

Allama Iqbal Open University AIOU BS / ADC solved Assignment no 2 Autumn 2025 Code 8594 Introduction to Business Finance

Q.1 What are the different sources of finance available to a business? Discuss the advantages and disadvantages of debt and equity financing.

Introduction

Finance is the lifeblood of every business. Without adequate funds, no organization can start, operate, or expand successfully. Finance refers to the money required for day-to-day operations, investment in assets, and

long-term growth. Every business needs funds for various purposes such as purchasing machinery, maintaining inventory, paying salaries, and meeting other operational expenses. Businesses raise finance from various sources, which can be broadly classified into **internal and external sources**. The choice of financing source depends on the size of the business, type of ownership, nature of operations, and financial needs.

1. Sources of Finance

Business finance can be categorized based on **time period, ownership, and source of generation**.

A. On the Basis of Time Period

1. Short-Term Sources:

These sources are used for meeting working capital requirements for a period of less than one year.

Examples include:

- Trade Credit
- Bank Overdraft
- Short-Term Loans
- Commercial Papers
- Bills of Exchange

2. Short-term finance helps a business meet its immediate operational needs, such as purchasing raw materials, paying wages, or managing cash flow.

3. Medium-Term Sources:

These funds are used for a period of one to five years. Examples include:

- Medium-Term Loans
- Hire Purchase Agreements
- Leasing

4. Medium-term finance is generally used for upgrading equipment, business renovation, or expanding

production facilities.

5. Long-Term Sources:

These are funds arranged for more than five years and are usually invested in fixed assets such as land, buildings, and machinery. Examples include:

- Equity Shares
- Preference Shares
- Debentures or Bonds
- Retained Earnings

- Long-Term Bank Loans

6. Long-term finance ensures stability and helps in the overall growth and expansion of the business.

B. On the Basis of Ownership

1. Owner's Funds (Equity Financing):

These funds are contributed by the owners or shareholders of the business. Examples include equity share capital, preference share capital, and retained earnings. The investors bear the risk but also enjoy ownership and profit rights.

2. Borrowed Funds (Debt Financing):

These funds are borrowed from external sources and must be repaid with interest. Examples include bank loans, debentures, bonds, and public deposits.

C. On the Basis of Source of Generation

1. Internal Sources:

Funds generated within the business itself, such as retained profits, depreciation funds, or sale of assets.

2. External Sources:

Funds raised from outside parties such as banks, financial institutions, investors, or the general public.

2. Major Sources of Finance

i. Equity Capital

Equity capital represents the funds contributed by the owners or shareholders of a company. It is a permanent source of finance, as it is not repaid during the lifetime of the company. Equity shareholders are entitled to dividends and have voting rights in company decisions.

Advantages of Equity Capital:

- Permanent source of finance.
- No fixed obligation to pay dividends.
- Increases the creditworthiness of the company.

- Enhances ownership control.

Disadvantages of Equity Capital:

- High cost of raising funds compared to debt.
- Dilution of ownership and control.
- Dividends are not tax-deductible.
- May reduce earnings per share if too many shares are issued.

ii. Preference Share Capital

Preference shareholders enjoy a fixed rate of dividend and have preferential rights over equity shareholders in receiving dividends and repayment of capital. However, they do not have voting rights.

Advantages:

- No obligation to repay during the lifetime of the company.
- Attracts investors seeking steady income.
- Less risk for investors due to preference in payments.

Disadvantages:

- Fixed dividend burden on the company.
 - Dividends are not tax-deductible.
 - Limited appeal to investors during uncertain periods.
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iii. Debt Financing (Borrowed Funds)

Debt financing refers to borrowing funds from external sources such as banks, financial institutions, or issuing debentures. The borrower must repay the principal along with interest within the agreed time frame.

Advantages of Debt Financing:

- Interest payments are tax-deductible, reducing taxable income.
- No dilution of ownership or control.
- Debt is cheaper compared to equity due to lower risk for lenders.
- Enhances return on equity through financial leverage if used wisely.

Disadvantages of Debt Financing:

- Fixed interest obligations increase financial risk.

- Excessive debt may lead to insolvency.
 - Restricts managerial freedom due to lender's conditions.
 - Must be repaid irrespective of profit or loss.
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iv. Retained Earnings

Retained earnings are the profits reinvested into the business instead of being distributed as dividends. It is an internal source of long-term finance.

Advantages:

- No cost of raising funds.

- Enhances the company's financial stability.
- Improves shareholders' confidence.
- Increases the company's growth capacity.

Disadvantages:

- Limited to the amount of profit earned.
 - May cause dissatisfaction among shareholders expecting dividends.
 - Inefficient utilization can lead to overcapitalization.
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v. Bank Loans and Financial Institutions

Businesses often obtain loans from commercial banks or development finance institutions for medium or long-term needs. These loans can be secured or unsecured depending on the business's credibility.

Advantages:

- Quick availability of funds.
- Suitable for both short-term and long-term needs.
- Interest rates can be negotiated.

Disadvantages:

- Requires collateral or security.

- Regular repayment burden.
 - Bank monitoring may restrict operational freedom.
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vi. Public Deposits

Some companies invite deposits from the public for a fixed period at a specified rate of interest.

Advantages:

- Simple and inexpensive method.
- No dilution of control.
- Provides flexibility in financing.

Disadvantages:

- Risk of non-renewal of deposits.
 - Suitable only for companies with strong reputations.
 - Interest is a fixed obligation.
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vii. Trade Credit

Suppliers often allow businesses to purchase goods on credit, payable after a specific period.

Advantages:

- Easy and quick to obtain.

- No interest cost if payment is made within credit period.
- Improves liquidity position.

Disadvantages:

- Limited to short-term use.
- Overdependence may affect credit reputation.
- May lose cash discounts if payments are delayed.

3. Comparison Between Debt and Equity Financing

Basis	Debt Financing	Equity Financing
Source	Borrowed from external parties	Contributed by owners or shareholders
Ownership	Does not dilute ownership	Dilutes ownership
Obligation to Pay	Interest must be paid regularly	Dividend paid only when profits are available
Cost of Capital	Cheaper due to tax benefits	More expensive
Risk	Increases financial risk	Lower financial risk
Control	Creditors have no control	Shareholders have voting rights

Repayment	Must be repaid after a fixed period	Not repayable during company's life
Tax Treatment	Interest is tax-deductible	Dividend is not tax-deductible

4. Advantages and Disadvantages of Debt Financing

Advantages:

1. Low cost of capital due to tax-deductible interest.
2. Retains full ownership and control.
3. Increases profitability through leverage when earnings exceed interest cost.

4. Suitable for short and medium-term financing.

Disadvantages:

1. Increases fixed obligations and financial risk.

2. Must be repaid irrespective of profits.

3. Restricts future borrowing capacity.

4. High dependence on debt may lead to bankruptcy.

5. Advantages and Disadvantages of Equity Financing

Advantages:

1. Permanent source of finance.

2. No repayment obligation.

3. Strengthens financial base.

4. Enhances corporate image and stability.

Disadvantages:

1. Costlier than debt financing.

2. Dividends are not tax-deductible.

3. Dilutes ownership control.

4. May reduce earnings per share.

Conclusion

Every business requires a balanced mix of **debt and equity financing** to ensure financial stability and profitability. Excessive reliance on debt increases risk, while too much equity may reduce returns. Therefore, the management must analyze its capital structure carefully and choose the most suitable combination according to business needs, cost of capital, and risk tolerance. A well-planned financial strategy contributes significantly to the long-term growth and success of the organizatio

Q.2

Given below is the information on the capital structure of three companies on 31-12-2024.

Particulars (Rs. in thousands)	Compa ny A	Compa ny B	Compa ny C
Paid-up Ordinary	200,00	120,00	600,00
Share Capital	0	0	0
Capital Reserves	25,000	10,000	150,00
			0
Retained Earnings	30,000	200,00	180,00
		0	0

8% Preference	30,000	250,00	—
Shares		0	
10% Bonds	100,00	50,000	—
(Redeemable at	0		
Par)			
Dividend on	12%	25%	14%
Ordinary Shares (%)			
Expected Growth in	8%	6%	5%
Equity (%)			
Earnings per	60,000	135,00	200,00
Ordinary Share		0	0
(Rs.)			
Market Value per	20	40	15
Share (Rs.)			

Effective Tax Rate	30%	32%	33%
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(%)

(a) Calculation of Cost of Equity (Ke)

Formula:

$$K_e = (D_1 / P_0) + g$$

Where:

D_1 = Expected Dividend next year

P_0 = Current Market Price per Share

g = Expected Growth Rate

Company A

Dividend Rate = 12%

Assume Face Value = Rs. 10

$$\text{Dividend (D}_0\text{)} = 12\% \text{ of } 10 = 1.20$$

$$\begin{aligned}\text{Expected Dividend (D}_1\text{)} &= D_0 \times (1 + g) = 1.20 \times (1 + 0.08) \\ &= 1.296\end{aligned}$$

$$P_0 = 20$$

$$g = 8\% = 0.08$$

$$K_e = (1.296 / 20) + 0.08$$

$$K_e = 0.0648 + 0.08 = \mathbf{14.48\%}$$

Company B

$$\text{Dividend Rate} = 25\% \text{ of Rs. } 10 = 2.50$$

$$\text{Expected Dividend (D}_1\text{)} = 2.50 \times (1 + 0.06) = 2.65$$

$$P_0 = 40$$

$$K_e = (2.65 / 40) + 0.06$$

$$K_e = 0.06625 + 0.06 = \mathbf{12.63\%}$$

Company C

Dividend Rate = 14% of Rs. 10 = 1.40

Expected Dividend (D_1) = $1.40 \times (1 + 0.05) = 1.47$

$P_0 = 15$

$K_e = (1.47 / 15) + 0.05$

$K_e = 0.098 + 0.05 = \mathbf{14.8\%}$

(b) Calculation of Cost of Debt (K_d)

Formula:

$K_d = \text{Interest} \times (1 - \text{Tax Rate})$

Company A

Interest = 10% of Rs. 100,000 = 10,000

Tax = 30%

$K_d = 10\% \times (1 - 0.30) = 7\%$

Cost of Debt (A) = 7%

Company B

Interest = 10% of Rs. 50,000 = 5,000

Tax = 32%

$K_d = 10\% \times (1 - 0.32) = 6.8\%$

Cost of Debt (B) = 6.8%

Company C

No Bonds → **$K_d = 0\%$**

(c) Calculation of Weighted Average Cost of Capital (WACC)

Formula:

$$WACC = (W_e \times K_e) + (W_p \times K_p) + (W_d \times K_d)$$

Where:

W_e = Weight of Equity

W_p = Weight of Preference Shares

W_d = Weight of Debt

Company A

Source	Amount (Rs.000)	Cos t (%)	Weight 255,000 / 385,000 = 0.662	Weight ed Cost 9.59
Equity (200,000 + 25,000 + 30,000 = 255,000)	255,000	14.4 8	255,000 / 385,000 = 0.662	9.59

Preference Shares	30,000	8.00	$30,000 / 385,000 = 0.078$	0.62
Debt	100,000	7.00	$100,000 / 385,000 = 0.26$	1.82
Total	385,000	—	—	12.03%

WACC (A) = 12.03%

Company B

Source	Amount	Cost	Weight	Weighted
	t	t		ed
	(Rs.000	(%)		Cost
)			

Equity (120,000 + 330,000)	12.6	330,000 / 630,000 = 0.524	6.61
Preference Shares	8.00	250,000 / 630,000 = 0.397	3.18
Debt	6.80	50,000 / 630,000 = 0.079	0.54
Total	—	—	10.33%

WACC (B) = 10.33%

Company C

Source	Amount (Rs.000)	Cost (%)	Weight	Weighted Cost
Equity (600,000 + 150,000 + 180,000 = 930,000)	930,000	14.8	$930,000 / 930,000 = 1.00$	14.8
Preference Shares	—	—	—	—
Debt	—	—	—	—
Total	930,000	—	—	14.8%

WACC (C) = 14.8%

Final Summary Table

Comp	Ke	Kd	WACC
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any	(%)	(%)	(%)
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A	14.4	7.00	12.03
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8

B	12.6	6.80	10.33
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3

C	14.8	0.00	14.80
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Conclusion

The results show that **Company B** has the **lowest Weighted Average Cost of Capital (10.33%)**, indicating efficient financing and lower financial risk. **Company C**, despite having no debt, faces a higher cost of capital due

to reliance solely on equity financing. **Company A** balances equity, preference, and debt effectively but still maintains a moderate cost of capital. This analysis emphasizes the importance of an optimal capital structure in minimizing financing costs and maximizing shareholder value.

Q.3

Future value of an annuity for each case in the accompanying table.

Case	Amount of Annuity (Rs.)	Interest Rate (Annual)	Deposit Period (Years)
A	3,000	7%	10
B	1,000	10%	5
C	25,000	12%	6
D	15,000	9%	8
E	8,000	6%	20

Case A

Given:

$$A = \text{Rs. } 3,000$$

$$r = 7\% = 0.07$$

$$n = 10$$

Ordinary Annuity:

$$FV_o = 3,000 \times [(1 + 0.07)^{10} - 1] / 0.07$$

$$= 3,000 \times [(1.967151 - 1) / 0.07]$$

$$= 3,000 \times (0.967151 / 0.07)$$

$$= 3,000 \times 13.816$$

$$= \text{Rs. } 41,448$$

Annuity Due:

$$FV_d = 41,448 \times (1 + 0.07)$$

$$= 41,448 \times 1.07$$

$$= \text{Rs. } 44,350$$

Case B

Given:

$$A = \text{Rs. } 1,000$$

$$r = 10\% = 0.10$$

$$n = 5$$

Ordinary Annuity:

$$FV_o = 1,000 \times [(1 + 0.10)^5 - 1] / 0.10$$

$$= 1,000 \times [(1.61051 - 1) / 0.10]$$

$$= 1,000 \times (0.61051 / 0.10)$$

$$= 1,000 \times 6.1051$$

$$= \text{Rs. } 6,105$$

Annuity Due:

$$FV_d = 6,105 \times (1 + 0.10)$$

$$= 6,105 \times 1.10$$

$$= \text{Rs. } 6,716$$

Case C

Given:

$$A = \text{Rs. } 25,000$$

$$r = 12\% = 0.12$$

$$n = 6$$

Ordinary Annuity:

$$FV_o = 25,000 \times [(1 + 0.12)^6 - 1] / 0.12$$

$$= 25,000 \times [(1.97382 - 1) / 0.12]$$

$$= 25,000 \times (0.97382 / 0.12)$$

$$= 25,000 \times 8.115$$

$$= \text{Rs. } 202,875$$

Annuity Due:

$$FV_d = 202,875 \times (1 + 0.12)$$

$$= 202,875 \times 1.12$$

$$= \text{Rs. } 227,220$$

Case D

Given:

$$A = \text{Rs. } 15,000$$

$$r = 9\% = 0.09$$

$$n = 8$$

Ordinary Annuity:

$$FV_o = 15,000 \times [(1 + 0.09)^8 - 1] / 0.09$$

$$= 15,000 \times [(1.99256 - 1) / 0.09]$$

$$= 15,000 \times (0.99256 / 0.09)$$

$$= 15,000 \times 11.028$$

$$= \text{Rs. } 165,420$$

Annuity Due:

$$FV_d = 165,420 \times (1 + 0.09)$$

$$= 165,420 \times 1.09$$

$$= \text{Rs. } 180,308$$

Case E

Given:

$$A = \text{Rs. } 8,000$$

$$r = 6\% = 0.06$$

$$n = 20$$

Ordinary Annuity:

$$FV_o = 8,000 \times [(1 + 0.06)^{20} - 1] / 0.06$$

$$= 8,000 \times [(3.207135 - 1) / 0.06]$$

$$= 8,000 \times (2.207135 / 0.06)$$

$$= 8,000 \times 36.7856$$

$$= \text{Rs. } 294,285$$

Annuity Due:

$$FV_d = 294,285 \times (1 + 0.06)$$

$$= 294,285 \times 1.06$$

$$= \text{Rs. } 312,942$$

Final Summary Table

Case	Ordinary	Annuity
	Annuity (Rs.)	Due (Rs.)
A	41,448	44,350
B	6,105	6,716

C	202,875	227,220
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D	165,420	180,308
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E	294,285	312,942
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Conclusion

The **future value of an annuity** depends on the interest rate, number of periods, and whether the payments are made at the **beginning (annuity due)** or **end (ordinary annuity)** of each period. As shown, the **annuity due** always yields a **higher future value** because each payment earns one additional period of interest.

Q.4 What are the different types of financial risks faced by businesses? Describe the tools and strategies used in managing these risks effectively.

Introduction

Financial risk refers to the possibility of losing money or facing uncertainty in a company's financial performance due to market fluctuations, credit issues, or internal inefficiencies. Every business organization, regardless of its size or sector, faces various forms of financial risks that can impact profitability, liquidity, and long-term sustainability. Understanding these risks and developing effective strategies to manage them is essential for maintaining financial stability and achieving business goals. In modern business environments, financial risk

management has become a crucial discipline that combines financial analysis, strategic planning, and forecasting tools to mitigate potential losses.

Types of Financial Risks Faced by Businesses

Businesses are exposed to several categories of financial risks that arise from internal operations and external economic conditions. The main types include:

1. Market Risk

Market risk arises due to changes in market prices, such as interest rates, foreign exchange rates, stock prices, or commodity prices. It affects businesses engaged in trading, exports, imports, and investments.

There are two main subcategories:

- **Interest Rate Risk:**

This occurs when fluctuations in interest rates impact a company's borrowing costs or investment income.

For example, if a business has taken loans at a variable interest rate, an increase in interest rates will raise its financial expenses.

- **Currency Risk:**

Businesses dealing in international markets face exchange rate volatility. For instance, a Pakistani exporter receiving payments in US dollars may suffer losses if the rupee appreciates against the dollar.

- **Equity Price Risk:**

This risk affects companies that invest in the stock market. A sudden decline in stock prices reduces the

value of their investment portfolios.

- **Commodity Price Risk:**

Companies dependent on raw materials like oil, gold, or agricultural products may experience higher costs due to fluctuating commodity prices.

2. Credit Risk

Credit risk occurs when a borrower or customer fails to meet their financial obligations, such as repaying loans or paying invoices. It mainly affects banks, financial institutions, and businesses offering credit sales.

For example, if a company sells goods on credit and the customer fails to pay on time, it results in a bad debt

expense. High credit risk reduces cash flow and profitability.

3. Liquidity Risk

Liquidity risk arises when a company cannot convert its assets into cash quickly enough to meet short-term obligations. It may have valuable assets, but if those assets are illiquid, the company can face difficulties paying suppliers, salaries, or loans.

For example, a real estate company with high property value but little cash flow may struggle to cover operating costs.

4. Operational Risk

Operational risk is related to internal failures such as human errors, system breakdowns, poor management decisions, or fraud. These risks directly affect day-to-day business operations.

Examples include accounting errors, cybersecurity breaches, production defects, or employee misconduct.

5. Legal and Compliance Risk

Legal risk occurs when a company faces penalties, fines, or lawsuits for violating laws and regulations. Compliance risk is related to not following financial reporting standards, tax laws, or labor laws.

For instance, a bank may face heavy penalties for non-compliance with anti-money laundering regulations.

6. Strategic Risk

Strategic risk arises when business strategies fail to deliver expected results due to poor planning, incorrect market analysis, or technological changes.

For example, investing heavily in outdated technology may reduce competitiveness and lead to long-term financial loss.

7. Reputational Risk

Reputational risk occurs when negative publicity or unethical behavior damages a company's public image. This can lead to a decline in sales, customer trust, and investor confidence.

For instance, a company involved in an environmental scandal may lose customers and market value.

Tools and Strategies for Managing Financial Risks

Effective financial risk management involves identifying, analyzing, and controlling potential threats to minimize their negative effects. Businesses use a combination of analytical tools, financial instruments, and strategic approaches to manage risks.

1. Risk Identification and Assessment

The first step is to identify potential financial risks and evaluate their impact. Tools such as risk matrices, SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), and scenario analysis are used to prioritize risks.

For instance, a manufacturing company may assess the

probability of raw material price fluctuations and their potential effect on production costs.

2. Risk Avoidance

This strategy involves eliminating activities that carry high financial risks. For example, a company might avoid investing in highly volatile foreign markets or speculative projects. While this approach reduces exposure, it can also limit growth opportunities.

3. Risk Reduction or Mitigation

Risk reduction aims to minimize the impact of unavoidable risks through diversification and process improvement.

Examples include:

- Diversifying investment portfolios across different sectors or currencies.
 - Implementing quality control systems to prevent operational losses.
 - Using modern cybersecurity systems to protect financial data.
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4. Risk Transfer

This involves shifting the financial burden of potential losses to another party, usually through insurance or hedging.

Examples:

- **Insurance:** Businesses purchase insurance policies to protect against property damage, liability claims, or employee injuries.
- **Hedging:** Companies use financial instruments like futures, options, and forward contracts to lock in prices or exchange rates. For instance, an exporter can hedge against currency fluctuations using forward exchange contracts.

5. Risk Retention

Sometimes businesses choose to accept minor risks because the cost of avoiding them is higher than the potential loss. This is common for small operational risks

that do not significantly affect financial stability. Companies often create **contingency reserves** or **provisions** to cover such risks.

6. Risk Sharing

In this strategy, businesses share potential risks with partners or stakeholders. Joint ventures and partnerships are examples of arrangements where financial risks are distributed among multiple entities, reducing the individual burden.

7. Financial Hedging Tools

Hedging is one of the most widely used tools for managing financial risks. Common instruments include:

- **Forward Contracts:** Agreements to buy or sell an asset at a future date for a fixed price.
- **Futures Contracts:** Similar to forward contracts but traded on exchanges.
- **Options:** Provide the right (but not obligation) to buy or sell an asset at a specified price before expiration.
- **Swaps:** Agreements between two parties to exchange cash flows, such as interest rate swaps or currency swaps.

Example:

A company expecting payment in foreign currency can

enter into a forward contract to fix the exchange rate, thus avoiding currency risk.

8. Maintaining Liquidity Reserves

Companies should maintain a healthy level of liquid assets to handle unexpected cash flow problems. This includes maintaining **cash reserves**, **credit lines**, or **marketable securities** that can be easily converted into cash.

9. Internal Controls and Audit Systems

Establishing strong internal controls helps prevent operational and financial fraud. Regular audits—both internal and external—ensure transparency, accuracy, and compliance with financial regulations.

10. Financial Forecasting and Sensitivity Analysis

Financial forecasting helps predict future revenues, expenses, and cash flow under various scenarios.

Sensitivity analysis tests how changes in key variables like sales, costs, or interest rates affect profitability. This helps management prepare for potential financial challenges.

Example of Integrated Risk Management

Consider a textile export company in Pakistan.

- It faces **currency risk** due to dollar-rupee fluctuations. To manage it, the company uses **forward contracts**.

- To avoid **credit risk**, it performs **credit checks** before approving export orders.
- To control **operational risk**, it installs automated systems and trains employees.
- For **liquidity management**, it maintains short-term investments and cash reserves.

This integrated approach ensures financial stability and long-term competitiveness.

Benefits of Effective Financial Risk Management

1. **Improves Decision-Making:** Managers can make informed choices with reduced uncertainty.
2. **Ensures Business Continuity:** Prevents severe financial losses that can disrupt operations.
3. **Enhances Investor Confidence:** Transparent risk management attracts investors and creditors.
4. **Protects Profitability:** By controlling costs and losses, businesses maintain higher profit margins.
5. **Compliance with Regulations:** Effective systems ensure adherence to financial laws and standards.

Conclusion

Financial risks are an inseparable part of doing business in today's globalized economy. However, organizations that identify, evaluate, and manage these risks effectively can turn challenges into opportunities. By combining tools such as insurance, hedging, diversification, and internal controls, businesses can minimize losses, enhance financial stability, and achieve sustainable growth. The key lies in adopting a proactive and well-structured risk management framework that continuously evolves with changing market conditions.

Q.5

a. A company earns Rs 1,200,000 after tax. It has 300,000 equity shares outstanding and the current market price per share is Rs 60. Calculate:

- i. Earnings Per Share (EPS)
 - ii. Price-Earnings (P/E) Ratio
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(i) Earnings Per Share (EPS):

Formula:

$$\text{EPS} = \text{Earnings after tax} / \text{Number of equity shares}$$

Given:

Earnings after tax = Rs 1,200,000

Number of shares = 300,000

$$\text{EPS} = 1,200,000 / 300,000$$

$$\text{EPS} = \text{Rs } 4.00$$

Therefore, Earnings Per Share (EPS) = Rs 4 per share.

(ii) Price-Earnings (P/E) Ratio:

Formula:

$$\text{P/E Ratio} = \text{Market Price per Share} / \text{Earnings Per Share}$$

Given:

$$\text{Market price per share} = \text{Rs } 60$$

$$\text{Earnings per share (EPS)} = \text{Rs } 4$$

$$\text{P/E Ratio} = 60 / 4$$

$$\text{P/E Ratio} = 15$$

Therefore, the Price-Earnings Ratio = 15 times.

Final Answers (Part a):

Particulars	Formula	Result
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EPS	$\frac{1,200,000}{300,000}$	Rs 4 per share
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P/E Ratio	$60 / 4$	15 times
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b. A firm has sales of Rs 1,000,000, variable costs of Rs 600,000 and fixed costs of Rs 200,000. It pays Rs 50,000 in interest. Calculate:

i. Operating leverage

ii. Financial leverage

(i) Operating Leverage:

Formula:

$$\text{Operating Leverage} = \text{Contribution Margin} / \text{EBIT}$$

Step 1: Calculate Contribution Margin

$$\text{Contribution} = \text{Sales} - \text{Variable Costs}$$

$$\text{Contribution} = 1,000,000 - 600,000 = 400,000$$

Step 2: Calculate EBIT (Earnings Before Interest and Taxes)

$$\text{EBIT} = \text{Contribution} - \text{Fixed Costs}$$

$$\text{EBIT} = 400,000 - 200,000 = 200,000$$

Step 3: Apply formula

$$\text{Operating Leverage} = 400,000 / 200,000$$

$$\text{Operating Leverage} = 2$$

Therefore, Operating Leverage = 2 times.

(ii) Financial Leverage:

Formula:

$$\text{Financial Leverage} = \text{EBIT} / \text{EBT}$$

Step 1: Calculate EBT (Earnings Before Tax)

$$\text{EBT} = \text{EBIT} - \text{Interest}$$

$$\text{EBT} = 200,000 - 50,000 = 150,000$$

Step 2: Apply formula

$$\text{Financial Leverage} = 200,000 / 150,000$$

$$\text{Financial Leverage} = 1.33$$

Therefore, Financial Leverage = 1.33 times.

Final Answers (Part b):

Particulars	Formula	Result
		t
Operating	400,000 /	2
Leverage	200,000	times
Financial	200,000 /	1.33
Leverage	150,000	times

Summary Table:

Part	Calculation	Result
(a)(i) EPS	$1,200,000 / 300,000$	Rs 4 per share
(a)(ii) P/E Ratio	$60 / 4$	15 times
(b)(i) Operating Leverage	$\text{Contribution} / \text{EBIT} =$ $400,000 / 200,000$	2 times
(b)(ii) Financial Leverage	$\text{EBIT} / \text{EBT} = 200,000 /$ $150,000$	1.33 times

Conclusion:

The company's Earnings Per Share is Rs 4, and the P/E

ratio is 15, indicating good investor confidence.

The Operating Leverage of 2 shows that the company's operating profit will change twice as much as sales.

The Financial Leverage of 1.33 indicates moderate debt usage, showing a stable and manageable financial position.