PERIYAR UNIVERSITY

(NAAC 'A++' Grade with CGPA 3.61 (Cycle - 3)

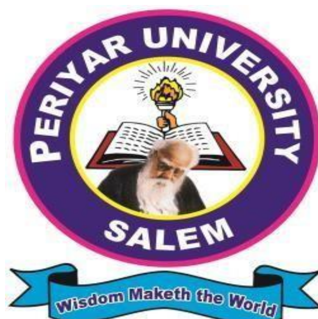
State University - NIRF Rank 56 – State Public University Rank 25

SALEM - 636 011, Tamil Nadu, India.

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)

MASTER OF COMMERCE

SEMESTER - I



CORE I: BUSINESS FINANCE

(Candidates admitted from 2024 onwards)

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SYLLABUS

SEMESTER – I BUSINESS FINANCE

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UNIT-1

NATURE OF FINANCIAL MANAGEMENT

Business finance is a fundamental aspect of any organization, encompassing the management, planning, and control of financial resources to achieve business objectives and maximize profitability. It plays a crucial role in the lifecycle of a business, from its inception and growth to its sustainability and expansion. Business finance is the field that deals with the management of money and other financial resources within a business. It involves the processes of planning, raising, managing, and analysing financial activities to ensure that a company can operate efficiently, achieve its financial goals, and maximize its value for shareholders. Business finance encompasses activities such as budgeting, investment decisions, capital structure management, working capital management, and financial risk management.

At its core, business finance involves several key activities:

1. **Financial Planning: T**his involves forecasting future financial needs and developing strategies to meet these needs. It includes budgeting, projecting cash flows, and setting financial goals.

2. **Capital Acquisition**: Businesses need funds to operate and grow. This can be achieved through various means such as equity financing (selling shares of the company), debt financing (borrowing money), or a mix of both.

3. **Investment Decisions:** Efficient allocation of resources is essential for generating returns. Businesses must decide where to invest their capital, whether in new projects, equipment, research and development, or other opportunities.

4. **Financial Management**: Day-to-day management of finances includes monitoring income and expenses, managing cash flow, and ensuring there is sufficient liquidity to meet obligations. This also involves financial reporting and analysis to keep track of the business's performance.

5. **Risk Management:** Identifying and mitigating financial risks is vital to protect the business from potential losses. This includes managing credit risk, market risk, and operational risk.

6. **Performance Monitoring:** Regularly evaluating financial performance helps businesses stay on track with their financial goals. This includes analysing financial statements, performance metrics, and other financial indicators.

Effective business finance ensures that an organization can meet its short-term obligations and long-term goals, contributing to its overall health and success. By carefully managing financial resources, businesses can improve their operational efficiency, support growth initiatives, and enhance shareholder value.

Objectives:

1. To raising of capital
2. To investment of capital
3. To protection of capital
4. To minimization of cost
5. To maximization of profit
6. To maximization of wealth
7. To maintain firm value.

1.1 Meaning

Business finance refers to the management of money and other assets in a business. It involves planning, organizing, controlling, and monitoring financial resources to achieve the goals and objectives of the business. Key aspects of business finance include

Capital Management: Ensuring there is enough capital to meet the business needs, including working capital for day-to-day operations and long-term capital for growth and expansion

Financial Planning: Setting financial goals and creating a plan to achieve them, including budgeting and forecasting

Investment Decisions: Determining where to invest the business's resources to achieve the best returns, including decisions about purchasing equipment, expanding operations, or investing in new projects.

Funding Strategies: Deciding how to raise capital, whether through equity, debt, or other financing options.

Financial Analysis and Control: Monitoring financial performance through accounting and financial reporting, analysing financial statements, and implementing controls to ensure the business stays on track financially

Risk Management: Identifying and managing financial risks, such as market fluctuations, credit risks, and operational risks.Effective business finance management is crucial for the sustainability and growth of a business, as it ensures that the company can meet its financial obligations, invest in opportunities, and maximize shareholder value.

1.1.2 The Objectives of Business Finance

Profit Maximization: Ensuring the highest possible returns on investments by optimizing revenues and minimizing cost.

Wealth Maximization: Enhancing the value of the business for shareholders by focusing on long-term growth and stability.

Efficient Resource Allocation: Allocating financial resources effectively to different projects and departments to maximize productivity and profitability

Liquidity Management: Maintaining adequate cash flow to meet the business's short-term obligations and operating needs.

Risk Management: Identifying, analysing, and mitigating financial risks to protect the business's assets and earnings.

Financial Planning and Forecasting: Developing accurate financial plans and forecasts to guide decision-making and strategy.

Capital Structure Optimization: Determining the best mix of debt and equity financing to minimize the cost of capital while maximizing financial flexibility.

Cost Control and Reduction: Monitoring and controlling costs to improve efficiency and profitability.

Sustainable Growth: Ensuring long-term growth through sustainable financial practices and investments

Regulatory Compliance: Adhering to financial regulations and standards to avoid legal issues and penalties. These objectives collectively help a business maintain financial stability, achieve growth, and provide value to its stakeholders.

1.1.3 Scopes of Business Finance:

1. capital budgeting:

- Evaluating and selecting long-term investments that are worth more than their cost.

- Techniques include Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period.

2. Capital Structure;

- Determining the optimal mix of debt and equity financing.

- Assessing the cost of capital **and** the impact on the company's risk and value.

3. Working Capital Management

Managing short-term assets and liabilities to ensure a company can meet its short-term obligations.

- Focus areas include inventory management, accounts receivable, and accounts payable.

4. Financial Planning and Analysis:

- Developing financial plans and budgets to forecast future financial performance.

- Analysing financial data to make informed business decisions.

5. Financial Risk Management:

- Identifying and managing financial risks such as market risk, credit risk, and operational risk.
- Utilizing tools like derivatives, insurance, and diversification strategies.

6. Investment Management:

- Overseeing the company's investment portfolio, including stocks, bonds, real estate, and other assets.
- Making decisions on asset allocation and investment strategies to maximize returns.

7. Corporate Governance and Ethics:

- Ensuring that the company's financial practices comply with laws, regulations, and ethical standards.
- Establishing a robust governance framework to enhance transparency and accountability.

8. Financial Reporting and Compliance:

- Preparing and presenting financial statements in accordance with regulatory requirements.
- Ensuring accuracy and reliability of financial information through audits and internal controls.

9. Mergers and Acquisitions:

- Evaluating potential merger and acquisition opportunities.
- Conducting due diligence and negotiating terms to maximize value for shareholders.

10. International Finance:

- Managing financial operations in a global context, including foreign exchange risk and international investment strategies.

- Navigating the complexities of different tax systems, regulations, and financial markets.

These scopes collectively contribute to a company's financial health, strategic growth, and ability to achieve its long-term objectives.

1.1.4 The Functions of Business Finance:

1. Financial Planning: Developing strategies to achieve the organization's **financial** goals, including budgeting, forecasting, and setting financial targets.

2. Capital Budgeting: Evaluating and selecting long-term investment projects that align with the company's goals, analysing their potential returns, and determining their feasibility.

3. Capital Structure Management: Determining the optimal mix of debt and equity financing to fund operations and investments while balancing risk and return.

4. Risk Management: Identifying, assessing, and mitigating financial risks that may impact the organization's profitability and financial stability, such as market risk, credit risk, and operational risk

5. Financial Reporting and Analysis: Generating financial statements (such as income statements, balance sheets, and cash flow statements) to communicate the organization's financial performance and position to stakeholders, and analysing financial data to make informed business decisions.

6. Working Capital Management: Managing the company's short-term assets and liabilities to ensure sufficient liquidity for day-to-day operations while optimizing cash flow and minimizing financing **costs.**

7. Corporate Finance: Making strategic financial decisions that maximize shareholder value, such as mergers and acquisitions, dividend policy, and capital restructuring.

8. Financial Control and Auditing: Implementing internal controls and procedures to monitor and regulate financial activities, ensuring compliance with laws

and regulations, and conducting audits to verify the accuracy and reliability of financial information.

These functions are essential for businesses to effectively manage their finances, allocate resources efficiently, and achieve their financial objectives.

Finance is the life blood of a business circulation of blood is necessary for maintaining life in human body. In the same way, finance is absolutely necessary for the survival and smooth running of a business. Finance is necessary to promote a business, purchase fixed assets, buy raw materials, produce goods and market them. Livery business activity requires finance. Without finance, the business would come to a halt. Therefore, finance is the fundamental requirement for any business enterprise to carry on operations and achieve the goals. It has been rightly stated that business needs money to make more money.

1.1.4 Financial Management

All business decisions have financial implications. A single decision may financially affect different departments of an organisation. Financial management may be described as making decisions on financial matters, implementing the decisions and review of the implementation. It is the process of managing the finance function.

According to Archer and Ambrosio, “Financial management is the application of the planning and control functions to the finance function”

In the words of Guthman and Dougall, “Business finance may be defined as the activity concerned with planning, raising, controlling and administering of the funds used in the business.”

Thus, financial management is a management function which is concerned with the management of funds. It includes:

a. Financial planning

b. Raising of financial resources

c. Management of financial resources and

d. Control of financial resource.

It deals with procurement and utilisation of funds in an efficient manner.

Objectives of Financial Management

Financial management is concerned with the raising of funds and their effective utilisation. The firm has to procure the funds at the minimum possible cost and use them efficiently. For this purpose, the following decisions are to be made.

1. Investment decisions
2. Financing decisions
3. Dividend decisions

In order to make these financial decisions rationally, the firm should have a clear objective. Two important objectives profit maximation and wealth maximation- are discussed here under.

1.1.5 Profit Maximisation

Profit maximisation refers to the maximisation of income or earnings of a firm. The arguments in favour of profit maximisation as the objective of financial management are:

1. **Natural Goal:** Profit is the aim of any business. Naturally, the goal of financial management should be profit maximisation.

2. **Measure of Efficiency:** Profit is a measure of efficiency. Higher profits imply greater efficiency. Hence, the objective of profit maximisation is quite rational.

3. **Internal Generation of Funds:** Profits lead to internal generation of funds. It helps to finance the growth of the business.

4. **Protection Against Risks:** Profits provide protection against risks. When a company is faced with unfavourable conditions (such as fall in prices, increase in costs and severe competition), accumulated profits serve as a cushion to absorb the shocks.

5. **Fulfilment of Social Obligations:** Profits are essential for fulfilling social obligations of the business. The goal of profit maximisation helps to maximise social welfare.

The arguments against the objective of profit maximisation are:

1. **Vague**: The term profit is vague. It has different meanings. For Instance, profit may refer to long-term profits of short-term profits. It may refer to profit before tax or profit after tax or ever operations

2. **Neglects Time Value of Money:** The objective of profit maximisation neglects value of money. Profits of today are more valuable than profits to be earned after five years. But profit maximisation objective treats all profits as equal, irrespective of the timing.

3. **Ignores Risk Factor:** Some projects are more-risky than the others though the expected earnings may be equal. But the risk factor is not considered by the profit maximisation goal.

4. **Taint of Immorality**: Profit maximisation implies exploitation of consumers, workers and the society. Hence, it is regarded as immoral.

5. **Invalid**: Profit maximisation may be a valid objective under conditions of perfect competition. As the markets are not perfect, it cannot be a valid objective.

6. **Inadequate:** In company form of a organisation, there is separation of ownership and control. Shareholders are the owners. But control is in the hands of professional managers. Creditors, financial institutions, workers, consumers and the society are concerned with the company's operations. The management has to reconcile the conflicting interests of these stakeholders. Profit maximisation goal is inadequate for the purpose.

The variants of profit maximisation “goal are:

Maximising Profit After Taxes:

To overcome the problem of vagueness, the term profit may be defined specifically as profit after taxes. But this objective is also not sound as it will not maximise the economic welfare of the shareholders

For example, A Ltd has 10,000 equity shares and earns a profit c Rs. 50,000. The earnings per share (EPS) is Rs 5. The company issue 5000 additional shares and invests the proceeds in the business. Profit after tax increases to Rs 60,000 the EPS will decline to Rs (Rs 60,000+15,000). It is clear that maximising profit after tax is not necessarily advantageous to the shareholders.

ii) Maximising the EPS

The objective of maximisation of earnings per share also suffers from drawbacks. It ignores time value of money and the risk element.

Because of the drawbacks, profit maximisation, as an objective of financial management has been rejected.

Wealth Maximisation

Wealth maximisation, as an objective of financial management, refers to the maximisation of the wealth of the shareholders. It involves maximisation of the net present value of an investment. Net present value (NPV) of an investment is the difference between present value of its inflows (benefits) and outflows (costs).

NPV =Total present value of inflows – Total present value of outflows Algebraically,

NPV (wealth) A = + A (1+k) $(1+k)^2$ + + An (1+k)” -C

At t=1(1+k) C

Where, NPV = Net Present Value

A1, A2, A3 = the stream of benefits or cash inflows

K = appropriate discount rate (cost of capital)

C= Investment or outflow

A positive net present value creates wealth to shareholders. On the other hand, a negative net present value erodes shareholders’ wealth. Hence, only investments which yield a positive net present value are accepted. When a number of mutually exclusive investment proposals are considered, the one with the highest NPV is chosen. As a result, the wealth of the shareholders is maximised. The wealth created

by a company is represented by the market price of its shares. Therefore, wealth maximisation implies maximisation of market value of shares.

The advantages of wealth maximisation objective are:

1. **Clarity:** Wealth maximisation is a clear concept. It represents the net present worth.

2. **Time Value of Money:** It takes into account the time value of money, by discounting the future cash inflows.

3. **Recognises Risk Factor:** The risk factor is also recognised. For proposals with a greater degree of risk, a high discount rate (cost of capital) is used and vice versa.

4. **Universal Acceptance:** The concept of wealth maximisation is universally accepted. It takes care of the interests of shareholders, financial institutions, employees and the society

In short, the goal of wealth maximisation provides an appropriate criterion for financial decision making. It is very clear and operationally feasible. It overcomes the limitation of the profit maximisation goal. Hence, the goal of wealth maximisation is widely accepted.

1.1.6FINANCIAL DECISIONS

Financial decisions are decisions concerning the financial matters of a firm. To accomplish the goal of wealth maximisation, a finance manager has to take decisions such as the amount of investment, kinds of assets to be acquired, financing of the investment and distribution of profits. These financial decisions are grouped into three categories.

1. Investment decisions

2. Financing decisions

3. Dividend decisions

1.Investment Decision: Investment decision is the most important financial decision. It is concerned with deciding the total amount of assets to be held in the firm and their composition.

The investment decisions are of two types.

i) **Long term Investment Decision**

Long-term investment decision refers to the capital expenditure decision. It is also known as capital budgeting. It involves the evaluation of various capital expenditure proposals in terms of their cost, revenue, profit and risks. Pay-back period, Accounting Rate of Return, Net Present Value, Net Present Value Index and Internal Rate of Return are widely used for evaluation of investment proposals.

ii) Short-term Investment Decision

Short-term investment decision is concerned with the management of working capital. It is also known as liquidity decision. It involves decisions regarding investment in current assets, allocation of funds among cash, receivables inventories etc.

A conflict exists between liquidity and profitability. Therefore, liquidity decision is influenced by a trade-off between liquidity and profitability. If a firm invests too much in current assets, it would lose profits as idle current assets do not earn anything. On the other hand, if it invests too little in current assets, liquidity will be adversely affected. Hence, a proper balance must be struck between liquidity and profitability.

2. Financing Decision

Once the investment decision is made, the finance manager has to decide the sources of finance for financing the investment. Debt and equity are two major sources of long-term finance. Use of debt helps to enhance made earnings f the shareholders. But excessive debt increases the risk. Therefore, the choice must be made in such a way that the capital structure is optimum and the value of the firm is maximised. In practice, factors such as control, management, flexibility, legal aspects, and loan covenants are also considered in deciding the capital structure.

3. Dividend Decision

Dividend decision is concerned with deciding the quantum of profits to be distributed to share-holders (payout). The finance manager has to decide whether the firm should distribute all the profits, retain all the profits or distribute a portion and retain the balance. The finance manager should generally aim at an optimum dividend payout, which maximises the value of the firm. However, he should also consider factors like dividend stability, issue of bonus shares, aspirations of shareholders; industry practices and taxation in making dividend decisions.

1.1.7 Time Value of Money

The concept of lime value of money is simple – According to this Concept, the same amount of cash, receivable during different lime periods has different values.
*The value of money received today is greater than the value of the same amount receivable after. 5 or to years Why years. (Future) preference to money"

Most of the Financial decisions, such as purchase of fixed assets, affect the cash flows of a firm over a long period.

In order to make sound financial the firm will have to compare cash inflows and outflows off Hence time value of money is to be recognised in making financial decisions.

The concept of time value of money is simple. According to this concept, the same amount of cash, receivable during different time periods has different values. The value of money received today is greater than the value of the same amount receivable after 5 or 10 years. The sooner the money is received the better it is. If Mr, Rajesh is given the option of receiving R 10,000 today or after one year he will definitely prefer to receive the amount, today itself. This is called time preference for money. However, he may be ready to receive the money after one year if he is suitably rewarded for his waiting. The reward is called interest. Mr. Rajesh may agree to receive Rs 10,000 after 1 year if he is paid an interest of Rs 1200. So, time preference for money is expressed as interest rate.

Hence, time value of money is to be recognised in making financial decisions. This is done by making appropriate adjustments through discounting or compounding of cash flows.

Reasons for Time Preference for Money People prefer to receive money, earlier than later. The reasons are:

1. **Uncertainty**: Future is uncertain. There is a chance of not getting the money at all. Hence, people like to receive the money today itself rather than waiting for the future.
2. **Preference for Consumption:** The money may be needed to meet urgent current needs. Therefore, people prefer to receive money as early as possible
3. **Investment Opportunities:** Money has time value. If Mr. Chandran receives Rs 50,000 today, he can invest the amount and earn interest. Suppose he gets an interest of 10%, he will have Rs 55,000 at the end of 1 year. Therefore, it is good to receive Rs 50,000 now as it will grow into Rs 55,000 after one year.

Methods of time value of money

The time value of money refers to the principle that money available today is worth more than the same amount in the future due to its potential earning capacity. The methods used to calculate this include:

Present Value (PV): It calculates the current worth of a future sum of money, discounted at a specific rate of return.

Future Value (FV): This calculates the value of an investment at a specific point in the future, considering compounding interest.

Net Present Value (NPV):NPV measures the profitability of an investment by comparing the present value of expected cash inflows with the present value of expected cash outflows, discounted at a chosen rate

Internal Rate of Return (IRR): IRR is the rate at which the NPV of cash flows equals zero, indicating the rate of return an investment is expected to generate.

Annuities: Annuities involve a series of equal payments or receipts made at regular intervals. Methods for annuities include calculating the present value of an annuity (PV of annuity), future value of an annuity (FV of annuity), and annuity due calculations. These methods help **individuals** and businesses make informed financial decisions by quantifying the value of money over time.

The time value of money (TVM) is a financial concept that states that money available now is worth more than the same amount in the future due to its potential earning capacity. Here are the key techniques used to apply the time value of money in financial analysis:

1. Present Value (PV)

Present value calculates the current worth of a future sum of money or stream of cash flows given a specified rate of return. The formula is:

$PV = fv / (1+i)^n$

Where FV is the future value, I is the interest rate, and n is the number of periods.

2. Future Value (FV)

Future value determines how much an investment made today will grow to at a future date. The formula is:

$FV = P(1+i)^n$

Where PV is the present value, I is the interest rate, and n is the number of periods.

3. Present Value of an Annuity (PVA)

This technique calculates the present value of a series of equal payments made at regular intervals. The formula is:

$$PVA = \frac{A}{(1 + i)^n}$$

Where A is annuity, i=rate of interest n= number of periods.

Multipleperiod:

Compound value = $P(1+i/m)^{mxn}$

Future value = $P(1+i/m)^{mxn}$

The time value of money (TVM) causes:

1. **Opportunity Cost:** Money available now can be invested to earn a return. If you have $100 today, you can invest it and earn interest or returns over time, which wouldn't be possible if you receive the same $100 in the future.

2. **Inflation:** Over time, inflation erodes the purchasing power of money. $100 today will generally buy more goods and services than the same $100 in the future, as prices tend to rise over time.

3. **Risk and Uncertainty:** Future cash flows are uncertain. There is always a risk that future payments might not be received due to various factors like default risk. Hence, money today is certain and preferred.

4. **Preference for Consumption:** People generally prefer to consume now rather than later. This preference for immediate consumption means that they value current money more highly than future money.

5. **Investment Returns:** The ability to earn returns on investments means that money available now can grow over time. Whether through interest, dividends, or capital gains, money has the potential to increase in value if invested wisely.

6. **Liquidity:** Immediate money provides liquidity and financial flexibility, allowing for immediate spending or investment opportunities, which is not possible with future money.

These factors collectively contribute to the concept that a sum of money today is worth more than the same sum in the future, forming the basis of the time value of money.

Compound Value of Lump Sum

The compound value of a lump sum refers to the future value of a single sum of money that is invested today and allowed to grow over a period of time at a specified interest rate, with interest being compounded at regular intervals. The concept is crucial in finance for understanding how investments grow over time due to the effects of compound.

Compound Value through Tables

Calculation of compound value becomes difficult when the period (n) is long, say15 or 20years. Hence, Compound value factor tables are used to calculate the compound values easily.

The Compound Value Factor table gives compound values of re.1 for different periods at different rate of interest.

Multiple Compounding Periods

In the previous section the compounding of interest annually has been explained. However, in practice, compounding of interest may be done halt-yearly, quarterly or even monthly. In such cases, future value Can be calculated as follows.

Future value (FV) = $P[1+i \div m]^{m \times n}$

Where p=Principal

I= Rate of interest

M= Frequency of compounding in a year

N= Number of years

Compound Value through Table

In the case of multiple compounding periods also, compound value Can be ascertained by referring to compound value factor tables, But the procedure is slightly different Compound value is to be located for (mxn)years at(i/m) interest.

In the above example,

Compound value of Re 1 in4 years (m×n) at 5%(i/m) =1.216

Compound value of Rs.20,000 =1.216x 20,000= Rs. 24,320.

Effective Rate of Interest

When interest is compounded annually, the nominal rate of interest Is the effective rate of interest. In the case of multiple period compounding, (half-yearly monthly etc.) the effective rate of interest Will be higher than the given nominal rate. The following example highlights the difference.

Doubling Period

Often investors and financial decision makers are interested in knowing the doubling period, that is the time taken for doubling of an investment. When interest rates ruled high in the nineties, investment in Indra Vikas Patra doubled in 5years. An investment of Rs 10,000became Rs 20,000in 5years.

The doubling period can be found approximately by following the Rule of thumb methods, popularly known as rule of 72 and Rule of 69.

Compound Value of a Series of Payments

Payments may be made at different points of time, such as at the end of the first year, second year third year and so on. The compound value may be received after the specified period, say 3years.Insuchcases, first payment remains locked up for2years (n-1) payment remains locked upfor1 year (n-2) and so on.

Compound Value of an Annuity

Annuity refers to a series of equal annual payments made at the End of each year for a particular period (e.g., annuity of Rs 7000 for 15 Years).Where such annual payments are made for a Certain number of Years the compound value can be found as shown below.

Compound Value through Annuity Table

The compound Value of an annuity can be found with the aid of Compound Value Annuity Factor tables.

Compound value of an annuity of Re.1 for 5years at 12% =6.353

Compound value of an annuity of Rs1000 =6.353 x1000=Rs. 6353

Compound Value of an Annuity Due

Annuity Due refers to equal annual payment made at the beginning of as each year. The compound value of such payments can be calculated as shown below.

Discounting or Present Value Techniques

Discounting technique is quite important in making financial Decisions. It is the opposite of compounding. Through the Process of Compounding we find out the future value of. Money -say the Compound Value of Rs. 5000 after 10 years at 10% interest. On the other- hand Through discounting, we find out the present Value of a future Cash flow Say the present value of Rs 10,000 receivable after 5years. The Discounting or present value technique facilitates meaningful Comparison of cash flows occurring at different periods of time.

For example, Rs. 5000receivable after 2yearsis Converted into Present value through discounting. SimilarlyRs.5000 receivable after5yearsis converted into present value. So Comparsion of present values Enables sound financial decision making.

In compounding, interest is added to the principal. Hence future Value is greater than the present value. Rs 1000 of today invested at10%growsinto Rs1610 in 5years.On the other hand, present value of a sum to be received in future is less, as can be seen from the following.

Example: PV = $FV \div (1+i)^n$

Present value of Rs 1000 received today = (0year)=Rs. 1000

Present value of Rs 1000receivable after1 year =$1000 \div (1+10)^1$= Rs. 909

Present value of Rs 1000 receivable after2years =$1000 \div (1+.10)^2$=Rs. 826

Present value of Rs 1000 receivableafter3years =$1000 \div (1+.10)^3$= Rs. 751

It could be seen that Rs 1000had been discounted to get its present Value. Further present value declines with increase in the number of Years. Longer the period, lower is the present value.

Present Value of a Lumpsum

Present value of a lumpsum is calculated by the following formula:

Present Value (PV) =FV÷(1+ i)ñ

Where FV is the future sum or Cashflow to be received

I =Rate of interest n=No. Of years

Present Value of a series of payments

When payments are made in series, over a period of time, present Value is calculated as follows. Each payment or cash flows is discounted with reference to the period, at the specified rate of interest to find out the present value. Then, the present values are added. The working is Illustrated by the following example.

SUMMARY:

Business finance focuses on managing a company's monetary resources to maximize profitability and ensure long-term stability. Key areas include investment decisions, financing strategies, and managing working capital. A critical concept in business finance is the time value of money (TVM), which asserts that a dollar today is worth more than a dollar in the future due to its earning potential. TVM is foundational in evaluating investment opportunities, comparing cash flows, and making financing decisions. Techniques like net present value (NPV) and internal rate of return (IRR) are used to assess the value of future cash flows. Understanding TVM helps businesses make informed financial decisions that enhance growth and value creation.

Glossary:

1. **Business Finance:** The management of a company's financial resources to achieve its goals and ensure long-term stability.

2. **Investment Decisions:** Choices made by a business regarding where and how to allocate funds to generate returns.

3. **Financing Strategies:** Plans and methods used by a business to raise capital, including equity, debt, and hybrid financing options.

4. **Working Capital:** The difference between a company's current assets and current liabilities, used to manage day-to-day operations.

5. **Time Value of Money (TVM):** The principle that a sum of money has greater value now than in the future due to its earning potential.

6. **Net Present Value (NPV):** A method for evaluating investment opportunities by calculating the present value of expected future cash flows, minus the initial investment.

7. **Internal Rate of Return (IRR):** The discount rate that makes the net present value of all cash flows from a particular project equal to zero.

8. **Cash Flow:** The total amount of money being transferred into and out of a business, particularly regarding operations, investments, and financing activities.

9. **Present Value (PV):** The current value of a future sum of money or stream of cash flows, given a specified rate of return.

10. **Discount Rate:** The interest rate used to discount future cash flows to their present value, reflecting the time value of money and investment risk.

Self-assessment questions

1.What is the primary goal of business finance?

2. Explain the concept of the time value of money (TVM). Why is it important in financial decision-making?

3. What are the key differences between net present value (NPV) and internal rate of return?

4. How does working capital management contribute to a company's financial health?

5. Describe a scenario where understanding the time value of money would be crucial for a business decision.

6. What factors should be considered when determining the discount rate for a project?

7. What is the role of financing strategies in business finance?

8. Why is cash flow analysis important in business finance?

9. How do present value (PV) calculations aid in comparing different investment options?

UNIT- 2

Risk Management

2.1.1 Introduction:

Risk management in business finance involves identifying, assessing, and prioritizing risks, followed by coordinated efforts to minimize, monitor, and control the probability or impact of unfortunate events. The goal Is to ensure that the business can achieve its financial objectives despite uncertainties.

Individuals invest their money in different types of financial assets Be government securities, bank deposits, debentures, preference shares and equity shares. The primary objective in making these investments is to get certain benefits in future periods. The benefits are in the form of interest or dividends. Further, in the case of shares, the investors expect appreciation in market value, which is called capital gains. The benefits secured from investments in the form of interest, dividends, bonus and capital gains are referred to as return on investments.

All securities or financial assets do not yield the same return. For example, the return on government securities is very low. Debentures offer a comparatively higher return and equity shares may yield a still higher return. The securities which offer a higher return carry a higher level of risk. The risk associated with government securities is nil, whereas equity shares are riskier investments.

2.1.2Meaning of risk management

Risk management in business finance refers to the systematic process of identifying, assessing, mitigating, and monitoring potential risks that could adversely affect a company's financial performance and objectives. The goal of risk management is to minimize the impact of these risks on the business's capital, earnings, and overall financial stability.

Risk management in business finance refers to the process of identifying, assessing, and prioritizing risks followed by the application of resources to minimize, control, and monitor the impact of those risks on an organization. This practice aims to protect a

company's capital and earnings by managing uncertainties that could negatively affect its financial health.

Investments are made to get certain benefits or return in future periods. If the investors can surely get the expected return, the risk element is nil. On the other hand, if there is a great chance of actual return differing from the expected return, the risk is high.

For example, an investor who has invested in government securities will definitely get the expected return. There will not be any difference between the expected return and actual return. However, if he invests in equity shares, the actual return may be greater or less than the expected return.

Thus, risk refers to the degree of variability of actual return from the expected return. It implies that the future return is unpredictable. Government securities are risk free investments because the probability of actual return diverging from the expected return is zero.

Objectives:

1. To Risk identification
2. To Risk Assessment
3. To Risk Mitigation
4. To Risk Monitoring
5. To Risk Reporting
6. To Risk Optimization
7. To Risk Minimization
8. To Value Protection
9. To Compliance
10. To Continuous Improvement

2.1.3Definition

Risk management in business finance is the strategic approach to managing uncertainty by systematically identifying potential financial risks, evaluating their likely

impact, and implementing measures to control or mitigate their effects on an organization's financial health and operations.

Key Elements of Risk Management:

1.Risk Identification

Internal Risks: Arise from within the organization, such as operational failures, financial or IT system failures.

External Risks: Originates outside the organization, including economic changes, regulatory changes, and natural disasters.

2.RiskAssessment:

Qualitative Assessment: Evaluating the impact and likelihood of risks based on subjective criteria

Quantitative Assessment: Using numerical and statistical methods to gauge risk levels

3.Risk Prioritization: Ranking risks based on their potential impact and the likelihood of occurrence to prioritize management efforts

4.Risk Mitigation:

Avoidance: Changing plans to circumvent risks.

Reduction: Implementing measures to reduce the likelihood or impact of risks. Sharing/Transfer: Outsourcing or insuring against risks.

Acceptance: Acknowledging the risk and preparing to deal with its impact if it occurs.

5.Risk Monitoring and Review: Continuously tracking risk factors and the effectiveness of mitigation strategies, adjusting as needed.

2.1.4 Importance in Business Finance:

***Protects Assets:** Safeguards financial assets from unexpected losses

***Ensures Stability:** Helps maintain steady cash flow and financial stability

***Supports Decision Making:** Provides a framework for making informed financial decisions.

***Enhances Reputation:** Demonstrates a proactive approach to managing potential issues, boosting stakeholder confidence.

***Regulatory Compliance:** Helps businesses adhere to laws and regulations, avoiding legal penalties

Common Risk Management Tools

Financial Hedging: Using financial instruments like derivatives to manage exposure to risks such as currency fluctuations and interest rate changes

Insurance: Transferring risk to an insurance company to protect against specific losses.

Diversification: Spreading investments across various assets to reduce exposure to any single risk.

Scenario Analysis and Stress Testing: Evaluating how different scenarios affect the business, particularly under extreme conditions effective risk management is integral to the financial health and long-term success of any business, enabling organizations to navigate uncertainties and capitalize on opportunities.

2.1.5 Sources of Risk Management:

Sources of risk in business management can originate from a variety of areas. Understanding these sources helps in developing comprehensive risk management strategies. Here are key sources of risk in business management:

1. Financial Risks:

Market Risk: Fluctuations in market prices, interest rates, and exchange rates.

Credit Risk: Potential for customers or counterparties to fail to meet contractual obligations.

Liquidity Risk: Inability to meet short-term financial obligations due to lack of liquid assets.

2. Operational Risks:

Process Risk: Failures in internal processes or systems.

People Risk: Risks related to employee actions, errors, or fraud.

Technology Risk: Failures or breaches in IT systems and cybersecurity.

3. Strategic Risks:

Competitive Risk: Actions by competitors that affect market position.

Reputation Risk: Damage to the company's reputation affecting customer trust and business relationships.

Regulatory Risk: Changes in laws, regulations, and compliance requirements.

4. External Risks:

Economic Risk: Macroeconomic factors like recessions, inflation, or economic downturns.

Political risk: Political instability, changes in government policies, or international relations.

Environmental Risk: Natural disasters, climate change, and environmental regulations.

5. Project Risks:

Scope Risk: Changes in project scope leading to cost overruns or delays.

Schedule Risk: Delays in project timelines affecting completion dates.

Resource Risk: Inadequate allocation or availability of resources.

6. Legal Risks:

Litigation Risk: Potential lawsuits or legal actions against the company.

Contract Risk: Issues arising from contractual obligations or breaches.

7. Human Resources Risks:

Talent Acquisition and Retention Risk: Challenges in hiring and retaining skilled employees.

Labor Relations Risk: Strikes, disputes, or issues with labour unions.

By identifying these sources, businesses can create targeted risk management plans to mitigate potential negative impacts.

2.1.6 Objectives of risk

1. **Protecting Assets:** Safeguarding the company's physical and financial assets from potential risks.

2.**Minimizing Losses:** Reducing the potential financial impact of risks, thereby minimizing losses.

3. **Ensuring Business Continuity:** Ensuring the business can continue to operate in the face of adverse events.

4. **Regulatory Compliance:** Meeting legal and regulatory requirements related to risk management.

5. **Enhancing Decision-Making:** Providing better information for making informed strategic and operational decisions.

6. **Optimizing Risk-Reward Balance:** Balancing potential risks with the rewards, ensuring that risk-taking aligns with the company's risk appetite and strategic objectives.

2.1.7Characteristics:

1. **Systematic Approach:** Risk management is a structured and systematic process involving the identification, assessment, and prioritization of risks.

2. **Proactive:** It involves anticipating potential risks and taking actions to mitigate them.

3. Comprehensive: It covers all types of risks, including financial, operational, strategic, and compliance risks.

4. Dynamic: Risk management is an ongoing process that evolves with the business environment and changing risk landscape.

5. Integrative: It integrates with all business functions and processes, ensuring a cohesive approach to managing risks across the organization.

6. Risk-Aware Culture: Promotes a culture where employees at all levels are aware of risks and their roles in managing them.

7. Continuous Monitoring and Review: Involves regular monitoring and reviewing of risk management strategies and practices to ensure they remain effective and relevant.

8. Communication and Reporting: Ensures transparent communication and reporting of risks and risk management activities to stakeholders.

2.1.8 Types or various methods of risk management:

In business finance, various types of risk management strategies are employed to address different kinds of risks. These strategies are essential for protecting a company's assets, ensuring financial stability, and achieving long-term objectives. Here are the main types of risk management in business finance:

1. Operational Risk Management

Process Controls: Implementing standard operating procedures to reduce the risk of errors and inefficiencies.

Business Continuity Planning: Developing plans to maintain operations during disruptions.

Quality Assurance: Ensuring products and services meet certain standards to prevent defects and recalls.

2. Financial Risk Management:

Credit Risk Management: Assessing and mitigating the risk of default by customers and counterparties.

Market Risk Management: Managing risks related to fluctuations in market prices, such as interest rates, currency exchange rates, and commodity prices.

Liquidity Risk Management: Ensuring the company can meet its short-term obligations by maintaining adequate cash flow and access to funding.

3. Strategic Risk Management:

Scenario Planning: Analysing potential future scenarios and their impacts on business strategy.

Competitive Analysis: Monitoring the competitive landscape to anticipate and respond to changes.

Mergers and Acquisitions: Conducting thorough due diligence to identify and mitigate risks associated with mergers and acquisitions.

4. Compliance and Legal Risk Management:

Regulatory Compliance: Ensuring adherence to laws and regulations to avoid legal penalties and reputational damage.

Contract Management: Reviewing and managing contracts to mitigate risks related to contractual obligations.

Intellectual Property Protection: Safeguarding patents, trademarks, and copyrights to prevent infringement and unauthorized us

5. Reputational Risk Management:

Crisis Communication: Developing plans to manage communication during a crisis to protect the company’s reputation.

Brand Management: Ensuring consistent and positive brand messaging to maintain customer trust and loyalty.

Social Media Monitoring: Tracking social media channels to quickly address negative publicity or customer complaints.

6. Environmental and Social Risk Management

Sustainability Initiatives: Implementing practices that reduce environmental impact and promote social responsibility.

Stakeholder Engagement: Actively engaging with stakeholders to understand and address their concerns.

Environmental Compliance: Adhering to environmental laws and regulations to prevent fines and reputational damage.

7. Technology Risk Management

Cybersecurity: Protecting digital assets from cyber threats through robust security measures.

Data Privacy**: Ensuring compliance with data protection regulations and safeguarding customer information.

System Reliability: Implementing measures to ensure IT systems are reliable and downtime is minimized.

8. Insurance and Risk Transfer

Policies: Purchasing insurance to transfer risks such as property damage, liability, and business interruption to an insurance company.

Risk Transfer Agreements: Using contractual agreements to transfer certain risks to third parties, such as through indemnity clauses or outsourcing arrangements.

9. Project Risk Management

Risk Assessment in Project Planning: Identifying and evaluating risks during the project planning phase.

Risk Mitigation Strategies: Developing plans to mitigate identified risks during project execution.

Post-Project Review: Assessing the effectiveness of risk management strategies after project completion to improve future practices.

By leveraging these various types of risk management strategies, businesses can better prepare for and respond to potential threats, thereby enhancing their resilience and ability to achieve their goals.

2.1.8 Measurement of Return:

1.Return on Investment (ROI): Measures the efficiency and profitability of an investment.

2. Return on Equity: It Indicates how effectively a company is using shareholders' funds to generate profit.

3. Return on Assets (ROA): Assesses how efficiently a company is using its assets to generate earnings.

4.Internal Rate of Return (IRR): The discount rate that makes the net present value (NPV) of all cash flows from an investment equal to zero. The purpose is Evaluating the profitability of potential investments.

5. Net Present Value (NPV): Measures the value of an investment by assessing the present value of expected future cash flows.

6. Profitability Index (PI): Present value / initial investment

2.1.9 Measurement of Risk

1. Standard Deviation

Ri = Return in each period

R = Average return

N = Number of periods

Purpose: Measures the dispersion of returns around the mean, indicating the volatility of an investment.

2. **Beta**

Definition: A measure of an investment's sensitivity to market movements.

Ri= Return of the investment

Rm= Return of the market

Purpose: Assesses the systematic risk of a security relative to the market.

3. Value at Risk (VaR)

Definition: The maximum potential loss over a specified time period with a given confidence level.

Purpose: Quantifies the potential loss in value of an asset or portfolio.

4. Sharpe Ratio

Purpose: Measures the risk-adjusted return of an investment.

2.1.9 Evaluating proposals to minimize risk in the context of risk assets and portfolio management involves a detailed analysis of several criteria.

1. Risk-Return Trade-off:

Expected Return: Evaluate the potential returns of the investment or portfolio and compare them with the associated risks.

Risk Metrics: Assess risk using measures like standard deviation, beta, Value at Risk (VaR), and Conditional Value at Risk (CVaR).

2. Diversification Benefits:

Correlation Analysis: Examine how the new investment correlates with existing assets in the portfolio. Lower correlation can lead to better diversification and reduced overall risk.

Asset Allocation Impact: Analyse how adding the new asset affects the overall asset allocation and whether it enhances portfolio diversification.

3. Financial Health of the Investment:

Creditworthiness: Assess the credit ratings and financial stability of the entity behind the asset (e.g., bond issuer, company).

Balance Sheet Analysis: Review key financial ratios and statements to ensure the investment is financially sound.

4. Liquidity Considerations:

Market Liquidity: Evaluate how easily the asset can be bought or sold without significantly affecting its price.

Portfolio Liquidity: Ensure that the portfolio maintains a suitable level of liquidity to meet short-term obligations.

5. Time Horizon Alignment:

Investment Horizon: Match the investment's time horizon with the portfolio's overall investment horizon and the investor's financial goals. Maturity Matching: For fixed-income assets, ensure the maturity dates align with the timing of expected cash flow needs.

6. Regulatory and Compliance Factors:

Regulatory Environment: Ensure that the investment complies with all relevant regulations and legal requirements.

Compliance Risks: Evaluate any potential compliance risks associated with the investment.

7. Economic and Market Conditions:

Macro-Economic Analysis: Consider current and projected economic conditions and how they might impact the investment.

Market Trends: Assess market trends and sentiment that could influence the investment's performance.

8. Management and Governance:

Management Quality: For equity investments, evaluate the quality and track record of the company's management team.

Corporate Governance: Assess the governance structure and practices of the entity to ensure they align with best practices and ethical standards.

9. Cost and Fee Structure:

Transaction Costs: Consider the costs associated with buying and selling the asset.

Management Fees: Evaluate the fee structure for managed funds or portfolios to ensure they are reasonable relative to the expected returns and services provided.

10. Scenario and Sensitivity Analysis:

Stress Testing: Perform stress tests to see how the investment or portfolio performs under extreme market conditions.

Sensitivity Analysis: Assess how sensitive the investment's performance is to changes in key variables, such as interest rates, inflation, and economic growth rates.

11.Historical Performance:

Past Return: Analyse the historical performance of the asset or similar assets to gauge potential future returns.

Volatility History: Review historical volatility to understand the potential risk associated with the investment.

12. Strategic Fit:

A**lignment with Goals**: Ensure the investment aligns with the overall strategic objectives and risk tolerance of the investor or portfolio.

Strategic Contribution: Evaluate how the investment contributes to achieving the broader investment strategy, such as income generation, capital preservation, or growth.

By carefully considering these criteria, investors and portfolio managers can make informed decisions that minimize risk while striving to achieve their financial objectives.

2.1.10 RISK MANAGEMENT:

Advantages:

1.Minimizes Potential Losses: Effective risk management identifies potential risks and implements strategies to mitigate them, thereby minimizing potential financial losses.

2. Improves Decision-Making: With a clear understanding of risks, businesses can make more informed decisions that balance potential rewards against potential risks.

3. Enhances Financial Stability: By preparing for uncertainties, businesses can maintain more stable cash flows and financial health, ensuring they can withstand unexpected events.

4. Increases Investor Confidence: Demonstrating a robust risk management process can increase investor confidence, as it shows the business is proactive in managing potential threats.

5. Regulatory Compliance: Effective risk management helps businesses comply with legal and regulatory requirements, avoiding penalties and legal issues.

6. Competitive Advantage: Businesses that manage risks effectively can gain a competitive edge by being more resilient and adaptable to changes in the market.

7. Protects Reputation: Proper risk management helps safeguard a company's reputation by avoiding situations that could lead to negative publicity.

Disadvantages:

1.Cost: Implementing and maintaining risk management systems can be expensive, requiring investment in specialized personnel, training, and technology.

2.Complexity: Risk management can be complex, requiring continuous monitoring and updating to address new and evolving risks.

3.Resource Intensive: It can consume significant resources, including time and effort from employees, which might otherwise be used for core business activities.

4.Possibility of Overemphasis: There is a risk of becoming overly cautious, potentially stifling innovation and taking fewer strategic risks that could benefit the business.

5. Uncertainty in Effectiveness: Despite best efforts, risk management cannot eliminate all risks, and unexpected events can still occur, rendering some efforts ineffective.

6. Potential for Complacency: Overreliance on risk management systems can lead to complacency, where businesses might underestimate the likelihood or impact of certain risks.

7.Resistance to Change: Employees and management may resist implementing risk management practices, especially if they perceive them as adding unnecessary bureaucracy.

In summary, while risk management in business finance provides significant advantages in terms of minimizing losses, improving decision-making, and enhancing stability, it also presents challenges such as costs, complexity, and the potential to stifle innovation. Balancing these aspects is key to an effective risk management strategy.

2.1.11 Hedging currency risk

Hedging currency risk in business finance involves employing strategies to mitigate potential losses due to fluctuations in exchange rates. The primary objective is to

protect the company's finances from adverse movements in currency values, which could impact profits, cash flow, and overall financial stability.

Definition: Hedging currency risk refers to the process of using financial instruments or contracts to offset the potential losses resulting from changes in currency exchange rates.

Objectives:

1. Protecting Profits: By hedging currency risk, businesses aim to safeguard their profit margins from being eroded by unfavourable exchange rate movements.

2. Stabilizing Cash Flow: Currency fluctuations can significantly affect cash flow, especially for businesses engaged in international trade. Hedging helps in maintaining a more stable cash flow by reducing the uncertainty associated with exchange rate changes.

3. Enhancing Predictability: Hedging provides a level of predictability to businesses regarding their future financial positions, allowing for better planning and decision-making.

4. Minimizing Transaction Costs: Constantly converting currencies for international transactions can accrue significant costs. Effective hedging can reduce these transaction costs by mitigating the need for frequent currency conversions.

5.Facilitating Long-Term Planning: Businesses often have long-term commitments and investments that involve foreign currencies. Hedging helps in reducing the risk associated with these commitments, enabling smoother long-term planning and execution.

6. Maintaining Competitiveness: A stable financial position achieved through hedging allows businesses to remain competitive in global markets by avoiding sudden price changes due to currency fluctuations.

7.Compliance and Risk Management: In some industries, hedging currency risk may be a regulatory requirement. Additionally, it is a fundamental aspect of risk management, ensuring that businesses are adequately prepared for potential currency-related losses. Overall, hedging currency risk is essential for businesses

operating in the global marketplace to mitigate the uncertainties arising from fluctuating exchange rates and to maintain financial stability and competitiveness.

2.1.12Rate of Return:

The return on a security refers to the total gain or loss to the Investor over a given period-say one year. Rate of return is calculated as a percentage of initial investment. In the case of equity shares, the return consists of dividends and capital gains, resulting from an increase in market value.

TYPES OF RISK

The following are the important types of risk

1. Capital Risk: The risk of in the price of a incurring a capital loss due to the fall security is known as capital risk. Investment in equity shares carries this type of risk.

2. Income Risk: Income risk is the risk of variation in return from a security. For available instance, dividends one quantity and preference shares may vary from year to year.

3. Default Risk: The chance of default by the company in the payment of interest or the repayment of principal is called default risk. It also includes the chance of losing paid up capital and principal (in the case of loans and debentures) in-case of winding up of the company. Default risk is also called financial risk or bank risk.

4. Liquidity Risk: It is associated with the secondary market. A security which can be bought or sold easily without significant price concession is considered liquid. The greater the uncertainty about the time and price of selling, the greater is the liquidity risk.

Risk and Return on a Single Security

Risk and return may be explained with reference to a single security or a portfolio of securities.

Rate of Return

The return on a security refers to the total gain or loss to the investor over a given period-say one year. Rate of return is calculated as a percentage of initial investment.

In the case of equity shares, the return consists of dividends and capital gains, resulting from an increase in market value.

Variability of Rates of return

The annual rates of return on equity shares may show wide fluctuations. These fluctuations are caused by volatile changes in the share market. The changes in dividend also contribute to the variability of rates of return on shares.

Variability may be defined as the degree of deviations of individual rates from the average rate of return. Standard deviation and variance (the square of standard deviation) are useful tools for measuring the variability of rates of return.

2.1.12 PORTFOLIO INVESTMENT

It is quite risky for an investor to invest his entire wealth in a single security. Hence it is advisable to invest in a number of securities or portfolio, A portfolio is a combination of two or more individual securities. For example, Mr. J holds shares in Reliance, Infosys, Larsen and Toubro. Hindustan Lever, ITC, Tata steel and Wipro. His collective holding is referred to as portfolio. A well-diversified portfolio helps to reduce the risk of an investor. When an investor holds a diversified portfolio, he is interested in the risk and return of the portfolio (group of securities) rather than that of individual securities.

Portfolio Return: Two Security Case

A portfolio is a combination of securities. The return of a portfolio is the weighted average of the returns of the individual securities. The weights are the proportion of each security in the total investment. Changing the proportion of investment in each security can change the expected return on a portfolio.

The following illustration shows the calculation of the returns of a portfolio, which includes two securities A and B.

MEASURING PORTFOLIO RISK

The risk of a portfolio can be measured by standard deviation or variance. However, the portfolio standard deviation is influenced by the association of movement of return of two securities. Hence, covariance of returns of securities, which measures their co-movement is relevant.

Relationship between Risk and Return:

From the foregoing discussion the following points emerge.

1. Returns from securities are not certain or fixed. They are uncertain and vary from expected returns. Hence securities are risky.

2. The risk of a security is generally measured by standard deviation.

3. The total risk consists of two parts:

   a) Unique risk and

   b) Market risk

4. Unique risk arises due to factors specific to the company (or security). It can be reduced by diversification of the portfolio.

5. The market risk arises due to general factors which affect all securities. Hence, it cannot be reduced.

6. A fully diversified portfolio does not carry any unique risk. It has only market risk.

7. The market risk in such a case is measured by Beta (B) Beta refers to the sensitivity of a security to the general market movements. In other words, it measures the market related risk of a security.

8. Beta of a particular security shows the percentage change in the security's return for one percentage change in the market return.

A beta of 1 means that the security is as risky as the market. A beta value of less than 1 implies that the security is less risky than the market. Beta greater than 1 means that the security is more risk than the market.

Glossary:

1. **Risk Management:** The process of identifying, assessing, and prioritizing risks followed by coordinated efforts to minimize, monitor, and control the probability or impact of unfortunate events.

2. **Risk Assessment**: The process of evaluating potential risks, their likelihood, and potential consequences.

3. **Risk Mitigation:** Strategies and actions taken to reduce the impact or probability of risks.

4. **Risk Appetite:** The level of risk an organization is willing to accept or tolerate in pursuit of its objectives.

5. **Risk Tolerance:** The degree of variability in investment returns that an individual or organization is willing to withstand.

6. **Risk Avoidance:** A strategy where an organization chooses not to engage in activities that carry certain risks.

7. **Risk Transfer:** Shifting the financial consequences of a risk to another party, often through insurance or outsourcing.

8. **Risk Monitoring:** Continuously tracking identified risks and evaluating the effectiveness of risk mitigation strategies.

9. **Operational Risk:** Risks arising from internal processes, people, systems, or external events.

10. **Market Risk:** The risk of losses in positions arising from movements in market prices.

11. **Credit Risk:** The risk of loss from a borrower failing to repay a loan or meet contractual obligations.

12. **Liquidity Risk:** The risk that an organization may not be able to meet its short-term financial obligations

Assessment test:

1.Define risk described the types of risk.

2.Illustrate the computation of the expected return on a security.

3. Explain how the risk of a security can be calculated.

4. What is portfolio? How was the written calculated on a portfolio of a securities

5. Explain systematic risk and systematic risk

6. Distinguish between unique cricket and market risk.

7. Explain the relationship between risk and return.

8. Write notes on CAPM.

Unit 3

Start-Up Financing and Leasing

3.1.1 Introduction to Start-up Financing:

Start-up financing is a critical component in the journey of transforming a business idea into a successful enterprise. The availability and management of financial resources significantly influence the potential for growth, innovation, and sustainability of a start-up. Understanding the various forms and stages of financing is essential for entrepreneurs to effectively strategize and secure the necessary funds.

3.1.2 Meaning of Start-up Finance

Start-up finance refers to the capital required to initiate, operate, and expand a new business venture. It encompasses the methods, sources, and processes through which start-up acquire funds to cover initial expenses, ongoing operations, and growth initiatives. These financial resources are pivotal for product development, market entry, team building, and scaling operations.

Start-up financing involves a blend of funding options, including equity, debt, and alternative financing methods, each with its own implications for ownership, control, and repayment.

Objectives:

1. To Minimizing Equity Dilution

2. To Managing Cash Flow

3. To Scaling the Business

4. To conserving Capital

5. To reducing Risk

6. To Flexibility

7. To access to Latest Technology

8. To Tax Benefits

3.1.2 Definition of Start-up Finance :

Start-up finance is the process of securing the financial resources needed to establish, sustain, and grow a new business venture. It involves various stages of capital raising, ranging from personal savings and seed investments to larger rounds of funding from venture capitalists or loans from financial institutions. The aim is to provide the start-up with the necessary funds to develop its product or service, penetrate the market, and achieve long-term viability and profitability.

Key Elements of Start-up Finance:

1. Capital Requirements:

- The amount of money needed at different stages of the start-up lifecycle, including initial setup, product development, marketing, and expansion.

2. Sources of Funding:

- The various avenues from which start-up can secure funding, such as personal savings, angel investors, venture capital, bank loans, and crowdfunding.

3. Financing Stages:

- Different phases of financing that correspond to the start-up growth stages, including pre-seed, seed, Series A, Series B, and beyond.

4.Investment Instruments:

- The financial tools and agreements used to structure the funding, such as equity shares, convertible notes, loans, and grants.

5.Valuation:

The process of determining the worth of the start-up, which influences investment terms and ownership percentages.

6.Risk and Return:

- The balance between the potential financial returns for investors and the risks associated with investing in early-stage companies.

3.1.3 Importance of Start-up Finance:

Business Initiation: Provides the necessary funds to turn an idea into a tangible business entity.

Growth and Scaling: Enables the start-up to expand operations, enter new markets, and increase market share.

Innovation: Supports research and development efforts to create innovative products and services.

Sustainability: Ensures the start-up has the financial resources to survive initial losses and achieve long-term profitability.

3.1.3 Objectives of Start-Up Finance:

1. **Seed and Early-Stage Funding**: Provide the necessary capital to cover initial costs such as product development, market research, and initial marketing efforts.

2. **Growth and Expansion**: Facilitate scaling operations, hiring staff, expanding into new markets, and increasing production capacity.

3. **Innovation and Development**: Fund research and development activities to innovate or improve products and services.

4. **Operational Stability**: Ensure smooth business operations by covering operational costs until the start-up becomes profitable.

5. **Competitive Edge**: Enable start-ups to quickly adapt to market changes and take advantage of emerging opportunities.

3.1.4 Advantages of Start-up Finance

1. Access to Capital: Provides the necessary funds that are often not available through traditional banking routes, especially for businesses without a credit history.

2. Growth Acceleration: Allows for faster growth and market penetration by providing the financial resources needed to scale operations quickly.

3.Expertise and Mentorship: Investors often bring valuable industry experience, mentorship, and networks that can help guide the start-up to success.

4.Risk Sharing: Distributes the financial risk between the start-up founders and investors, reducing the burden on individual entrepreneurs.

5. Innovation Incentive: Encourages innovation and creative solutions by providing the financial backing needed to experiment and take risks.

6. Enhanced Credibility: Attracting investors can enhance the start-up's credibility, making it easier to secure additional funding and partnerships.

Disadvantages of Start-up Finance

1. Equity Dilution: Founders may need to give up a significant portion of their equity to secure funding, which can reduce their control over the business.

2. High Expectations: Investors often have high expectations for growth and profitability, which can lead to pressure and stress on the start-up team.

3. Loss of Control: Investors may want a say in business decisions, which can lead to potential conflicts and loss of autonomy for the founders.

4. Debt Obligations: If financing is obtained through loans or debt instruments, the start-up is obligated to repay the debt, which can be challenging if the business does not generate sufficient revenue.

5. Short-term Focus: Investors may focus on short-term returns rather than the long-term vision, potentially leading to strategic decisions that do not align with the founder's goals.

6.Time and Effort: Securing finance can be a time-consuming process, requiring significant effort in pitching, negotiations, and due diligence.

4. 8 Sources of Start-Up Financing

Putting all your eggs in one basket is never a good business strategy. When you diversify your financing sources, you also have a better chance of getting the appropriate financing that meets your specific needs. Keep in mind that bankers don't see themselves as your sole source of funds. And showing that you've sought or used various financing alternatives demonstrates to lenders that you're a proactive entrepreneur.

Whether you opt for a bank loan, an angel investor, a government grant or a business incubator each of these sources has specific demands.

Here's an overview of typical financing sources:

1. Personal investment: When borrowing, you invest some of your own money in either in the form of cash or collateral on your assets. This proves to your banker that you have a long-term commitment to your project.

2.Love money: This is money loaned by a spouse, parents, family or friends. A banker considers this as "patient capital", which is money that will be repaid later as your business profits increases. When borrowing love money, you should be aware that: family and friends rarely have much capital. They may want to have equity in your business—be sure you don't give this away.

A business relationship with family or friends: should never be taken lightly

1. Venture capital

Venture capitalists take an equity position in the company to help it carry out a promising but higher risk project. This involves giving up some ownership or equity in your business to an external party. Venture

capitalists also expect a healthy return on their investment, often generated when the business starts selling shares to the public. Be sure to look for investors who bring relevant experience and knowledge to your business.

BDC Gas a venture capital team that supports leading edge companies strategically positioned in a promising market. Like most other venture capital companies, it gets involved in startup with high growth potential, preferring to focus on major intervention} when a company needs a large amount of financing to get established in its market.

2. Angels:

Angels are generally wealthy individuals or retired company executives who invest directly in small firms owned by others. They are often leaders in their own field who not only contribute their experience and network of contacts but also their technical and/or management knowledge.

Angels tend to finance the early stages of the business with investments in the order of $25,000 to ₴ 100,000. Institutional venture capitalists prefer larger investments, in the order of $1! million.

In return for risking their money, they reserve the right to supervise the company's management practices. In concrete terms, this often involves a seat on the board of directors and an: assurance of transparency.

Angels tend to keep a low profile. To meet them, you have to contact specialized associations or search websites on angels. The National Angel Capital Organization, the Canadian International Angel Investors and Agnes Québec can put entrepreneurs in touch with angels.

3. Crowdfunding:

Crowd funding is a form of fundraising where a business asks the public for a contribution, usually in exchange for equity in the company.

It usually entails a private company asking large numbers of people for small contributions. This differs from the more conventional practice of raising money through angel investors or venture capitalists, where a handful of actors inject larger sums into your business.

In return for investing in your business, supporters will receive equity, albeit with less liquidity than what do would get with public stocks. There are also more relaxed rules governing crowdfunding than IPOs.

There are various forms of crowd funding, including:

Equity crowd funding, where, in exchange for their money, investors receive shares in a company or the right to a portion of revenues or profits from a specific product.
*Debt crowdfunding, where investors lend their money to a company at relatively high interest rates thus mitigating their overall lending risk by spreading a large amount of money in small increments across a large number of loans.
*Donation/rewards-based crowdfunding, where a company sets a fundraising target and asks for donations—in exchange for some kind of token or receipt of the eventual product or service to be developed.

Business Incubators: Business incubators (or "accelerators") generally focus on the high-tech sector providing support for new businesses in various stages of development. However, they are also local economic development incubators, which arefocused on areas such as job creation, revitalization and hosting and sharing services

- Generally, the incubation phase can last up to two years. Once the product is ready, the business usually leaves the incubator's premises to enter its industrial production phase and is on its own.
- Businesses that receive this kind of support often operate within state-of-the-art sectors such as biotechnology, information technology, multimedia, or industrial technology. Businesses that were supported by an incubator have a better success rate over five years.

5. Grants and subsidies

It's not always easy to bring innovations to light so government agencies provide aid Canadian companies. You may have access to this funding to help cover expenses, such as research and development, marketing, salaries, equipment and productivity improvement.

Technically, a grant is a sum of money conditionally given to your business that you don't have to repay. However, you're bound legally to use it under the terms of the grant, or otherwise you may be asked to repay it. As well, once you are granted money from one government source, it is not uncommon to receive further funding from the source if you meet program requirements.

Criteria:

Getting grants can be tough. There may be strong competition and the criteria for awards are often stringent. Generally, most grants require you to match the funds you are being rewarded and this amount varies greatly, depending on the granter. For example, a research grant may require you to find only 40% of the total cost.

6. Loans:

Loans are the most commonly used source of funding for small and medium size business. Consider the fact that all lenders offer different advantages, whether it's personalized service or customized repayment. It's a good idea to shop around and find the lender that meets your specific needs. In general, start-ups have a harder time accessing loans that do established Entrepreneurs with a solid business plan and a good credit rating are more likely to be able to access loans.

3.1.5 Bootstrapping: Bootstrapping is building a business without the help of outside capital. A business that uses bootstrapping is characterized by a high dependence on internal sources of financing, credit cards, mortgages, and loans. In other words, bootstrapping is characterized by limited sources of financing.

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The main reasons for taking bootstrapping as a business model are a lack of experience in formulating business plans, as well as a lack of skills for product promotion and relationships with suppliers.

Keep in mind the following recommendations: reinvest net profit to scale the business, a business idea (product/service) should solve someone's problem, and attract a mentor or any person who is successful in that and who will give good advice.

Stages of Bootstrapping:

There are a few stages that a bootstrapped company goes through

1. Beginner stage:

The beginner stage starts with some saved money or borrowed/invested money coming from friends.

For example, the founder continues to work on their main job and, at the same time, starts a business.

2. Customer-funded stage: When money from customers/clients is used to keep the business operating and to fund its growth.

3. Credit stage: The credit stage involves the entrepreneur focusing on funding specific activities, such as hiring staff upgrading equipment, etc. At the credit stage, the business takes out loans or tries to find venture capital for expansion.

Advantages of Bootstrapping

1. Entrepreneur gets a wealth of experience while risking his own money only. It means that if the business fails, he will not be forced to pay off loans or other borrowed funds. If the project is successful, the business owner will save capital and will be able to attract investors. So, the business will grow up to a new level.

2. The "bootstrapper" reserves the right to all developments, as well as ideas that were used during the development of the business.
3. Lack of initial funding makes entrepreneurs look for unusual ways to solve problems, create new offers on the market, and show creative thinking.
4. Independence from investor opinions. An entrepreneur can make all the decisions independently, so he is able to create something unique, realize a dream, test strength, and be independent of the investors' instructions.
5. Attracting external funding is challenging and can be a very stressful and time-consuming task. Bootstrapping allows an entrepreneur to fully focus on the key aspects of the business, such as sales, product development, etc.
6. Creating the financial foundations of business by an entrepreneur is a huge attraction for future investments. Investors, such as private individuals, special funds, or venture capital firms, are much more confident in financing businesses that are already secured and have demonstrated the promises and commitment of the owners.
7. Providing value to people. Business is all about delivering a particular value through a product or service.

Disadvantages of Bootstrapping: Business growth can be difficult if demand exceeds the company's ability to offer or produce services or products.

1. The entrepreneur takes on almost all financial risks instead of sharing them with investors who invest in supporting the company's growth.

2. Limited capital and lack of investment: In the context of the specifics of bootstrapping, the attraction of large investments and fully implementing one's ideas can be extremely hard.
3. Stress problems: The ability to handle stressful situations is regularly checked when unexpected problems arise.

Bootstrapping Strategy:

Below are some proven methods that will help an entrepreneur in the early stages of the bootstrapped startup:

Reinvest net profit Create a business plan. Planning is necessary, and it will help the owner organize things and understand the vectors of movement.

A business idea (product/service) should solve someone's problem. Other-wise there is neither product nor a target audience.

Attract a mentor or any person who is successful in that business and who will give useful advice.

Use the most of networking opportunities and communicate with a network of! personal contacts. In a developed personal network (or a network of friends and relatives), there may be journalists who will write about you or graphic designers who will make a logo or a minimalistic but trendy website out of friendship.

3.1.5 Angel Investor

Angel investors, unlike venture capitalists, use their own net worth. They are wealthy private investors who am to finance startup business ventures in exchange for equity. With their patience and hard work, they deal with entrepreneurs and offer small dollar amounts for a more extended period of time.

However, they also consider an exit tactic to earn a profit on their own through an acquisition or public offering. Another specialty of these investors is to fund businesses in different industries.

Understanding Angel Investors:

If you wish to understand the concept of angel investment, you first need to understand who an angel investor is. Such an investor is a wealthy private investor who focuses on financing small businesses in exchange for equity. The best part of working with an angel investor is they do not use an investment fund like the venture capital firms. Instead, they use their net worth.

Origins of Angel Investors

Angelis a term that originated from Broadway theatre. That was a time when wealthy people gave money to theatrical productions. Angel Investor was initially used by William Wetzel of the University of New Hampshire. Wetzel is the founder of the centre for venture research. Wetzel completed the education about how entrepreneurs can gather capital. That is how the term and purpose of angel investment came into being.

At the initial phase of the startup, business angels act as the bridge between self-funding and sourcing capital. In maximum circumstances, business angels invest in familiar industries. Theie trends make them an outstanding networking resource for small businesses. Angels remain connected to startup funders, and they refer them to other investors as your business expands.

Who Can Be an Angel Investor?

An individual who has a focus on financial capital and aims to offer the right funding for startups may become an angel investor. Maximum entrepreneurs prefer them for small businesses or startups over

any other predatory sources of funding since they are less intrusive the purpose of an angel investor is to invest between Rs. 5 lakhs and Rs. 2 crores based on the

company's size. But did you know? At different times, they may not prefer investing over 5-10% of the total portfolio amount in one company.

Type of angel investors: At times, angel investors in India may wish to acquire an accredited investment status: But if you consider SEBI, an accredited investor might be an individual having a total worth of Rs. 7.5 crores having a liquid worth of Rs. 3.75 crores on individuals with income of Rs. 2 crores. Note that they also have accreditation by a credible agency. Note that not always an angel investor turns Out to be an investor. The only requirement one needs to become an angel investor is an interest in offering capital for startups. So, an angel investor can be anyone from your family, wealthy individuals, groups, or even crowdfunding. Let's discover more in the following points:

A Family Member or Friend: In start-up funding, an angel investor turns out to be the entrepreneur's friend or family member. It's a common source of funding for startups and often the first point of consideration for startups regarding funding. e Groups: Did you know multiple angel investors in India operate as part of one group? It increases their potential for a high amount of investment.

Wealthy individuals: Based on the business, people have a higher net worth than other individuals. Some of the angel investors examples of wealthy individuals include engineers, successful business individuals, doctors, and more. They invest a significant amount of money in exchange for equity in that business.

Crowdfunding: The next type is crowdfunding — a sort of funding that is gaining immense traction these days. What it does is allows larger groups of individuals to invest a small amount of money to support the company and assist it in meeting the funding objectives.

Education qualification of an Angel Investor

An individual does not need any educational qualification to become a company's angel investor. They come from different backgrounds, such as finance, business, engineering, medicine, and more. Angel investors are highly experienced individuals who have knowledge about business, startups, equity investments, and entrepreneurship. With their understanding of the field, they can take risks and invest their money in a small startup.

Role of an angel investor

The prime purpose of these investors is to offer capital for startups at an early stage in, convertible or exchange debt or even equity ownership. Most investors invest their money in companies that work in the same domains where they have experience and expertise. Their prime purpose is to offer strategic inputs and accelerate the ultimate growth. There is to be active shareholders in the annual general company meetings and events. In return, they receive considerable equity ownership.

Sources of Funding

As the source of funding is considered, unlike venture capitalists, angel investors use their money. They invest their money in the strategically managed fund. Angel investors in India represent individuals, but the entity offering the fund might be an LLC, investment fund, trust, business, etc.

Investment Profile

Startups that fail during an early stage tend to lose investments. That is where an angel investor comes into being. They look for opportunities for an exit strategy, IPOs or initial public offerings, and acquisitions. Considering the internal rate of return for any successful portfolio for the investors is around 22%.

While investors might feel this might be excellent, entrepreneurs may think it to be quite expensive, especially for businesses that are at an early stage. Since inexpensive financing options like banks are not always available for these ventures, angel investments turn out to be a perfect solution for entrepreneurs struggling during the initial stage of business.

Over the last couple of years, angel investing has emerged as a popular concept. It has become a notable funding source for startups these days. And in return, it has also fostered innovations, thereby promoting economic growth.

Advantages and Disadvantages of Angel Investment for a Business

Narrated below are the benefits and downsides of angel investment for any business:

Advantages of Angel Investors:

1. Connections: Angel investors in India are well-connected in a business as they connect the entrepreneur to new clients, business partners, and funding options.

2. Expert Investors: With angel investment, you can have extensive sectoral knowledge. They may be business owners with expertise and experience in the same industry and provide yeti with guidance for success.

3. Extended Support: Angel investors must be encouraged by the position to contribute the maximum that they can. In addition, adding their name to the business profile may raise funding.

4. Big bankroll: If the small firm needs more money, it may consult the angel investor for additional contribution. Even when an establishment cannot secure finance from the bank or other financial agency, they may get support from angel investors.

Disadvantages of Angel Investors:

So, after explaining the advantages, here's a list of disadvantages in the below-offered points:

1. Shared Authority: A few angel investors in India may demand a huge ownership stake. So, you may end up selling more than you ever intended to. As a result, it dilutes your ownership and causes hindrances in future business fund-raising.

2. Tune and Effort: Always stay prepared for the long and procedure since you must produce paperwork, which includes income statements, cash flow statements, balance sheets, bank statements, and more.

3.Possibly being rejected: Even when you believe that your company has exceptional growth potential or a revolutionary product, funding may carry some risk.

4.Possibly Ineffective: Hiring someone without conducting due diligence may bring financial consequences. So, you need to request references from your investor. It is better to speak to startups with whom they have worked previously for funding. An angel investor must be devoted and hardworking to work with you besides aiming to gain the money back solely. Such a type of professional would lead to success.

Tips for Start-ups Before Approaching an Angel Investment

Are you a budding entrepreneur who is thinking of hiring an angel investor? Here's what you must perform:

1. Have a Business Plan:

Before you get funds from a professional or hire one, please create a strategic business tactic. Whether you wish to get financing solutions from the lender or investor, a business strategy helps you accomplish success. After all, an effective business strategy would include financial projections, budgeting, strategies for product marketing, and specifically considering the business's target market.

2. Be Specific About What the Investor Is Offering:

Specificity associated with writing the services of the investor will ensure business success. Note that multiple angel investors contribute their expertise and time to startups where they invest. From mentorship to strategic advice, the investor can offer great benefits.

3. Establish Roles:

Developing a comprehensive understanding of the roles is important. Your angel investor might have their ideas for operating the business. Duc to this, they might want to have clarity about each individual's role in the business. So, the next thing you must perform is to establish roles that ultimately mitigate the risks of conflicts at a structure stage of business.

3.1.6 Venture capital fund

What is a Venture Capital Fund?

A venture capital fund is a type of investment fund that invests in early-stage startup companies that offer a high return potential but also come with a high degree of risk. The fund is managed by a venture capital firm, and the investors are usually institutions or high net worth

individuals. Below is a basic overview of a typical venture capital fund structure:

Types of Venture Capital Funds

Venture Capital Funds. 3 main types are early-stage financing, expansion financing, and acquisition buy out financing.

1. Early-stage financing:

Tiere are 3 sub-categories in early-stage financing. These are seed financing, startup financing, and first stage financing. Seed financing is a small sum given to the entrepreneur to serve the purpose of qualifying for a startup loan. Startup financing is when the companies receive funds to complete the development of its services and products. When companies need capital to begin the business activities in full swing, they need first stage financing.

2. Expansion financing

Expansion financing is classified into second stage financing, bridge financing, and third stage financing. The second stage and third stage financing are given to companies so that they can start their expansion process in a major way. Bridge financing is offered to companies in the form of monetary support when they employ Initial Public Offerings (IPO) as a principal business strategy.

3. Acquisition or buyout financing

Acquisition finance and leveraged buyout financing are the categories falling under acquisition or buyout financing. When a company needs funds to acquire another company or parts of a company, acquisition financing comes to aid. Leveraged buyout financing is required when a management group of a company wishes to acquire another company's particular product

Features of Venture Capital Funds:

- The main focus of VCFs is on early-stage investment but sometimes, it can also involve expansion stage financing.
- Often, equity stakes of the enterprises or companies that are funded by the VCFs are purchased by the VCFs.
- Along with the capital, VCFs also bring with them the knowledge and experts of the investors which will help the company make further advancements.
- Sometimes the VCFs also help in developing new products/services and acquire latest technologies that will help the company to improve efficiency.
- VCFs hold the authority to influence the decisions of the enterprises they are investing in.
- To mitigate the risks involved in funding new projects, VCFs invest in a variety of young startups with a belief that at least one firm will achieve massive growth and reward them with a large payout.

Disadvantages of Venture Capital Funds

Though venture capital funds come with an array of benefits, there are also a few disadvantages that they offer. Some of them are given below:

- When investors fund a startup or a small enterprise, they partly become the owners of the enterprise which means that they have a control in the decision-making process. This results in the founders losing their control and autonomy.
- Ihe, entire process of venture capital financing is lengthy and complex.
- This form of financing is very uncertain and benefits can be realised only in a long run.

Venture Capitalist	Angel Investors
They are private firms investing capital pooled from other people	They are often the successful individuals who invest their own money
Invests at a later stage, particularly when the establishment has become profitable	They invest at an early stage of the business (more specifically at a pre-revenue or ideation stage)
fie investment amount is higher here	The investment amount is lower than venture capitalist

3.1.7 Leasing

Leasing is the process by which a firm can obtain the use of certain fixed assets for which it must make a series of contractual, periodic, tax-deductible payments. A lease is a contract that enables a lessee to secure the use of the tangible property for a specified period by making payments to the owner

Advantages of Lease Financing

The advantages from the viewpoint of the lessee

1. **Saving of Capital:** Leasing covers the full cost of the equipment used in the business by providing 100% finance. lessee is not to provide or pay any margin money as there is no down payment. In this way, the saving in capital or financial resources can be used for other productive purposes, e.g., the purchase of inventories.

2. **Flexibility and Convenience:** The lease agreement can be tailor-made in respect of lease period and lease rentals according to the convenience and requirements of all lessees.
3. **Planning Cash Flows:** Leasing enables the lessee to plan its cash flows properly. The rentals can be paid out of the cash coming into the business from the use of the same assets.
4. **Improvement in Liquidity:** Leasing enables the lessee to improve its liquidity position by adopting the sale and leaseback technique.
5. **Shifting of Risk of Obsolescence:** The lessee can shift the risk upon the lessor by acquiring the use of assets rather than buying the asset.
6. **Maintenance and Specialized Services:** In the case of a special kind of lease' arrangement, the lessee can avail specialized services of the lessor for maintenance of asset leased. Although lesser charges higher rentals for providing such services, leases see overall administrative and service costs are reduced because of specialized services of the lessor.
7. **Off-the-Balance-Sheet-Financing:** Leasing provides "off-balance-sheet" financing for the lessee in that the lease is recorded neither as an asset nor as a liability.

Disadvantages of leasing financing:

1. **Higher Cost:** The lease rental includes a margin for the lessor as also the cost of risk of obsolescence; it is, thus, regarded as a form of financing at a higher cost.
2. **Risk:** Risk of being deprived of the use of assets in case the leasing company winds up.
3. **No Alteration in Asset:** Lessee cannot make changes in assets as per his requirement.

4. **Penalties On Termination of Lease:** The lessee has to pay penalties in case he has to terminate the lease before the expiry lease period.

Types of leasing

Leasing takes different types, which are given below;

Based on Nature.

I. Operating lease

2. Financial lease,

Based on the Method of Lease.

1. Direct lease.
2. Sale & Leaseback.
3. Leverage lease

Operating Lease: An operating lease is a cancel able contractual agreement whereby the lessee agrees to make periodic payments to the lessor, often for 5 or fewer years, to obtain an asset set's services. According to the International Accounting Standards (IAS-17), an operating lease is one that is not a finance lease.

Financial Lease: A financial (or capital) lease is a longer-term lease than an operating lease that is non-cancel able and obligates the lessee to make payments for the use of an asset over a predetermined period of time. According to the International Accounting Standard (IAS-17), in a financial lease, the lessor transfer to the lessee substantially all the risks and rewards identical to the ownerships of the asset whether or not the title is eventually

transferred. Direct Lease: Under direct leasing, a firm acquires the right to use an asset from the manufacture directly. The ownership of the asset leased out remains with the manufacture itself. Sale & Leaseback: Under the sale & leaseback arrangement, the firm sells an asset that it owns and then leases to the same asset back from the buyer. This way, the lessee gets the assets for use, and at the same time, it gets cash.

Leveraged Lease: Leveraged lease is the same as the direct lease, except that a third party, the lender, is involved in addition to the lessee & lessor. The lender partly finances the purchase of the asset to be leased; the lessor turns to be a borrower

Financial evaluation from the perspective of lessor and lessee.

Lease Financing: As you have observed, Block-3 is intended to discuss diverse sources of long-term financing. The proceeding two units (viz 8 and 9) have focused on the significance of equity, preference and debenture capitals as sources of long-term finance. The capacity of a firm too long-term finance depends on the conditions prevailing in the capital market. It is, therefore, nothing but imminent to survey the developments in the primary and secondary markets. Such an attempt has already been made.

In the recent years many newer forms of long-term financing are gaining popularity both in the developed and developing economics. Among these, leasing, hire-purchasing and venture capital financing are the most popular modes in the recent past. In this unit, we shall discuss the significance and economics of lease financing as a part of the sources of long-term financing.

Concept of Lease Financing

A lease is a contract whereby the owner of the asset (know as the 'lessor') grants to another party (known as the 'lessee') the exclusive

right to use the asset, usually for an agreed period of time, in return for the payment of rent.

thus, a lease transaction consists of two parties, the lessor and the lessee. An obvious advantage to the lessee is the use of an asset without having to buy it. For this advantage, the lessee has to pay periodic lease payments, usually monthly or quarterly. A typical lease agreement may contain the following provisions

Duration: The lease contract may be for any period, from a few hours to the entire expected economic life of the asset.

Lease rent: As the lessee gets the exclusive right to use the asset during the lease period, he pays, in return, lease rents in instalments. If the lease period is the same as the life period of the asset rents are set to enable the lessor to recover the cost of asset plus a fair return on investment over the period of the lease.

Alternatives at termination: In the lease agreement, option may be given to lessee to renew the lease for another lease period or to purchase the asset at expiration. If the lessee does not exercise its option, the lessor takes possession of the asset and is entitled to, if any, residual value associated with it.

Duties of the parties as to taxes, insurance and maintenance: Either the lessee or the lessor may bear these obligations or these may be divided between lessee and lessor according to the terms of the agreement.

Early termination: lease agreement may grant the right to terminate the contract on payment of a penalty.

Distinction Between Leasing and Financing

As against leasing, hire purchase involves the purchase of an asset on the understanding that the purchase (called the hirer) will pay in equal periodical instalments spread over a length of time. Leasing and hire purchase have emerged as a supplementary source of intermediate long-term finance. They are provided mainly by non-banking financial companies, financial institutions and other organizations.

Lease financing resembles hire purchase in certain ways. Both are similar so far as the use of the asset by the hirer or the lessee is concerned. In both the cases, the right to use the equipment is transferred to the hirer, or the lessee.

In case of leasing, the user of the asset (the lessee) is not the owner of the asset. Hence, depreciation on asset cannot be claimed by the lessee as a deduction from taxable income. As against this, the hire purchase capitalizes the asset bought under the hire purchase contract although the ownership does not pass on to him until the last instalment is paid. Hire purchaser charges depreciation regularly to profit and loss account. The liability for future hire purchase instalments are shown separately in the balance sheet,

Under leasing, the entire lease rentals represent a 'hire charge' and can there-fore be treated as expenses and hence tax deductible. Under hire purchase, part of the instalment represents capital outlay and the other part is interest on loan. The pan representing capital outlay is not an expense, but the interest on loan is considered a revenue expenditure and hence is tax deductible.

In the case of Hire Purchase, the hirer is deemed to be the owner of the assets; whereas in leasing, the lessor is the owner. The asset figures as part of the ross block of Assets in the books of hirer; who charges depreciation thereon. Because of this different in tax treatment, the lease charges are generally lower than Éire purchase charges. Hire purchase is generally extended for transport vehicles; whereas leasing is usually

granted for industrial equipment. From the point of view of the lessee (hirer), the following differences may be noted:

Forms of Lease Finance

Generally, leases are classified into (i) Financial Lease and (ii) Operating Lease. However, other types of leases are also prevalent.

1. Financial Lease

A financial lease is also known by various names such as full payment lease, capital lease, long-term lease, etc. In this type of lease, the lease period is generally equal to the expected economic life of the equipment. One of the important features of financial lease is that the contract is non-cancellable. The lessee is obligated to pay lease rents until thy lease period expires. The lessee uses the equipment exclusively, maintains it, insures and avails of the after sales service if any. The lessee pays lease rentals on a periodic basis over the period of lease.

In financial lease, the lessee may select the equipment, settle the price of terms of the sale: and an-angle with a leasing company to buy it. This type of lease transfers substantially all the risk and rewards incident to ownership from the lessor to the lessee.

Contractual period in a financial lease can be split up into two or three periods over the life of the equipment. The lease during the first period IS called the 'Primary Lease', which is for a pre-determined period. During this period the leasing company generally recovers the complete cost of the equipment and also interest on the money invested. The primary lease period may be followed by a 'Secondary Lease' period during which the lease rentals stand substantially reduced. This period may be followed by a perpetual lease on token rental for the remaining period of the life of the asset.

Under a financial lease, the rate of lease rental would be fixed, based on the kind of financial lease taken, the period of lease,

periodicity of rental payment and the rate of depreciation and other tax benefits and incentives available.

Like other countries, financial leases are popular in India and high cost equipment are leased under it. Locomotives, earthmoving equipment, office equipment, plant and machinery, printing machinery, textile machinery, machine tools, etc. are the equipment being leased under it.

2. Operating Lease

An operating lease is also known as short-term, service or maintenance lease. In this type of lease, the lease period is generally less than the full expected economic life of tile equipment. Unlike financial lease, the contract is cancellable with proper prior notice.

The risks and rewards incidental to ownership are retained with the lessor The lessor is expected to maintain the assets in good working condition. The lessor does not recover its investment during the first lease period. The lease period is usually for a short period and may stretch from a day to about 5 years, depending on the asset being leased, its frequency of use and other such factors. The shorter the lease contract period, the higher will be the lease rentals.

Operating leases are most suitable for equipment which are highly sensitive to obsolescence. This type of leases are most suitable and popular for computers, copy machines, electronic equipment, automobiles and other office equipment.

Finance lease and operating lease may be differentiated as follows:

Basis	Finance Lease	Operating lease
1. Life of contract	Approximates the economic life of the asset	Shorter than the economic life of the assets
2. Maintenance	Provided by the lessee or covered by a separate agreement	Provided by the lessor and included in the lease rentals
3. Lease Payments	Return the cost of the assets and allow a profit to the lessor	Not sufficient to cover the cost of the asset
4. Cancellation	May be cancelled only if both the lessor and the lessee agree	May be cancelled before expiring date.

It is important to note that the finance lease and operating lease differ not only on the basis of the length of the contract, but also with respect to the period of lease as against, the economic life of the asset. Although the differences between the finance and operating lease are obvious, lease arrangements may not fit neatly into any of these two. They may have the features of both the types and may be called a combination lease.

Other forms of Lease Financing

The other important form of lease financing are:

1. Direct Leasing
2. Sale and Leaseback arrangement, and
3. Leveraged Leasing

These three forms are discussed in detail below.

1. Direct Leasing

Under direct leasing, a company acquires the use of an asset, it did not own previously. The' major types of lease are manufactures, finance companies, banks and independent leasing companies. For leasing arrangements involving all but manufacturers, the vendor sells the asset to the lessor, who, in turn, leases it to the lessee. A lessee firm may also lease an asset form the manufacturer.' A wide variety of direct leasing arrangements meet various needs of the firms.

2. Sale and Leaseback

Under this type of lease arrangement, a firm, that owns a given asset sells it LO the leasing company and gets it back on lease. usually the asset is sold at approximately its market value the firm (the lessee) received the sale price in cash and the economic use of the asset during the primary lease period. In turn it agrees to pay lease rents periodically and gives up title to the asset. Retail stores, office buildings, multipurpose industrial buildings are frequently financed by this method. Most of the "Sale and lease back" arrangement are on a net—net basis which means that the lessee pays all maintenance expenses, property taxes, insurance and lease payments. The agreement may allow the lessee to repurchase the property at the termination of the lease. Lessors engaged in sale and lease back arrangement include financial institutions, banks and independent leasing companies..

Avoidance of Risk of Ownership

One of the major reasons for acquiring an asset on lease is that the lease offers the advantage of placing the risk of obsolescence on the: shoulders of the owner. When a firm purchases machinery, it has to bear the risk that the machinery may become obsolete before the completion of its service life. However, this risk can be avoided by taking the machinery on lease. It is sometimes argued that this

reasoning may not always be valid because of the fact that leasing firms, who have specialized in the kind of equipment they own, are generally more knowledgeable than the lessee regarding the risk of obsolescence and accordingly will charge for bearing that risk. The risk factor will, therefore, be reflected in appreciably higher rental payments. This really means that the lessee pays for, and benefits the specialist's services but nevertheless avoids the risk of ownership.

Convenience

Leasing enables the lessee firm to make full use of the asset without making immediate payments of the purchase price which it would otherwise have been required to pay. In view of this firms experiencing dearth of funds can acquire assets more quickly under leasing arrangement than through buying.Lease financing is regarded as more convenient Conn of financing than debt financing as it relieves the firm a number of restrictive terms and conditions which are stipulated in bond indenture. Although lease contracts are tightening, there are still generally few restrictions on future operations and future indebtedness in a financial lease than in a loan.

Sustaining Borrowing Position

Leasing is said to be useful to a lessee firm in so far as it strengthens its borrowing capacity and thereby permits the firm to raise more debt capital than direct borrowing, given the firm existing equity base. Since the obligation created under the leasing arrangement does not appear as debt on the balance sheet, the firm's borrowing power remains intact are the lenders may extend more credit to such firm even after the lease is signed, than they would, if the asset were purchased and financed by debt; because both the asset and the debt incurred would be shown in the financial statement. Lenders may not fully appreciate the extent of

the lease created financial obligations and therefore, they may be more liberal in extending credit facilities.

Tax Advantage

Lease financing is considered as one of the tax planning devices employed to minimize tax liability. Leasing can provide the tax advantages to the lessee. When a company acquires an asset on lease, the full amount of the lease payments is deductible for tax purposes. Alternatively, if the company borrows and buys the same asset, it would be entitled to deduct depreciation changes and interest expenses incurred in its financing. Which of the two sets of deductions is more valuable to the lessee as a tax shield would, in fact, depend on their magnitude and timing. Usually, it is found that a lessee firm is benefited from lease if it can charge off the cost of an asset more rapidly through rental payments than through depreciation and interest changes.

Leasing, however, suffers forms certain limitations which might have serious financial implications. Let us briefly point-out these.

Many experts hold that leasing is only another form of debt financing and lies some-where in between scoured debt and unsecured debt. Ak such, in the long run, all the attendant and disadvantages of debt financing are bound to be associated with lease also, albeit in a disguised manner.

In some cases, leasing may prove to be costlier than a straight purchase through the conventional modes of equipment financeis would happen particularly in the case of leveraged leasing where the lessor is only a financial intermediary, who has obtained finance from bank or financial institution and has added to the cost his own profit. Another dis-advantages of leasing is that the lessee may be deprived of a substantial bonanza on account of appreciation in the value of assets at the end of the lease tenure, Further, in case of

the lessor's failure to honour his commitment to repay the loans raised by him from the bank/financial Institutions, the assets obtained by the lessee through lease may taken away by the bank/financial Institutions disrupting the lessee's production schedule.

Financial Evaluation of the lease

Any prospective lease must be evaluated by both the lessee and lessor. The lessee must determine whether leasing an asset will be less costly than buying it. Whereas the lessor must decide whether or not the lease will provide a reasonable rate of return. Since, this unit considers leasing as an alternative to financing, we shall evaluate the effect of lease decision from the point of view of lessee only.

As such, the decision of the lessee as to whether to take an equipment on essentially involves choosing between leasing and borrowing / buying. An economic evaluation of lease would thus call for comparison of the financial costs of the lease with the costs of borrowing necessary funds to purchase the assets. If the cost of the lease is found higher than the cost of borrowing, it would be in the interest of the company to borrow and buy the asset. The converse will hold true where cost of borrowing is higher than the cost of leasing.

A detailed, step by step, approach to leasing decision would involve the following:

1. Calculation of the loan payment schedule.
2. Calculation of saving from investment allowance
3. Calculation of after-tax effect of cash salvage value.
4. Calculation of the after-tax cost of owning

5. Calculation of the after-tax cost of leasing

6. Calculation of the present value of the cost of owing and cost of leasing.

7. Comparison of the present value of owning cost with present value of leasing cost company. At the same time, the leasing company will get much trouble since it has to bear the capital loss in case of obsolescence.

Cut Throat Competition

The immediate future of leasing companies in India is bleak, since many companies entered in field almost at the same time. It leads to cut throat competition and in the process lease rentals have come down too much uneconomic levels. It has been reported that the rate of interest is worked out to be 13 to 14 per cent which is very much below the average cost of capital and as such the survival of many companies is at stake. A buoyant market did not exist for all these companies in the segments they wished to operate, with rising competition, the major players are diversifying their activities to other activities.

Further, the leasing industry has been facing competition from the manufacturing sector. This segment _has been concentrating mostly in lease financing items where 100 per cent depreciation write off is available.

Lack of Qualified Personnel

The success or failure or any business depends on the qualifications and experience of its personnel and leasing business is not an exception. As the nature of leasing business is nothing but financing the capital equipment, the personnel working in these organizations must be well versed with all procedures like appraisal, judging,

integrity and capability of the borrowed party, legal matters recovery of rentals maintenance of account.

Leasing in India

Leasing activity was initiated in India in 1973, the first leasing company of India, named First Leasing Company of India Ltd. was set' up in that year by Farouk Irani, with industrialist A C Muthia. For several years, this company remained the only company in the country until 20th Century Finance Corporation was set up — this was around 1980.

By 1981, the trickle started and Shetty Investment and Finance, Jay-Bharat Credit and Investment, Motor and General Finance, and Sundaram Finance etc. joined the leasing game. The last three names, already involved with hire-purchase of commercial vehicles, were looking for a tax break and leasing seemed to be the ideal choice.

The industry entered the third stage in the growth phase in late 1982, when numerous financial institutions and commercial banks either started leasing or announced pians to do so, ICICI , prominent among financial institutions, entered tile industry in 1983 giving a boost to the concept of leasing. Thereafter, the trickle soon developed into flood, and leasing became the new gold mine. This was also the time when the profit-performance of the two doyen companies, First Leasing and 20th Century had been made public, which contained all the fascination for many more companies to join the industry. In the meantime, International Finance Corporation announced its decision to open four leasing joint ventures in India. To add to the leasing boom, the Finance Ministry announced strict measures for enlistment of investment companies on stock-exchanges, which made many investment companies to turn overnight into leasing companies.

As per RBI's records by 31stMarch, 1986, there were 339 equipment leasing companies in India whose leased assets totalled Rs. 2395.5 million. One can notice the surge in number

From merely 21 in 1980 to 339 in 6 years. There has been appreciable entry of first generation entrepreneurs into leasing, and in retrospect it is possible to say that specialized leasing firms have done better than diversified industrial groups opening a leasing division.

Another significant phase in the developed leasing in India was the Dahotr Committee's recommendations based on which the RBI framed guidelines on commercial bank funding to leasing companies. growth of leasing in India has distinctively been assisted by funding from banks and financial institutions.

Banks themselves were allowed to offer leasing facilities much later in 1994. However, even to date, commercial banking machinery has not been able to gear up to make any remarkable difference to the leasing scenario.

The post- liberalisation era has been witnessing the slow but sure increase in foreign investment into Indian leasing. Starting with GE Capital's entry, an increasing number of foreign-owned financial firms and banks are currently engaged or interested in leasing in India.

As per the data compiled by the Association of Leasing and Financial Services companies, the value of the leased and hired assets will be about Rs. 261 billion by the end of March 1997. This data is based on the 226 companies reported to the Association. As a matter of fact, it is estimated that there will be some 3000 large and small companies involved in the leasing business in India with an outstanding business of Rs.5 million done by each firm. In addition, the Indian Railway Finance Corporation (IRFC) — a 100% subsidy of Indian Railways — does a

business of around Rs. 120 billion. Thus, the aggregate volume of leasing business is estimated to be around Rs. 381 billion.

Summary

Lease financing resembles hire purchasing in certain ways. But there are certain inherent differences. main difference hovers around the tax treatment, Nevertheless, there is wider preference to leasing. There are two kinds of leasing, viz., financial lease and observing lease, Usually, in financial lease, the lessee selects the equipment, settles the price and terms of sale and request the leasing company to buy the same for leasing. Operating leases are for maintenance only, in-case of highly sensitive equipment, this type of lease is preferred.

The crucial part of the leasing as a source of finance is its evaluation with respect to benefits and costs. The lessee is supposed to compare the merits and demerits of the alternative ways of financing like the lease vs. buy, to come to a decision. Naturally, the benefits shared be more in case of leasing than owning the assets.

Glossary:

Startup Finance:

1. **Bootstrapping:** Funding a business using personal savings or revenue.

2. **Seed funding:** Early-stage funding to validate a business idea.

3. **Series A, B, C:** Subsequent funding rounds for growth and scaling.

4. **Venture capital (VC):** Investment from VC firms in exchange for equity.

5. **Equity:** Ownership shares in a company.

Leasing:

1. **Lease:** Agreement to use equipment or assets for a set period.

2. **Lessor**: Owner of the leased asset.

3. **Lessee:** User of the leased asset.

4. **Lease term:** Duration of the lease agreement.

5. **Rent:** Periodic payment for asset use.

6. **Residual value:** Asset value at the end of the lease.

7. **Depreciation:** Asset value reduction over time.

8. **Operating lease:** Lease where the lessor bears asset maintenance and risk.

9. **Financial lease:** Lease where the lessee bears asset maintenance and risk.

10. **Capital lease:** Lease treated as a loan for accounting purpose.

Assessment test questions:

Startup financing:

1. What is the primary goal of seed funding?

a) Scaling the business

b) Achieving profitability

c) Validating the business model

d) Repaying debt

2. Which funding option dilutes equity?

a) Bootstrapping

b) Venture capital

c) Crowdfunding

d) Bank loan

3. What is the purpose of a financial projection?

a) To track expenses

b) To forecast revenue

c) To determine funding needs

d) To measure profitability

4. Which financial statement shows cash inflows and outflows?

a) Balance sheet

b) Income statement

c) Cash flow statement

d) Profit and loss statement

Leasing:

1. What is the main advantage of leasing equipment?

a) Building equity

b) Reducing debt

c) Conserving capital

d) Increasing cash flow

2. Which type of lease allows for ownership transfer?

a) Operating lease

b) Financial lease

c) Capital lease

d) Sale-leaseback

3. What is the lease term that specifies the equipment's value at the end of the lease?

a) Residual value

b) Depreciation

c) Interest rate

d) Security deposit

4. Which lease type is treated as a loan for accounting purposes?

a) Operating lease

b) Financial lease

c) Capital lease

UNIT 4

Cash, Receivable and Inventory Management

4.1.1 CASH MANAGEMENT

Cash plays an important role in the economic life of the business what bleed is to a human body card at all times to keep his the most liquid of all other assets. It is needed at all times to keep the business liquid. A business concern should of cash will disrupt the cash for meeting its obligations any shortage of be unproductive the operatives of a concern and any excess of it will be unproductive. Hence, the of a responsibility of financial management is to plan cash and maintain adequate cash balance.

4.1.2 Meaning of Cash

The term cash includes coins, currency notes, cheques, drafts, cash at bank. Sometimes near cash items such as marketable securities cash fixed deposits, money at call and short notice are also included in bank. The basic characteristics of near cash assets is that they can be readily converted into cash in times of need.

Motives of holding cash: There are three possible motives of holding cash. They are:

Transaction motive b. Precautionary motive c. Speculative motive

a. Transaction Motive: The basic objective of holding cash is to meet routine business payments The firm needs cash to make payments for purchase of raw materials, wages and salaries, other operating expenses, taxes, dividends etc. The need to hold cash would not arise if there were perfect harmony between cash receipts and cash payments. Sometimes, the cash outflow may exceed the cash inflow. In order to meet the business obligations in such situations, it is necessary to maintain adequate cash balance.

b. Precautionary motive: A firm is required to keep some cash to meet unexpected contingencies such as strike, floods, fire accident, plant break down, sharp increase in the price of materials, unexpected slow-down in collection of accounts receivables etc. Such contingencies often arise in business. The cash maintained for

such contingencies needs is unproductive or cash remains idle. Hence, such idle funds should be invested in high liquid or low risk marketable securities which may provide cash as and when necessary.

c. Speculative motive: Speculative motive relates to holding profitable opportunities as and when they arise. Of cash for investing in p Such opportunities do not come in example, a firm may like to take advantage of an opportunity to purchase raw materials at a reduced price on delay the purchase of the normal course of business. For payment of immediate cash or draw materials in anticipation of declining prices. Similarly, the prices of shares and securities may be low at a time. The firm may like to purchase these securities with an expectation that the prices will go up shortly. Such opportunities can be availed of firm has sufficient cash balance with it. Only if a

4.1.3 Management of Cash

Management of the financial it of cash is an important function manager. The modern day bus business comprises of financial manager to provide adequate cash to each of the units For the survival of any business it is absolutely essential that there should be adequate cash. The management of cash is not as simple as it appears. If a firm does not maintain adequate cash, it shall not be in a position to meet the payment obligations in time. On the other hand, if the firm keeps huge cash than what is necessary, excess cash may remain idle which lowers firm's profitability. It is a duty of the financial manager to maintain sufficient cash keeping in mind the twin objectives of liquidity and cost.

4.1.4 Objectives of Cash Management:

The objectives of cash management are:

a. To meet the cash disbursement needs as per payment schedule

b. To keep cash at the minimum level

c. To invest the surplus cash if any in profitable opportunities.

Aspects / Dimensions of Cash Management

There are four important dimensions of cash management. They are:

A. Cash planning. C. Managing cash outflow

B. Managing cash inflow. D. Investing surplus funds

a. Cash planning: Cash planning is simply forecasting of cash needs well in advance for a given period. Cash planning enables the firm to maintain adequate cash balance in hand sufficient to meet the payment obligations as and when they arise. It includes cash control as well. The main purpose of cash planning is to synchronise cash receipts and payments. In most firms such perfect harmony or Synchronisation is difficult to achieve except in public utility enterprises whose terms are strictly on cash basis and whose sales are evenly spread over the entire operating period. Cash planning includes of cash budget.

Preparation of Cash Budget: A cash budget is a device to plan and control the use of cash. It is a summary statement of firm's expected cash inflows and outflows over a projected period. It gives information on the timings and the amount of expected cash inflows and outflows over a projected period. This information helps the financial manager to determine the future cash needs of the firm, plan for financing these needs and exercise control over the cash and liquidity of the firm.

B. Managing cash inflows: Having prepared the cash budget, the financial manager should ensure that there is no significant deviation between the projected cash inflows and cash outflows. To achieve this proper control over cash inflows and outflows is necessary. Cash management will be successful only if cash collections are accelerated and cash disbursements are delayed as much as possible.

4. 1. 5 Methods of accelerating cash inflows

1. Prompt payment by customers: In order to accelerate cash inflows, the collections from customers should be prompt. This will bar possible which should be put ned prompt payable and the time by which self the use of technical devices for billing along with self-addressed return envelope will speed up payment by customers

is to her method to speed up the collection from the customers them cash speed up the availability of discount implies, considerable saving to discount. Lens. In order to avail cash discount, the customers may make immediate payments.

2**. Decentralised Collections:** A big firm operating over wide Graphical area can accelerate this to the fate of geographical collections. Under the system establishes a number of collection centres in different areas instead of collecting receipts at one place. The firm opens its bank accounts in local banks of different areas where it has its collection centres. The collection centres are required to collect cheques from their customers and deposit them in the local bank accounts. The collection centres in turn transfer all the surplus funds to the Head office bank account. Thus, decentralised collection procedure is useful way to reduce float. The following are the advantages of this system.

A. The mailing time is reduced since the collection centre themselves collect cheques from the customers and immediately deposit them in the local banks.

B. The time required to collect cheques is also reduced since the cheques deposited in the local bank accounts are usually drawn on banks in that area.

3. **Lock-box system:** Lock box system is another method of reducing mailing, processing and collecting time. This system is quite popular in U.S.A. Under this system, firms hire post office box at important collection centres. The customers are required to remit payments to the local box directly. The local bank of the firm are authorised to open the box and picks up the cheques several times a day and deposit them in the firm's account. Standing instructions are given to the local banks to transfer funds to the Head Office bank when they exceed a particular limit. For internal accounting purposes of the firm, the bank prepares Detailed records of the cheques picked up.

The difference between the decentralised collections system and lock box system is that in the case of former the cheques are collected by the collection centres and after processing they are deposited in the firm's bank account. In the latter case, cheques are mailed to the post office box directly. The bank picks up the cheques and after processing they are deposited in the firm's bank account. Thus the lock box system

eliminates the time gap between cheques received by the collection centres and its actual depositing in the local bank account.

Advantages of Lock box system: The following are the advantages of lock box system.

I. The bank performs the clerical task of handling the remittances even prior to deposit with them at a low cost.

2. It cuts down mailing and processing time and thus reduces the cash requirements of the firm.

C. Controlling outflows

An effective control over outflows can also helps the firm in conserving cash and reducing the financial requirements. The objective of controlling cash outflows is to slow down the payments as much as possible. By delaying payments the firm makes maximum use of trade credit which results in maximum availability of funds. However, that delays in making payments may endanger its credit standing.

Methods of slowing cash outflows: The following methods can be used to delay disbursements:

Paying on last date: The disbursements can be delayed on making payments on the last due date only. If the credit is for 15 days, then payments should be made on 15th day only. That is, neither before nor after. In can help in using the money for short periods. At the same time, the firms should neither lose cash discount nor its prestige on account of delay in payments.

Centralisation of Payments: All payments should be centralised and payments should be made through cheques. When cheques are issued from the Head office, then it will take some time for the cheques to be cleared through post. The benefit of cheque collecting time is availed by the firm.

Making use of float: float is the difference between the Balance shown in the company’s cash book (bank column) and the immediately. Iii. Making use of float: Float is the difference between the balance in the pass book. Whenever the cheque is issued, the balance in the bank column of cash book is reduced. The party to whom

the cheques has been issued may not present it for payment I There is always the time lag between issue of cheque by the firm and its actual presentment. As a result of this, the firm's actual bank balance will be more than cash book balance. This difference is known as payment in float. The company can make use of these float funds However, using the float funds is very risky. The finance manager has to maintain a constant touch with the bank to ensure that no cheque issued by the firm is dishonoured for want of funds.

Investment of surplus funds: The surplus cash is the cash in excess of the firm's normal cash requirements. It may arise due to seasonal variations or cyclical movements in the volume of business the finance manager has to use his discretion as operations. Investment of surplus funds is it must be surplus cash decision fond therefore it is unproductive. It must be invested for the greater benefit of the firm.

Surplus cash may be available temporarily or permanently. If it is available temporarily, it may be invested in liquid and risk free securities to earn some income. On the other if it is available permanently It may be used for the purchase of additional assets or for expansion or for the repayment of loan. However, it should not be used for speculative purposes.

6. Selection of Securities

A firm can invest its excess cash in many types of securities. In choosing the securities for investment, the firm should keep in mind the following three basic factors:

Safety: Safety refers to absence of any type of risk. Funds should never be invested in securities which may prove risky and in which the value of investment is likely to fall. Securities of Central Government are regarded as gilt edged securities, as they are free from risk. Further, surplus cash can be invested only for short periods because the amount may be needed in business at any time.

Maturity: Maturity refers to life of the instrument. Generally lower the maturity, greater is the risk and return. It is advisable to select Securities according to the maturities keeping in view the period for which the surplus cash is available.

Marketability: It refers to conversion of securities into cash quickly without any loss of value, it is called high securities can be sold quickly without any loss of value still under highly liquid or marketable government treasury bills fall under this category,

The securities Which have low marketability usually have higher yields in order to attract investment.

4.1.7 Cash Management Models

A number of cash management models have been developed to determine the optimum cash balance. The purpose of all models is to ensure that there should be neither excess cash nor shortage of cash. However, the inventory model developed by William J. Baumol and Stoachastic model of Miller and Daniel Orr are mainly used to determine the optimum cash balance. These models are explained below:

William J. Baumol model: This model is similar to the one used for determining the economic order quantity for inventories. According to this model, optimum cash level is that level where the carrying costs and transaction costs are the minimum. The carrying cost refers to the costs of holding cash namely, the interest foregone on marketable securities. The transaction cost refers to the cost involved in getting marketable securities converted into cash. This happens when the firm falls short of cash and has to sell the securities resulting in clerical, brokerage, registration and other costs. The optimum cash balance is determined at a point where the total cost is the minimum. The figure below shows the optimum cash balance.

Level of cash

It is clear from the above diagram that opportunity cost is low at low level of cash and it is high at a high level of cash. As the level of cash holding increases, the opportunity cost goes up and transaction cash goes down gradually. In this way the optimum level of cash can be determined at a point where the total cost is minimum as shown by the line OX in the above diagram.

Cash Cycle and Cash Turnover: Cash cycle indicates the time lag between the point of time of cash outflow for purchase of raw materials and the point of time of cash inflow from the sale of finished goods using that raw materials.

Cash Turnover: Cash turnover means the number of times, the average cash is turned over during an operating period (usually 360 days). It indicates the velocity or the speed of average cash. A finance manager should, therefore, try to reduce the duration of cash cycle se as to increase the cash turnover. If he succeeds in doing so,

then he will succeed in keeping minimum cash and turning over it again and again to achieve the maximum volume of sales. It is calculated as follows

Cash Cycle = Average age Inventory + Average age of Receivables - Average age of Payables

Cash Turnover = No. of days operating periods ÷ duration of cash.

4.2.1 RECEIVABLES MANAGEMENT

Accounts receivables are one of the major components of king capital. Receivables arise from credit sales. Credit sales or de credit is considered as an important marketing strategy, particularly in the competitive world. Credit sales attract more firm allows It is not always possible credit in more to sell goods on cash basis only. A order to increase its sales volume, which in turn increases. However, extension of credit involves risk and cost. Financial manager should, therefore, pay due attention to the Management of receivables so that every rupee invested in accounts receivables may contribute to the net-worth of the organisation.

Meaning of Receivables: The term receivables refer to debt owed in the firm by the customers arising from sale of goods or services in the ordinary course of business. These are the claims of the firm against its Customers and form part of its current assets. Receivables are also known as accounts receivables, trade receivables or book debts. The period of credit and extent of receivables depends upon the credit policy allowed by the firm.

Purpose of maintaining receivables: The purpose of maintaining receivables (objectives of credit sales) are as follows:

To increase sales and market share

To increase profits due to higher sales and charge a higher margin of profit on credit sales as compared to cash sales.

To meet competition, the company may have to grant better credit facilities than those offered by its competitors.

4.2.2 Meaning and Objectives of Receivables Management:

Receivables management is the process of making decisions relating to investment in trade debtors. Certain investment in receivables is necessary to increase the sales and profits. But at the same time selling of goods on credit results in blocking of firm's funds in accounts receivables. Additional funds are, therefore, required to meet the working capital needs of a business which require extra costs in terms of interest. Moreover, increase in receivables also increases the risk of bad debts. Thus, the objective of receivables management is to take a sound decision as regards investment in debtors.

The objective of receivables management is "to promote sales is reached where the return on further funding of receivables is less than the cost of funds raised to and profit until that point finance that additional credit" Cost of maintaining receivables: Efficient and effective receivable management help to increase sales. Receivables and their management should be controlled and with-in involve the costs relating to maintaining of accounts receivables are as follows:

i. Capital costs
ii. Administration costs
iii. Collection costs
iv. Default costs

Capital costs: Selling of goods on credit results in blocking of firm's funds in receivables. This is because there is a time gap between the sale of goods to the customers and the payment by them. In the meantime, the firm has to make arrangements for additional funds to meet its own obligations such as payment to employees, suppliers of materials etc. The additional funds may either be raised from outside or out of profits retained in the business. In both the cases, the firm incurs a cost. In the former case, the firm has to pay interest to the outsiders. In the latter case, there is opportunity cost to the firm. (i.e. the money which could have been earned otherwise by investing funds elsewhere.)

Administration costs: The firm has to incur additional administration costs for maintaining accounts receivables. It has to incur cost in the form of salaries to staff for maintaining accounting records relating to the customers, cost of investigating the

credit- worthiness of its customers etc. These expenses would not have been incurred if the firm does not sell goods on credit.

Collection costs: The firm has to incur costs for collecting the amounts from the customers to whom credit sales have been made. The collection costs include the expenses incurred in engaging collection agencies, cost of discounting bills of exchange, stationary, postage, hank charges etc. In some cases, legal expenses may have to be incurred for collecting the receivables.

Defaulting costs: Sometimes, the firm may not be able to recover the debts due by the customers. Such debts are known as bad debts and have to written off since they have not been realised.

4.2.3 Factors influencing the size of receivables:

Volume of credit sales: This is the most important factor in the determining the size of accounts receivables. Other things remaining equal, accounts receivables vary directly with the volume of credit sales. Is the most important factor in If credit sales increase, receivables will also increase. If credit sales decline of Credit Sales: This is the other things remaining decline, receivables also decline.

Terms of credit sales: It is there another important variable determining the level of investment in receivables firm takes addition to sell only on cash basis as in the case of bata shoes company when there will be no receivables but such a decision cannot be enforced by all business concerns date customs competition and business practice force the company to sell goods on predict otherwise their extension will be in danger the form should therefore establish sound credit policy to suit it needs.

Credit Policy: The credit policy of a firm also determines the size of investment in receivables the credit policy involves decision relating to length of the credit period cash discount and other special terms these decisions in return determine investment in receivables average collection. And bad debt losses a firm's credit policy has some matter of fact determines the amount of risk the farmers willing to undertake in its sales activities performed with liberal credit policy will have a high level of receivable this is because the liberal credit policy includes the customs to delay the payments even

though they are financially solved such a delay will increase the size of receivable under process ability of bad deaths there form without consideration credit policy will have a look size of receivables

Credit Terms: The size of receivable is also affected by credit terms. It refers to the terms under which a firm sells goods on credit to its customers. The two important credit terms are: a. Credit period and b. Cash discount

A) Credit Period: A firm may extend credit for longer duration to increase its profits through additional sales. This is however, accompanied by a larger investment in receivables increase in the average collection period and a higher incidence of bad debts. Shortening of credit period will have an opposite effect on profits and reduce the size of receivables.

B) Cash discount: Firms generally offer cash discount to induce customers to make prompt payments. It is a means of improving the liquidity position of the seller. Attracting cash discount terms reduce the average collection period resulting in reduced investment in receivables.

C) Credit Collection Efforts: The collection of credit should be streamlined. The customers should be sent periodical remainders if they fail to pay in time, An efficient credit collection machinery will Reduce the size of investment in receivables. If adequate attention is not paid towards credit collection, the firm’s outstanding will be more and It will face a very serious financial problem.

D) Relation with Profits:

The credit policy is followed with a view to increase sales. When sales increase beyond a certain level, additional costs incurred are less than the increase in revenue. It will be beneficial to increase sales beyond a point because it will bring more profits. The increase in profits will be followed by an increase in the size of receivables or vice versa.

Optimum Size of receivables:

Liberal credit policy and tight credit policies involve certain costs and benefits. A firm with a liberal credit policy will have a high a level of receivables. This in turn increases

the cost of credit (cost of delayed payments, collection costs, opportunity costs, bad debts etc.) At the same time such a policy increases the volume of sales and the size of profits also. On the other hand, if a firm follows a tight credit policy, the liquidity position of the firm will improve and the cost of credit may also be kept within limits. But the volume of sales and the size of profit will go down. Therefore, the credit policy adopted by a firm should be optimum-neither too liberal nor tight.

From the above diagram, it is clear that in the case of tight credit but profitability tight to liberal credit policy, liquidity goes down but profit goes up. Thus optimum credit policy will be at a point of intersection of two curves a shown in the above diagram.

Credit / Policy Variables/Dimensions of Receivable Management:

credit efficient management of receivables, a suitable credit policy. While formulating a credit policy a firm has to firm should adopt a take into consideration the following points.

i. **Credit Standard**
ii. **Credit Terms and**
iii. **Collection Policies**

I. Credit Standards: The term credit represent the minimum criteria for the extension of credit to the customers the credit standard followed by a firm has an impact on sales and receivables a firm may be follow either liberal credit standard or tight credit standard the liberal credit standards attend to push sales up by attracting more customers this is however accompanied by a larger investment in receivables a higher cost of collection and higher bad debts the larger investment in receivables will advise leave affect the liquidity position of firm that credit standards on the other hand tend to lower sales decrease the investment in receivables lower the collection cost and reduce bad debt this will increase the liquidity of the firm thus the choice of optimum credit standard involves a trade off between incremental return and incremental cost.

A. Analysis of customers: Before granting of credit to a prospective customer, the credit worthiness of a customer is to be studied. Otherwise the payment may either be delayed or defaulted. In judging the credit worthiness of a customer five C's must be considered. They are Capital, Capacity, Character, Collateral and Conditions.

Capital refers to the financial strength of the customer (firm)

Capacity denotes customer's ability to pay

Character implies customer's willingness to pay

Collateral indicates the assets which the customer can offer by way of security

Conditions reveal general economic conditions which may affect the customer's ability to pay

Information about five's C can be collected from various sources such as firm's past experience trade references, bank reference, financial statements of the customers, credit rating agencies and salesman's opinion and report.

Number of credit rating agencies exist in advanced countries Don and Bradstreet Inc of USA is the largest mercantile credit reporting agency this organization has more than 100 years of experience in the field of credit reporting at publish a reference book 6 times air containing information about important business firms region wise in India no such deputed agency existed except from credit rating of public issues bank references and trade references of commonly used tool for collecting information about credit worthiness of the prospective customers for the existing customer the firm can maintain each customers file a periodic examination of the file will reveal to the firm the credit standing of the customers

B. **Credit Decision:** After determining the credit-worthiness of the customer, the finance manager has to decide whether or not credit facilities should be provided. For that matter, the credit-worthiness of the customer should be matched against established credit standards. If the customer is above or up to the standard, obviously credit facilities would be provided, otherwise not.

C. **Credit Terms:** This is the second crucial area in the receivables management. The conditions for extending credit sales are called credit terms and they include: a. Credit Period b. Cash Discount.

Credit Period: A Firm cannot determine the credit period once for all. In fact, it is based on market conditions prevailing at a particular time. If the demand for the product is inelastic, the credit period may be small. However, if the product has an elastic demand, the credit period will determine the quantum of sales. The

availability of funds and credit risk also determine the credit period. The credit period is generally governed by the norms prevailing in the industry and the practice followed by the competitors. However, a firm may extend credit period to a longer duration for pushing up its sales Determining optimum credit period involves locating the period where the profits on additional sales are exactly offset by cost of carrying higher amount of accounts receivables. The credit period is generally expresses in terms of 'net days'. For example, if the firm's credit terms are net 3 days, it means that the customers are expected to pay within 30 dam from the date of sale.

Cash Discount: Discount are normally given to speed up the collection of the debts. A cash discount is a means of improving the liquidity of the seller. Attractive cash discount terms reduce the average collection period resulting in reduced investment in receivables. Thus there is a saving in capital costs. Optimal cash discount is established at a point where the cost and benefits are exactly offsetting.

In practice, credit terms would include (1) rate of cash discount (2) the cash discount period and (3) the net credit period. For example, the credit terms may be expressed as 3/10 net 30 days. This means that a cash discount of 3% will be granted if the customer pays within 10 days. If he does not avail the offer, he must make full payment within 30 days.

iv. **Collection Policies:** This is the third crucial decision area in 'receivables management, Collection efforts determine the actual collection period. A firm has to make a clear and definite policy relating to collection. Such a policy is important because all the customers do not pay the firm's bill in time. Some customers are slow-payers while some are non-payers. The collection efforts of the firm should aim at accelerating collections from slow-payers and reducing bad debt losses. The collection policy should ensure prompt and regular collection. Prompt collection is needed for faster turnover of working capital, keeping collection costs and bad debts within limits and maintaining collection efficiency. Regularity in collections keeps debtors alert and they tend to pay their dues promptly. A collection policy should therefore, aim at maximise the profits and minimise the bad debts.

Collection policies cover two aspects: a. degree of effort to collect the overdue and b. type of collection efforts.

a. **Degree of Collection Effort:** The collection policy of a firm may be termed as a strict and Lenin a strict collection policy involves more efforts on collections such as policy has both positive and negative effects a strict credit policy enables early collection of dues and reduces the risk of bad debts moreover the average collection. Will be reduced as a result of these 2 effects the firm will be benefit and its profit will be increased but there would be a negative effect also a very rigorous collection policy will involve increased collection cost it may be also reduce the volume of sales and profits this is because some customers may not like the pressure and intense efforts of their concern and may switch over to the other firms lenient collection policy on the other hand, may increase the debt collection period and more bad A customer not pay earlier dues first, thus causing loss se he will have to he will, the collection policy of a firm should neither Orders because Therefore collection policy should be an optimum policy matching the costs and benefits of collection.

b. **Type of Collection Efforts:** The second aspect of collection policy is to take steps to collect the overdue amounts. While taking be to speed the genuine difficulties of the custom policy said be given due consideration. The purpose of the should up the collection of dues. The firm may take various steps to collect up them the customers such as (a) sending remainders for payments personal request through telephone and personal visits to the customers (d) threat of legal action on overdue accounts and finally € taking legal action. The last step say legal action should be taken only after exhausting all other avenues. This is because taking legal action not only involves a cost but also affect the relationship with the customers

Control of Receivables: Merely setting standards and framing credit policy is not sufficient. It is equally important to control receivables. Receivables can be controlled through monitoring.

Monitoring of Receivables: A firm needs to continuously monitor and control its book debts to ensure the success of collection efforts. The collection of book debts can be monitored with the use of: a. Average Collection period and b. Aging Schedule.

Average Collection Period: Average collection period indicates the speed with which debtors / accounts receivables are collected. It shows the number of days taken to collect money from debtors. It is calculated as follows:

Debtors + B/R Average collection period ÷ Credit Sales x No. of days in a year

The average collection period so calculated should be compared with the firm's stated credit period to evaluate the collection efficiency for example, if a firm's stated credit period is 30 days and the actual collection period is 40 days, then it can be concluded that the firm's collection effort is not satisfactory. Further, due to delay in collection the firm's liquidity position may be affected and increases the chances of bad debts.

C Aging Schedule: Under this method receivables (Sundry debtors + Bills receivables). The objective of preparing aging schedule is to have a closer watch over the quality of individual aging schedule requires ascertaining of the sales made to and the payments received from each customer by checking the receivables ledger. An aging schedule may be prepared in the following form.

Factoring Receivables

A factor is a financial institution (usually banks) which offers services relating to management and financing of debt arising from credit sales. In factoring arrangement, accounts receivables are sold to a factor who charges commission and may or may not bear the credit risks associated with receivables purchased by it.

Factoring services are very popular in advanced countries. In our country, at present only two factors S.B.I. Factoring and Commercial Services Ltd. And Can bank Factoring Ltd. Have been set up to operate in the western region and southern region respectively. Punjab National Bank and the Bank of Allahabad are expected to set up factoring agencies to serve northern region and the eastern region respectively.

Factoring Services: Factor generally renders the following services:

1. Factor purchases the selected receivables of his client (seller) for immediate cash. Thus, the seller gets funds for his immediate working capital.

2. In some cases, factors assumes the responsibility of collecting the receivables of the seller and advances money up to 80% of the face value of the receivables. The advance amount carries interest, which may be equal to or higher than the lending rate of the commercial banks.

3. Besides interest on advances against debt, the factor charges commission, which may be 1 to 2% of the face value of the debt factored.

4. It maintains debtors ledger. Hence, the seller need not maintain individual sales ledgers for his customers.

5. Factoring may be on a recourse basis (this means that the credit risk is borne by the seller) or on a non-recourse basis. (this means that the credit risk is borne by the factor) At present, factoring in India is done on a recourse basis.

6. Factor also provides relevant advisory services to the seller.

4.2.4 Parties to The Factoring Agreement

There are three parties in a factoring contract. They are:

1. Seller of goods (i.e. client) who has supplied goods or services the customers on credit terms

2. Buyer of goods (i.e. customer) who has purchased goods or services on credit from the seller.

3. Factor who purchases the invoices (receivables) from the seller goods and collects money from the customers.

Working of Factoring Services:

The working procedure involved in factoring are as follows: When the client (seller) sells goods to the customer, the client enters into an agreement with a factor. The third party namely the actor is also introduced and their relationship is shown as under

The customer places an order with the client for boots and services on credit client delivery the goods along with the invoice and the informed the customer that the payment has to be made to the factor a copy of the voice invoice is also sent to the factor purchases the invoice and mixed prepayment to that up to 80% of invoice value the fact or since monthly statement accounts to the customer and carries follow up with the customer does not pay by due date the customer pays money to the factor on due date factor in turn pays the balance amount due to the client.

Advantages:

1. Factoring ensures definite pattern of cash inflows from credit sales

2. Continuous factoring virtually eliminates the need for collection department

3. When non-recourse factoring arrangement is made, the client can eliminate the losses on account of bad debts. This will result in increase in sales and profit.

Disadvantages:

1. Factoring of debt is considered as a sign of inefficient management.

2. Factoring increases cost of finance when compared to other sources of short-term finance.

3. If the client has cheaper means of finance and credit (where goods are sold against advance payment) the factoring may not be useful.

4.3.1 INVENTORY MANAGEMENT

Inventories constitute the most significant part of current assets in 60% undertakings. On an average, inventories are approximately 60% of current assets in public limited companies in India. It is therefore, essential to manage inventories companies effectively in order to avoid excessive investment. An undertaking neglecting the management of inventories will be jeopardising its long run profitability and may fail ultimately. It is possible for a company to reduce its level of inventories to a considerable extent without any adverse effect on production and sales by using simple inventory planning and control techniques. The reduction of excessive inventories will create a favourable impact on the company’s profitability. The purpose

of inventory management is to ensure availability of raw materials in sufficient quantities as and when required and also minimise investment in inventories.

4.3.2 Meaning and kinds of inventories

Inventories are stock of goods kept in business and meant either for sale or for consumption in the production process. It includes raw materials, work-in-progress and finished goods.

Raw materials: Raw materials are the basic inputs. They are converted into finished product through the manufacturing process.

Work-in-process: Work-in-process inventories are semi- finished goods. The raw materials enter the process of manufacture but they are yet to attain a final shape of finished goods.

Finished goods: Finished goods are completed products which are ready for sale. The levels of three kinds of inventories of a in depend on the nature of its business. A manufacturing firm will have high levels of all the three kinds of inventories. On the other and, a retailer or a wholesaler will have a very high level of finished pods and no raw materials or work- in- process.

A fourth kind of inventory' Supplies' are also maintained by firms. Supplies include fuel, chemical, soaps, detergents etc. These materials do not directly enter production, but are necessary for production process.

4.3.3 Need/ Purpose of holding inventories

The question of managing inventories will arise only when the company holds inventories. Maintaining and handling coves blocking of firm's funds and incurrence of storage and handling costs. Though it is expensive to hold inventories, companies hold and maintain inventories for three motives. They are:

a. Transaction motive which facilitates continuous production and timely execution of sales orders.

b. Precautionary motive which necessitates the holding of inventories for meeting the unpredictable changes in demand and supplies of materials.

c. Speculative motive which induces the holding of inventories for taking advantage of price fluctuations Benefits of holding inventories: The benefits of holding inventories are as follows

a. Avoiding loss of sales: If a firm maintains adequate stock of finished goods, it can avoid loss of sales due to non-supply of goods in time.

b. Availing quantity discount: Maintaining of large inventories in selected product lines enables the firm to obtain quantity discount through bulk purchases.

c. Reducing ordering costs: The variable cost associated with individual orders e.g. typing, checking, approving and mailing the order etc. can be reduced if a firm places large orders rather than numerous small ones.

d. Smooth running of business: If a firm maintains adequate stock of raw materials, it facilitates uninterrupted production and smooth running of business.

Risk and Cost of holding inventories

Holding of inventories exposes the firm to a number of risks and costs. The various risk and costs involved in holding inventories are as follows:

a. **Risk of price decline:** This may be due to increase in the market supply of the product, competition or general depression in the market.

b. **Risk of obsolescence:** The inventories may become obsolete due to improved technology, improvements in product design, changes in customer's taste exact of Quality.

c. **Risk of deterioration:** The quality of the materials may deteriorate due to the holding of inventories for a long period or improper storage conditions.

d. **Capital costs:** Maintaining of inventories results in locking up of firm's funds and loss of profit. The firm has to arrange for additional funds to meet the cost of inventories. The funds may be arranged either from its own source or from outsiders. In both the cases, the firm incurs a cost in the former case, there is an opportunity cost of investment while in the latter case, the firm has to pay interest to the outsiders.

e. **Storage and Handling costs:** Holding of inventories involves storage as well as handling costs. The storage costs include go down rent, insurance, spoilage cost etc.

4.3.4 Management of inventories

Inventories constitute the most significant part of current assets A major part of working capital is invested in inventories. It is, therefore, necessary for the management to give proper attention to inventory management. A proper planning of purchasing, handling, storing and accounting should form a part of inventory management. An efficient system of inventory management will determine:

A. what to purchase

B. from where to purchase

C. how to purchase

Where to stores

Hence, it is rightly observed 'good inventory management is good financial management.'

There are conflicting interests of different departmental heads over the issue of inventory. Production manager will be interested in purchase of more inventory as he does not want any interruption in production due to shortage of inventory. The financial manager, on the other hand, will try to invest less amount in inventory because for him it is an idle investment. It is therefore, the prime responsibility of the financial manager to have proper management and control over the Investment in inventories so that it is not unprofitable for the business.

Management of inventories involves two basic problems

A. Maintaining a sufficiently large size of inventory for efficient and smooth production and sales operations

B. Maintaining a minimum investment in inventories to maximize profitability.

The aim of inventory management is to keep the stocks in such a way that neither there is overstocking nor under stocking. The over stocking means excessive carrying

costs and reduction of liquidity. Under stocking on the other hand, will result In stoppage of production. Hence, investment in inventory should be kept at the optimum level.

4.3.5 Objectives of Inventory Management

The main objectives of inventory management are as follows

A) To ensure continuous supply of materials, spares and finished goods so that production may not be held up for want of supply of materials.

B) To avoid over-stocking and under-stocking of inventories.

C) To avoid wastage like theft, pilferage, leakage, spoilage etc.

D) To promote manufacturing efficiency and prompt execution of orders to ensure better service to customers

E) To maintain inventories at the optimum level keeping in view the operational requirements

F) To eliminate duplication in ordering or replenishing stock. This is possible with the help of centralizing the purchases.

G) To have optimum investment in inventories, thus ensuring efficient use of capital

H) To purchase raw materials in bulk to avail quantity discount and to take advantage of favourable market conditions.

I) To ensure supply of raw materials at a reasonable price without sacrificing the quality

4.3.5 Tools and Techniques of Inventory Management

The following are the main techniques of inventory control.

Determination of stock levels: For effective inventory control and to avoid over-stocking and under-stocking of materials an important requirement is to decide upon the various stock levels which are as follows:

Minimum stock level: This is the level below which stock should not be allowed to fall at any time. If the stock level goes below this level there is a danger of stoppage of production for want of materials. This level is fixed after taking into account the

following factors. A. Rate of consumption: It is the average consumption of materials in the factory. The rate of consumption will be decided on the

Basis of past experience and production plans. B. Nature of materials: If the materials required only against special orders of the customers then minimum stock will not be required for such materials.

Lead time: Lead time is the time required to get fresh supplies. It is the period from the date of placing the order to the date of actual delivery. It is essential to maintain some inventory during this period. Minimum stock level = Re-ordering level – (Normal consumption period) X Normal re-order

2. Re-order level: This is the level at which a new order for materials is to placed by the store-keeper. This level is fixed between the maximum level and the minimum level to ensure that the stock on hand does not fall below the minimum level before the receipt of ordered materials. This level depends upon the lead time, rate of consumption and economic order quantity.

Re-order level = Maximum consumption x Maximum re-order period

Maximum level: This is the level above which the stock should not be allowed to exceed at any time. The objective of fixing the maximum stock level is to avoid the costs of over-stocking such as cost of storage, cost of investment in stock, cost of insurance, risk of obsolescence etc. This is fixed by taking into account the following factors:

A. Availability of capital
B. Rate of consumption
C. Cost of maintenance
D. possibility of changes in fashions
E. Storage space available
F. Re-order level
G. Extent of price fluctuations
H. Economic order quantity
I. Restriction imposed by the government in the case of explosive materials
J. Time required to obtain fresh supply of materials.

Maximum level = Re-order level + Re-order quantity – (Minimum consumption x Minimum re-order period)

4. Danger level: This is fixed below the minimum level. When stocks reach this level, action for immediate purchase is necessary.

Danger level = Average consumption x Emergency delivery time.

II. Economic order quantity: It is not a stock level. It is an ideal quantity of materials which can be purchased at minimum costs at a time. It is defined as, 'the size of order that will result in the lowest total of ordering costs and carrying costs for an item of inventory'. Determination of optimum size of order for inventory involves two

Types of costs:

a. Ordering costs

b. Carrying costs.

a. **Ordering costs:** The term ordering costs refer to the costs incurred for acquiring inputs. These costs include –

- Cost of placing an order
- Cost of transportation
- Cost of receiving goods
- Cost of inspecting goods

These costs decline as the order size increases.

b. **Carrying costs:** The term Carrying costs refer to the costs incurred in maintaining a given level of inventory. These costs include

- Cost of storage space
- Cost of handling material
- Cost of Insurance
- Cost of deterioration or obsolescence
- Cost of store staff

Carrying costs vary with inventory size. The ordering and carrying costs have inverse relationship. The ordering cost goes up with the increase in the number of orders

placed. On the other hand, carrying cost per unit goes down with the increase in the number of units purchased and stored.

4.3.6 Assumptions of Economic order quantity:

The following are the assumptions of EOQ.

i. Quantity to be consumed is known

- Constant rate of usage
- Constant ordering costs
- Constant carrying costs, and
- Zero lead-time/delivery period

E. O. Q. = $\sqrt{2AO \div C}$

Where, A =Annual consumption

O=Cost of placing an order

C= Cost of carrying one unit

Economic order quality

In the above diagram, costs are measured on vertical axis and order size is measured on horizontal axis. The carrying costs and, ordering costs move in opposite directions. If a huge quantity is ordered at a time, ordering costs will be low and carrying costs will be high. On the other hand, if low quantity is ordered at a time, ordering costs will be high and carrying costs will be low. These two costs intersect each other at a point where the total cost is minimum. E.O.Q. will occur at the point Q.

III. Determination of optimum production run: The E.O.Q. model can be extended to determine optimum size of manufacture. Two costs are involved in this process. They are:

A. Set- up cost and b. Carrying cost

Set-up cost is of the nature of fixed cost and is to be incurred at the time of commencement of each production run. It includes cost preparing and processing the stock orders, preparing drawings and specifications, tools, equipments and materials,

overtime etc. Larger the size of production run, low will be the set-up cost per unit. The carrying cost, on the other hand, will increase with the increase in the size of production run. Thus there is an inverse relationship between these two costs. The optimum production size is at that level where the total of this set-up cost and carrying cost is minimum. In other words, at this level the two costs will be equal.

Economic production size can be found out by applying the following formula:

Economic production size = 2ASC

Where, A =Annual consumption

S =Set-up cost per production run

C =Carrying cost per unit per annum

IV, Determining re-order point: The basic problem in inventory management is to decide the re-order point. This point indicates when an order should be placed so that the firm does not run out of stock. To determine the re-order point under conditions of certainty, we should know: (a). average usage or Consumption (b). lead time c. economic order quantity

By certainty, we mean, that usage and lead time remain stable. Under such a situation, re-order point is simply that inventory level which will be maintained for consumption during the lead time. Reorder point can be computed as follows:

Re-order point = Average usage X Lead time

Re – order point under certainty

V. Safety stock: In the example given above, the re-order point was computed under the assumption of certainty. (That is, the lead time and the average usage can be exactly predicted.) But in actual practice, it is difficult to predict usage and lead time accurately. If the actual usage increases or the delivery time is delayed, the firm may faced a problem of stock out. In order to protect against stock out, the firm maintains safety stock- some minimum stock as a cushion against possible increase in usage and/ or delay in delivery time. The level of safety stock can be calculated by applying the following formula.

Safety stock = Average usage X Period of safety stock

For example, if the usage rate is 50 units per week and the firm wants to hold sufficient inventory for at least 2 weeks of production, the amount of safety stock will be 50 x2 = 100 units

The formula for determining the re-order point when the safety stock is maintained is as follows:

Re-order point = (Average usage X Lead time) + Safety stock

VI. ABC Analysis:

ABC analysis is a system of inventory control. It exercises varied degree of care and control for different categories of materials, according to their value. Hence, it is known as selective value approach. It is also referred to as Always Better Control system. It is based on the principle of management by exception i.e. concentrate more on costlier items than others.

The inventory of some concerns may consist of a small number of items representing a major portion of the inventory value, and a large number of items may represent only a minor portion of the inventory value. In such concerns, ABC analysis is very useful.

Under ABC analysis, the materials are classified into three categories on the basis of their value

Category A - High value materials

Category B - Medium value materials

Category C - Low value materials

The concept may be made clear from the following table

Category	Qty	% of total Qty	Value Rs.	% to total value	Average cost p. u.
A	40	10	70,000	70	1,750
B	80	20	24,000	24	300
C	280	70	6,000	6	21.42
	400	100	1,00,000	100	

Category A materials account for 10 percent of the total quantity of materials. But, in terms of value, they account for 70 per cent of the total. Hence maximum materials control must be exercised on category A items.

Category B Materials represent 20 percent of the total quantity and their share in the total value is 24 per cent. These items require reasonable degree of care and control.

Category C Materials represent 70 per cent of the total quantity their but value is only 6 per cent of the total of inventory. Hence, lower degree control is exercised on these items.

Note: The cut - off level between these categories are somewhat arbitary. While calculating ABC analysis, the exact percentage stated above may not be followed.

Illustration 5:

From the following data a plan of ABC selective control

Item	Units	Unit cost (Rs)
1	9,000	30.50
2	16,000	5.50
3	30,000	1.00
4	15,000	2.40
5	11,000	3.00
6	5,000	51.00
7	14,000	6.00

Solution:

Ranking of items according to their usage value

Item	Unit	Unit cost	Total cost	% total cost	Ranking
1	9,000	30.50	2,74,500	34.29	1
2	16,000	5.50	88,000	10.99	3
3	30,000	1.00	30,000	3.75	7
4	15,000	2.40	36,000	4.50	5

5	11,000	3.00	33,000	4.12	6
6	5,000	51.00	2,55,000	31.86	2
7	14,000	6.00	84,000	10.49	4
	1,00,000		8,00,500	100	

ABC Plan

Items in order of ranking	**Units**	**% Total**	**Total**	**% Total**	**Category**
1	9,000	14%	2,74,500	34.29	66.15 A
2	5,000		2,55,000	31.86	
3	16,000	30%	88,000	10.99	21.48 B
4	14,000		84,000	10.49	
5	30,000		36,000	4.50	
6	15,000	56%	33,000	4.12	12.37 C
7	11,000		30,000	3.75	
	1,00,000	100	8,00,500	100	

Advantages

1. It ensures effective control on costly items (i.e. Category A items) which require large investment.
2. It helps in the maintenance of high stock-turnover ratio.
3. Investment in inventory can be regulated and funds can be utilised in the best possible manner.
4. Management time is saved since attention is paid only to some of the items having more value.
5. It ensures minimum total cost (i.e. ordering costs and carrying costs) of inventory.

VII. VED Analysis

Vital, Essential and Desirable analysis is used primarily for control of spare parts. The spare parts can be divided into three categories- Vital, Essential and Desirable keeping in view their importance to production

Vital parts are very important parts. Non - availability of these parts at the required time may lead to stoppage of production. Hence, vital parts are kept in stock in sufficient quantities to ensure uninterrupted production.

Essential Spare parts are essential for efficient functioning of the operating system. Care has to be taken to ensure that they are always in stock.

Desirable spare parts are those parts which are needed but their absence for a short time will not lead to stoppage of production.

VED classification is largely useful for capital intensive industries.

VIII. Inventory turnover ratio: Inventory Turnover Ratio is one of the techniques of inventory control. It expresses the relationship between the cost of material consumed and the average stock held. It indicates the number of times the inventory is consumed and replenished. A high inventory turnover ratio indicates fast moving material. A low ratio on the other hand, indicates a high stock in relation to usage.

Objectives of Inventory Turnover Ratio

The objective of inventory turnover ratio is to find out:

a. Fast moving stock i.e. stock in high demand

b. Slow moving stock i.e. stock in low demand

C. Dormant stock i.e. stock having no demand at present

d. Obsolete stock i.e. stock no longer in demand

Summary

Cash Management:

Managing cash inflows and outflows to maintain liquidity. Optimizing cash levels to reduce costs and maximize returns. Managing cash flow risks such as fraud and liquidity crises.

Receivable Management:

Managing customer invoices and payments to optimize cash flow. Setting credit terms and monitoring customer creditworthiness. Minimizing bad debts and optimizing accounts receivable turnover

Inventory Management:

Managing inventory levels to optimize sales and minimize costs. Setting inventory levels and reorder points to avoid stockouts and overstocking. Optimizing inventory turnover and minimizing inventory costs

Effective management of cash, receivables, and inventory is crucial for maintaining liquidity, optimizing cash flow, and maximizing profitability in business finance. By managing these areas effectively, businesses can reduce costs, improve efficiency, and increase their competitiveness in the market.

Glossary:

Cash Management:

1. Cash Flow: Inflows and outflows of cash and cash equivalents.

2. Liquidity: Ability to convert assets into cash quickly.

3. Cash Conversion Cycle: Length of time to sell inventory, collect receivables, and pay payables.

4. Cash Budget: Forecast of cash inflows and outflows.

5. Cash Reserve: Emergency fund to meet unexpected expenses.

Receivable Management:

1. Accounts Receivable: Amounts owed to the company by its customers.

2. Credit Policy: Terms and conditions for extending credit to customers.

3. Credit Limit: Maximum amount a customer can borrow.

4. Collection Period: Average time to collect accounts receivable.

5. Bad Debt: Uncollectible accounts receivable.

Inventory Management:

1. Inventory: Goods or materials held for sale, production, or distribution.

2. Inventory Turnover: Number of times inventory is sold and replaced.

3. Inventory Levels: Quantity of inventory on hand.

4. Reorder Point: Level at which inventory must be reordered.

5. Economic Order Quantity (EOQ): Optimal quantity to order to minimize costs.

Assessment questions:

1.What mean by receivables. what are the objectives of receivables?

2. Enumerated the various cost of receivables

3. Merits and d merits of factoring

4. What is mean by optimum level of receivable

5. What is mean by credit policy

6. What does mean by inventory and its types

7. What are the benefits of inventory

8. What is ABC analysis and it's advantages

9. What is VED analysis

10. Write a shot note on maximum level. Minimum level, reorder level, danger level ,economic order quantity, safety stock and lead time

UNIT V

Multinational Capital Budgeting

Multinational capital budgeting refers to the process that global firms use to evaluate and select long-term investment projects in foreign nations. When a firm operates in multiple nations, it faces additional intricacies likened to domestic capital budgeting. Multinationals must assess projects in other currencies and consider nation-specific risks like political, currency, and regulatory risks. They use the same tactics like net present value, internal rate of return, and payback period. However, they adjust the discount rates to account for higher risks in some nations. Governments may provide stimuli like tax breaks or subsidies that impact the projected profitability of projects.

5.1.1 MEANING: Multinational Capital Budgeting

Multinational corporations' capital budgeting involves investing in long-term assets like plants, equipment, and technology. When done by global firms operating across borders, it is called multinational capital budgeting. Global firms face more intricate because they assess projects in various currencies, nations, and regulatory climates. They have to consider risks specific to foreign nations, like political, currency, legal, and transfer pricing issues affecting cash flows. Plans like net present value, internal rate of return, and payback period are still used, but discount rates must account for higher risks in some nations.

Objectives:

1. To Maximize Shareholder Value

2. To optimize Investment Decisions

3. To Minimize Risk

4. To Manage Currency Exposure

5. To balance Global

6. To Consider Tax Implications

7. To Assess Political and Country

8. To Manage Cash Flow

9. To Monitor and Control

10. To Achieve Strategic Objectives

5.1.2 Factors Affecting Multinational Capital Budgeting

Factors to consider in multinational capital budgeting have been differed below.

- **Regulatory compliance:** Projects in foreign nations must comply with local laws and regulations. This adds to project costs and intricacies that must be viewed.
- **Rival:** The competitive terrain in global markets can differ greatly. Firms must assess project risks based on each nation's unique opponent profiles.
- **Culture and language:** Cultural and linguistic contrasts among home and host nations can pose challenges in setting and driving global projects.
- **Supply chain risks:** Reliance on global suppliers for inputs adds risks that must be factored into the cost and cash flow projections.
- **Human resource risks:** Finding and keeping fit local staff for projects in foreign nations can be tough, affecting project timelines and budgets.
- **Trade barriers:** import quotas, and other trade restrictions in host nations can affect project costs and market potential.
- **Lack of learning:** Nations may lack venture operating in specific foreign markets, making it hard to accurately budget for projects initially.
- **Ownership rules:** Some nations may restrict foreign right in specific firms, posing risks for global assets.
- **Infrastructure gaps:** Inferior infrastructure in some nations can drive up project product costs and timelines.
- Changes in currency exchange rates can greatly affect global projects' cash flows and profitability. This adds tension for global firms.

- **Political risk:** Shifts in government policies, rules, and laws in foreign nations pose risks to the viability and success of projects there. This is a major concern for global firms.
- **Nation risk:** A nation's overall economic and political stability affects the riskiness of projects found there. Firms assess national risk while studying global assets.
- **Transfer pricing:** The transfer of goods, uses, and intangibles among fellows across borders must follow transfer pricing rules. This affects the profitability and cash flows used for capital budgeting decisions.
- **Tax differentials:** Contrasts in corporate tax rates across nations impact global projects' after-tax cash flows and returns. Firms must account for this.
- **Government incentives:** Alien states may provide incentives like tax breaks, subsidies, or lower tariffs to attract asset. Firms factor these incentives into their analyses.
- **Cost of capital**: Multinationals must select good discount rates for projects in other nations based on nation-specific risks. This is more tricky than for domestic projects.
- **Data gaps:** Multinationals often lack valid and timely data about foreign projects, adding risks and fate to capital budgeting findings.

5.1.3 The Objective of Multinational Capital Budgeting

Multinational capital budgeting, also known as multinational capital budgeting, aims to make educated asset decisions involving projects or assets in other nations or currencies. Multinational capital budgeting considers the unique intricacies and risks linked with global assets. Its primary goal is to maximize shareholder value and ensure the efficient allocation of financial resources across borders. Here are the key goals of multinational capital budgeting:

- **Maximize Shareholder Wealth:** The overarching goal of multinational capital budgeting is to maximize shareholders' wealth. After accounting for all costs and risks, this is achieved by selecting projects expected to generate positive net present value (NPV) or return on investment (ROI).

- **Risk Oversight:** Consider and manage the risks associated with global assets, including currency exchange rate fluxes, political instability, regulatory shifts, and economic uncertainties. The goal is to minimize risk and protect the organization's financial health.
- **Optimal Allocation of Capital:** Ensure financial resources are allocated efficiently across different projects and locations. Multinational capital budgeting helps prioritize investments that offer the highest returns relative to their linked risks.
- **Currency Exposure Management:** Assess the impact of currency exchange rate fluxes on cash flows and profits. The goal is to mitigate currency risk via methods like hedging to ensure the stability of expected cash flows.
- **Compliance and Regulatory Reviews:** Ensure compliance with global laws, tax laws, and accounting standards when making cross-border investment decisions. This has knowing the tax imports and legal needs of operating in other nations.
- **Cost of Capital:** Select the right cost of capital for global assets, weighing factors like national risk, inflation rates, and market needs. The goal is to use an accurate capital cost to discount cash flows to calculate NPV.
- **Long-Term Strategic Alignment:** Align global investments with the firm's long-term strategic goals. The goal is to ensure that assets donate to the firm's overall growth and competitiveness on a global scale.
- **Resource Share:** Assign aids efficiently among other subsidiaries or divisions based on their prospect for generating value. Assess factors like growth prospects, market demand, and competitive advantage.
- **Assess Expansion Options:** Assess the feasibility of raising functions into new markets or nations. Decide whether entering a new market or acquiring a foreign subsidiary is financially viable and aligned with the firm's goals.
- **Ensure Financial Sustainability:** Assess the sustainability of global investments by viewing their effect on cash flow, profitability, and the firm's overall financial health. The goal is to avoid exceeding the firm's financial aids.

- **Strategic Hedging:** Use financial tools such as options or forward contracts to hedge against adverse currency moves that could negatively impact global investments. The goal is to protect against likely losses due to currency changes.
- **Investment Portfolio Diversification:** Consider global investments as part of a diversified portfolio strategy to spread risk and achieve a more balanced overall risk-return profile.

In summary, the goal of multinational capital budgeting is to make investment decisions that enhance shareholder value while considering the intricacies and risks associated with global markets. It involves a careful analysis of cash flows, risk review, currency exposure management, and strategic alignment with the organization's goals and ideals on a global scale.

5.1.4 Steps of Multinational Capital Budgeting

Multinational capital budgeting involves evaluating and making investment decisions for projects or assets in different nations or currencies. The process can be complex due to the various factors that need to be considered, including exchange rate risk, political stability, and international regulations. Here are the steps involved in multinational capital budgeting:

Project Identification: The process begins with identifying likely asset projects or options in other nations. These projects should align with the firm's strategic goals and growth plans.

Cash Flow Estimation: Estimate the cash flows associated with each investment project over its expected lifespan. This includes forecasting revenues, expenses, and any expected capital expenditures. Consider local currency cash flows and their potential conversion to the firm's reporting currency.

Risk Assessment: Evaluate the various risks associated with each project. These may include currency exchange rate, political, economic, regulatory, and market risks. Assess the impact of these risks on the cash flows of the project.

Currency Risk Management: Develop strategies to manage currency exchange rate risk.;'[This may involve using financial tools like forward contracts or options to hedge against adverse currency moves.

Cost of Capital Determination: Determine the right cost of capital for each project, considering nation-specific factors such as nation risk premiums, inflation rates, and the cost of debt or equity in the local market.

Discounted Cash Flow (DCF) Analysis: Calculate the Net Present Value (NPV) or other appropriate financial metrics for each project using the estimated cash flows and the cost of capital. Discount cash flows to their present value in the reporting currency.

Sensitivity Analysis: Perform sensitivity analysis to assess how changes in key variables, such as exchange rates, interest rates, or sales volumes, impact the project's financial viability. This helps in understanding the project's robustness in different scenarios.

Ranking and Prioritization: Rank the investment projects based on their NPVs or other relevant financial metrics. Prioritize projects that offer the highest returns relative to their risks.

Strategic Alignment: Ensure that the selected projects align with the organization's long-term strategic goals and plans. Consider how each project contributes to the firm's growth and competitiveness on a global scale.

Legal and Regulatory Compliance: Assess the legal and regulatory needs in each nation where investments will be made. Ensure compliance with local laws, tax laws, and accounting standards

Due Diligence: Perform as per due diligence on likely projects, including market research, competitive analysis, and evaluation of local partners or suppliers. Verify the feasibility of executing the project successfully.

Investment Decision: Make informed investment findings based on the results of the analysis. Approve projects that meet the firm's financial criteria and strategic goals.

Monitoring and Control: Execute a system for monitoring and managing the performance of global projects. Always track actual cash flows, compare them with projections, and adjust strategies as needed.

Reporting and Communication: Communicate the results of the multinational capital budgeting analysis to key stakeholders, including senior management and the board of directors. Provide regular updates on the gain and performance of global investments.

Post-Investment Evaluation: After projects are executed, conduct post-investment evaluations to assess whether the expected returns and goals are being met. Make critical adjustments if deviations occur.

Multinational capital budgeting is an ongoing process that requires careful consideration of various factors and risks associated with global investments. It helps firms make well-informed findings that maximize shareholder value while effectively managing global operations.

Conclusion

Though the basic principles remain the same, multinational capital budgeting is more difficult due to currency risks, political delays, tax intricacies, and data gaps associated with assets across numerous nations. Successful multinational capital budgeting needs firms to properly understand and manage these risks and issues. While domestic capital budgeting deals with assets in one nation and currency, multinational capital budgeting has to guide multiple regulatory climates, risks, and currencies, making it a tougher process.

5.1.5 Why is International Financing Required?

International finance plays a very crucial role in terms of international trade and inter-economy relation in the sector of exchange of goods and services. International Financing is important for various reasons, one being the important tool to estimate

the exchange rates prevailing, these rates further helps the investors in deciding about their investment in foreign companies.

Also, International Financing helps in utilizing the financial statements made by the countries who have adopted the style of IFRS. This helps the countries to follow the similar reporting systems.

International Finance

International finance also known as international macroeconomics here one will come across monetary interactions that are studied between two or more countries. The study is focused on areas such as foreign direct investment and currency exchange rates.

The understanding of the International Finance can be illustrated in the following points below:

- International finance is the study of monetary interactions which happens between two or more countries.
- International finance talks about foreign direct investment and currency exchange rates.
- Increase in globalization has intensified the importance of international finance.
- The concept of International Finance crosses the barriers of the nations and deals about the international funding rather than restricting itself to particular national boundaries.

The International Finance Research is conducted by the large institutes like the International Finance Corporation, National Bureau of Economic Research. All these research institutions are dedicated to the research and development of the global market.

5.1.6 Sources of International Finance

The sources of International finance can be excavated deep in the international economy and international market. The various sources for International Finance are as follows:

1. Commercial Banks

Global Commercial Banks all over the international market provide loans in the foreign currency to the companies. These banks are very crucial in financing the non-trade international operations. They facilitate international trading to occur smoothly.

International Agencies and Development Banks

The developmental banks and other international agencies have come forth over the years for the purpose of financing in the international sector. The agencies are set up by the government of the developed countries of the world. The highly industrious agencies among this sector are – International Finance Corporation, EXIM Bank and Asian Development Bank.

International Capital Markets

The budding organizations which include the multinational companies depend upon the fairly large amount of loans known as the foreign currency. The financial instruments which are used by these organizations include – American Depository Receipts, Global Depository Receipts, and Foreign Currency Convertible Bonds.

International Finance (Examples):

We have understood the meaning and the sources of International Financing. Detailing our knowledge by citing a few examples will allow in-depth knowledge about International Finance.

The examples of International Finance are as follows:

- **Personal Banking**

One's personal banking matters can cross the borders of their nation, their scope of banking increases with personal banking systems. The students studying abroad can set up their foreign accounts, they can move their money from the United States to other overseas accounts.

- **Company Assets Shifts**

  A company may need to move the financial assets from the U.S. to any other country. This is international finance that happens in the form of re-allocation of the assets. The companies doing these transactions must be well versed with the prevailing law which is laid down by the government agencies who keep a vigilant alert in this type of cross-border activity.

- **Sales, Purchases, Trade**

  The buying, selling, and trading of the foreign commodities is a way for the world's financial systems to operate. Foreign cars, branded foreign clothes, foreign home goods, and even international pet products consist of the world's populations, all these require a lot of international finance transactions, in the form of buying, selling, and trading with the familiarity of the prevailing laws.

5.1.7 Evaluating multinational capital expenditure proposals requires comprehensive techniques to account for the complexities and risks associated with international investments.

Here are several key techniques:

1. **Net Present Value (NPV)**

- **Definition**: NPV calculates the present value of future cash flows minus the initial investment.
- **Application**: Adjust for varying discount rates to reflect different risk profiles, inflation rates, and cost of capital across countries.

2. **Internal Rate of Return (IRR)**

- **Definition**: IRR is the discount rate at which the NPV of the project is zero.
- **Application**: Compare IRR to the required rate of return, adjusting for country-specific risks and financing conditions.
- **Evaluation**: A project is acceptable if its IRR exceeds the required return rate.

3. **Payback Period**

- **Definition**: The payback period is the time needed for an investment to generate cash flows sufficient to recover the initial investment.
- **Application**: Useful for assessing liquidity risk and quick recovery in volatile environments.
- **Calculation**: Sum of cash flows until the initial investment is recovered.

4. **Adjusted Present Value (APV)**

- **Definition**: APV separates the project’s value from the effects of financing.
- **Application**: Particularly useful for projects in different tax jurisdictions or with varying financing conditions.

5. **Real Options Analysis**

- **Definition**: Evaluates investment opportunities as real options, providing flexibility to adapt future decisions.
- **Application**: Useful for projects with significant uncertainty or potential for future expansion or modification.
- **Techniques**: Utilize decision tree analysis and option pricing models (e.g., Black-Scholes).

6. **Risk-Adjusted Discount Rate**

- **Definition**: Adjust the discount rate to incorporate the specific risks of the country and project.
- **Application**: Include country risk premiums and specific project risks, such as political, economic, and currency risks.

7. **Scenario Analysis**

- **Definition**: Assess the impact of different scenarios (e.g., economic downturn, regulatory changes) on the project.
- **Application**: Evaluate the project under various economic, political, and market conditions to understand potential outcomes.

8. **Sensitivity Analysis**

- **Definition**: Analyze how changes in key assumptions (e.g., exchange rates, interest rates) impact the project’s NPV or IRR.
- **Application**: Identify critical variables and their impact on project viability.
- **Techniques**: Create sensitivity tables and graphs to visualize the effect of changes in assumptions.

9. **Monte Carlo Simulation**

- **Definition**: Use probabilistic models to simulate a range of possible outcomes based on varying input variables.
- **Application**: Assess the probability distribution of NPV or IRR to understand the risk profile of the project.
- **Techniques**: Implement simulation software to model different risk factors and their interactions.

10. **Economic Value Added (EVA)**

- **Definition**: Measures the project's value creation beyond the required return on capital.
- **Application**: Useful for comparing projects across different countries with varying capital costs.

11. **Political and Economic Risk Analysis**

- **Definition**: Assess the impact of political stability, regulatory environment, and economic conditions on the project.
- **Application**: Incorporate country risk assessments and external expert evaluations.
- **Techniques**: Use risk indices and qualitative analysis to gauge the political and economic landscape.

By integrating these techniques, multinational corporations can comprehensively evaluate capital expenditure proposals, accounting for the diverse risks and opportunities associated with international investments.

1. Discounted Payback Period:

- **Definition**: The discounted payback period calculates the time required for an investment to recover its initial cost, taking into account the time value of money.
- **Application**: It provides a measure of liquidity and risk, considering the present value of cash flows.
- **Calculation**: Sum the discounted cash flows until they equal the initial investment.

2. Net Present Value (NPV):

- **Definition**: NPV measures the difference between the present value of cash inflows and outflows over a project's life.

- **Application**: It helps in assessing the profitability of an investment by considering the time value of money and the required rate of return.
- **Formula**: total present value - initial investment

3. Profitability Index (PI):

- **Definition**: The profitability index measures the present value of future cash flows per unit of investment.
- **Application**: It evaluates the relative profitability of different projects by considering their costs and benefits.
- **Formula net present value / initial investment**

4. Internal Rate of Return (IRR):

Definition: IRR is the discount rate that makes the NPV of a project zero, indicating the project's rate of return.
- **Application**: It helps in comparing different investment opportunities and assessing their attractiveness.
- **Evaluation**: If the IRR exceeds the required rate of return, the project is considered economically viable.

5.1.8 Capital Rationing:

Definition: Capital rationing refers to the situation where a company faces limitations or constraints on its ability to invest in profitable projects due to factors such as budget constraints, limited access to financing, or risk aversion.

5.1.9 Scope of Capital Rationing:

1.***Financial Constraints**: Companies may face limitations in raising capital due to factors such as high debt levels, restricted access to credit, or unfavorable market conditions.

2.Strategic Constraints: Organizations may prioritize certain types of projects over others based on strategic goals, market conditions, or resource allocation strategies.

3.**Risk Management****: Capital rationing may be employed as a risk management strategy to avoid overextending resources and to maintain financial stability.

Advantages of Capital Rationing:

1.****Resource Allocation****: Helps in prioritizing investments and allocating resources to projects with the highest potential for returns, thereby maximizing shareholder wealth.

2.****Risk Mitigation****: Prevents overinvestment in risky projects, reducing the company's exposure to financial distress and enhancing overall risk management.

3.****Strategic Focus****: Encourages strategic decision-making by directing investments towards projects that align with the company's long-term goals and competitive advantage.

4****Financial Discipline****: Promotes financial discipline by enforcing strict criteria for project selection and ensuring that investments meet predefined financial targets.

Disadvantages of Capital Rationing:

****Missed Opportunities****: Restricts the company's ability to pursue potentially profitable investment opportunities, leading to missed growth prospects and competitive disadvantages.

****Suboptimal Resource Allocation****: May result in suboptimal allocation of resources, as projects with positive NPV but higher initial investment requirements may be overlooked.

****Innovation and Growth****: Limits innovation and growth potential by constraining investment in research and development, new technologies, or market expansion initiatives.

****Market Competitiveness**:** Could reduce the company's competitiveness in dynamic markets where rapid investment is necessary to seize emerging opportunities or respond to competitive threats.