

**Allama Iqbal Open University AIOU BS ADC
solved Assignment NO 1 Autumn 2024
Code 8594 Introduction to Business Finance**

Q.1

- a. What are main functions of a present-day finance manager? (20)**
- b. What are major financial decisions. Explain each financial decision with the help of examples?**

Ans:

A finance manager is responsible for managing a company's financial resources, ensuring that the organization remains financially healthy and achieves its goals. Below are the key functions of a present-day finance manager:

1. Financial Planning and Forecasting

- The finance manager is responsible for preparing long-term and short-term financial plans.

- **Example:** Creating budgets, forecasting revenues, and estimating expenses for the upcoming fiscal year to ensure the company remains solvent.

2. Capital Budgeting and Investment Decisions

- The finance manager evaluates and selects projects, investments, or assets that the company should undertake.
- **Example:** Deciding to invest in new equipment or infrastructure that improves productivity and supports future growth.

3. Cost Management and Control

- The finance manager ensures efficient allocation of resources and keeps costs under control.
- **Example:** Identifying areas where the company can cut costs, such as reducing waste, renegotiating supplier contracts, or improving operational efficiency.

4. Raising and Managing Capital

- The finance manager is responsible for identifying funding sources such as equity, debt, or retained earnings to support the company's growth.
- **Example:** Issuing shares or bonds, securing loans, or accessing credit lines to fund expansion projects or working capital needs.

5. Financial Reporting and Analysis

- The finance manager prepares financial reports to monitor the company's performance, financial position, and compliance with regulatory requirements.
- **Example:** Preparing income statements, balance sheets, and cash flow statements for stakeholders, including management, investors, and regulatory bodies.

6. Risk Management

- The finance manager identifies and mitigates financial risks, such as interest rate risks, inflation, exchange rate fluctuations, and operational risks.
- **Example:** Using hedging techniques (e.g., derivative instruments) to manage foreign exchange or interest rate risk.

7. Liquidity Management

- Ensuring that the company has sufficient cash flow to meet its short-term obligations and investments in operations.
- **Example:** Managing working capital to maintain a balance between accounts receivable, accounts payable, and cash reserves.

8. Tax Planning and Compliance

- The finance manager ensures compliance with tax regulations and seeks to minimize the company's tax liabilities.

- **Example:** Preparing tax returns, claiming tax deductions, or structuring financial transactions to optimize tax efficiency.

9. Stakeholder Management

- The finance manager interacts with internal and external stakeholders, such as investors, lenders, government agencies, and auditors.
 - **Example:** Presenting financial reports to investors, explaining financial performance, and addressing their concerns.
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Q. 1(b) – Major Financial Decisions and Examples

1. Capital Structure Decisions

- **Definition:** Determining the mix of debt and equity to finance the company's operations and investments.
 - **Example:** A company may decide to issue bonds or equity shares to raise funds for expansion. The mix of debt and equity affects the company's cost of capital and risk profile.
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2. Investment Decisions (Capital Budgeting)

- **Definition:** Choosing long-term investment projects that maximize shareholder value.
- **Example:** A company decides to invest in a new manufacturing facility, promising increased production

capacity and efficiency. The finance manager evaluates the expected returns and risks of such an investment using tools like Net Present Value (NPV) or Internal Rate of Return (IRR).

3. Dividend Policy Decisions

- **Definition:** Determining how much of the company's profits should be distributed to shareholders and how much should be retained.
 - **Example:** A company may decide to retain profits to fund growth or pay higher dividends to attract investors, balancing the trade-off between reinvestment and shareholder returns.
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4. Working Capital Decisions

- **Definition:** Managing current assets and liabilities to ensure adequate liquidity and operational efficiency.
 - **Example:** A company decides to maintain higher levels of inventory or increase accounts receivable to support sales growth while managing short-term obligations like paying suppliers.
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5. Capital Expenditure (CapEx) Decisions

- **Definition:** Investing in fixed assets like machinery, equipment, or property to improve production efficiency or capacity.

- **Example:** A company decides to purchase new production machinery to increase efficiency and reduce costs, which can lead to higher profits.
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6. Financing Decisions

- **Definition:** Choosing the optimal financing mix (debt vs. equity) to fund company operations and growth.
 - **Example:** A company decides to issue bonds to finance new projects instead of relying solely on retained earnings, aiming to avoid diluting ownership by using debt.
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7. Mergers and Acquisitions (M&A) Decisions

- **Definition:** Evaluating potential mergers or acquisitions to expand the company's market share or product offerings.
 - **Example:** A company decides to acquire a competitor to enter new markets and increase its market share, enhancing growth opportunities.
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8. Liquidity and Cash Flow Management Decisions

- **Definition:** Ensuring the company maintains optimal levels of cash and other liquid assets to meet short-term obligations.
- **Example:** A company decides to invest in short-term treasury bills or marketable securities to ensure liquidity while earning some return on idle cash.

9. Foreign Exchange and Risk Management Decisions

- **Definition:** Managing currency risks from international operations through hedging or other financial instruments.
- **Example:** A company decides to hedge its exposure to foreign currency fluctuations using forward contracts or options to protect against adverse impacts.

10. Tax Planning Decisions

- **Definition:** Structuring operations and transactions to minimize tax liabilities while ensuring compliance with tax regulations.
- **Example:** A company may restructure its operations in regions with lower tax rates or take advantage of tax incentives and credits.

Each of these financial decisions is crucial for a company's success, helping to balance growth, profitability, and risk while maximizing shareholder value.

Q.2 Discuss the statement “A rupee today is worth more than a rupee tomorrow” Explain with a suitable example.

Ans:

Introduction to Time Value of Money (TVM):

The statement "A rupee today is worth more than a rupee tomorrow" reflects the fundamental concept of the **time value of money (TVM)**. The premise is that money available today is more valuable than the same amount of money available in the future due to its potential to earn returns, face inflation, and provide immediate utility. TVM is a cornerstone in finance, influencing investment decisions, loans, and valuations.

Key Factors Behind the Time Value of Money:

1. Opportunity Cost of Capital:

- A rupee today has the opportunity to generate returns. If you receive a rupee today, you can invest it to earn interest or returns. Over time, the returns from this investment would accumulate, meaning that the rupee received today could grow in value through the interest.
- For example, if you invest Rs. 1,000 at an interest rate of 5%, after one year, the value of the invested money will grow to Rs. 1,050. The future value of this money is

Rs. 1,050, not Rs. 1,000, indicating that money available today has more value.

2. Inflation:

- Inflation erodes the purchasing power of money over time. A rupee today can purchase more goods and services than a rupee tomorrow due to rising prices and the declining value of money.
- For example, if inflation is 3% per year, Rs. 1,000 today can buy goods worth Rs. 1,000, but Rs. 1,000 a year from now might only be able to buy goods worth Rs. 970 due to inflation.

3. Risk and Uncertainty:

- Future cash flows are uncertain, and the risk associated with those cash flows also tends to increase over time. The uncertainty regarding future returns lowers their present value.
- For example, an investor may demand a higher rate of return for investing in risky projects with uncertain cash flows compared to safer, more predictable projects.

Examples to Illustrate the Concept:

1. Investment Example:

- Let's assume you have Rs. 1,000 today, and you decide to invest it at an annual interest rate of 5%.
- The future value of Rs. 1,000 after 1 year will be:

$$2. 1,000 \times (1 + 0.05) = 1,050$$

- If you receive Rs. 1,000 in the future without any investment, its value will not grow. Therefore, Rs. 1,050 a year from now is less valuable than Rs. 1,000 today.

3. Loan Example:

- Consider a borrower who has two choices:
 - Borrow Rs. 10,000 today or wait a year to receive Rs. 10,000.
 - If the borrower waits, they miss out on the opportunity to earn returns from the borrowed amount.
 - If they borrow today, they can invest it and pay off the loan after earning returns.

4. Consumer Spending Example:

- A person can purchase a smartphone today for Rs. 20,000. However, if they wait a year, the price of the smartphone may increase due to inflation or increased demand. Thus, a rupee today gives access to goods and services that might cost more in the future.

Financial Decision-Making and the Time Value of Money:

1. Investment Decisions:

- In making investment decisions, financial managers evaluate whether it is better to receive cash today or in the future. The concept of TVM helps to compare the present value of future cash flows.

- For instance, if a company can receive Rs. 1,000 today or Rs. 1,100 a year later, the company must discount the future value of Rs. 1,100 using an appropriate rate to determine which option offers a higher present value.

2. Loan and Financing Decisions:

- When businesses or individuals seek loans, they compare the present value of using that money today versus in the future. A loan is typically worth more today because of its potential returns or due to the interest cost paid to borrow funds.
- Similarly, lenders assess whether the present value of repayments over time justifies the loan.

3. Capital Budgeting:

- In capital budgeting, companies assess long-term investments using the Net Present Value (NPV) and Internal Rate of Return (IRR). Both metrics evaluate whether an investment will yield a return higher than the cost of capital.
- A higher NPV means the investment is expected to generate more value than the cost, reinforcing the idea that money received or invested today is worth more than money in the future.

Advantages of the Concept:

1. Better Financial Decisions:

- The TVM concept helps organizations make more informed decisions regarding investments, loans, and

financial planning. It ensures that resources are allocated to projects that provide the highest returns.

2. Accurate Valuation:

- It allows businesses to determine the fair value of future cash flows, aiding in the valuation of assets, liabilities, and equity.

3. Time Preferences:

- It reflects the preference of individuals and businesses to have money sooner rather than later due to risks, inflation, and investment opportunities.

Limitations of the Concept:

1. Uncertainty in Future Cash Flows:

- Future cash flows may not always be accurately predicted due to uncertainties in economic conditions, interest rates, and inflation.

2. Assumption of Constant Interest Rate:

- TVM assumes a constant interest rate, which may not hold in all scenarios. Interest rates fluctuate based on economic conditions.

3. Complexity in Real-Life Scenarios:

- Real-life decisions often involve complex variables such as taxes, inflation, and risk. TVM doesn't fully account for these factors unless adjusted.

Conclusion:

The concept "A rupee today is worth more than a rupee tomorrow" reflects the idea that money today has a greater value due to its potential to earn returns, face inflation, and mitigate risks. In financial decision-making, TVM plays a crucial role in evaluating investments, loans, and capital budgeting. Understanding and applying TVM ensures more informed financial decisions, leading to greater value creation over time.

Q.3

A multinational company had sales totaling Rs. 40,000,000 in the fiscal year 2023. Some ratios for the company are listed below. Use this information to determine the dollar values of income statement and balance sheet accounts as requested. (20)

Ans:

Calculation	Details	Amount (Rs.)
Sales	Total Sales	40,000,000

Gross Profit Margin	Gross Profit Margin = Sales × 80%	40,000,000 × 80% = 32,000,000
Cost of Goods Sold (COGS)	COGS = Sales - Gross Profit	40,000,000 - 32,000,000 = 8,000,000
Operating Profit Margin	Operating Profit = Sales × 35%	40,000,000 × 35% = 14,000,000
Net Profit Margin	Net Profit = Sales × 8%	40,000,000 × 8% = 3,200,000
Return on Total Assets	Total Assets = Net Income ÷ 16%	3,200,000 ÷ 16% = 20,000,000
Return on Common Equity	Equity = Net Income ÷ 20%	3,200,000 ÷ 20% = 16,000,000
Total Asset Turnover	Accounts Receivable = Net Sales ÷ (Total Asset Turnover × 365)	
Accounts Receivable	Accounts Receivable = 40,000,000 ÷ (2 × 365)	40,000,000 ÷ 730 = 54,794

Q.4

a. If you invest Rs. 20,000 every year for the next 15 years starting 1 year from today and you earn an interest rate of 10% per year. How much will you have at the end of 10 years?(20)

b. What is the present value of following cash flows at the interest rate of 8% per year?

i. Rs 150,000 received 5 years from now.

ii. Rs. 200,000 received 20 years from now.

iii. Rs. 100,000 received every year, beginning one year from now and ending 10 years from now.

Ans;

Step	Details	Formula	Calculation	Result (Rs.)
a. Future Value of Annuity	Invest Rs. 20,000 every year for 15 years at 10%	$FV = P \times \frac{(1+r)^n - 1}{r}$	$20,000 \times \frac{(1.1)^{15} - 1}{0.1}$	$20,000 \times 164.5 = 3,289,900$
b. Present	1. Rs. 150,000	$PV = \frac{150,000}{(1+0.08)^5}$	$150,000 \times \frac{1}{1.4693}$	102,000

Value of Cash Flows at 8% after 5 years $\frac{150,000}{(1 + 0.08)^5}$ ac{150,000}{1.4693}

2. Rs. 200,000 after 20 years $PV = \frac{200,000}{(1 + 0.08)^{20}}$ 200,000 51,700 $PV = \frac{200,000}{3.8681}$ ac{200,000}{3.8681}

3. Rs. 100,000 per year for 10 years $PV = \frac{100,000}{0.08} \times [(1 - (1 + 0.08)^{-10}) / 0.08]$ 100,000 811,000 $\times 8.11$

Q.5

Discuss the motives for keeping cash in hand by company. Which of the motives do you consider the most important and why?

Ans;

Cash is a critical asset for any company, as it serves as the foundation for operational efficiency, financial stability, and investment opportunities. A company keeps cash for several important motives, each of which plays a key role in its overall financial health and strategic planning. Below, we will explore these motives in detail, along with their significance and how companies can prioritize them.

1. Precautionary Motive:

The precautionary motive refers to the need to maintain a sufficient cash reserve to cover unforeseen circumstances, unexpected expenses, or emergencies. Companies face various uncertainties, including economic downturns, unexpected expenses, natural disasters, or delays in receivables. Without adequate cash reserves, a company may struggle to meet its financial obligations, such as paying suppliers, employees, or creditors.

- **Importance:**

- The precautionary motive is the most fundamental and widely recognized reason for keeping cash in hand. It acts as a safety net to guard against any sudden and unforeseen financial crisis. For example, if a company's receivables are delayed, or sales decrease unexpectedly, cash reserves allow the company to continue operations without disruption.

- A company that fails to maintain adequate liquidity may face liquidity shortages, leading to late payments, disruptions in operations, or even bankruptcy in extreme cases.
 - **Example:** If a company expects that its sales will decline due to an economic recession or delays in payments from clients, keeping cash ensures that it can still meet essential obligations like salaries, rent, or payments to suppliers.
 - **Challenges:**

Maintaining high levels of cash for precautionary reasons can reduce the funds available for other uses, such as investment in growth opportunities or expansion. However, balancing the need for liquidity with potential lost returns from not investing excess cash remains a key challenge.
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2. Transactions Motive:

The transactions motive pertains to the need for cash to support a company's regular day-to-day operations. A business requires cash for routine transactions like purchasing inventory, paying wages, settling utility bills, covering operational expenses, and settling supplier invoices.

- **Importance:**
 - This motive ensures that a company can maintain smooth operations without disruptions. If cash is not available to pay for necessary supplies, labor, or other

operational expenses, production may slow down, and the company may lose sales or market share.

- Maintaining sufficient cash ensures that the company can operate efficiently, fulfill customer orders, and avoid the added costs associated with borrowing or delayed payments.
- **Example:** A manufacturing company needs cash to pay for raw materials, utilities, wages, and other operating expenses. Without adequate cash, the company could face production interruptions, leading to reduced output and lost sales opportunities.

- **Challenges:**

- Holding too much cash for transactions may not be optimal, as cash that sits idle may not generate returns for the company. Striking a balance between sufficient cash for operations and investing excess cash for growth is key.

3. Speculative Motive:

The speculative motive involves keeping cash reserves to take advantage of investment opportunities, such as purchasing assets, investing in stocks or bonds, or acquiring new businesses. Companies often maintain cash for these opportunities when they anticipate favorable market conditions or potential growth.

- **Importance:**

- The speculative motive allows companies to capitalize on investment opportunities that may arise from favorable market conditions. If companies can identify opportunities where they can invest cash to earn a higher return than holding cash, they may enhance their overall profitability.
- This motive is particularly relevant in dynamic industries where market conditions change frequently. By holding cash, companies are prepared to act swiftly when suitable investment opportunities arise.
- **Example:** A company might keep cash reserves to invest in emerging markets, purchase undervalued assets, or acquire other businesses to expand its operations. If the company finds an opportunity to acquire a competitor at a lower cost or invest in a high-growth venture, having sufficient cash gives it the financial flexibility to act quickly.

- **Challenges:**

- The speculative motive comes with risks. If a company invests in opportunities that do not yield expected returns, it could face financial losses. Additionally, identifying and evaluating high-return investment opportunities can be complex and uncertain.

4. Why the Precautionary Motive is the Most Important:

Among the three motives, the **precautionary motive** is often considered the most important because it directly addresses the company's need for financial stability and survival during

uncertain times. A company's ability to maintain cash reserves provides a buffer to absorb shocks such as economic downturns, cash flow fluctuations, or delays in receivables. Without this safety net, companies face the risk of operational disruptions, increased borrowing costs, and a weakened position in the market.

- **Financial Stability:** Companies that prioritize the precautionary motive are better prepared to meet unexpected challenges without relying on external financing, such as loans or credit, which could increase financial costs.
- **Survival and Growth:** Maintaining a strong cash position ensures that companies can continue investing in essential operations, manage fixed costs, and take advantage of opportunities when they arise.

Conclusion:

In conclusion, while all three motives (precautionary, transaction, and speculative) are important, the **precautionary motive** is often regarded as the most crucial due to its role in ensuring financial stability and the company's ability to withstand unexpected events. Companies must strike a balance between holding adequate cash reserves for operational efficiency and investing excess cash to maximize returns. Balancing these motives effectively ensures long-term growth and financial health.