management, which the wealth of the business. This is the most modern approach towards the goals of financial management. It is also called value maximisation since this theory focuses on increasing the wealth of the business to increase the value of shares by creating wealth for the stakeholders. When we say stakeholders, there are two important categories of stakeholders we can see in any business.



Improving market share-The business entities may start with a humble beginning but they dream to acquire market share. Market share gives a general idea of the size of a company about its market and its competitors. The market

leader in an industry is the company with the largest market share. The calculation for market share is usually done for specific countries or regions.

The investors or individuals interested in a business can access market share details from various sources. For example,

- Published annual reports
- Television
- Newspapers
- Magazines
- Podcasts
- Social media.

It is important to note that when a business improves its market share, it can start enjoying economies of scale, reducing competition, resulting in revenue growth. A few important means to improve market share are listed below:

- Reducing cost
- Increase volume of sales
- Promotion
- Improving efficiency
- Introducing new products
- Customization and standardization
- Customer loyalty
- New technologies
- Talent retention
- Acquisitions

FINANCING DECISION

What are Financial Decisions?

Financial decisions are the decisions that managers take with regard to the finances of a company. These are crucial decisions for the financial well-being of the company. These decisions can be in terms of acquisition of assets, financing and raising funds, day-to-day capital and expenditure management, etc. Financial decisions, therefore, affect both the assets and liabilities of a company. They can lead to profits, revenue generation, and receipt of funds and

assets for the company. They can also be in terms of expenditure, the creation of liabilities, and an exodus of funds for a company.

TYPES OF Financial Decisions

1. Investment Decisions
2. Financing Decisions
3. Dividend Decisions

Investment Decisions

Investment decisions are decisions that relate to the investment in different types of assets, instruments, securities, etc. Managers decide how to invest the company's funds in different asset classes, depending on the needs of the organization. Assets can be both short-term and long-term. As each company has scarce financial resources, it is crucial to decide which asset to invest in first. Managers must make the tough call of postponing investing in some assets that are not strictly necessary at present, or that may not give the desired return.

Long-Term Investment Decisions

Capital budgeting decisions are decisions to invest in long-term assets to improve the overall production/servicing capacity of the organization. They often require heavy capital expenditure and are always for a longer term. Therefore, Capex decisions need to be made very wisely. Any commitment to such assets is irreversible and leads to the blockage of a significant amount of capital. In addition, returns on such investments are very late and can take long periods of time, over a year, before such an investment yields positive returns. These expenditures include the establishment of a new unit or the expansion of an existing unit, the purchase or replacement of new machinery, investments in research and development, etc.

Short-Term Investment Decisions

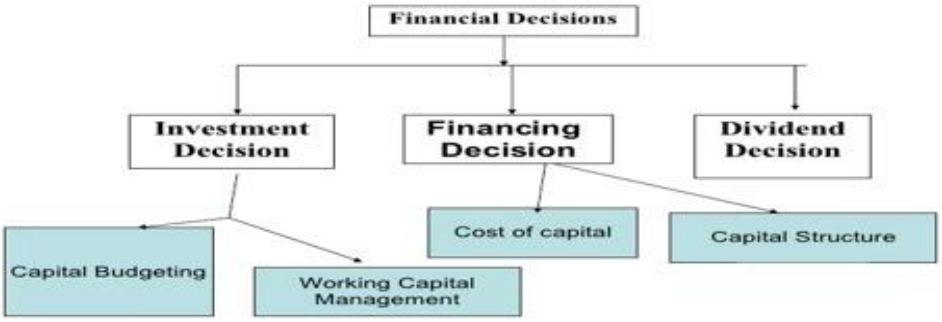
Short-term investment decisions are decisions regarding the day-to-day operations and management of the company. We may loosely call it the working capital management of the company. Managers must ensure that the company has sufficient liquidity for its day-to-day activities. The managers must ensure that these funds do not dry up and there is no hindrance or bottleneck to the day-to-day activities of the company. They must also decide on the sources of short-term financing and prioritize expenditure according to the availability and urgency of the funds. Short-term investment decisions also concern receivables and payables, as well as the acquisition and use of inventory.

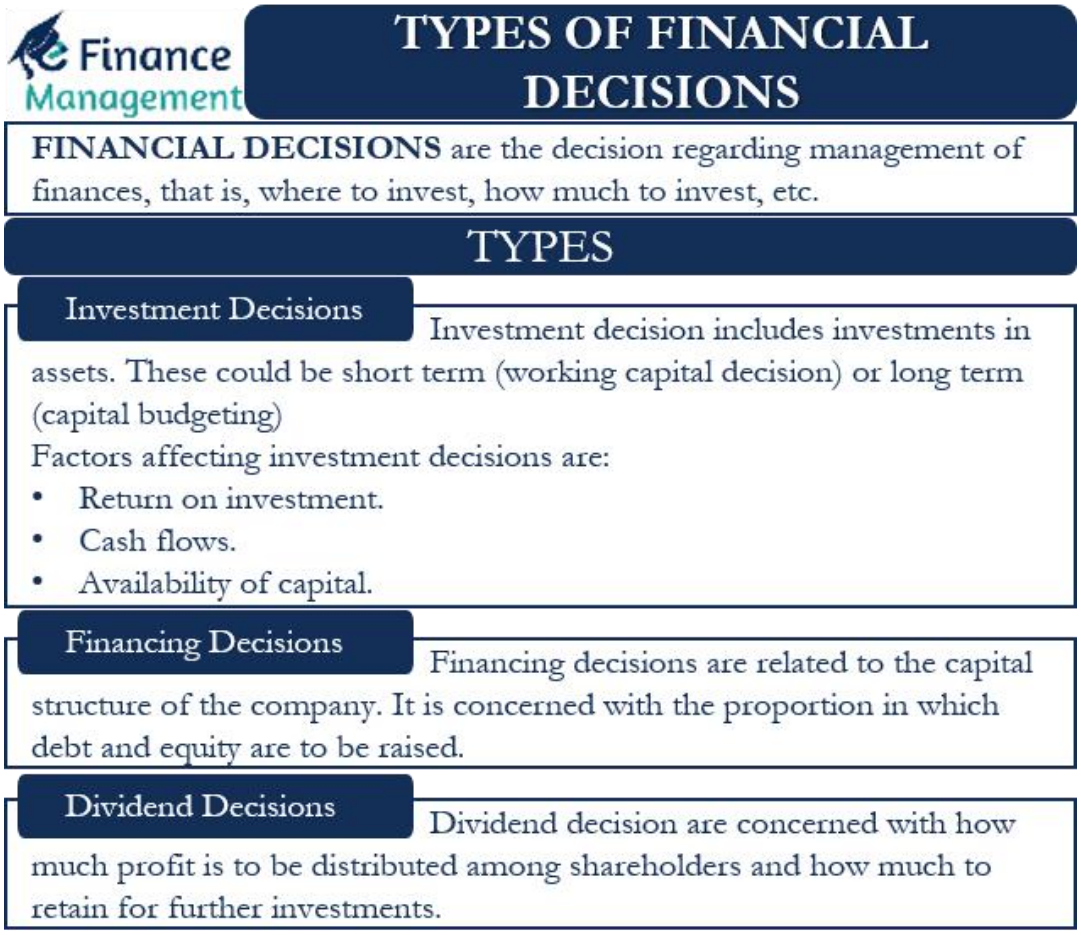
Financing Decisions

Financing decisions are decisions that are made to ensure the financing of the company. They relate to the raising of equity as well as debt for the company to fund its investment decisions. It is a continuous and ongoing process, as each company regularly needs funding. As a growing company's needs do not cease, they instead go on increasing to keep pace with growth.

Dividend Decision

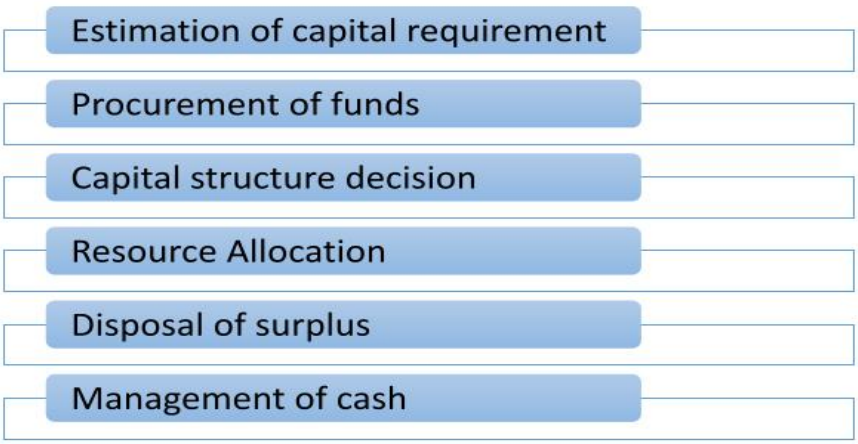
Under dividend decisions, whenever a company makes a profit, it decides to reward its shareholders for their investment, trust, and confidence in the company. This reward is called a dividend. At the same time, managers must decide to retain part of the profit for the future needs of the company. This is known as retained earnings





FUNCTIONS OF FINANCIAL MANAGER

Well! After understanding the scope of financial management, it is important to continue understanding the functions of a financial manager since they are interconnected. Some of the most common functions performed by a financial manager are briefly discussed below:



Estimation of capital requirement

A finance manager has to make an approximation about the capital requirements of the company. This will depend on expected expenditures and expenses for future projects. Capital estimation is done in two ways

- Funds required to buy long-term assets, maintain long term assets, and expand the business
- Funds required to take care of working capital requirements

Procurement of funds

Once the capital estimation is complete, it's time to find the right source of funds from the market. There are a series of options available, and the finance manager needs to handpick the source of funds considering the cost and benefits. Finance managers need to analyses each of the options available carefully to understand inherent limitation of each source of capital.

Capital structure decision

Creating the right mix of sources in the capital structure is critical for a business. Once the requirement of capital funds is finalized, a decision with regards to the kind and proportion of various sources of funds has to be taken. For this, the financial manager needs an adequate mix of equity and debt and short-term and long-term debt proportion. This is done to accomplish the minimum cost of capital and maximize shareholders' wealth.

Resource Allocation

Once the funds are acquired, the manager must allocate funds appropriately within the organization and ensure the funds are effectively utilized to create long-term value for the business.

Nevertheless, there are three guiding principles for the allocation of funds within the organization.

1. Safety
2. Liquidity
3. Profitability

Disposal of surplus

The financial manager should decide on how much to preserve for reinvesting and how much to distribute as dividends to shareholders out of the profits of the company. The factors that impact these decisions include the trend of earnings of the company, the trend of the market price of its shares, the necessities of funds for self-financing the future projects, and so on.

Management of cash

Management of cash and other liquid assets is an imperative task of a financial manager. It encompasses projecting the cash inflows and outflows to confirm that there is neither a shortage nor a surplus of cash within the organization. Adequate funds must be accessible for the acquisition of materials, payment of salaries and wages, and meeting day-to-day expenses.

FINANCIAL PLANNING

Financial planning is the task of determining how a business will afford to achieve its strategic goals and objectives. Usually, a company creates a Financial Plan immediately after the vision and objectives have been set.

Definition of Financial Planning

Financial Planning is the process of estimating the capital required and determining its competition. It is the process of framing financial policies in relation to procurement, investment, and administration of funds of an enterprise.

KEY CHALLENGES OF A FINANCIAL MANAGER

1) Investment planning
2) Financial structure
3) Treasury operations
4) Investor communication
5) Management Control

PRINCIPLES OF SOUND FINANCIAL PLANNING

(1) Simplicity
(2) Foresight
(3) Flexibility
(4) Optimum use of funds
(5) Liquidity
(6) Anticipation of contingencies and
(7) Economy.

Principles of Sound Financial Planning

- **Set your financial goals:** You need to determine what you want to achieve from your financial planning. Identify your short-term, medium-term, and long-term financial goals.
- **Create a budget:** A budget will help you understand your income and expenses. You can create a monthly or yearly budget, depending on your preference.
- **Manage your debt:** Avoid taking on too much debt. Make sure you have a plan to repay any outstanding debts, such as credit card balances or loans.
- **Save regularly:** Set aside a portion of your income for savings every month. This will help you build an emergency fund and achieve your financial goals.

- **Invest wisely:** Investing can help you achieve your long-term financial goals. But make sure you understand the risks and potential returns of any investment before committing your money.
- **Protect your assets:** Make sure you have adequate insurance coverage for your home, car, and health. This will help you avoid financial losses in case of unexpected events.

Review and adjust your plan: Regularly review your financial plan to ensure that it is still aligned with your goals. Adjust your plan as needed to reflect changes in your circumstances or financial situation.

FINANCIAL PLANNING PROCESS

Establish your Goals and Objectives

First step towards the financial planning process is to establish your financial goal. Where you will have to analyze your short-term financial goals and long-term financial goals, along with the objective and time-frame to achieve those goals.It's a long and time-consuming process. Your personal goals cannot be set by **financial planner**. This is the personal financial planning process that you will have to analyze for yourself.

Develop a Strategy to Meet your Goals

Next step towards the personal financial planning process is to develop a financial planning strategy or roadmap to achieve your goals. Here you can take

the advice from financial planner or financial consultant to develop a strategy for your financial plan.While developing strategy, you will go through various **investment opportunities** available in the market. Take some time to study various investment options that best fit your requirements.

Gather and Analyze Information
Once you have selected a set of investment options as per your requirement. Next step is to gather information about those investments and perform some analysis on the data. There are various online tools to analyze investment options based on past historical data.

Draft and Implement your Plan
Once you have gathered required information and selecting investment option. Next thing in the business or personal financial planning process is to prepare a systematic investment plan and draft your implementation plan.This is one of the important steps in your financial plan. For example, if a person has knowledge of investment options and knows which option is good for investment but does not have the courage to take a risk or implement a plan, then there will be no returns on the information gathered.

Review your goals and Market Situation
Mainly, every investment is selected based on past performance. It is assumed that it will perform in the same way in the future. But there are instances when future performance diverges from past performance.Therefore, the next step in the business or personal financial planning process is to continuously monitor your capital investments. Reviewing your goals and market situation will assist you in deciding whether to stay invested or to look for other investment opportunities.

FACTORS INFLUENCING A SOUND FINANCIAL PLAN

PERSONAL FACTORS

- **Risk profile:** Some people are naturally more comfortable taking more risk than others. If we feel that we are ‘risk averse’, meaning we do not like to take risks, even if our financial plan requires it, we must avoid investing too much in risky products. From childhood, Karim was always more ready to take risks than Vignesh, and as a result, he could take on the risk of doing business while Vignesh preferred working for a company.

- **Age:** Age is an important factor while choosing investment products. When we are young, we can choose riskier products because we have time on our side. Risky investments usually pay off in the long term. Also, if something goes wrong and we lose some of our capital when we are young, we can rebuild it over time. When we are older, we should invest in safer investments even if they give low returns. This may have been the reason why Karim did not expect his father to invest in his new and risky idea of setting up a cybercafé in the village.
- **Number of dependents:** Vignesh was the only earning member of his family, so he cannot afford to take many risks with his income. Karim, on the other hand, had the support of his wife's income and his father's and brother's earning ability. He could afford to take a risk while investing.

- **EXTERNAL FACTORS**
- **Economic growth in the country:** Countries go through economic cycles. This means that there are a few years during which a country will grow at a good rate, and then it will be followed by a few years of slightly slower growth. If a country is growing well, businesses do well. As a result, stock prices increase. On the other hand, interest rates and inflation remain moderate. When a country is in a downturn, stock prices are relatively low, and interest rates and inflation start to increase.
- **Political issues:** When a country enjoys political stability, the economy prospers. Although both growth and social issues are equally important, there are certain political parties that give more importance to the former, and others that give more importance to the latter. As a result, the political party in power has an impact on the performance of stocks and other financial products.
- **Interest rates:** Interest rates determine the rates at which businesses borrow and lend to the banking sector and other lending institutions. Usually, when business people want to borrow more money to grow their businesses, interest rates in the market increase. Another important factor that impacts interest rates is inflation. When inflation is high, the RBI may increase the interest rates to bring inflation down. There are other factors that affect interest rates too.
- **Inflation:** The rise in prices is broadly referred to as inflation. If inflation and interest rates are high, businesses are likely to show lower profits, and therefore their prices on the stock exchange are likely to fall. The reverse is usually true too.
- Inflation also has a direct impact on the way we plan for long-term goals. If inflation is high, we expect the cost of the goal in the distant future to be higher, and we have to invest accordingly, and vice versa.
- **Global issues:** Our economy is affected by many global issues. If prices of oil rise internationally, we face higher fuel prices too. Directly and

indirectly, this pushes inflation upwards. Also, since money flows between India and the rest of the world in the form of investments, if countries abroad are facing problems, it impacts their investments in India, and vice versa. As a result, the fate of the global economy makes our stock markets move up and down, which could ultimately impact businesses.

The traditional approach to financial management:

The traditional approach to financial management is a more rigid and conservative approach that focuses on maintaining financial stability and maximizing profits through cost control. It is characterized by the following features:

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1. Financial planning and forecasting:

Under the traditional approach, financial planning is an essential component of financial management. It involves forecasting future revenues and expenses, which are used to develop a budget for the organization.

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2. Budgeting and control:

Budgeting is a critical aspect of financial management, and under the traditional approach, budgets are used to control costs and manage cash flow. The budgeting process involves estimating the revenues and expenses for the upcoming period, setting financial goals and objectives, and developing a plan to achieve them.

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3. Capital structure:

The traditional approach emphasizes maintaining a stable capital structure, which means balancing debt and equity financing to ensure that the organization has sufficient funds to meet its obligations.

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4. Working capital management:

Working capital management is another important aspect of financial management under the traditional approach. It involves managing the company's short-term assets and liabilities to ensure that it has enough cash on hand to meet its obligations.

The modern approach to financial management:

The modern approach to financial management is a more dynamic and strategic approach that focuses on maximizing shareholder value and long-term growth. It is characterized by the following features:

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1. Strategic financial planning:

Under the modern approach, financial planning is an integral part of strategic planning. It is used to identify opportunities for growth and to develop strategies to achieve the organization's long-term objectives.

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2. Value-based management:

The modern approach emphasizes the creation of shareholder value as the primary objective of financial management. Value-based management involves aligning financial decisions with the organization's strategic objectives and measuring financial performance based on value creation.

3. Risk management:

The modern approach places a greater emphasis on risk management than the traditional approach. It involves identifying and managing financial risks that may impact the organization's ability to achieve its objectives.

4. Financial analysis and modeling:

The modern approach relies heavily on financial analysis and modeling to support decision-making. Financial analysis and modeling provides insights into the organization's financial performance and helps identify opportunities for growth and improvement.

5', Corporate finance:

The modern approach emphasizes the use of corporate finance techniques such as mergers and acquisitions, divestitures, and capital restructuring to create value for shareholders.

Conclusion on Financial Management:

In conclusion, for any organization, financial management plays a vital role in its success of any organization. The traditional approach to financial management focused on maintaining financial stability and maximizing profits through cost control, while the modern approach is more dynamic and strategic, focusing on creating shareholder value and long-term growth. Both approaches have their strengths and weaknesses, and organizations must choose the approach that best suits their needs and objectives.

Finance Manager Job Responsibilities:

- Ensures business processes, administration, and financial management.
- Maintains accounting system.
- Leads planning and forecasting activities with business partners to achieve business and company goals.
- Reviews financial reports.
- Prepares financial forecasts.
- Monitors financial details to ensure legal compliance.

- They analyze revenue, expenses, cash flows, and balance sheets.
- Assists management in making financial decisions.
- Supervises employees.
- Investigates means to improve profitability.
- They review and process payments of the company.
- Maintains an accurate filing and record-keeping system for all financial statements and company documents.
- Participates in the execution of changes to procedures, policies, and systems to facilitate expansion, compliance, and scaling of the business.

Unit 2 Time Value of Money

Meaning of Time value of Money

It refers to "time has got a value". The rupee value keeps on changing over a period of time. The purchasing power of a rupee, is either increase or decrease but never remains constant.

In other words, the concept of time value of money refers to the money received today is different in its worth from the money receivable at some other time in future.

Need for Time value of Money

a. Reinvestment opportunities
b. Uncertainty
c. Inflation
d. Personal consumption preference

Techniques of Time value of Money

There are basically two techniques for calculation of time value of money:

1. Compounding technique
2. Discounting technique (present value technique)

1 Compounding technique: This concept is used to find out the future value of present money. It is the same as the concept of compound interest, wherein, the interest earned in preceding year is reinvested at the prevailing rate of interest for the remaining period.

Thus, the accumulated amount (principal + interest) at the end of a period becomes the principal amount for calculating the interest for the next period.

The compounding technique is to find out the future value (FV) of the present worth of money, can be explained with reference to:

a. The future value of a single present cashflows
b. The future value of annuity/series of even cashflows
c. The future value of multiple (uneven) cashflows

Meaning of Future Value: It refers to the value of an asset or cash at a particular date in the future which is equivalent to the value of a specified sum at present. The future value can also be explained as the amount of money which will be reached by a present investment as a result of its growth in the future.

$$FV = PV (1+ r)^{n}$$

Where, FV= Future value

PV= Present value

r = Rate of interest

n = Nor of years

a. The future value of a single present cashflows:
   i. In case of annual compounding

$$FV = PV (1 + r)^{n}$$

Simple problems:

1. Find out the future value of a sum of Rs 2,000 after a year with a time preference money of 12%
2. X invests Rs 1,000 for 3 years in a savings account that pays 10% interest per annum. Calculate the future value
3. Find out the future value Rs 1,600 received after two years at 10% time preference rate
4. Calculate the future value for Rs 20,000 deposited in bank for a period of 5 years at 12% PA. Given $(1.12)^5 = 1.762$
5. Arun makes a deposit of Rs 10,000 in a bank which pays 8% interest compounded annually for 8 years. You are required to find out the amount to be received by him after 8 years

   ii. In case of multiple compounding period or intra compounding

$$FV = PV \left(1 + \frac{r}{m}\right)^{mn}$$

- When interest is payable half yearly

$$FV = PV \left(1 + \frac{r}{2}\right)^{2n}$$

- When interest is payable quarterly

$$FV = PV \left(1 + \frac{r}{4}\right)^{4n}$$

- When interest is payable monthly

$$FV = PV \left(1 + \frac{r}{12}\right)^{12n}$$

- When interest is payable daily

$$FV = PV \left(1 + \frac{r}{365}\right)^{365n}$$

Simple problems:

1. Calculate the future value of Rs 4000 is invested for 4 years and the interest on it is compounded at 12% PA half yearly. Find out the compounded value or future value. Given $(1.06)^8 = 1.594$
2. Calculate the future value of Rs 7000 invested for 5 years at a rate of interest of 15% compounded half yearly. According to compound table compound value factor for Re.1 in 5 years at rate 15%. Given $(1.075)^{10} = 2.0610$
3. Mrs. Paru deposit Rs 6000 in a bank for 5 years and the interest on it is compounded at 10% PA. If interest is calculated quarterly. Given $(1.025)^{20} = 1.637$ calculate the future value quarterly

4. Calculate the future value of Rs 9000 is invested for a period of 5 years at 12 % PA interest compounded quarterly. Find out Future Value Given $(1.03)^{20} = 1.806$

b. The future value of annuity/series of equal cashflows

$$FVA = R(1+i)^{n-1} + R(1+i)^{n-2} + R(1+i)^{n-3} + R(1+i)^{n-4}$$

where, FVA= Future value of annuity

R = Even Cash flows

i = interest rate

n = nor of year

Simple problems:

1. Calculate the future value of annuity of Rs 8000 deposited at the end of each year at 6% for a period of 5 years.
2. Mr. kumar deposits Rs 6000 at the end of every year for five years and the deposit earns compound interest @12% PA. Determine how much money he will have at the end of 5 years
3. Calculate the future value of annuity of Rs 4000 deposited at the end of each year at 6% for a period of five years
4. Mr. Manju deposits Rs 3000 at the end of every year for five years in his savings account paying 6% interest compounded annually. He wants to determine how much sum of money he will have at the end of five years.

c. The future value of multiple (uneven) cashflows

$$FVUECF = R_1(1+i)^{n-2} + R_2(1+i)^{n-2} + R_3(1+i)^{n-3} + R_4(1+i)^{n-4}$$

Where, FVUECF = Future value of uneven cash flow

R1, R2, R3, R4 = Uneven cash flow

i = interest rate

n = nor of years

Simple problems:

1. Calculate the future value of the following cash flow if it is invested @ 8% interest PA
   At the end of 1st year Amount deposited Rs 2000
   At the end of 2nd year Amount deposited Rs 4000
   At the end of 3rd year Amount deposited Rs 6000
   At the end of 4th year Amount deposited Rs 8000

2. Calculate the future value at the end of 4 years of the following series of payments at 9% rate of interest

   At the end of 1st year Amount deposited Rs 1000
   At the end of 2nd year Amount deposited Rs 2000
   At the end of 3rd year Amount deposited Rs 3000
   At the end of 4th year Amount deposited Rs 4000

3. Discounting technique (present value technique)
   Present value: The present value of an entity can be defined as the present worth of a prospective amount of money or a stream of cash flows with a specified return rate.

   Calculation of Present value

$$PV = \frac{FV}{(1 + r)^n}$$

a. The present value of a single present cashflows
b. The present value of annuity/series of even cashflows
c. The present value of multiple (uneven) cashflows

a. The present value of a single present cashflows

- In case of Annual Compounding

$$PV = \frac{P1 \text{ or } FV}{(1 + r)^n}$$

Simple Problems:

1. Find out the present value of Rs 3000 received at the end of the year, if the discount rate is 9%PA
2. Calculate the present value of a sum of Rs 50000 received after 2 years, if the discount rate is 8% PA

- In case of multiple Compounding or Intra compounding

$$PV = \frac{P1 \text{ or } FV}{(1 + \frac{r}{m})^{mn}}$$

Simple Problems:

1. Find out the present value of Rs 10000 receivable after 3 years at the rate of 12% interest. Calculate semi-annually
2. Find out the present value of Rs 10000 receivable after 3 years at the rate of 10% interest. Calculate semi-annually

b. The present value of annuity or A series of equal or even future cashflows

$$PVA = \frac{P1}{(1+r)^1} + \frac{P1}{(1+r)^2} + \frac{P1}{(1+r)^3} + \frac{P1}{(1+r)^4}$$

Where, PVA = Present Value of Annuity cash flow
P1 = Uniform series of payments
r = Discount rate or interest rate

Simple Problems:

1. Find out the present value of annuity receipt of Rs 4000 received for 4 years at the rate of 8% discount rate
2. Find out the present value of a 5 years annuity of Rs 10000 discounted at 9 %

c. The present value of multiple (uneven) cashflows

$$PVEUCF = \frac{P1}{(1+r)^1} + \frac{P2}{(1+r)^2} + \frac{P3}{(1+r)^3} + \frac{P4}{(1+r)^4}$$

Where, PVUECF = Present Value of uneven cash flow
P1, P2, P3 = uneven cashflows
r = Discount rate or interest rate

Simple Problems:

1. Calculate the present value of the following series of payments made at the end of each year for a period of 5 years at 8% interest rate
   Cash flow at the end of 1st year Rs 2000
   Cash flow at the end of 2nd year Rs 4000
   Cash flow at the end of 3rd year Rs 6000
   Cash flow at the end of 4th year Rs 8000
   Cash flow at the end of 5th year Rs 10000

2. Calculate the present value of the following series of payments made at the end of each year for a period of fine years at 8% interest rate
   Cash flow at the end of 1st year Rs 4000
   Cash flow at the end of 2nd year Rs 5000
   Cash flow at the end of 3rd year Rs 6000
   Cash flow at the end of 4th year Rs 7000
   Cash flow at the end of 5th year Rs 8000

Doubling Period: The doubling time is the period of time required for a quantity to double in size or value. It is applied to population growth, inflation and resource extraction, consumption of goods, compound interest, the volume of malignant tumours, and many other things which tend to grow over time.
The doubling time formula is used in finance to calculate the length of time required to double an investment or money in an interest-bearing account.

FINANCIAL MANAGEMENT

UNIT-03: FINANCING & DIVIDEND DECISIONS

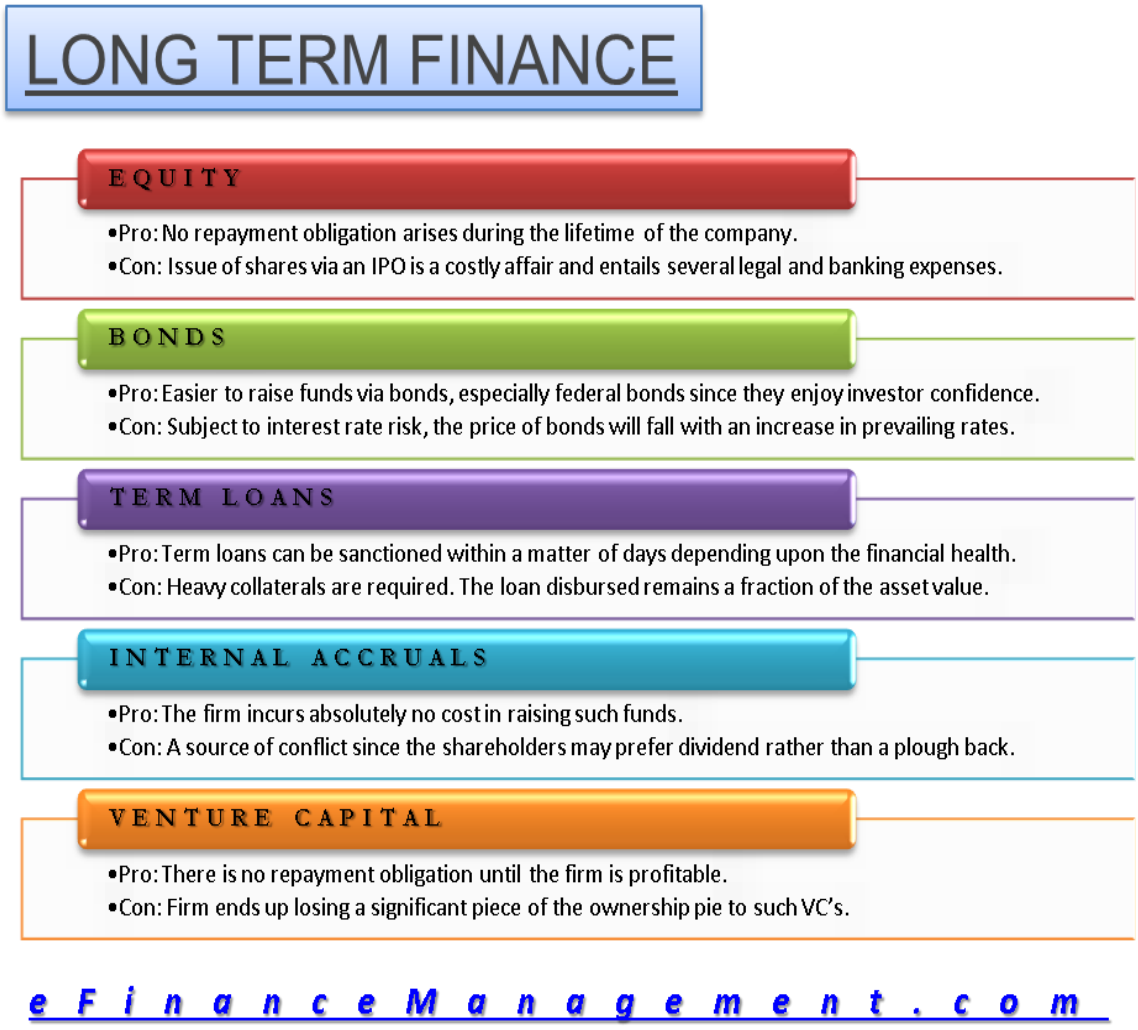
Financing Decision: Sources of Long-Term Finance - Meaning of Capital Structure, Factors
influencing Capital Structure,
Optimum Capital Structure – EBIT, EPS Analysis, Leverages – Problems.
Dividend Decision: Meaning & Determinants of Dividend Policy, Types of Dividends, Bonus
Shares (Meaning only)

FINANCIAL DECISIONS

Financial decisions are the decisions taken by managers about an organization's finances. These decisions are of great significance for the organization's financial well-being. The financial decisions pertaining to expenditure management, day-to-day capital management, assets management, raising funds, investment, etc.

LONG TERM FINANCE

The funds that are not paid back within less than a year are referred to as long-term finance. Certain long-term finance options directly form a part of the permanent capital of the firm. In such cases, the repayment obligation does not even arise. A 20-year mortgage or 10-year treasury bills are examples of long-term finance. The primary purpose of obtaining long-term funds is to finance capital projects and carry out operations on an expansionary scale.
Such sources of finance are normally invested into avenues from which greater economic benefits are expected to arise in the future.



Equity

Equity is the foremost requirement at the time of floatation of any company. They represent the ownership funds of the company and are permanent to the firm's capital structure. The equity can be private or public. Private equity is raised from institutional or high-net-worth individuals. Public equity is raised by issuing shares to the public at large, which are subscribed to by retail investors, mutual funds, banks, and a pool of other investors. On the flip side, equity is an expensive variant of long-term finance. Investors expect a high return due to the extent of risk involved.

- Pro: No repayment obligation arises during the lifetime of the company.
- Con: The issue of shares via an IPO in the primary market is costly and entails several legal and banking expenses.

Bonds

Bonds are debt instruments involving two parties- the borrower and the lender. The borrower can be the government, a local body, or a corporation. They provide fixed interest payments at periodic intervals and are redeemable at a predetermined date in the future. Bonds are

normally issued against collateral and are therefore a highly secured form of long-term finance. Bonds may prove to be a very cost-effective source of funds in a bullish market.

- Pro: It is easier to raise funds via bonds, especially federal bonds since they enjoy complete investor confidence.
- Con: Subject to interest rate risk. Therefore the price of bonds will fall with an increase in prevailing interest rates.

Term Loans

Term loans are borrowings made from banks and financial institutions. Such term loans maybe for the medium to long term, with a repayment period ranging from 1 to 30 years. Such long-term finance is generally procured to fund specific projects (expansion, diversification, capital expenditure, etc.) and is, therefore, also known as project finance. Term loans can be sourced by both small as well as established businesses. Also, the interest rates are relatively low and are negotiated depending upon the duration of the loan, nature of security furnished, the risk involved, etc.

- Pro: Term loans can be sanctioned immediately within a matter of days depending upon the firm's financial health.
- Con: Heavy collaterals are required to be furnished to obtain a term loan. Even then, the amount of loan disbursed remains a fraction of the asset value.

Internal Accruals

Internal accruals are nothing but the reserve of profits or retention of earnings that the firm has created over the years. They represent one of the most essential sources of long-term finance since they are not injected into the business from external sources. Instead, it is self-generated and highlights the sustainability and profitability of the entity. Also, internal accruals are the owner's funds and therefore create no charge on the company's assets.

- Pro: The firm incurs absolutely no cost in raising such funds.
- Con: It may be a source of conflict since the shareholders may prefer the payout of dividends rather than a plough back.

Venture Capital

This form of financing has emerged with the growing popularity of start-up culture worldwide. Venture Capital (VC) firms invest in companies at their inception or seed stage. They are constantly on the watch out for firms demonstrating high growth potential. Their investment takes the form of ownership funds and forms a part of the firm's permanent capital. Venture capitalists also have a predetermined exit strategy before they invest. This results in the target company being listed or a secondary sale to another VC firm.

- Pro: The companies that are yet to establish steady cash flows are not burdened by any covenants which entail debt financing. There is no repayment obligation until the firm is profitable.
- Con: The firm ends up losing a significant piece of the ownership pie to such Vc's.
-

SHORT TERM VS. LONG TERM FINANCE

A comparative analysis of short and long-term financing will further aid in effectively grasping the benefits of long-term finance. Short and long-term sources of finances cater to a different set of requirements for different borrowers. The table below illustrates some points of distinction.

	Short-Term Finance	**Long-Term Finance**
Duration	Typically repayable within one year or less.	Have a longer time span varying from 1 to 30 years.
Requirements	Obtained to fund a temporary shortfall in the working capital, repayment of current liabilities, etc.	Obtained to fund the purchase of PPE or capital projects on a wide scale.
Collaterals	Do not create a charge on the assets of the firm.	Collaterals are the most primary condition for the furnishing of long-term finance.
Terms of loan	Interest rates are unstable and are vulnerable to inflationary forces.	Interest rates are stable, and the loan terms offer flexibility such as prepayment options, re-negotiation of interests upon improvement in credit rating, etc.
Volume of funds	Used to raise funds in limited amounts since they are repayable in the near future.	A large volume of funds can be obtained. However, the same is restricted to the nature of securities furnished, the credit rating of a borrower, etc.
Examples	Overdraft, Credit Cards, Line of Credit.	Leasing, Term Loans, Public Deposits, Bonds.

CAPITAL STRUCTURE

Capital structure refers to the specific mix of debt and equity used to finance a company's assets and operations. From a corporate perspective, equity represents a more expensive, permanent source of capital with greater financial flexibility.

FACTORS INFLUENCING CAPITAL STRUCTURE

1. Financial Leverage or Trading on Equity
2. Expected Cash Flows
3. Stability of Sales
4. Control over the Company
5. Flexibility of Financial Structure
6. Cost of Floating the Capital
7. Period of Financing
8. Market Conditions
9. Types of Investors
10. Legal Requirements.

1. Financial Leverage or Trading on Equity:
The word 'equity' denotes the ownership of the company. Trading on equity means taking advantage of equity share capital to borrowed funds on reasonable basis. It refers to the additional profits that equity shares earn because of funds raised by issuing other forms of securities, viz., preference shares and debentures.

2. Expected Cash Flows:
Debentures and preference shares are often redeemable, i.e., they are to be paid back after their maturity. The expected cash flows over the years must be sufficient to meet the interest liability on debentures every year and also to return the maturity amount at the end of the term of debentures. Thus, debentures are not suitable for those companies which are likely to have irregular cash flows in future.

3. Stability of Sales:
Stability of sales turnover enhances the company's ability to pay interest on debentures. If sales are rising, the company can use more of debt capital as it would be in a position to pay interest. But if sales are unstable or declining, it would not be advisable to employ additional debt capital.

4. Control over the Company:
The control of a company is entrusted to the Board of Directors elected by the equity shareholders. If the board of directors and shareholders of a company wish to retain control over the company in their hands, they may not allow to issue further equity shares to the public. In such a case, more funds can be raised by issuing preference shares and debentures.

5. Flexibility of Financial Structure:
A good financial structure should be flexible enough to have scope for expansion or contraction of capitalisation whenever the need arises. In order to bring flexibility, those securities should be issued which can be paid off after a number of years.
Equity shares cannot be paid off during the life time of a company. But redeemable preference shares and debentures can be paid off whenever the company feels necessary. They provide elasticity in the financial plan.

6. Cost of Floating the Capital:
Cost of raising finance by tapping various sources of finance should be estimated carefully to decide which of the alternatives is the cheapest. Prevailing rate of interest, rate of return expected by the prospective investors, and administrative expenses are the various factors which affect the cost of financing.
Generally, cost of financing by issuing debentures and preference shares for a reputed company is low. It is also essential to consider the floatation costs involved in the issue of shares and debentures, such as printing of prospectus, advertisement, etc.

7. Period of Financing:
When funds are required for permanent investment in a company, equity share capital is preferred. But when funds are required to finance expansion programme and the management of the company feels that it will be able to redeem the funds within the life-time of the company, it may issue redeemable preference shares and debentures.

8. Market Conditions:
The conditions prevailing in the capital market influence the determination of the securities to be issued. For instance, during depression, people do not like to take risk and so are not interested in equity shares. But during boom, investors are ready to take risk and invest in equity shares. Therefore, debentures and preference shares which carry a fixed rate of return may be marketed more easily during the periods of low activity.

9. Types of Investors:
The capital structure is influenced by the likings of the potential investors. Therefore, securities of different kinds and varying denominations are issued to meet the requirements of the prospective investors. Equity shares are issued to attract the people who can take the risk of investment in the company. Debentures and preference shares are issued to attract those people who prefer safety of investment and certainty of return on investment.

10. Legal Requirements:
The structure of capital of a company is also influenced by the statutory requirements. For instance, banking companies have been prohibited by the Banking Regulation Act to issue any type of securities except equity shares.

OPTIMAL CAPITAL

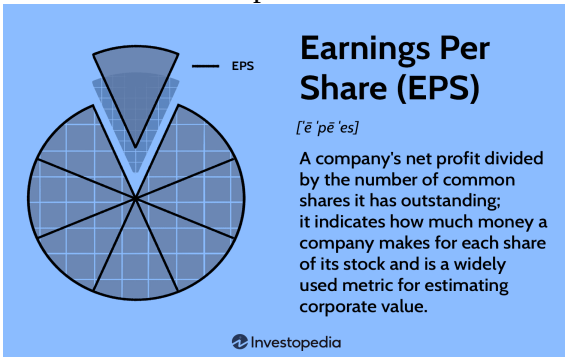
optimal capital structure of a firm is the best mix of debt and equity financing that maximizes a company's market value while minimizing its cost of capital. In theory, debt financing offers the lowest cost of capital due to its tax deductibility.

EARNINGS BEFORE INTEREST AND TAXES (EBIT)

Earnings before interest and taxes is a common measure of a company's operating profitability. As its name suggests, EBIT is net income excluding the effect of debt interest and taxes. Both of these costs are real cash expenses, but they're not directly generated by the company's core business operations.

EARNING PER SHARE

EPS indicates how much money a company makes for each share of its stock and is a widely used metric for estimating corporate value. A higher EPS indicates greater value because investors will pay more for a company's shares if they think the company has higher profits relative to its share price.



$$EPS = \frac{\text{Net Profit}}{\text{Number of Equity Shares}}$$

WHAT IS LEVERAGE

It is when one uses borrowed funds (debt) for funding the acquisition of assets in the hopes that the income of the new asset or capital gain would surpass the cost of borrowing is known as financial leverage. This concept sums up the leverage definition.

TYPES OF LEVERAGES

– Financial,

Operating and

Combined Leverages

1. Financial Leverage:

Financial Leverage is a tool with which a financial manager can maximise the returns to the equity shareholders. The capital of a company consists of equity, preference, debentures, public deposits and other long-term source of funds. He has to carefully select the securities to mobilise the funds. The proper blend of debt to equity should be maintained.

$$\text{Financial Leverage} = \frac{\text{Operating Income / EBIT}}{\text{Taxable Icome / EBT}} \quad \text{or}$$

$$\frac{EBIT}{EBIT - I} = \frac{EBIT}{EBT}.$$

EBIT = Earnings before Interest and Tax

EBT = Earnings before Tax, and I = Interest

Example: A company has the following capital structure

Equity Capital of ₹ 10/- each	=	*₹ 5,00,000*
15% Debentures of ₹ 500 each	=	*₹ 5,00,000*
Total	=	*₹ 10,00,000*
EBIT of Operating Profit	=	*₹ 2,00,000*

$$\text{Financial Leverage} = \frac{\text{EBIT}}{\text{EBT}} \text{ or } \frac{\text{EBIT}}{\text{EBIT} - \text{I}} = \frac{2,00,000}{2,00,000 - 75,000}$$

$$I = \frac{15}{100} \times 5,00,000 \text{ (Deb)} = 75,000$$

$$\text{Financial Leverage} = \frac{2,00,000}{1,25,000} = 1.6 \text{ times.}$$

2. Operating Leverage:

Operating leverage shows the ability of a firm to use fixed operating cost to increase the effect of change in sales on its operating profits. It shows the relationship between the changes in sales and the charges in fixed operating income. Thus, the operating leverage has impact mainly on fixed cost, variable cost and contribution.

It indicates the effect of a change in sales revenue on the operating profit (EBIT). Higher the operating leverage indicates higher the amount of fixed cost and reduces the operating profit and increases the business risks.

$$\text{Operating Leverage} = \frac{\text{Contribution}}{\text{EBIT/Operating Profit}}$$

Example: A firm has the following sales and cost data. Sales 50,000 units @ ₹ 6 per unit. Variable expenses ₹ 2 per unit. Fixed expenses ₹ 1,00,000. The earnings will be: .....

		₹
Sales (50,000 × ₹ 6)	=	*3,00,000*
Less: Variable Cost (50,000 × ₹ 2)	=	*1,00,000*
Contribution	=	*2,00,000*
Less: Fixed expenses	=	*1,00,000*
EBIT/Operating profit	=	*1,00,000*

From the above calculation, it is observed that, variation in production influences the operating profit. When the production was 50,000 units, the EBIT was 1,00,000 and EBIT was nil, when the production was dropped to 25,000 units.

Let us compare the same situation by using operating leverage.

Situation I–where sales = ₹ 3,00,000 V.C. = ₹ 1,00,000 and Fixed cost = ₹ 1,00,000

$$\text{Operating Leverage} = \frac{\text{Contribution}}{\text{EBIT/Operating Profit}}$$

Sales	=	₹ 3,00,000
Less: Variable Cost	=	₹ 1,00,000
Contribution	=	₹ 2,00,000
Less: Fixed expenses	=	₹ 1,00,000
EBIT/Operating Profit	=	₹ 1,00,000

$$\text{Operating Leverage} = \frac{2,00,000}{1,00,000} = 2 \text{ times}$$

Situation II = If the sales has dropped to ₹ 1,50,000, V. Cost = ₹ 50,000 and Fixed cost = ₹ 1,00,000

Sales	=	₹ 1,50,000
Less: Variable Cost	=	₹ 50,000
Contribution	=	₹ 1,00,000
Less: Fixed expenses	=	₹ 1,00,000
EBIT/Operating Profit	=	Nil

$$\text{Operating Leverage} = \frac{1,00,000}{0} = 0$$

Hence, if the production is reduced to 25,000 units (50 per cent), it is not possible for the firm to have operating profit.

3. Combined Leverage:

This leverage shows the relationship between a change in sales and the corresponding variation in taxable income. If the management feels that a certain percentage change in sales would result in percentage change to taxable income they would like to know the level or degree of change and hence they adopt this leverage. Thus, degree of leverage is adopted to forecast the future study of sales levels and resultant increase/decrease in taxable income. This degree establishes the relationship between contribution and taxable income.

$$\text{Combined Leverage} = \text{Operating Leverage} \times \text{Financial Leverage}$$

$$\text{Combined Leverage} = \frac{\text{Contribution}}{\text{EBIT/Operating Profit}} \times \frac{\text{EBIT}}{\text{EBT}}$$

$$\text{Combined Leverage} = \frac{\text{Contribution}}{\text{Earning before Tax}}$$

DIVIDEND

Definition: Dividend refers to a reward, cash or otherwise, that a company gives to its shareholders. Dividends can be issued in various forms, such as cash payment, stocks or any other form. A company's dividend is decided by its board of directors and it requires the shareholders.

DETERMINANTS OF DIVIDEND POLICY

DETERMINANTS OF DIVIDEND POLICY	
1.	Legal Restrictions
2.	Magnitude and Trend of Earnings
3.	Desire and Type of Shareholders
4.	Nature of Industry
5.	Age of the Company
6.	Future Financial Requirements
7.	Government's Economic Policy
8.	Taxation Policy
9.	Inflation
10.	Control Objectives
11.	Requirements of Institutional Investors
12.	Stability of Dividends
13.	Liquid Resources

https://theintactone.com/2019/04/29/fm-u4-topic-3-determinants-of-dividend-policy/

Some of the most important determinants of dividend policy are**: (i) Type of Industry (ii) Age of Corporation (iii) Extent of share distribution (iv) Need for additional Capital (v) Business Cycles (vi) Changes in Government Policies (vii) Trends of profits (vii) Trends of profits (viii) Taxation policy (ix) Future Requirements and (x) Cash Balance.**

(i) Type of Industry:

Industries that are characterised by stability of earnings may formulate a more consistent policy as to dividends than those having an uneven flow of income. For example, public utilities concerns are in a much better position to adopt a relatively fixed dividend rate than the industrial concerns.

***(ii) Age of Corporation**:*

Newly established enterprises require most of their earning for plant improvement and expansion, while old companies which have attained a longer earning experience, can formulate clear cut dividend policies and may even be liberal in the distribution of dividends.

(iii) Extent of share distribution:

A closely held company is likely to get consent of the shareholders for the suspension of dividends or for following a conservative dividend policy. But a company with a large number of shareholders widely scattered would face a great difficulty in securing such assent. Reduction in dividends can be affected but not without the co-operation of shareholders.

(iv) Need for additional Capital:

The extent to which the profits are ploughed back into the business has got a considerable influence on the dividend policy. The income may be conserved for meeting the increased requirements of working capital or future expansion.

(v) Business Cycles:

During the boom, prudent corporate management creates good reserves for facing the crisis which follows the inflationary period. Higher rates of dividend are used as a tool for marketing the securities in an otherwise depressed market.

(vi) Changes in Government Policies:

Sometimes government limits the rate of dividend declared by companies in a particular industry or in all spheres of business activity. The Government put temporary restrictions on payment of dividends by companies in July 1974 by making amendment in the Indian Companies Act, 1956. The restrictions were removed in 1975.

(vii) Trends of profits:

The past trend of the company's profit should be thoroughly examined to find out the average earning position of the company. The average earnings should be subjected to the trends of general economic conditions. If depression is approaching, only a conservative dividend policy can be regarded as prudent.

(viii) Taxation policy:

Corporate taxes affect dividends directly and indirectly— directly, in as much as they reduce the residual profits after tax available for shareholders and indirectly, as the distribution of dividends beyond a certain limit is itself subject to tax. At present, the amount of dividend declared is tax free in the hands of shareholders.

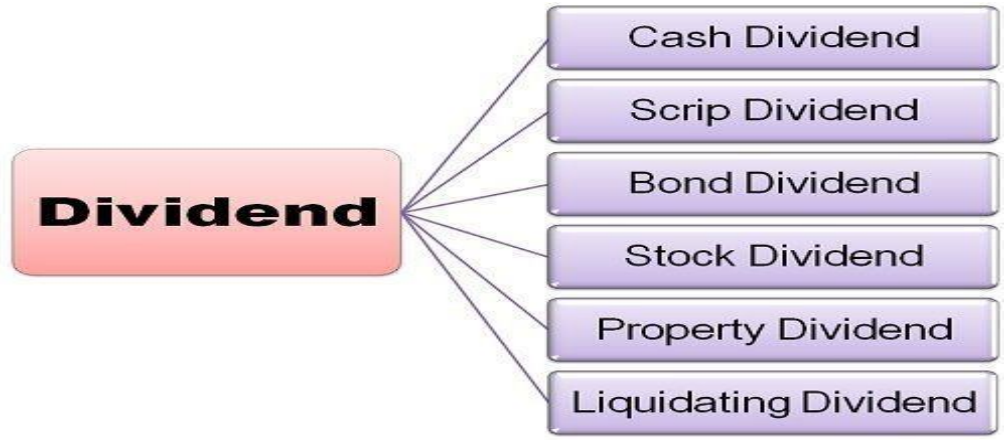
(ix) Future Requirements:

Accumulation of profits becomes necessary to provide against contingencies (or hazards) of the business, to finance future- expansion of the business and to modernise or replace equipments of the enterprise. The conflicting claims of dividends and accumulations should be equitably settled by the management.

(x) Cash Balance:

If the working capital of the company is small liberal policy of cash dividend cannot be adopted. Dividend has to take the form of bonus shares issued to the members in lieu of cash payment.

TYPES OF DIVIDEND



1. **Cash Dividend:** It is one of the most common types of dividend paid in cash. The shareholders announce the amount to be disbursed among the shareholder on the "date of declaration." Then on the "date of record", the amount is assigned to the shareholders and finally, the payments are made on the "date of payment". The companies should have an adequate retained earnings and enough cash balance to pay the shareholders in cash.
2. **Scrip Dividend:** Under this form, a company issues the transferable promissory note to the shareholders, wherein it confirms the payment of dividend on the future date.A scrip dividend has shorter maturity periods and may or may not bear any interest. These types of dividend are issued when a company does not have enough liquidity and require some time to convert its current assets into cash.
3. **Bond Dividend:** The Bond Dividends are similar to the scrip dividends, but the only difference is that they carry longer maturity period and bears interest.
4. **Stock Dividend/ Bonus Shares:** These types of dividend are issued when a company lacks operating cash, but still issues, the common stock to the shareholders to keep them happy.The shareholders get the additional shares in proportion to the shares already held by them and don't have to pay extra for these bonus shares. Despite an increase in the number of outstanding shares of the firm, the issue of bonus shares has a favorable psychological effect on the investors.
5. **Property Dividend:** These dividends are paid in the form of a property rather than in cash. In case, a company lacks the operating cash; then non-monetary dividends are paid to the investors.The property dividends can be in any form: inventory, asset, vehicle, real estate, etc. The companies record the property given as a dividend at a fair market value, as it may vary from the book value and then record the difference as a gain or loss.
6. **Liquidating Dividend:** When the board of directors decides to pay back the original capital contributed by the equity shareholders as dividends, is called as a liquidating dividend. These are usually paid at the time of winding up of the operations of the firm or at the time of final closure.

BONUS

A bonus issue of shares is the allocation of additional shares to stockholders. Bonus shares increase a company's share capital but not its market capitalization. A bonus issue of shares is funded by a company's earnings or share reserves.

Types of Bonus Shares

There are two different types of bonus shares as follows:

1) Fully paid bonus shares

2) Partly-paid up bonus shares

- **Fully Paid Bonus Shares**

  Fully paid bonus shares are those shares that are distributed at no extra cost in the proportion of the investors holding in the company.

  These types of bonus shares can be issued from the following sources:

  1) Profit and loss account 2) Capital reserves 3) Capital redemption reserves 4) Security premium account

- **Partly-Paid Up Bonus Shares**

  Before understanding party-paid up bonus shares, let's understand what a partly-paid share is?

  A partly paid share is a share in a company that is only partially paid compared to the full issue price. It means that the investor can buy partly paid shares without paying the total issue price.

  However, the remaining amount for partly paid shares can be paid in instalments when the company makes calls.

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UNIT- 4 Investment and Dividend decision

Investment decision: It is referred to the activity of deciding the pattern of investment. It covers both short term as well as long term investment i.e., fixed assets and the current assets.

Capital budgeting

Meaning: It refers to the process of making decision regarding capital investment in fixed assets such as machinery, land, buildings, furniture etc. It is a long-term plan to make and finance proposed capital outlay.

Definition: Charles T. Horngren, "Capital budgeting is a long-term planning for making and financing proposed capital out-lays".

Significance or Features or Needs or Importance of Capital Budgeting

1. Large Investment
2. Long term commitment of funds
3. Irreversible nature
4. Long term effect on profitability
5. National importance
6. Difficulties of investment decisions
7. Indirect forecast of sales
8. Comparative study of alternative projects
9. Timing of assets-acquisition
10. Cash forecast
11. Wealth-maximization of shareholders

Process of Capital Budgeting:

Step-1: Identification of various investment proposals

Step-2: Screening or matching proposals

Step-3: Evaluation

Step-4: Fixing property

Step-5: Final approval

Step-6: Implementation

Step-7: Performance review of feedback

Techniques of Capital Budgeting

A. Traditional methods
   1. Payback period method
   2. Accounting rate of return

B. Modern methods
   1. Discounted payback method
   2. Net Present Value method
   3. Internal rate of return method
   4. Profitability index method
   5. MIRR (Modified IRR) and EVA (Economic Value Added)
   6. APV (Adjusted Present Value) method
   7. Utility method

A. Traditional Methods

1. Payback Period method: It is defined as the time required for recovering the initial investment in a project from operations.
   Under this method, cash inflows refers to profit after tax before depreciation (PATBD)
   I. When cash inflows are Even (same)

$$PBP = \frac{\text{Original or Initial Investment}}{\text{Annual CIF}}$$

   II. When cash inflows are Uneven (changing)

$$PBP = \text{Nor of Years} + \frac{\text{Amount to be recovered}}{\text{Annual CIF of next year}}$$

2. Accounting Rate of Return: This method takes into account the earnings expected from the investment over its whole life. Under this method, the accounting concept of profit is used rather than cash inflows. The project with the higher rate of return is selected as compared to the one with lower rate of return.
   This method is based on conventional accounting concepts. (i.e., net profit after depreciation and after tax)

$$ARR = \frac{\text{Total profit after depreciation and after tax}}{\text{Average investment}} \times 100$$

   Calculation of Average investment
   - ✓ When no scrap value and additional capital

$$\text{Average Investment} = \frac{\text{original investment}}{2}$$

   - ✓ When scrap value is considered but no additional capital

$$\text{Average Investment} = \frac{\text{original investment- scrap value}}{2}$$

- ✓ When scrap value and additional capital is considered

$$\text{Average Investment} = \frac{\text{original investment- scrap value}}{2} + \text{Working capital} + \text{Scrap value}$$

B. Modern Methods

1. Net Present Value (NPV) Method : It is defined as the difference between the present value of the cost of inflows and the present value of cash outflows.
   NPV= Present value of cash inflows – Initial investment

2. Profitability Index: It is the relationship between net cash inflows and present value of cash outflows. It is one of the techniques of capital budgeting, it provides ready comparison between different investment proposals.
   Projects having highest profitability index will be ranked highest and vice-versa.
   It is the relationship between present value of cash inflows and the present value of cash outflows
   $$\text{Profitability Index (PI)} = \frac{\text{Present value of cash inflows}}{\text{Present value of cash outflows}}$$

Dividend Decisions:

The term Dividend refers to that part of after-tax profit which is distributed to the owners (shareholders) of the company. The undistributed part of the profit is known as retained earnings.

Meaning of Dividend decisions: It refers to companies' policies to distribute the earning between payments to shareholders and retained earnings. Retained earnings are nothing but the profits of the company and which is retained in the company itself used for the growth and expansion of the company.

Dividend Policy: It refers to the policy of management concerning to the quantum of profit to be distributed to shareholders as returns on their investments.

Dividend policy of a firm decides the portion of earnings to be paid as dividend to ordinary shareholders and the portion that is ploughed back in the firm for investment purpose.

Determinants of Dividend Policy:

1. Stability of earnings
2. Financing policy of the company
3. Liquidity of funds
4. Dividend policy of competitors
5. Past dividend rates
6. Debt obligation
7. Ability to borrow
8. Growth needs of the company

9. Legal requirements
10. Control objectives
11. Desire and type of shareholders
12. Trade cycle
13. Tax position of shareholders
14. Profit rate
15. Inflation

Types of Dividend Policy:

1. Regular dividend policy
   Payment of dividend at the normal rate is termed as regular dividend. The investors such as retired persons, widows and other economically weaker persons prefer to get regular dividends from the company to meet their expenses

2. Stable dividend policy
   It refers to the consistency or lack of variability in the stream of dividend payments. In other words, it means payment of a certain minimum amount of dividend regularly.

   a. Constant or stable dividend per share:
      A company that follows this policy will pay a fixed amount per share as dividends. For ex: Rs 2 as dividend on the face value of share of Rs 10 each

   b. Stable or constant payout:
      The ratio of dividends to earnings is called payout ratio. In this policy a fixed percentage of earnings are paid as dividends each year.

   c. Stable rupee dividend plus extra dividend
      Under this policy the management fixes the minimum dividend per share to reduce the possibility of net paying dividend. An extra dividend is paid in the years of prosperity.

3. Irregular dividend policy
   Some companies follow irregular dividend payments whose earnings are uncertain, those who have lack of liquid financial resources and those who unsuccessful business operations etc.

4. No dividend policy
   Some companies will not pay dividend. Such companies whose have unfavorable working capital position or companies who need funds for expansions and modifications programmes will follow no dividend policy.

FORMS OF DIVIDEND

On the basis of Mode of Payment

1. Cash dividend: Dividend paid by the company to its shareholders in the form of cash is known as Cash dividend. It is the most desirable by the investors because the investors after receiving their part of share in cash can invest in the manner they desire.

2. Stock dividend: A stock dividend is the issuance by a company of its common stock to its common shareholders without any consideration. If the company issues less than 25 percent of the total number of previously outstanding shares, you treat the transaction as a stock dividend.

3. Property dividend: A company may issue a non-monetary dividend to investors, rather than making a cash or stock payment. You record this distribution at the fair market value of the assets distributed. The dividend paid or declared by the company in the form of assets or property other than cash is known as Property dividend

4. Scrip Dividend or Bond dividend: A company may not have sufficient funds to issue dividends in the near future, so instead it issues a scrip dividend, which is essentially a promissory note (which may or)

UNIT 5 WORKING CAPITAL MANAGEMENT

Meaning: working capital management involves deciding upon the amount and composition of current assets and the manner in which it is financed.
Working capital is for short term investment wherein organization invests these funds in day to day operations of business.

Definition: According to Shubin, "working capital is the amount of funds necessary to cover the cost of operating the enterprise".

Types of working capital

I. Permanent or fixed working capital
    1. Regular working capital
    2. Reserve working capital

II. Temporary or variable working capital
    1. Seasonal working capital
    2. Special working capital

Concepts of Working capital

1. Gross working capital
2. Net working capital

Determinants of Working capital

1. Nature of Business
2. Size of business
3. Cash requirements
4. Volume of sales
5. Terms of purchases and sales
6. Price level changes
7. Inventory turnover
8. Receivable turnover
9. Production schedule
10. Business cycle
11. Production cycle
12. Seasonal fluctuations
13. Repayment ability
14. Changes in technology
15. Firm's policies

Sources of Working Capital

A. Long term sources of working capital:
   Long term sources are sources through which funds are raised for a longer period of time. In order to ensure appropriate liquidity for the enterprise, it would be wise to meet the permanent or core part working capital through long term sources.
   1. Issue of shares
   2. Floating of debentures
   3. Accepting public deposit
   4. Raising funds by internal financing

B. Short term sources of working capital:
   This provides financial assistance for a shorter period of time i.e., less than one year. The firm must arrange these sources in advance to meet day-to-day operational expenses.
   1. Trade credit
   2. Accrued expenses and deferred incomes
   3. Bank finance
      i. Overdraft
      ii. Cash credit
      iii. Bills purchasing and discounting
      iv. Working capital loan
      v. Letter of credit

ADEQUATE WORKING CAPITAL

An organization has to maintain adequate amount of working capital for smooth running of a business. Inadequacy of working capital may lead to problems in the business which would affect the overall functioning of an organization.

Significance of Adequate working capital

1. To protect the business from adverse effects of reduction in the value of current assets
2. To permit a sufficient level of inventories for continuous production
3. To enable the management to overcome depression period
4. To pay current liabilities on time promptly and avail discounts on payment
5. Acts as a cushion in emergencies like strikes, flood etc.
6. Have favorable credit terms with customers

Disadvantages of Excess working capital

1. Leads to low profitability even though sufficient cash is available
2. Outstanding liabilities and losses may be faced
3. Creates an imbalance between liquidity and profitability
4. It leads to greater production level but not having a matching demand in market
5. High level of inventories and its maintenance and storage cost increases

6. It may lead to carelessness about costs and therefore inefficiency of operations
7. Unwise dividend policies

Demerits or Disadvantages of Inadequacy of working capital

1. A firm will lose its reputation when it is not in a position to honor its short term obligations
2. It becomes difficult for the firm to exploit favorable market situations
3. A company cannot avail cash discounts facilities in case of bulk order
4. A company may have to borrow funds at higher rates on interest
5. It becomes impossible to utilize the fixed assets efficiently
6. During the period of emergencies withstanding business from depression would be tough

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