Before We **Begin**

To maintain and enhance their financial health, businesses worldwide need managers skilled in various aspects of finance. Financial management is essential to guide decisions on asset acquisition, capital raising, and strategies for maximizing shareholder wealth. It encompasses evaluating capital structure, selecting sources of capital, deciding on investment opportunities, managing liquidity, and implementing financial controls. The role of financial management also covers capital composition evaluation, capital source selection, fund investment determination, liquidity management, and financial control. The three key pillars of financial management include investment decisions, financing choices, and dividend policies.

Learning financial management fosters both analytical skills and a holistic perspective on key financial topics, developing students' critical thinking and acumen. At the Intermediate Level, students are encouraged not only to gain professional knowledge but also to develop the ability to apply that knowledge effectively in practical questions and case scenarios. By bridging theoretical understanding with practical questions, the subject equips students with the critical thinking and analytical abilities, necessary for success in today's complex business environments. Through this approach, students become well-prepared to face the challenges of the professional world with confidence and skill.

Study Tips for Exam Preparation

Preparation for practical exams requires a good grasp of core concepts and effective memorization strategies. Here are some valuable techniques to enhance your study approach:

1. **Master the Art of Effective Notetaking**
   - ***Jot down running notes.*** Focus on main points during live learning classes, BOS video lectures, and self-study of study material of the Institute. Regularly taking notes helps you capture essential details.
   - ***Use your own words.*** Keep key phrases from study material, but express other details in your own language for easier recall.
   - ***Organize Your Notes by Topic or Subject:*** As you accumulate notes, it can be helpful to sort them by topics or subjects. This organization allows for quicker retrieval when revisiting concepts, especially during revision periods.
   - ***Summarize Each Topic at the End:*** After taking notes on a specific topic, write a short summary. This brief overview reinforces your understanding and provides a quick refresher when revisiting the material later.
   - ***Utilize Diagrams and Flowcharts:*** Visual aids like diagrams, flowcharts, and tables can help simplify complex concepts. They make notes more engaging and can aid in memory retention by connecting ideas visually.
   - ***Review and Revise Regularly:*** Schedule time to review your notes periodically. This repeated exposure reinforces information retention and helps identify any areas that require further study.
2. **Avoid Last-Minute Notes**
   - Using last-minute notes or new materials just before the exam can disrupt your learning pattern. Stick with the study materials you've reviewed thoroughly over your preparation period.

3. **Practice Problem-Solving with Pen and Paper**
   - ***Solving problems hands-on is critical.*** Watching others solve them isn't enough. Practice by writing out solutions for mock tests and past question papers, building confidence and familiarity with exam-style questions.

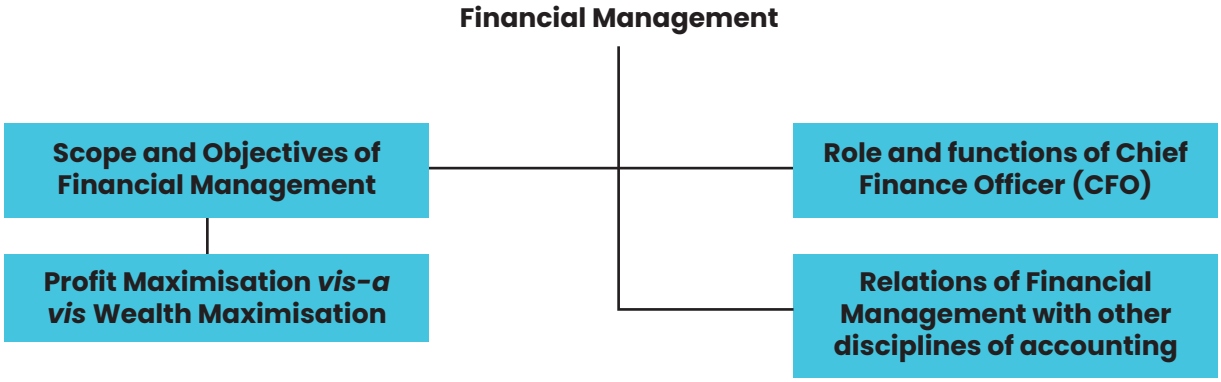
These strategies will strengthen your understanding, making your preparation for the CA Inter exams more effective and manageable.

INDEX

Financial Management

Scope and Objectives of Financial Management

Chapter Overview

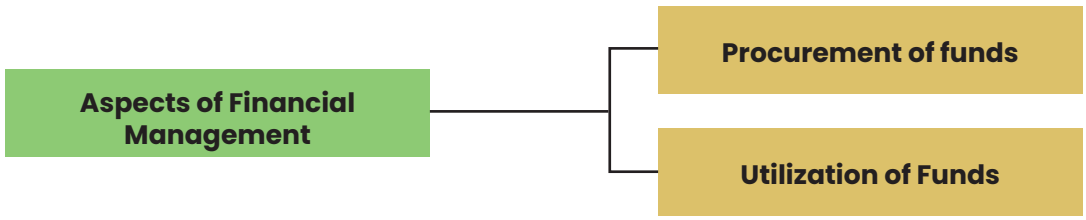


Meaning of Financial Management

Financial management comprises the forecasting, planning, organizing, directing, co-ordinating and controlling of all activities relating to acquisition and application of the financial resources of an undertaking in keeping with its financial objective.

Two Basic Aspects Of Financial Management

There are two basic aspects of financial management viz., procurement of funds and an effective use of these funds to achieve business objectives.

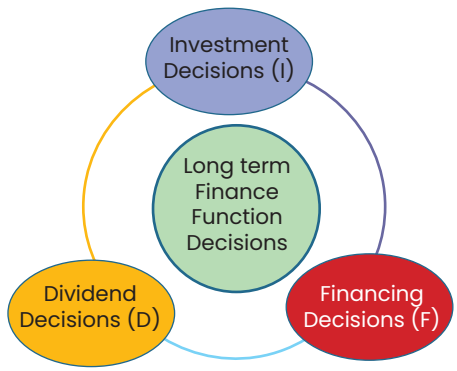


Finance Functions/Finance Decision

Value of a firm will depend on various finance functions/ decisions. It can be expressed as

V = f (I,F,D).

The finance functions are divided into long term and short term functions/decisions



Scope and Objective of Financial Market

Short- term Finance Decisions/Function ▶ Working capital Management (WCM)

Scope of Financial Management

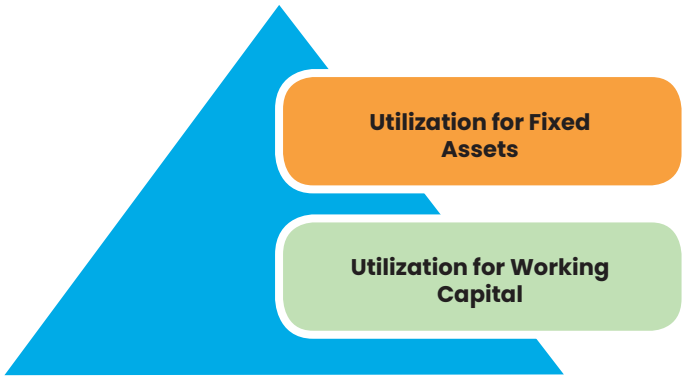
- Determination of size of the enterprise and determination of rate of growth.
- Determining the composition of assets of the enterprise.
- Determining the mix of enterprise's financing i.e., consideration of level of debt to equity, etc. and short term functions/decisions
- Analysis, planning and control of financial affairs of the enterprise.

Procurement of Funds

Since funds can be obtained from different sources, therefore their procurement is always considered as a complex problem by business concerns. Some of the sources for funds for a business enterprise are:

Effective Utilisation of Funds

The Finance Manager has to point out situations where the funds are being kept idle or where proper use of funds is not being made. All the funds are procured at a certain cost and after entailing a certain amount of risk.

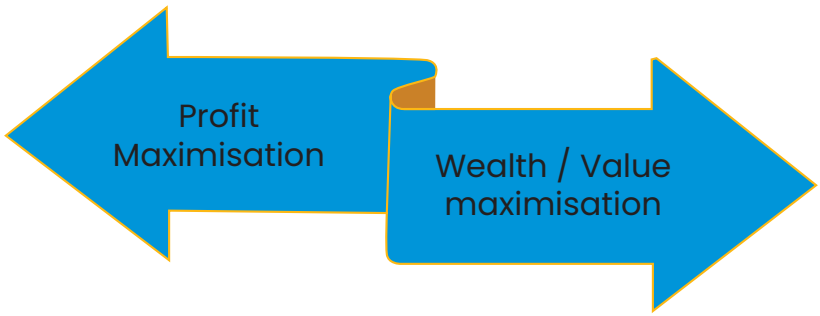


Evolution Of Financial Management

The evolution of financial management is divided into three phases. Financial Management evolved as a separate field of study at the beginning of the century. The three stages of its evolution are

Stages of Evolution of Financial Management		
Traditional Phase	Transitional Phase	Modern Phase

Objectives of Financial Management



Scope and Objective of Financial Market

How do we measure the value/wealth of a firm?

- Stockholders hire managers to run their firms for them.....
- Managers set aside their interest and maximise stock prices...
- Stockholders wealth is maximised...
- Societal wealth is maximised...

Value of a firm (V) = Number of Shares (N) × Market price of shares (MP)

Or

V = Value of equity (Ve) + Value of debt (Vd)

Three Important Decisions for Achievement of Wealth Maximisation

Conflict between Profit versus Value maxi misation Principle

As a normal tendency, the management may pursue its own personal goals (profit maximization). But in an organization where there is a significant outside participation (shareholding, lenders etc.), the management may not be able to exclusively pursue its personal goals due to the constant supervision of the various stakeholders of the company-employees, creditors, customers, government, etc.

The below table highlights some of the advantages and disadvantages of both profit maximisation and wealth maximization goals

Goal	Objective	Advantages	Disadvantages
Profit Maximization	Large amount of profits	(i) Easy to calculate profits (ii)Easy to determine the link between financial decisions and profits.	(i) Emphasizes the short term gains (ii) Ignores risk or uncertainty (iii)Ignores the timing of returns (iv)Requires immediate resources.
Shareholders Wealth Maximisation	Highest market value of shares	(i) Emphasizes the long term gains (ii) Recognises risk or uncertainty (iii) Recognises the timing of returns (iv) Considers shareholders' return.	(i) Offers no clear relationship between financial decisions and share price. (ii) Can lead to management anxiety and frustration.

Role of Finance executive in today's World vis-a-vis in the past

Today, the role of chief financial officer, or CFO, is no longer confined to accounting, financial reporting and risk management. Some of the key differences that highlight the changing role of a CFO are as follows

What a CFO used to do?	What a CFO now does?
Budgeting	Budgeting
Forecasting	Forecasting
Accounting	Managing M & As
Treasury (cash management)	Profitability analysis (for example, by customer or product)
Preparing internal financial reports for management.	Pricing analysis
Preparing quarterly, annual filings for investors.	Decisions about outsourcing
Tax filing	Overseeing the IT function.
Tracking accounts payable and accounts receivable.	Overseeing the HR function.
Travel and entertainment expense management.	Strategic planning (sometimes overseeing this function).
	Regulatory compliance.
	Risk management.

Types Of Financing

Relationship of financial management with related disciplines

Financial management is not a totally independent area. It draws heavily on related disciplines and areas of study namely economics, accounting, production, marketing and quantitative methods. Even though these disciplines are inter-related, there are key differences among them.

Financial Management and Accounting:	Treatment of Funds	In accounting, the measurement of funds is based on the accrual principle.
		The treatment of funds in financial management is based on cash flows.
	Decision – making	Chief focus of an accountant is to collect data and present the data.
		The financial manager's primary responsibility relates to financial planning, controlling and decision making.

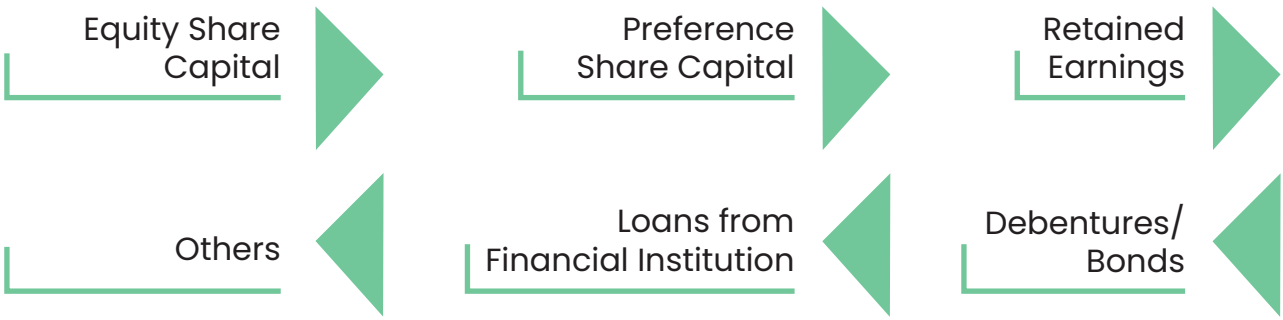
Financial Management and Other Related Disciplines

Financial management also draws on other related disciplines such as marketing, production and quantitative methods apart from accounting. For instance, financial managers should consider the impact of new product development and promotion plans made in the marketing area since their plans will require capital outlays and have an impact on the projected cash flows.

Types Of Financing

Chapter Overview

Sources of Finance



Classification of Financial Sources

There are mainly two ways of classifying various financial sources

(i) Based on basic Sources

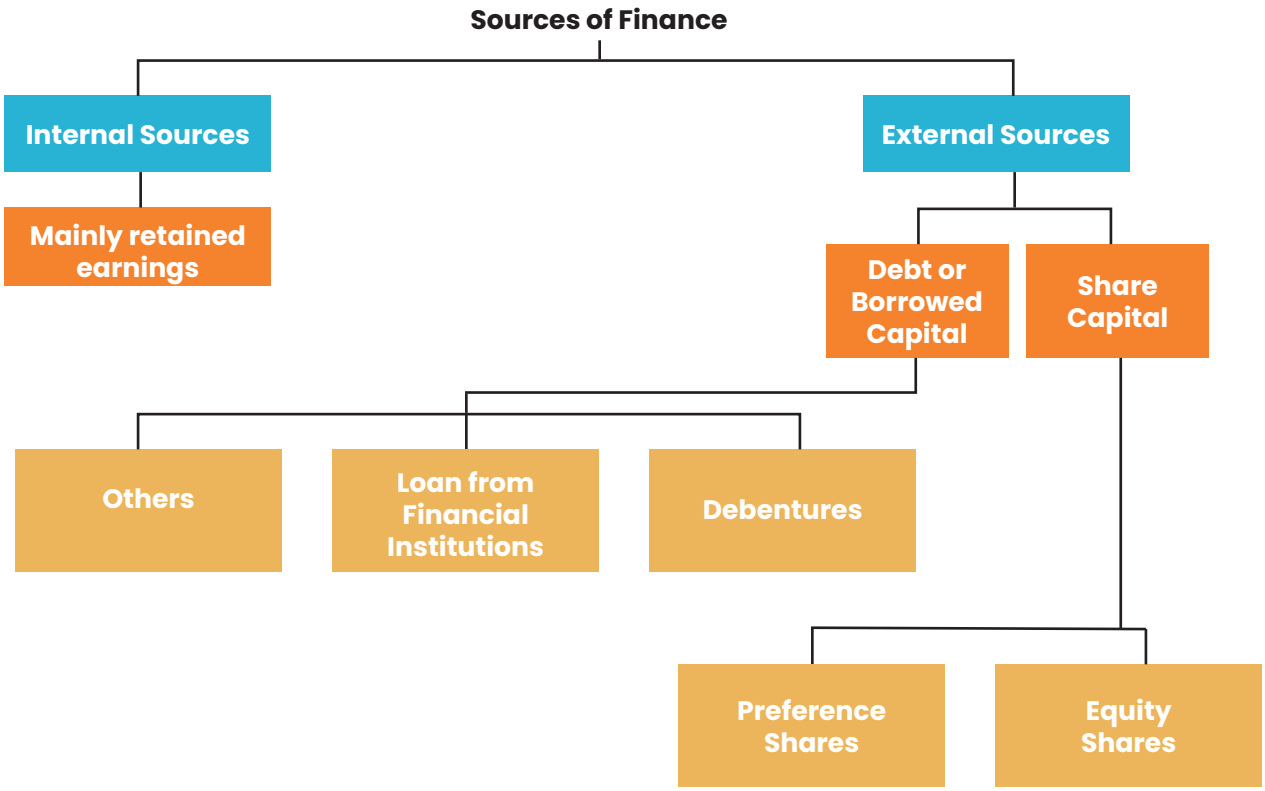
(ii) Based on Maturity of repayment period

(iii) Based on Ownership and control

Types Of Financing

Sources of Finance based on Basic Sources

Based on basic sources of finance, types of financing can be classified as



Sources of Finance based on Maturity of Payment

Sources of finance based on maturity of payment can be classified as

Sources of Finance

Long-term

1. Share capital or Equity shares
2. Preference shares
3. Retained earnings
4. Debentures/Bonds of different types
5. Loans from financial institutions
6. Loans from State Financial Corporations
7. Loans from commercial banks
8. Venture capital funding
9. Asset securitisation
10. International financing like Euro-issues, Foreign currency loans

Medium-term

1. Preference shares
2. Debentures/Bonds
3. Public deposits/fixed deposits for duration of three years
4. Medium term loans from Commercial banks, Financial Institutions, State Financial Corporations
5. Lease financing/Hire-Purchase financing
6. External commercial borrowings
7. Euro-issues
8. Foreign Currency bonds

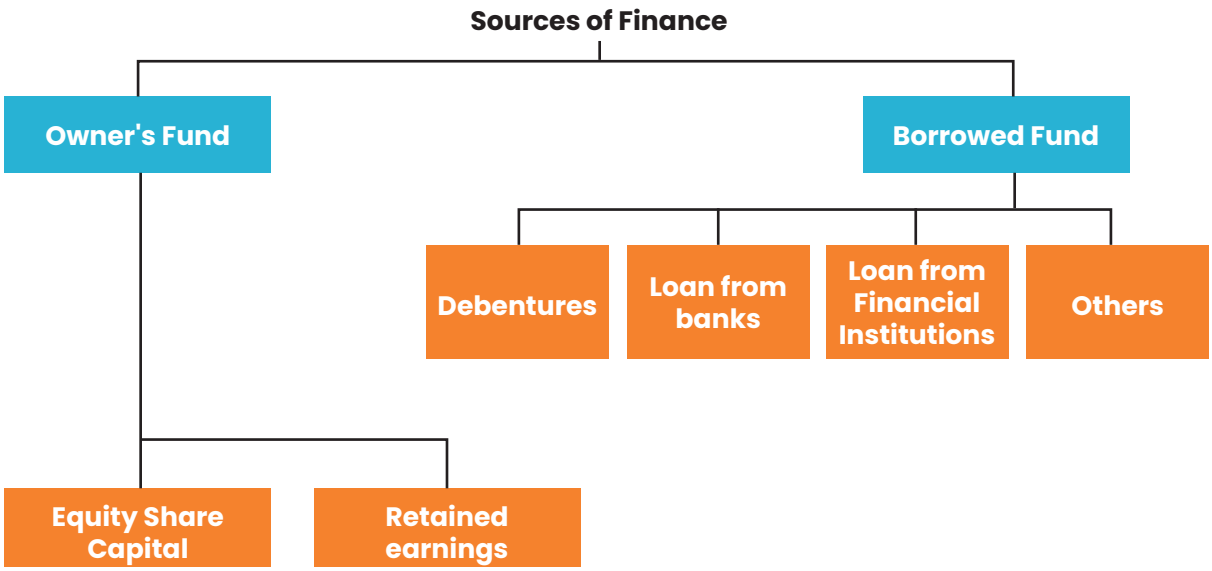
Short-term

1. Trade credit
2. Accrued expenses and deferred income
3. Short term loans like Working Capital Loans from Commercial banks
4. Fixed deposits for a period of 1 year or less
5. Advances received from customers
6. Various short-term provisions

Types Of Financing

Sources of Finance based on Ownership and Control

Based on Ownership and Control, types of financing can be classified as below:



Types Of Financing

Owner's Capital or Equity Capital:

A public limited company may raise funds from promoters or from the investing public by way of owner's capital or equity capital by issuing ordinary equity shares.

Preference Share Capital:

These are a special kind of shares; the holders of such shares enjoy priority, both as regards to the payment of a fixed amount of dividend Sources of finance based on maturity of payment can be classified as and also towards repayment of capital on winding up of the company.

Debt Securitisation:

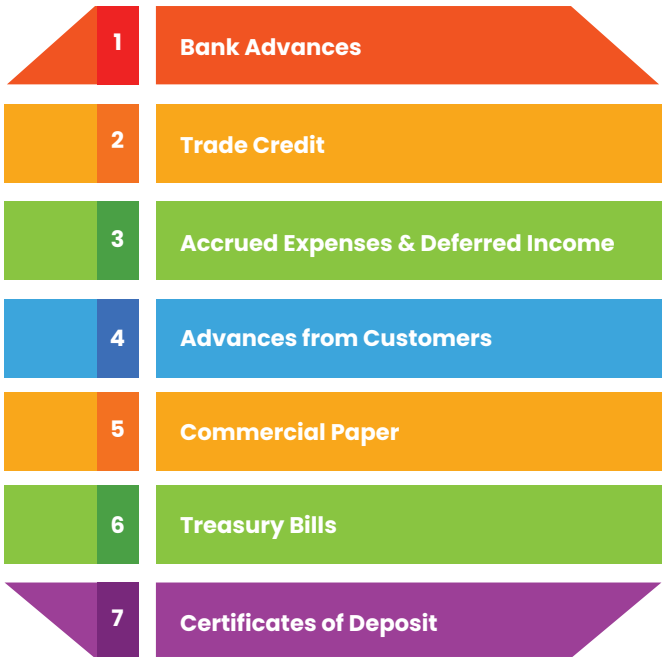
Securitization is a process in which illiquid assets are pooled into marketable securities that can be sold to investors. The process leads to the creation of financial instruments that represent ownership interest in, or are secured by a segregated income producing asset or pool of assets.

Lease Financing:

Leasing is a general contract between the owner and user of the asset over a specified period of time. The asset is purchased initially by the lessor (leasing company) and thereafter leased to the user (lessee company) which pays a specified rent at periodical intervals.

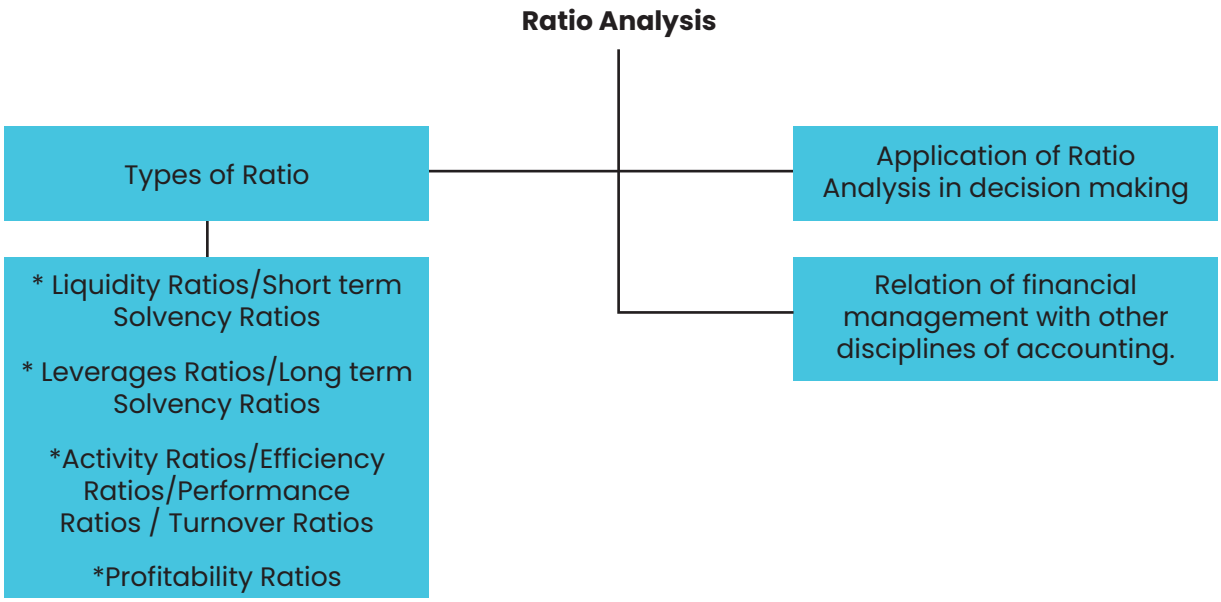
Short term Sources of Finance:

There are various sources available to meet short- term needs of finance. The different sources are as shown alongside.



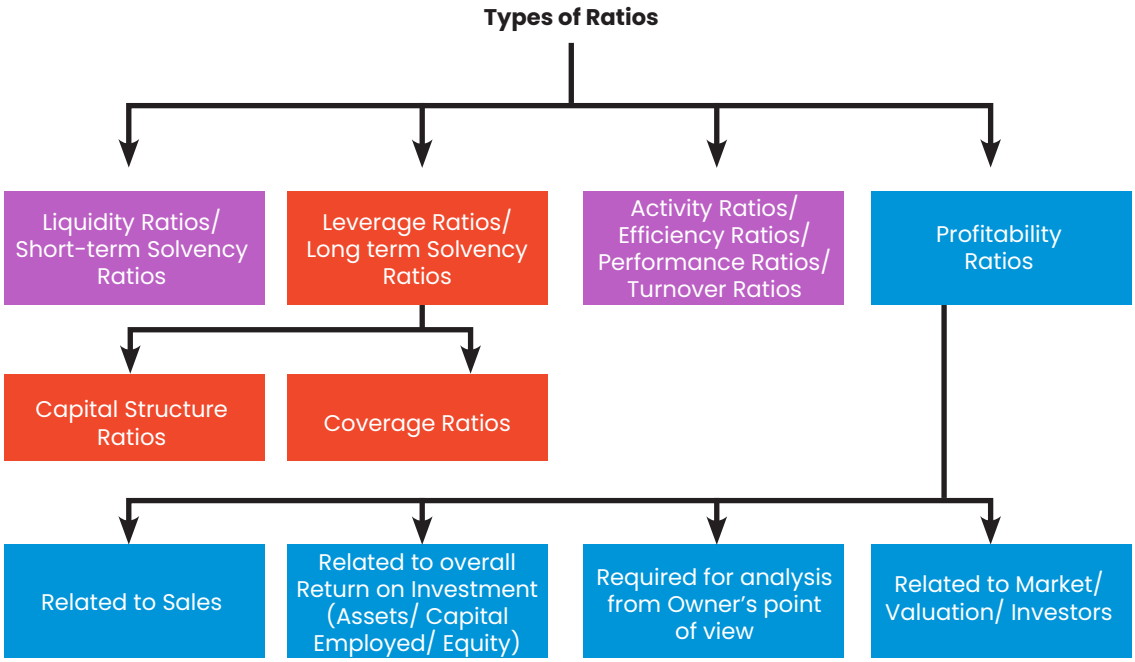
Financial Analysis And Planning – Ratio Analysis

Chapter Overview



Ratio and its Types

Ratio analysis is a comparison of different numbers from the balance sheet, income statement, and cash flow statement against the figures of previous years, other companies, the industry, or even the economy in general for the purpose of financial analysis. Types of the Ratios is as given alongside.



Summary of Ratios

Summary of the ratios has been tabulated as under:

Ratio	Formulae	Comments
Liquidity Ratios		
Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	A simple measure that estimates whether the business can pay short term debts. Ideal ratio is 2 : 1.
Quick Ratio	$\frac{\text{Quick Assets}}{\text{Current Liabilities}}$	It measures the ability to meet current debt immediately. Ideal ratio is 1 : 1.
Cash Ratio	$\frac{\text{(Cash and Bank Balances + Marketable Securities)}}{\text{Current Liabilities}}$	It measures absolute liquidity of the business.
Basic Defense Interval Ratio	$\frac{\text{(Cash and Bank Balances + Marketable Securities)}}{\text{Operating Expenses – No. of days}}$	It measures the ability of the business to meet regular cash expenditures.
Net Working Capital Ratio	Current Assets – Current Liabilities	It is a measure of cash flow to determine the ability of business to survive financial crisis.
Capital Structure Ratios		
Equity Ratio	$\frac{\text{Shareholders' Equity}}{\text{Capital Employed}}$	It indicates owner's fund in companies to total fund invested.
Debt Ratio	$\frac{\text{Total Outside Liablilities}}{\text{Total Debt + Net Worth}}$	It is an indicator of use of outside funds.
Debt to equity Ratio	$\frac{\text{Total Outside Liabilities}}{\text{Shareholders' Equity}}$	It indicates the composition of capital structure in terms of debt and equity.
Debt to Total assets Ratio	$\frac{\text{Total Outside Liabilities}}{\text{Total Assets}}$	It measures how much of total assets is financed by the debt.
Capital Gearing Ratio	$\frac{\text{(Preference Share Capital + Debentures + Other Borrowed Funds)}}{\text{(Equity Share Capital + Reserves \& Surplus – Losses)}}$	It shows the proportion of fixed interest bearing capital to equity shareholders' fund. It also signifies the advantage of financial leverage to the equity shareholder.
Proprietary Ratio	$\frac{\text{Proprietary Fund}}{\text{Total Assets}}$	It measures the proportion of total assets financed by shareholders.
Coverage Ratios		
Debt Service Coverage Ratio (DSCR)	$\frac{\text{Earnings available for debt service}}{\text{Interest + Instalments}}$	It measures the ability to meet the commitment of various debt services like interest, installment etc. Ideal ratio is 2:1.
Interest Coverage Ratio	$\frac{\text{EBIT}}{\text{Interest}}$	It measures the ability of the business to meet interest. Ideal ratio is > 1.
Preference Dividend Coverage Ratio	$\frac{\text{Net Profit/Earning after taxes (EAT)}}{\text{Preference dividend liability}}$	It measures the ability to pay the preference shareholders' dividend. Ideal ratio is > 1.

Financial Analysis And Planning - Ratio Analysis

Fixed Charges Coverage Ratio	$\frac{\text{EBIT + Depreciation}}{\text{Interest + Re-payment of loan} \frac{}{1 - \text{tax rate}}}$	This ratio shows how many times the cash flow before interest and taxes covers all fixed financing charges. The ideal ratio is > 1.
Activity Ratios/ Efficiency Ratios/ Performance Ratios/ Turnover Ratios		
Total Asset Turnover Ratio	$\frac{\text{Sales/COGS}}{\text{Average Total Assets}}$	A measure of total asset utilisation. It helps to answer the question - What sales are being generated by each rupee's worth of assets invested in the business?
Fixed Assets Turnover Ratio	$\frac{\text{Sales/COGS}}{\text{Fixed Assets}}$	This ratio is about fixed asset capacity. A reducing sales or profit being generated from each rupee invested in fixed assets may indicate overcapacity or poorer-performing equipment.
Capital Turnover Ratio	$\frac{\text{Sales/COGS}}{\text{Net Assets}}$	This indicates the firm's ability to generate sales per rupee of long term investment.
Working Capital Turnover Ratio	$\frac{\text{Sales/COGS}}{\text{Working Capital}}$	It measures the efficiency of the firm to use working capital.
Inventory Turnover Ratio	$\frac{\text{COGS/Sales}}{\text{Average Inventory}}$	It measures the efficiency of the firm to manage its inventory.
Debtors Turnover Ratio	$\frac{\text{Credit Sales}}{\text{Average Accounts Receivable}}$	It measures the efficiency at which firm is managing its receivables.
Receivables (Debtors') Velocity	$\frac{\text{Average Accounts Receivable}}{\text{Average Daily Credit Sales}}$	It measures the velocity of collection of receivables.
Payables Turnover Ratio	$\frac{\text{Annual Net Credit Purchases}}{\text{Average Accounts Payables}}$	It measures the velocity of payables payment.
Profitability Ratios based on Sales		
Gross Profit Ratio	$\frac{\text{Gross Profit}}{\text{Sales}} \times 100$	This ratio tells us something about the business's ability consistently to control its production costs or to manage the margins it makes on products it buys and sells.
Net Profit Ratio	$\frac{\text{Net Profit}}{\text{Sales}} \times 100$	It measures the relationship between net profit and sales of the business.
Operating Profit Ratio	$\frac{\text{Operating Profit}}{\text{Sales}} \times 100$	It measures operating performance of business.
Expenses Ratios		
Cost of Goods Sold (COGS) Ratio	$\frac{\text{COGS}}{\text{Sales}} \times 100$	It measures portion of a particular expenses in comparison to sales.
Operating Expenses Ratio	$\frac{\text{Administrative exp. + Selling \& Distribution OH}}{\text{Sales}} \times 100$	
Operating Ratio	$\frac{\text{COGS + Operating Expenses}}{\text{Sales}} \times 100$	
Financial Expenses Ratio	$\frac{\text{Financial Expenses}}{\text{Sales}} \times 100$	
Profitability Ratios related to Overall Return on Assets/ Investments		
Return on Investment (ROI)	$\frac{\text{Return/ Profit / Earnings}}{\text{Investments}} \times 100$	It measures overall return of the business on investment/ equity funds/ capital employed/ assets.

Return on Assets (ROA)	$\frac{\text{Net Profit after taxes}}{\text{Average Total Assets}} \times 100$	It measures net profit per rupee of average total assets/ average tangible assets/ average fixed assets.
Return on Capital Employed ROCE (Pre-tax)	$\frac{\text{EBIT}}{\text{Capital Employed}} \times 100$	It measures overall earnings (either pre-tax or post tax) on total capital employed.

Users and Objective of Financial Analysis: A Bird's Eye view

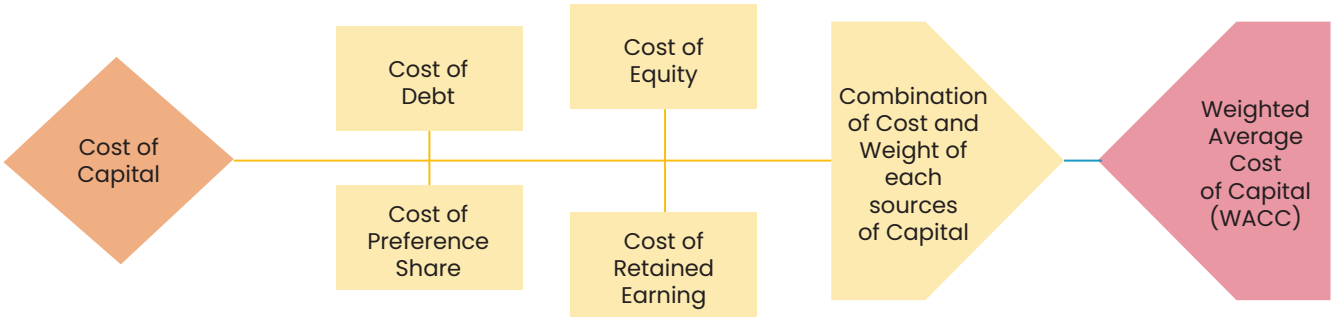
Financial Statement analysis is useful to various shareholders to obtain the derived information about the firm.

S.No.	Users	Objectives	Ratios used in general
1.	Shareholders	Being owners of the organisation they are interested to know about profitability and growth of the organization	• Mainly Profitability Ratio [In particular Earning per share (EPS), Dividend per share (DPS), Price Earnings (P/E), Dividend Payout ratio (DP)]
2.	Investors	They are interested to know overall financial health of the organisation particularly future perspective of the organisations.	• Profitability Ratios • Capital structure Ratios • Solvency Ratios • Turnover Ratios
3.	Lenders	They will keep an eye on the safety perspective of their money lended to the organisation	• Coverage Ratios • Solvency Ratios • Turnover Ratios • Profitability Ratios
4.	Creditors	They are interested to know liability position of the organisation particularly in short term. Creditors would like to know whether the organisation will be able to pay the amount on due date.	• Liquidity Ratios • Short term solvency Ratios
5.	Employees	They will be interested to know the overall financial wealth of the organisation and compare it with competitor company.	• Liquidity Ratios • Long terms solvency Ratios • Profitability Ratios • Return of investment
6.	Regulator / Government	They will analyse the financial statements to determine taxations and other details payable to the government.	Profitability Ratios
7.	Managers:-		
	(a) Production Managers	They are interested to know various data regarding input output, production quantities etc.	• Input output Ratio • Raw material consumption.
	(b) Sales Managers	Data related to quantities of sales for various years, other associated figures and produced future sales figure will be an area of interest for them.	• Turnover ratios (basically receivable turnover ratio) • Expenses Ratios
	(c) Financial Manager	They are interested to know various ratios for their future predictions of financial requirement.	• Profitability Ratios (particularly related to Return on investment) • Turnover ratios • Capital Structure Ratios
	Chief Executive/ General Manager	They will try to find the entire perspective of the company, starting from Sales, Finance, Inventory, Human resources, Production etc.	• All Ratios

8.	Different Industry		
	(a) Telecom	Finance Manager /Analyst will calculate ratios of their company and compare it with Industry norms.	• Ratio related to 'call' • Revenue and expenses per customer
	(b) Bank		• Loan to deposit Ratios • Operating expenses and income ratios
	(c) Hotel		• Room occupancy ratio • Bed occupancy Ratios
	(d) Transport		• Passenger -kilometre • Operating cost - per passenger kilometre.

Cost of Capital

Points of Discussion

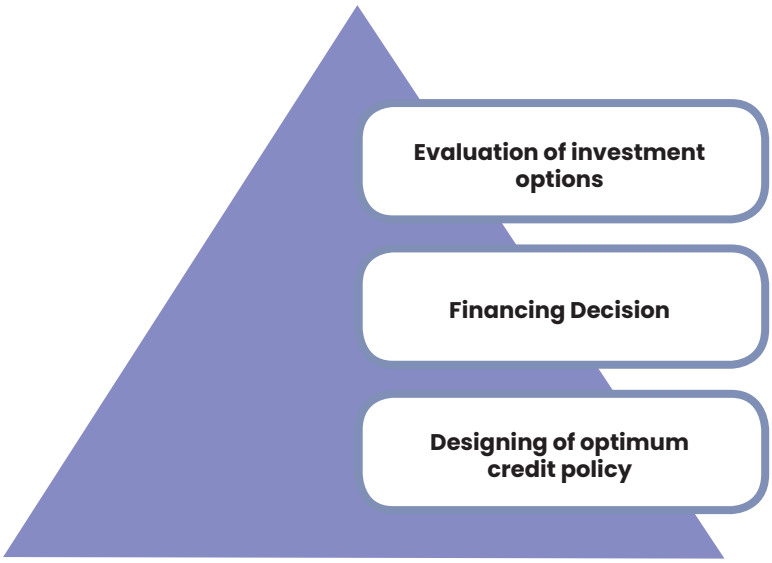


Meaning of Cost of Capital

Cost of Capital

- Return expected by the providers of capital (i.e. shareholders, lenders and the debtholders)

Significance of Cost of Capital



Cost of Capital

Determination of Cost of Capital

Cost is **not** the amount which the **company plans to pay** or actually pays, **rather** it is the **expectation of stakeholders**

TO CALCULATE COST

Identify various cash flows

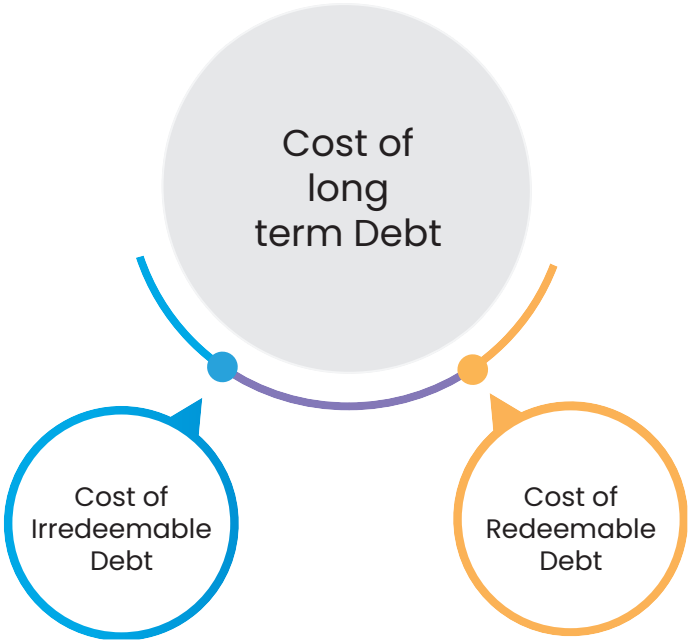
Like:
- **Inflow of amount received at the beginning.**
- **Outflow of payment of interest, dividend, redemption amount etc.**
- **Inflow of tax benefit on interest or Outflow of payment of dividend tax.**

THEREAFTER, use trial & error method to arrive at a rate where present value of outflows is equal to present value of inflows which is basically IRR.

Cost of LONG-TERM DEBT (K_d)

Long-term Debt

- Do **not confers ownership** to the providers of finance.
- Debt providers **do not participate in the affairs of the company.**
- They **get charge on the profit** before taxes in the form of interest



"Every problem is a gift - without problems we would not grow" - Anthony Robbins

Cost of Irredeemable Debentures

$$K_d = \frac{I}{NP}(1-t)$$

Where,

K_d = Cost of debt after tax

I = Annual interest payment

NP = Net proceeds of debentures* (new debentures) or Current market price (existing debentures)

t = Tax rate

*Net proceeds means issue price less issue expenses or floatation cost

Cost of Redeemable Debentures

Using Approximation method

$$^{\#}K_d = \frac{I(1-t) + \frac{(RV-NP)}{n}}{\frac{(RV+NP)}{2}}$$

Where,

I = Interest payment

NP = Net proceeds (new) or Current market price (existing)

RV = Redemption value of debentures

t = Tax rate applicable to the company

n = Remaining life of debentures

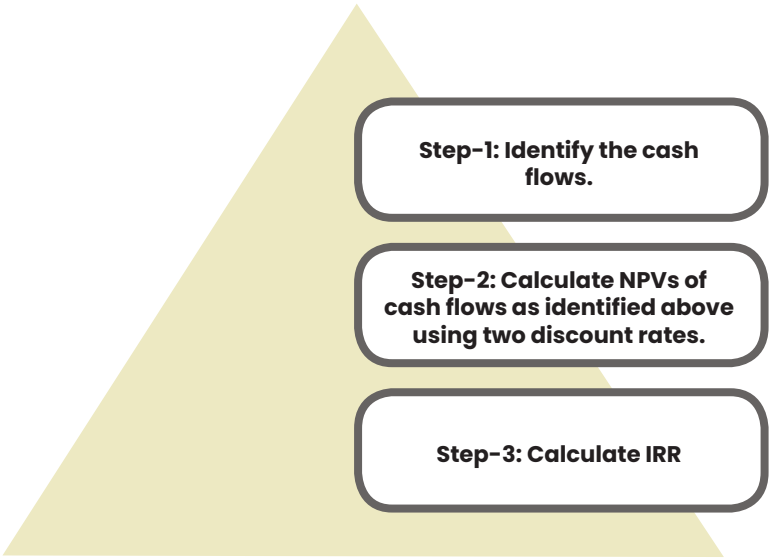
#is formula is used where only interest on debt is tax deductible. Sometime, debts are issued at discount and/ or redeemed at a premium. If such discount on issue and/ or premium on redemption are tax deductible, the following formula can be used:

$$K_d = \frac{I + \frac{(RV-NP)}{n}}{\frac{(RV+NP)}{2}}(1-t)$$

Using Present value method [Yield to maturity (YTM) approach]

YTM - An internal rate of return at which current price of a debt equals to the present value of all cash-flows.

STEPS TO CALCULATE RELEVANT CASH FLOWS



Step-1: Identify the cash flows.

The relevant cash flows are as follows:

Year	Cash flows
0	Net proceeds in case of new issue/ Current market price in case of existing debt (NP or P_o)
1 to n	Interest net of tax [I(1-t)]
n	Redemption value (RV)

Step-2: Calculate NPVs of cash flows as identified above using **two discount rates** (guessing) to get each a positive NPV (lower rate) and a negative NPV (higher rate).

Step-3: Calculate IRR.

$$IRR = L + \frac{NPV_L}{NPV_L - NPV_H} (H-L)$$

[Here, H and L stands for higher discount rate and lower discount rate respectively. It is to be noted that **higher the difference between H and L, lower the accuracy of answer.**]

Example: A company issued 10,000, 10% debentures of ₹100 each on 01.04.2021 to be matured on 01.04.2026. The company wants to know the current cost of its existing debt if the market price of the debentures is ₹80, considering 35% tax rate.

Step-1: Identification of relevant cash flows

Year	Cash flows
0	Current market price (P_0) = ₹80
1 to 5	Interest net of tax [I(1-t)] = 10% of ₹100 (1-0.35) = ₹6.5
5	Redemption value (RV) = Face value i.e. ₹100

Step- 2: Calculation of NPVs at two discount rates

Year	Cash flows (₹)	Discount factor @ 10% (L)	Present Value (₹)	Discount factor @ 15% (H)	Present Value (₹)
0	80	1.000	(80.00)	1.000	(80.00)
1 to 5	6.5	3.791	24.64	3.352	21.79
5	100	0.621	62.10	0.497	49.70
NPV			+6.74		-8.51

Step- 3: Calculation of IRR

$$IRR = L + \frac{NPV_L}{NPV_L - NPV_H}(H-L) = 10\% + \frac{6.74}{6.74-(-8.51)}(15\%-10\%) = 12.21\%$$

Amortisation of Bond

A bond **may be amortised every year** i.e., principal is repaid every year rather than at maturity.

In such a situation, the **principal** will **go down** with annual payments and interest will be computed on the outstanding amount.

Cash flows will be **uneven**.

$$\text{Value of Bond VB} = \frac{C_1}{(1+K_d)^1} + \frac{C_2}{(1+K_d)^2} + \ldots\ldots + \frac{C_n}{(1+K_d)^n}$$

$$V_B = \sum_{t=1}^{n} \frac{C_t}{(1+K_d)^t}$$

Cost of Capital

Cost of Convertible Debentures

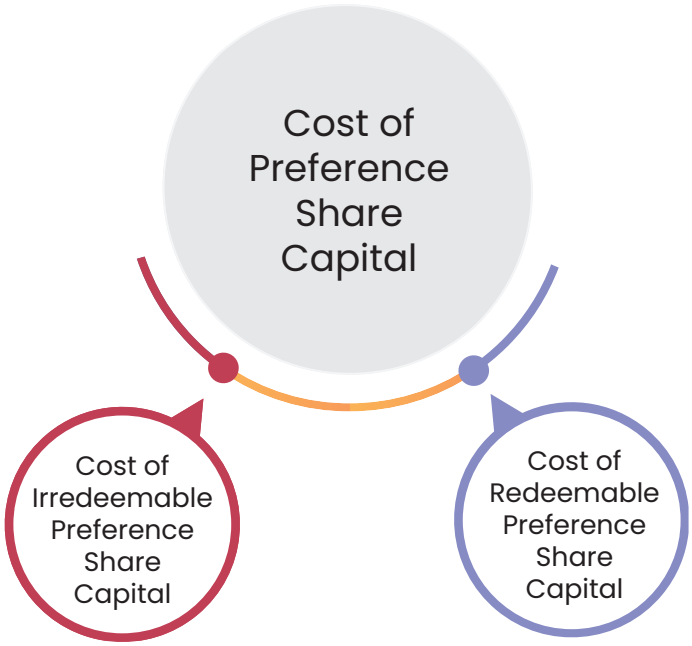
Option to either get the debentures redeemed into **cash or** get specified numbers of company's **shares.**

While determining redemption value, it is assumed that all the debenture holders will **choose the option which has the higher value i.e. beneficial to the holder.**

Cost of Preference Share Capital (K_p)

Preference Share Capital

- Paid **dividend** at a **specified rate** on face value.
- Dividend treated as an **appropriation** of after tax **profit**.
- Does not reduce the tax liability of the company.



Cost of Irredeemable Preference Shares

$$K_p = \frac{PD}{P_0}$$

Where,

PD = Annual preference dividend
P_0 = Net proceeds $ from issue of preference shares

$Net proceeds means issue price less issue expenses or floatation cost

Cost of Redeemable Preference Shares

$$K_p = \frac{PD + \frac{(RV-NP)}{n}}{\frac{(RV+NP)}{2}}$$

Where,
PD = Annual preference dividend
RV = Redemption value of preference shares
NP = Net proceeds from issue of preference shares
n = Remaining life of preference shares

Cost Of Equity Share Capital (K_e)

Equity Share Capital

- It is the **expectation of equity** shareholders.
- **Value is performance** divided by expectations.
- **Performance means amount paid by company to investors,** like interest, dividend, redemption price etc. which is **uncertain in case of equity**.

Methods to compute Cost of Equity Share Capital

- **Dividend Price Approach**
- **Earning Price Approach**
- **Growth Approach**
- **Realized Yield Approach**
- **Capital Asset Pricing Model (CAPM)**

Cost of Capital

Dividend Price Approach

This approach assumes that the dividend per share is expected to remain constant forever.

$$K_e = \frac{D}{P_0}$$

Where,

D = Expected dividend (also written as D_1)

P_0 = Market price of equity (ex- dividend)

Earnings Price Approach

This approach co-relate the earnings of the company with the market price of its share.

$$K_e = \frac{E}{P}$$

Where,

E = Current earnings per share

P = Market price per share

Growth Approach or Gordon's Model

Rate of dividend growth remains constant. Earnings, dividends and equity share price all grow at the same rate.

$$K_e = \frac{D_1}{P_0} + g$$

Where,

D_1 = $[D_0 (1+ g)]$ i.e. next expected dividend

P_0 = Current Market price per share

g = Constant Growth Rate of Dividend

In case of newly issued equity shares where **floatation cost is incurred,**

$$K_e = \frac{D_1}{P_0 - F} + g$$

Where,

F = Flotation cost per share

Example: A company has paid dividend of ₹1 per share (of face value of ₹10 each) last year and it is expected to grow @ 10% every year. e market price of share is ₹55.

$$K_e = \frac{D_1}{P_0} + g = \frac{₹1(1+0.1)}{₹55} + 0.1 = 0.12 \text{ or } 12\%$$

Estimation of Growth Rate

(i) Average Method

$$\text{Current Dividend } (D_0) = D_n(1+g)^n$$

or

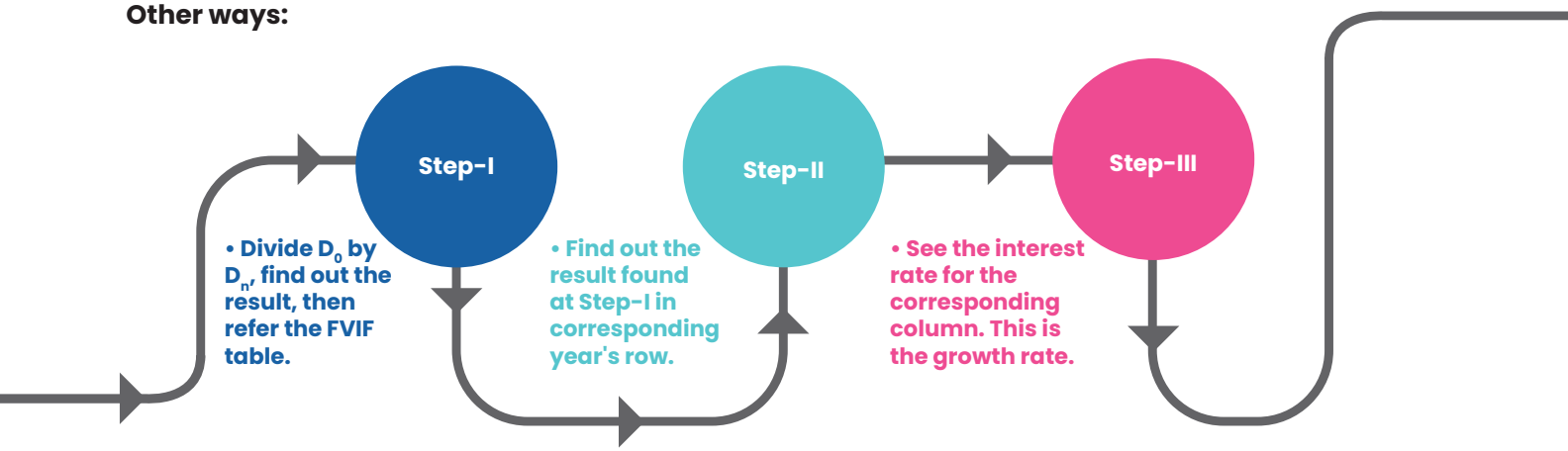
$$\text{Growth rate} = \sqrt[n]{\frac{D_0}{D_n}} - 1$$

Where,

D_0 = Current dividend,

D_n = Dividend in n years ago

Other ways:



Example: The current dividend (D_0) is ₹16.10 and the dividend 5 year ago was ₹10. e growth rate in the dividend can found out as follows:

Step-I: Divide D_0 by Dn i.e. ₹16.10 ÷ ₹10 = 1.61

Step-II: Find out the result found at Step-I i.e. 1.61 in corresponding year's row i.e. 5th year.

Step-III: See the interest rate for the corresponding column which is 10%. Therefore, growth rate (g) is 10%.

(ii) Gordon's Growth Model

This model attempts to derive a future growth rate.

Growth (g) = b × r

Where,
b = earnings retention rate*
r = rate of return on fund invested

*Proportion of earnings available to equity shareholders which is not distributed as dividend.

Realised Yield Approach

Average rate of **return realised** in the **past** few years historically **regarded** as **'expected return'** in future.

Computes **cost** of **equity based on** the **past records** of dividends actually realised.

Example: Mr. X had purchased a share of ABC Limited for ₹1,000 and received dividend for five years @ 10%. At the end of the fifth year, he sold the share for ₹1,128. The cost of equity as per realised yield approach would be as follows:

It would be the discount rate which equates the present value of the dividends received in the past five years plus the present value of sale price of ₹1,128 to the purchase price of ₹1,000.

The discount rate which equalises these two is 12% (approx..)

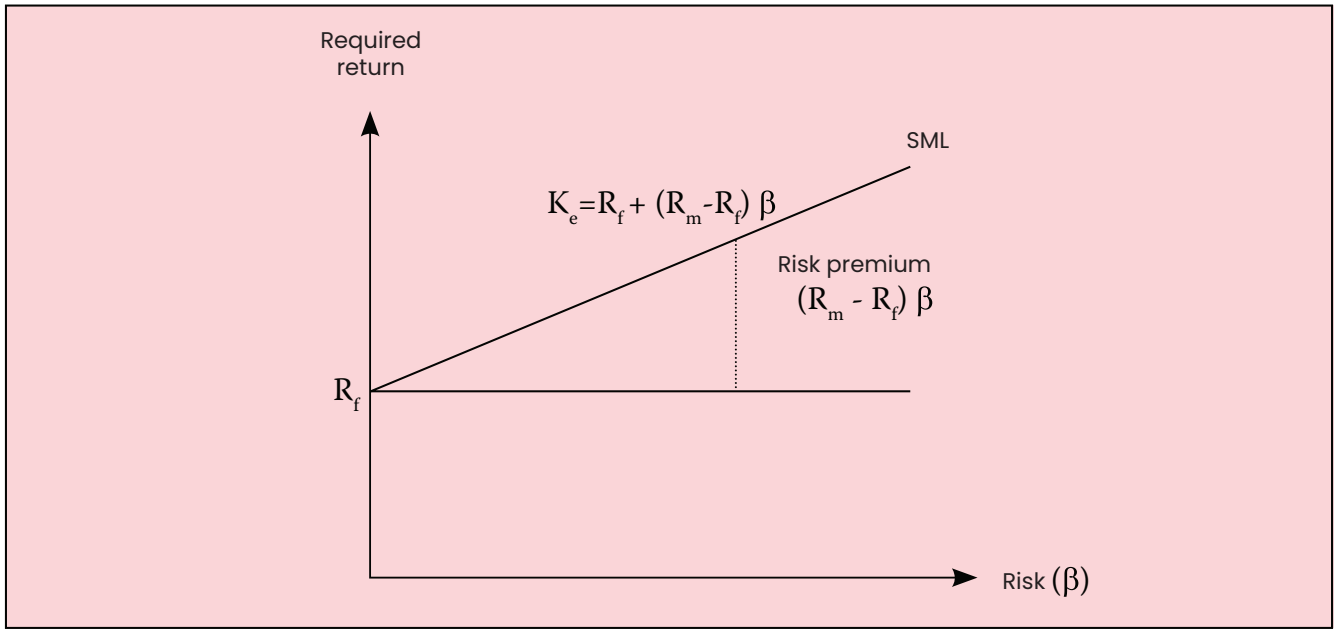
Year	Dividend (₹)	Sale Proceeds (₹)	Discount Factor @ 12%	Present Value (₹)
1	100	-	0.893	89.3
2	100	-	0.797	79.7
3	100	-	0.712	71.2
4	100	-	0.636	63.6
5	100	-	0.567	56.7
6	Beginning	1,128	0.567	639.576
				1,000.076

Capital Asset Pricing Model (CAPM) Approach

Diversifiable or Unsystematic risk (related with the company's performance) can be eliminated by an investor through diversification.

However, **non-diversifiable or systematic risk (macro-economic or market specific risk)** is the risk which **cannot be eliminated;** thus, a business should be concerned as per CAPM method, solely with non-diversifiable risk.

Cost of Equity under CAPM = Risk free rate + Risk premium



$$K_e = R_f + ß\,(R_m - R_f)$$

Where,

K_e = Cost of equity capital

R_f = Risk free rate of return

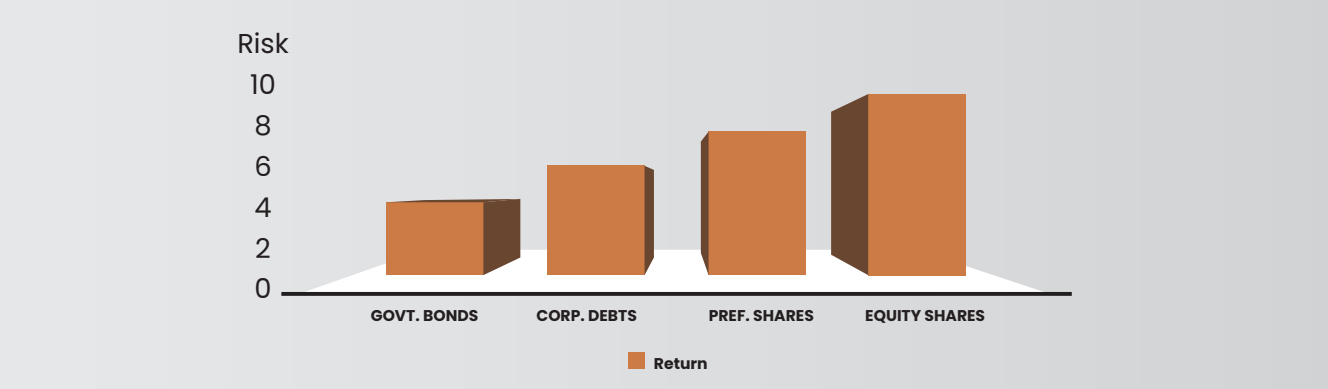
ß = Beta coefficient (represents systematic risk)

R_m = Rate of return on market portfolio

$(R_m - R_f)$ = Market risk premium

Cost of Capital

Risk Return relationship of various securities



Example: The risk-free rate of return equals 10%. The company's beta equals 1.75 and the return on the market portfolio equals to 15%. Thus, the cost of equity capital of the company would be:

$K_e = R_f + ß\ (R_m - R_f)$

$K_e = 0.10 + 1.75\ (0.15 - 0.10) = 0.1875$ or 18.75%

Cost of Retained Earnings (Kr)

Retained Earnings

- It is the **opportunity cost of dividends foregone by shareholders.**

Formulas used for calculation of cost of retained earnings are same as formulas used for calculation of cost of equity.

Dividend Price method: $K_r = \frac{D}{P}$

Earning Price method: $K_r = \frac{EPS}{P}$

Growth method: $K_r = \frac{D_1}{P_0} + g$

For K_e : P = net proceeds realized i.e. issue price less floatation cost. But for Kr : P = current market price. However, sometimes issue price may also be used ignoring Floatation cost.

Weighted Average Cost Of Capital (WACC)

WACC

- A company makes a mix of various sources of finance.
- Cost of total capital will be equal to WACC of individual sources of finance.

Steps to calculate WACC:

Step 1

- **Calculate** the **total capital** from all the sources of capital.
- Eg. Long-term debt capital + Pref. Share Capital + Equity Share Capital + Retained Earnings

Step 2

- **Calculate** the **proportion** (or %) of each source of capital to the total capital.
- [Equity Share Capital (for example)/Total Capital (as calculated in Step1 above)]

Step 3

- **Multiply** the **proportion** as calculated in Step 2 above with the respective **cost of capital**.
- (K_e × Proportion (%) of equity share capital (for example) calculated in Step 2 above)

Step 4

- **Aggregate** the **cost of capital** as calculated in Step 3 above. **This is the WACC.**
- ($K_e + K_d + D_p + K_s$ as calculated in Step 3 above)

Choice of Weights

Book Value (BV)

Operationally **easy and convenient.** Reserves such as share premium and retained profits are **included in the BV of equity**.

Market Value (BV)

More correct and **represent** a firm's **capital structure**. **Preferable** to use **MV** weights for the **equity**. Reserves such as share premium and retained profits are **ignored** as they are in effect incorporated into the value of equity. **No separate MV for retained earnings.**

Example: The capital structure of the company is as under:

	(₹)
10% Debentures with 10 years maturity (₹100 per debenture)	5,00,000
5% Preference shares with 10 years maturity (₹100 per share)	5,00,000
Equity shares (₹10 per share)	10,00,000
	20,00,000

The market prices of these securities are:

Debentures	₹105 per debenture
Preference shares	₹110 per preference share
Equity shares	₹24 per equity share

After tax Cost of Capital: Equity = 10%, Debt = 6.89% and Preference shares = 4.08%

Cost of Capital

The WACC applying BV and MV would be as follows:

(a) Calculation of WACC using BV weights

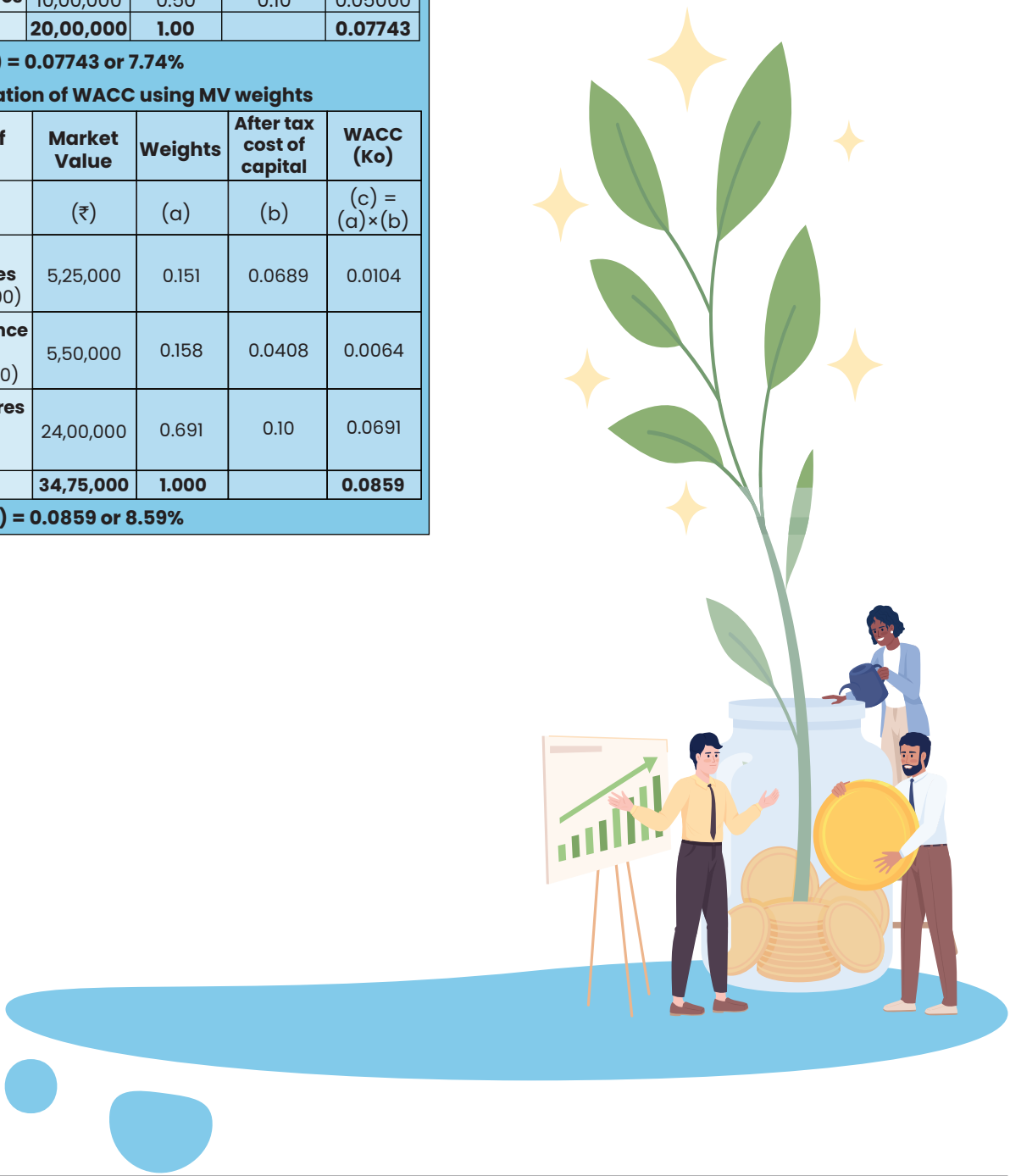
Source of capital	Book Value	Weights	After tax cost of capital	WACC (K_o)
	(₹)	(a)	(b)	(c) = (a)×(b)
10% Debentures	5,00,000	0.25	0.0689	0.01723
5% Preference shares	5,00,000	0.25	0.0408	0.0102
Equity shares	10,00,000	0.50	0.10	0.05000
	20,00,000	**1.00**		**0.07743**

WACC (K_o) = 0.07743 or 7.74%

(b) Calculation of WACC using MV weights

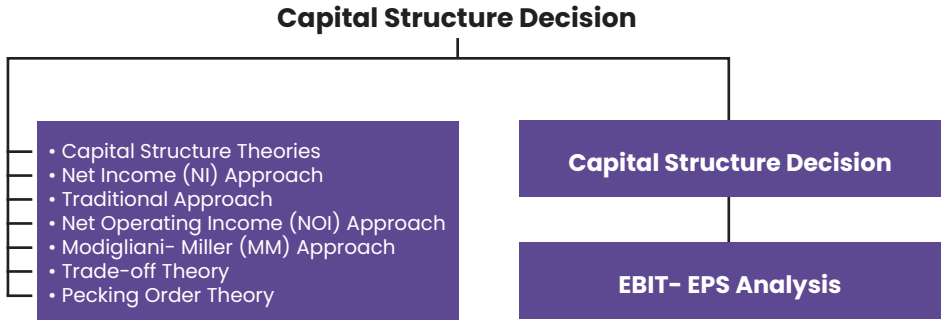
Source of capital	Market Value	Weights	After tax cost of capital	WACC (Ko)
	(₹)	(a)	(b)	(c) = (a)×(b)
10% Debentures (₹105× 5,000)	5,25,000	0.151	0.0689	0.0104
5% Preference shares (₹110× 5,000)	5,50,000	0.158	0.0408	0.0064
Equity shares (₹24× 1,00,000)	24,00,000	0.691	0.10	0.0691
	34,75,000	**1.000**		**0.0859**

WACC (Ko) = 0.0859 or 8.59%

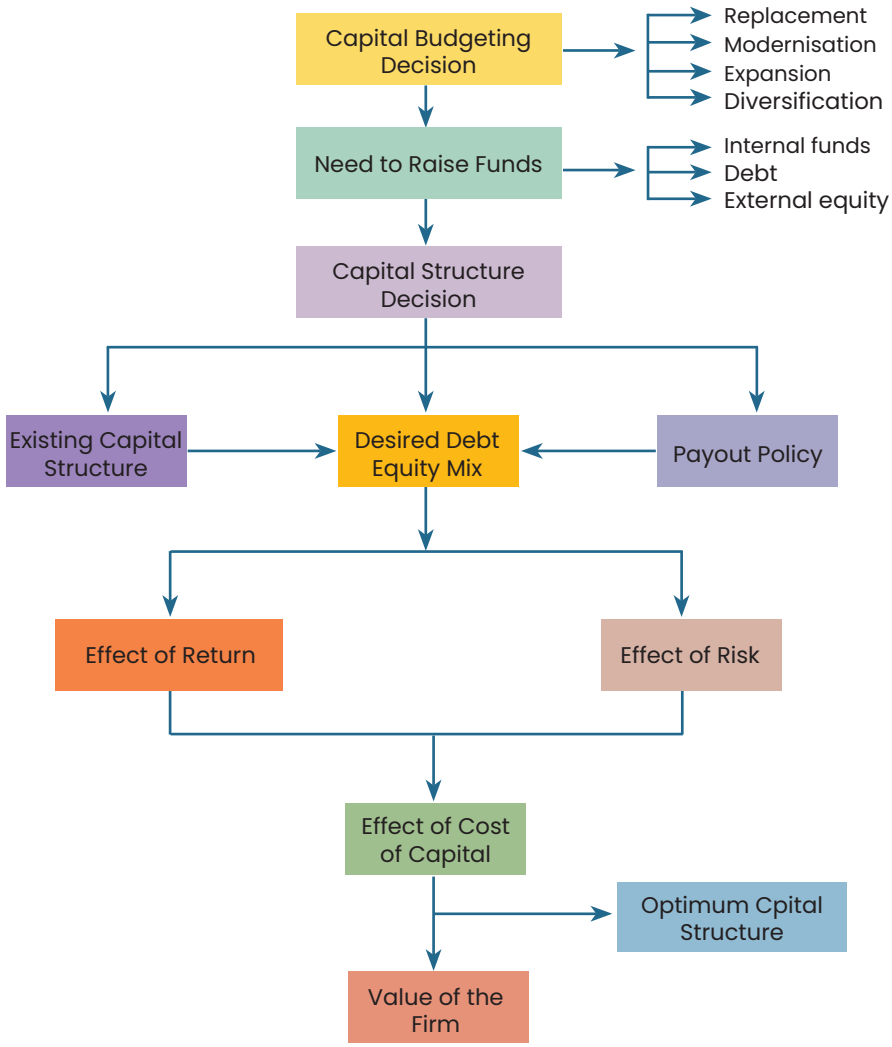


Financing Decisions-Capital Structure

Chapter Overview



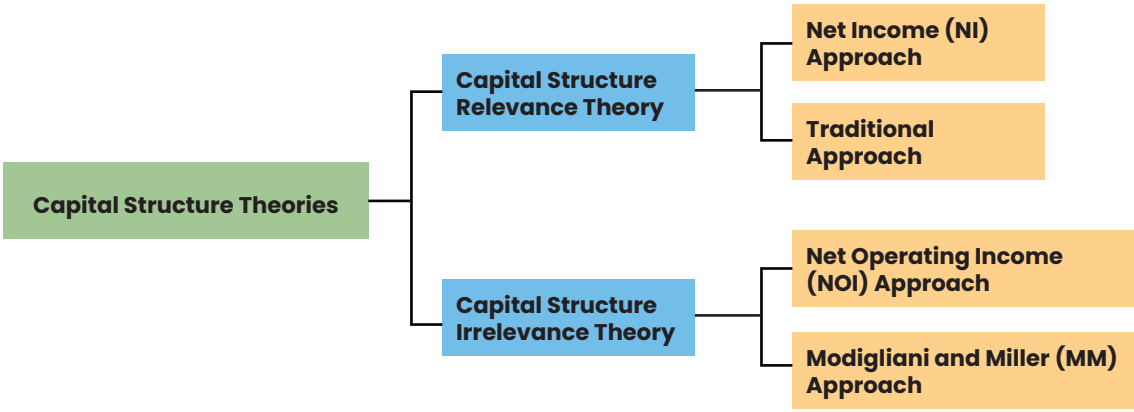
Capital Structure decision refers to deciding the forms of financing (which sources to be tapped); their actual requirements (amount to be funded) and their relative proportions (mix) in total capitalisation.



Financing Decisions-Capital Structure

Capital Structure Theories

The following approaches explain the relationship between cost of capital, capital structure and value of the firm



Net Income (NI) Approach

According to this approach, capital structure decision is relevant to the value of the firm. An increase in financial leverage will lead to decline in the weighted average cost of capital (WACC), while the value of the firm as well as market price of ordinary share will increase. Conversely, a decrease in the leverage will cause an increase in the overall cost of capital and a consequent decline in the value as well as market price of equity shares

The value of the firm on the basis of Net Income Approach can be ascertained as follows:

V = Market Value of Equity + Market Value of Debt

$$\text{Overall cost of capital} = \frac{\text{EBIT}}{\text{Value of the Form}}$$

Traditional Approach

This approach favours that as a result of financial leverage up to some point, cost of capital comes down and value of firm increases. However, beyond that point, reverse trends emerge. The principle implication of this approach is that the cost of capital is dependent on the capital structure and there is an optimal capital structure which minimises cost of capital.

Net Operating Income Approach (NOI)

Any change in the leverage will not lead to any change in the total value of the firm and the market price of shares, as the overall cost of capital is independent of the degree of leverage. As a result, the division between debt and equity is irrelevant.

As per this approach, an increase in the use of debt which is apparently cheaper is offset by an increase in the equity capitalisation rate. This happens because equity investors seek higher compensation as they are opposed to greater risk due to the existence of fixed return securities in the capital structure.

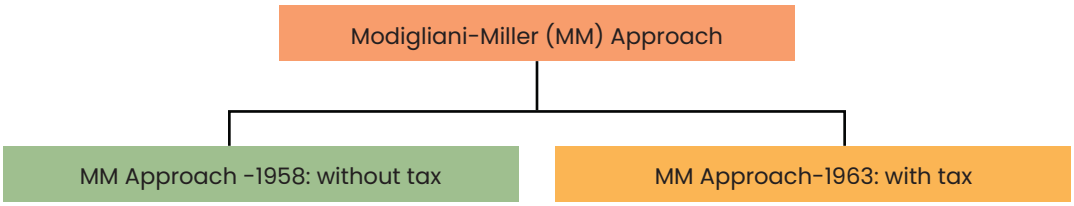
$$V = \frac{NOI}{K_o}$$

Where,

V = Value of the firm
NOI = Net operating Income
K_o = Cost of Capital

Modigliani-Miller Approach (MM)

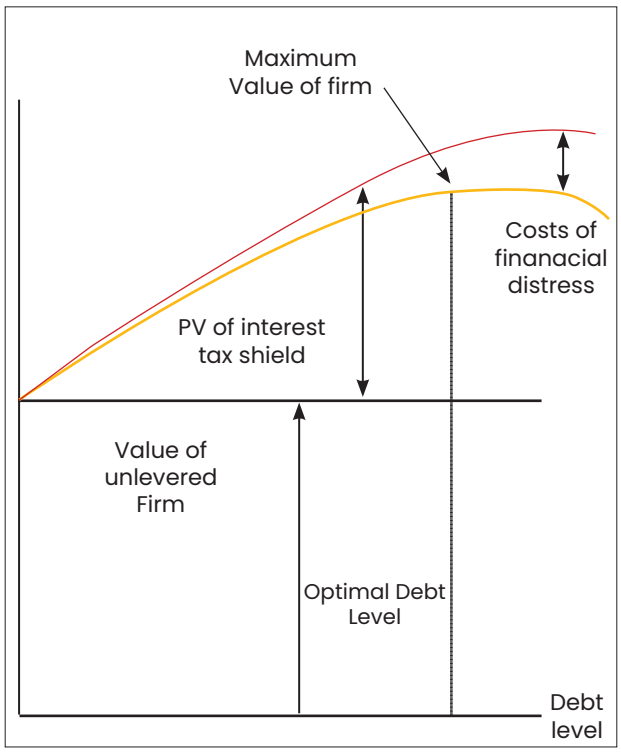
The NOI approach is definitional or conceptual and lacks behavioral significance. It does not provide operational justification for irrelevance of capital structure. However, Modigliani-Miller approach provides behavioral justification for constant overall cost of capital and therefore, total value of the firm. This approach indicates that the capital structure is irrelevant because of the arbitrage process which will correct any imbalance i.e. expectations will change and a stage will be reached where arbitrage is not possible.



The Trade-off Theory:

The trade-off theory of capital structure refers to the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits.

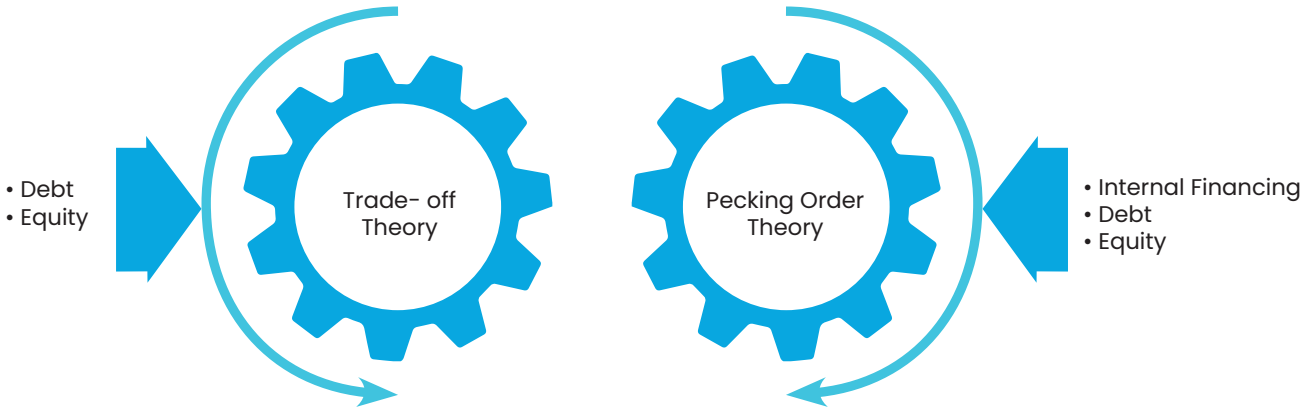
Financing Decisions-Capital Structure



Pecking order theory

The Pecking order theory argues that the capital structure decision is affected by Manager's choice of a source of capital. Managers may use following order for raising of fund:

Internal Financing → Debt → Equity

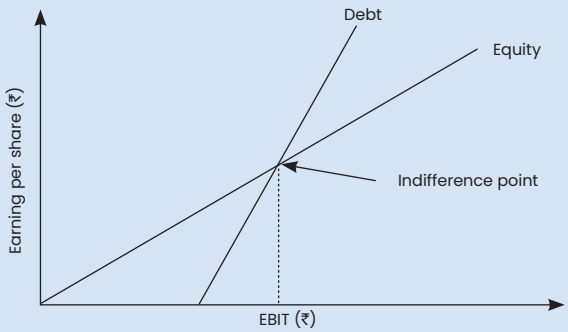


EBIT-EPS Analysis

The basic objective of financial management is to design an appropriate capital structure which can provide the highest earnings per share (EPS) over the company's expected range of earnings before interest and taxes (EBIT).

EPS measures a company's performance for the shareholders. The level of EBIT varies from year to year and represents the success of a company's operations.

However, The EPS criterion ignores the risk dimension as well as it is more of a performance measure.



Financial break-even point is the minimum level of EBIT needed to satisfy all the fixed financial charges i.e. interests and preference dividends. It denotes the level of EBIT for which the company's EPS **equals zero**.

Financial breakeven point (BEP) can be calculated as:

Financial Break-even point = Interest + Preference dividend/(1 - tax rate)

EBIT-EPS break-even analysis is used for determining the appropriate amount of debt a company might carry.

Indifference point or Break-even point shows that, between the two given alternatives of financing (i.e., regardless of leverage in the financial plans), EPS would be the same at the given level of EBIT.

$$\frac{(EBIT-I_1)(1-t)}{E_1} = \frac{(EBIT-I_2)(1-t)}{E_2}$$

Where,

EBIT = Indifference point
E_1 = Number of equity shares in Alternative 1
E_2 = Number of equity shares in Alternative 2
I_1 = Interest charges in Alternative 1
I_2 = Interest charges in Alternative 2
T = Tax-rate

Over- Capitalisation

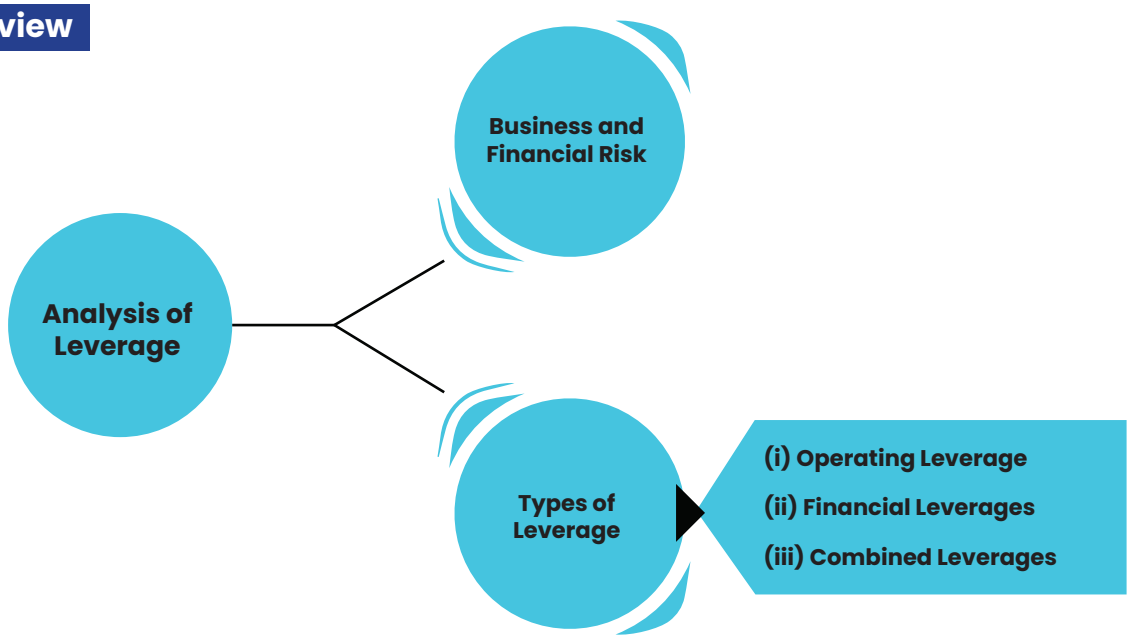
- It is a situation where a firm has more capital than it needs or in other words assets are worth less than its issued share capital, and earnings are insufficient to pay dividend and interest.

Under Capitalisation

- It is just reverse of overcapitalisation. It is a state, when its actual capitalisation is lower than its proper capitalisation as warranted by its earning capacity.

Financing Decisions- Leverages

Overview



In financial analysis, leverage represents the influence of one financial variable over some other related financial variable. These financial variables may be costs, output, sales revenue, Earnings Before Interest and Tax (EBIT), Earning per share (EPS) etc.

Business Risk and Financial Risk

Risk facing the common shareholders is of two types, namely business risk and financial risk. Therefore, the risk faced by common shareholders is a function of these two risks, i.e. (Business Risk, Financial Risk).

Business Risk

- It refers to the risk associated with the firm's operations. It is the uncertainty about the future operating income (EBIT), i.e. how well can the operating incomes be predicted?

Financial Risk

- It refers to the additional risk placed on the firm's shareholders as a result of debt use i.e. the additional risk a shareholder bears when a company uses debt in addition to equity financing.

Types of Leverage

There are three commonly used measures of leverage in financial analysis. These are

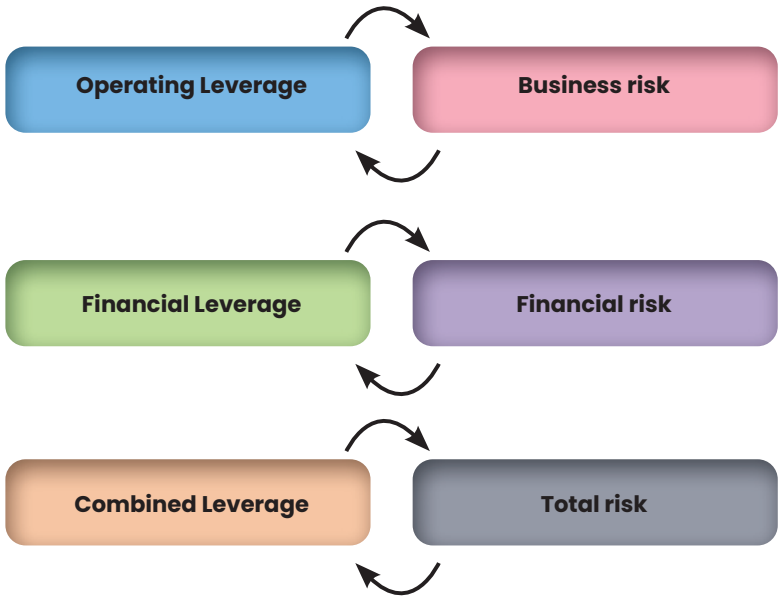


Chart Showing Operating Leverage, Financial Leverage and Combined Leverage

Profitability Statement			
Sales	xxx		
Less: Variable Cost	(xxx)		
Contribution	xxx	} Operating Leverage	} Combined Leverage
Less: Fixed Cost	(xxx)		
Operating Profit/ EBIT	xxx		
Less: Interest	(xxx)	} Financial Leverage	
Earnings Before Tax (EBT)	xxx		
Less: Tax	(xxx)		
Profit After Tax (PAT)	xxx		
Less: Pref. Dividend (if any)	(xxx)		
Net Earnings available to equity shareholders/ PAT	xxx		
No. Equity shares (N)			
Earnings per Share (EPS) = (PAT ÷ N)			

Financing Decisions- Leverages

Operating Leverage

Operating leverage (OL) maybe defined as the employment of an asset with a fixed cost in the hope that sufficient revenue will be generated to cover all the fixed and variable costs.

$$\text{Operating leverage} = \frac{\text{Contribution}}{\text{EBIT}}$$

$$\text{Degree of Operating Leverage (DOL)} = \frac{\text{\% change in EBIT}}{\text{\% change in Sales}}$$

Break-Even Analysis and Operating Leverage

$$\text{Break-even point in units} = \frac{\text{Fixed Cost}}{\text{Contribution per unit}}$$

There is a relationship between leverage and Break-even point and fixed cost which is as under:

Leverage	**Break-even point**
1. Firm with high leverage	1. Higher Break-even point
2. Firm with low leverage	2 .Lower Break-even point
Fixed cost	**Operating Leverage**
1. High fixed cost	1. High degree of operatin leverage
2. Lower fixed cost	2. Lower degree of operating leverage

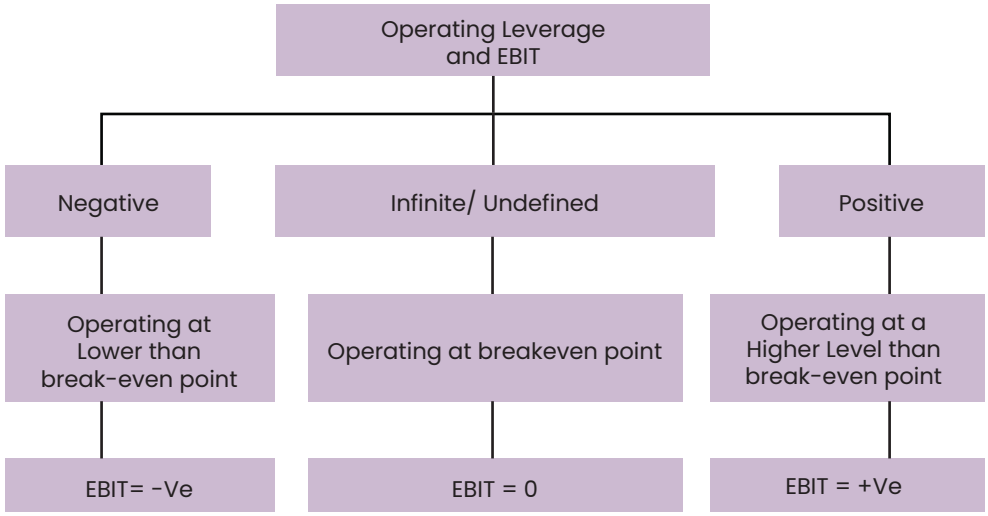
Margin of Safety (MOS) and Operating Leverage (OL)

$$\text{MOS} = \frac{\text{Contribution - Fixed Cost}}{\text{Contribution}} = \frac{\text{EBIT}}{\text{Contribution}}$$

$$\text{Degree of Operating leverage} = \frac{1}{\text{Margin of Safety}}$$

If Margin of safety	**Business Risk**	**DOL (1/MOS)**
Rises	Falls	Falls
Falls	Rises	Rises

Positive and Negative Operating Leverage



Note: DOL can never be between zero and one. It can be zero or less or it can be one or more.

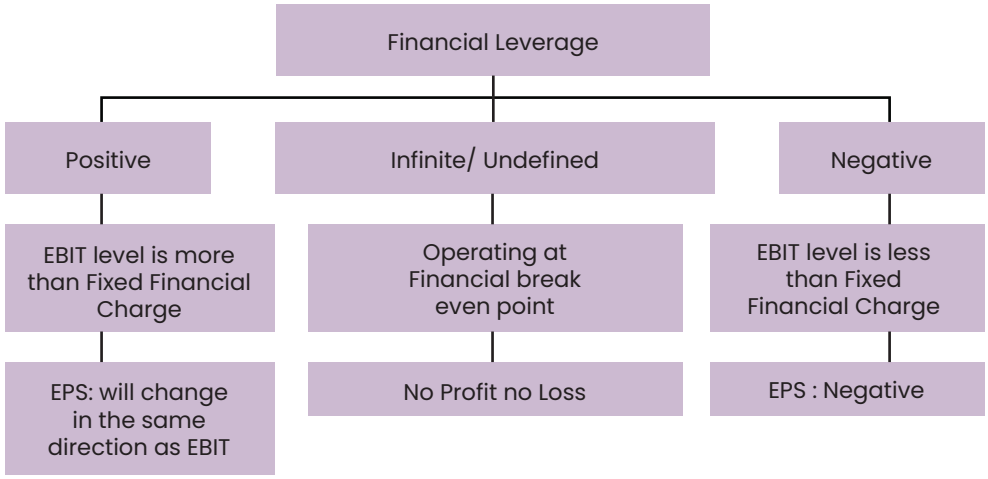
Financial Leverage

Financial leverage (FL) maybe defined as 'the use of funds with a fixed cost in order to increase earnings per share.' In other words, it is the use of company funds on which it pays a limited return.

$$\text{Financial leverage} = \frac{\text{EBIT}}{\text{EBT}}$$

$$\text{Degree of Financial Leverage (DFL)} = \frac{\text{\% change in EPS}}{\text{\% change in EBIT}}$$

Financing Decisions- Leverages



Note: DFL can never be between zero and one. It can be zero or less or it can be one or more.

Combined Leverage

Combined leverage

- It maybe defined as the potential use of fixed costs, both operating and financial, which magnifies the effect of sales volume change on the earning per share of the firm.

Degree of Combined Leverage = DOL X DFL

$$\text{Degree of Combined Leverage (DCL)} = \frac{\%\text{ change in EPS}}{\%\text{ change in Sales}}$$

Analysis of Combined Leverage

Combine leverage measures total risk. It depends on combination of operating and financial risk.

DOL	DFL	Comments
Low	Low	Lower total risk. Cannot take advantage of trading on equity.
High	High	Higher total risk. Very risky combination.
High	Low	Moderate total risk. Not a good combination. Lower EBIT due to higher DOL and lower advantage of trading on equity due to low DFL.
Low	High	Moderate total risk. Best combination. Higher financial risk is balanced by lower total business risk.

Financial Leverage as 'Trading on Equity'

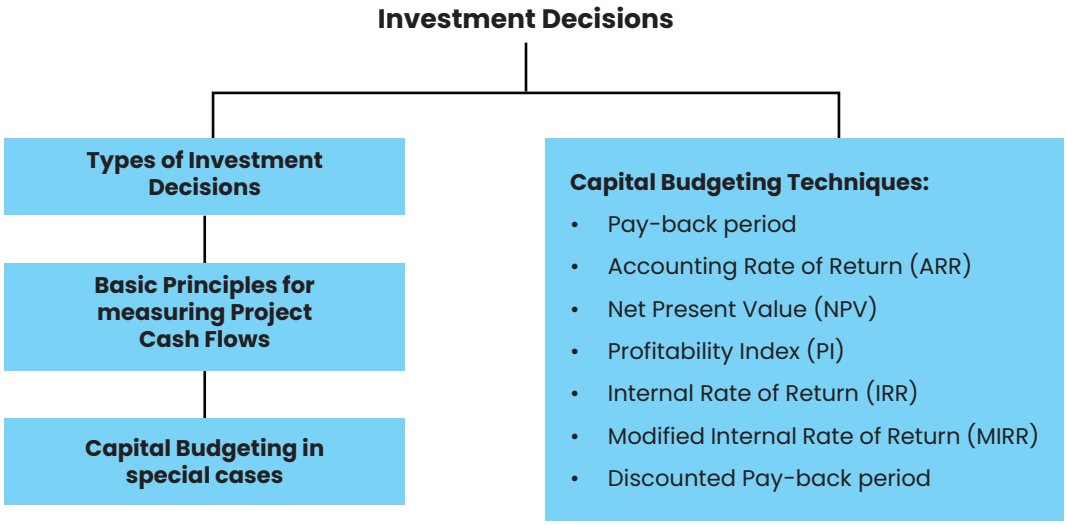
- Financial leverage indicates the use of funds with fixed cost like long term debts and preference share capital along with equity share capital which is known as trading on equity. When the quantity of fixed cost fund is relatively high in comparison to equity capital, it is said that the firm is "trading on equity".

Financial Leverage as a 'Double edged Sword

- On one hand when cost of 'fixed cost fund' is less than the return on investment financial leverage will help to increase return on equity and EPS. However, when cost of debt is more than the return it will affect return of equity and EPS unfavourably. This is why financial leverage is known as "double edged sword".

Investment Decisions

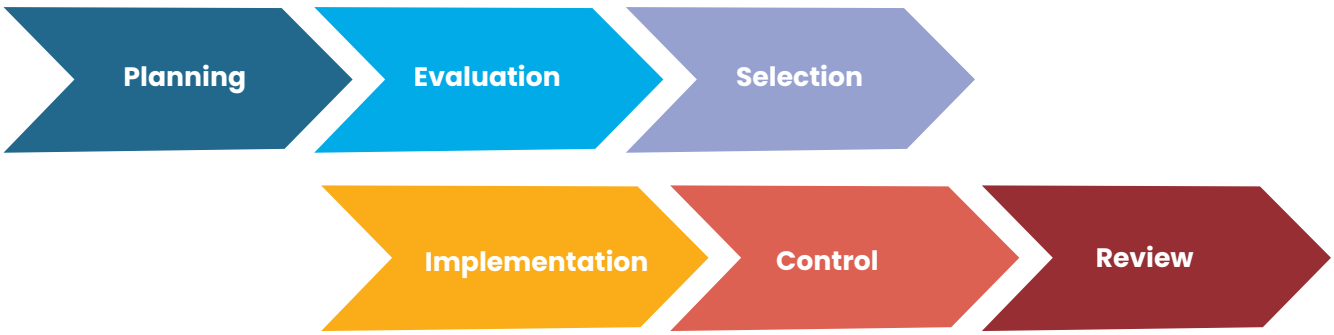
Chapter Overview



Capital Budgeting involves

- Identification of investment projects that are strategic to business overall objectives;
- Estimating and evaluating post-tax incremental cash flows for each of the investment proposals; and
- Selection of an investment proposal that maximizes the return to the investors

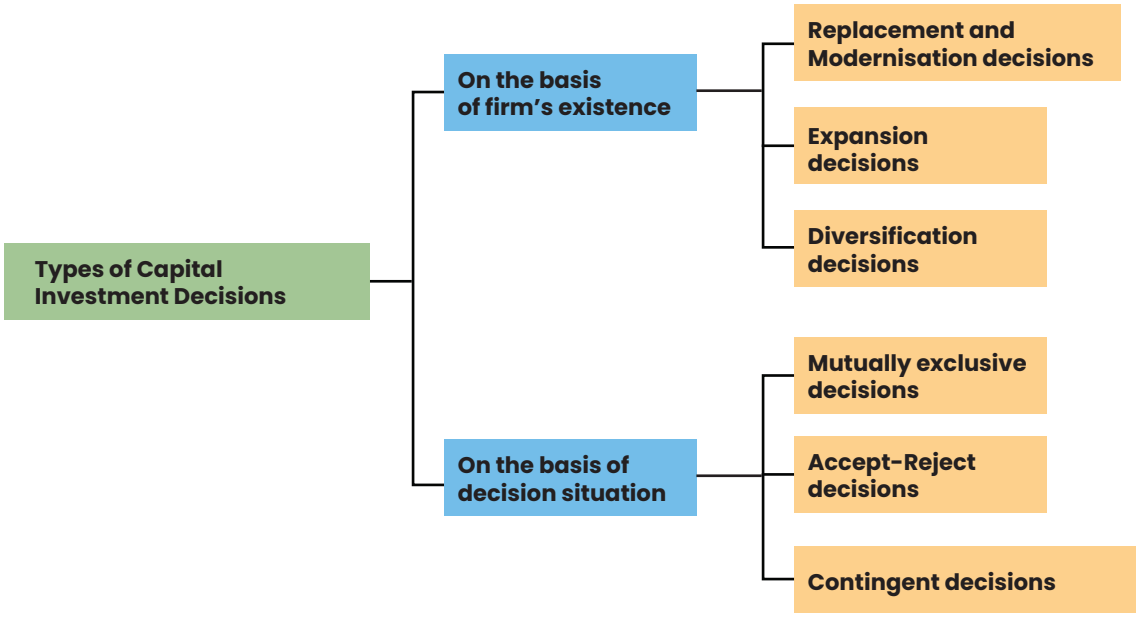
Capital Budgeting Process



Investment Decisions

Types Of Capital Investment Decisions

Generally, capital investment decisions are classified in two ways. One way is to classify them on the basis of firm's existence. Another way is to classify them on the basis of decision situation.



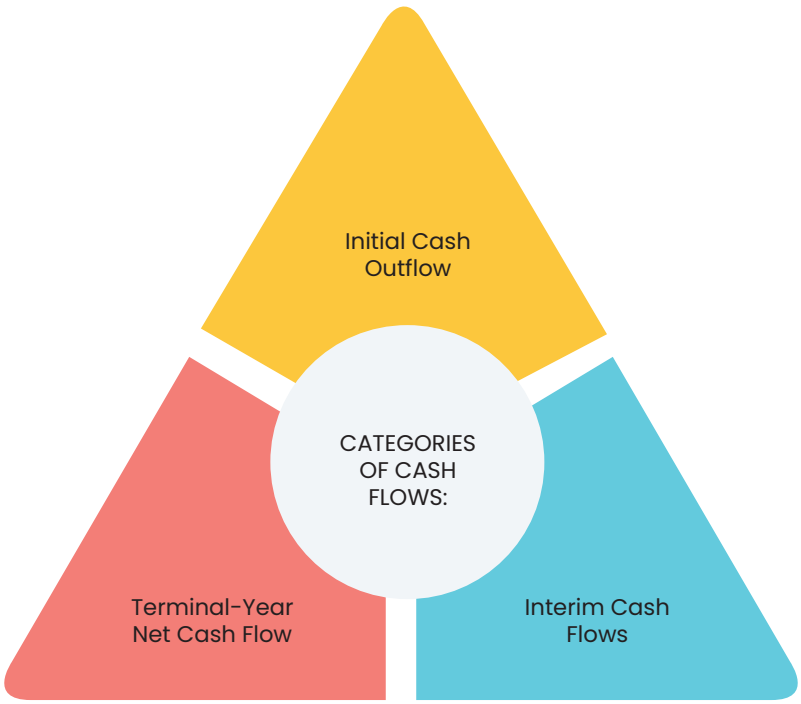
Estimation of Project Cash Flows

Capital Budgeting analysis considers only incremental cash flows from an investment likely to result due to acceptance of any project. Therefore, one of the most important tasks in capital budgeting is estimating future cash flows for a project.

Calculating Cash Flows

Particulars	No Depreciation is Charged	Depreciation is Charged
	(₹Crore)	(₹Crore)
Total Sales	***	***
***Less*: Cost of Goods Sold**	***	***
	***	***
***Less*: Depreciation**	-	***
Profit before tax	***	***
Tax @ 30%	***	***
Profit after Tax	***	***
Add: Depreciation*	-	***
Cash Flow	***	***

* Being non-cash expenditure, depreciation has been added back while calculating the cash flow.



Initial Cash Outflow

Initial Cash Outflows are further divided into two categories on the basis of fresh proposal and replacement decision.

(a) If decision is related to investment in a fresh proposal or an expansion decision

		Amount	Amount
	Cost of new Asset(s)		xxx
Add:	Installation/Set-Up Costs	xxx	
Add:	Investment in Working Capital	xxx	xxx
	Initial Cash Outflow		**xxx**

(b) If decision is related to replacement decision

		Amount	Amount
	Cost of new Asset(s)		xxx
Add:	Installation/Set-Up Costs	xxx	
Add/ (less):	Increase (Decrease) in net Working Capital level	xxx	xxx
Less:	Net Proceeds from sale of old assets	(xxx)	
Add/ (less):	Tax expense (saving/ loss) due to sale of Old Asset	xxx	xxx
	Initial Cash Outflow		**xxx**

Interim Cash Flows

Interim Cash Flows are further divided into two categories on the basis of fresh proposal and replacement decision.

(a) If analysis is related to a fresh or completely a new project

		Amount	Amount
	Profit after Tax (PAT)		xxx
Add:	Non-Cash expenses (e.g. Depreciation)	xxx	
Add/(less):	Net decrease (increase) in Working Capital	xxx	xxx
	Interim net cash flow for the period		**xxx**

(b) If analysis is related to replacement decision

		Amount	Amount
	Net increase (decrease) in Operating Revenue		xxx
Add/(less):	Net decrease (increase) in operating expenses)		xxx
	Net changes in income before taxes		xxx
Add/(less):	Net decrease (increase) in taxes		xxx
	Net change in income after taxes		xxx
Add/(less):	Net decrease (increase) in depreciation charges		xxx
	Incremental net cash flow for the period		**xxx**

Terminal-Year Net Cash Flow

		Amount	Amount
	Final salvage value (disposal costs) of asset		xxx
Add:	Interim Cash Flow	xxx	
Add/(less):	Tax savings (tax expenses) due to sale or disposal of asset (Including depreciation)	xxx	
Add:	Release of Net Working Capital	xxx	xxx
	Terminal Year net cash flow		**xxx**

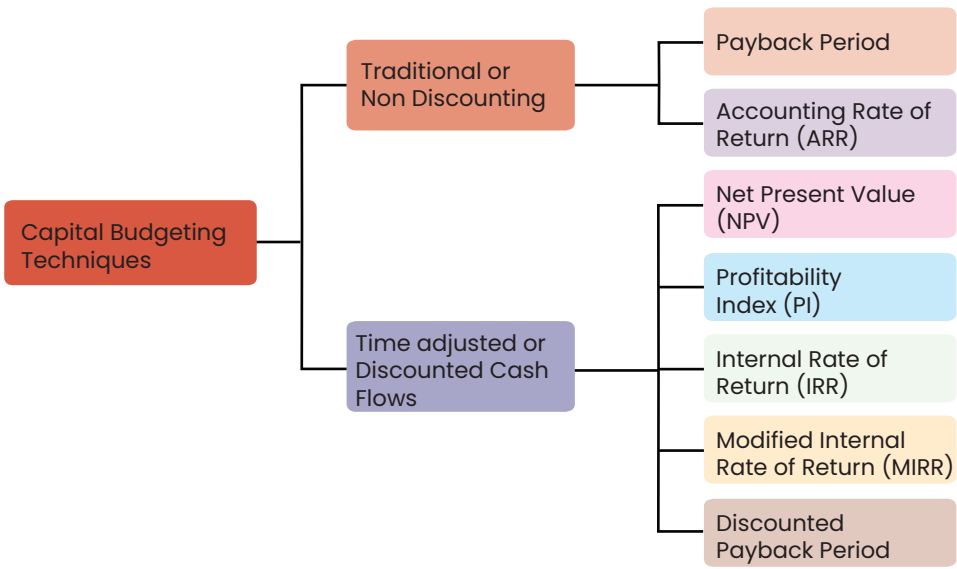
Statement showing the calculation of Cash Inflow after Tax (CFAT)

Sl. no.		(₹)
1	Total Sales Units	xxx
2	Selling Price per unit	xxx
3	Total Sales [1 × 2]	xxx
4	Less: Variable Cost	xxx
5	Contribution [3 - 4]	xxx
6	Less: Fixed Cost	
	(a) Fixed Cash Cost	xxx
	(b) Depreciation	xxx
7	Earning Before Tax [6 - 7]	xxx
8	Less: Tax	xxx
9	Earning After Tax [7-8]	xxx
10	Add: Depreciation	xxx
11	Cash Inflow After Tax (CFAT) [9 +10]	xxx

Capital Budgeting Techniques

Effective investment decisions arc crucial for a company's growth and sustainability, ensuring that resources are allocated to projects that maximize shareholder value.

There are a number of techniques available for appraisal of investment proposals and can be classified as presented below:



Investment Decisions

Payback Period

The payback period of an investment is the length of time required for the cumulative total net cash flows from the investment to equal the total initial cash outlay.

$$\text{Payback period} = \frac{\text{Total initial capital investment}}{\text{Annual expected after-tax net cash flow}}$$

Accounting (Book) Rate of Return (ARR)

The accounting rate of return of an investment measures the average annual net income of the project (incremental income) as a percentage of the investment.

$$\text{ARR} = \frac{\text{Profit after Depreciation}}{\text{Investment in the begining of the year}} \times 100$$

OR

$$\text{ARR} = \frac{\text{Average Annual Profit}}{\text{Investment in the begining}} \times 100 \quad \text{OR} \quad \text{ARR} = \frac{\text{Average Annual Profit}}{\text{Average Investment}} \times 100$$

Average Investment = ½ (Initial Investment – Salvage Value) + Salvage Value

In case of additional working capital
= ½(Initial Investment – Salvage Value) + Salvage Value + Additional Working Capital

Discounting Techniques

Net Present Value Technique (NPV)

The net present value technique is a discounted cash flow method that considers the time value of money in evaluating capital investments.

Net present value = Present value of net cash inflow - Total net initial investment/ Present value of cash outflows

$$\text{NPV} = \left(\frac{C_1}{(1+k)} + \frac{C_2}{(1+k)^2} + \frac{C_3}{(1+k)^3} + \ldots\ldots + \frac{C_n}{(1+k)^n}\right) - 1$$

OR

$$\text{NPV} = \sum_{t=1}^{n} \frac{C_t}{(1+k)^t} I$$

Where,

C = Cash flow of various years
K = discount rate
N = Life of the project
I = Investment

Decision Rule:

If NPV ≥ 0	Accept the Proposal
If NPV < 0	Reject the Proposal

Profitability Index/Desirability Factor/Present Value Index Method (PI)

In comparing alternative proposal of comparing, we have to compare a number of proposals each involving different amounts of cash inflows. One of the methods of comparing such proposals is to work out what is known as the 'Desirability factor', or 'Profitability index' or 'Present Value Index Method'.

$$\text{Profitability Index (PI)} = \frac{\text{Sum of discounted cash inflows}}{\text{Initial cash outlay or Total discounted cash outflow (as the case maybe)}}$$

Decision Rule

If PI ≥ 1	Accept the Proposal
If PI < 1	Reject the Proposal

In case of mutually exclusive projects; project with higher PI should be selected.

Internal Rate of Return Method (IRR)

Internal rate of return for an investment proposal is the discount rate that equates the present value of the expected net cash flows with the initial cash outflow.

$$LR + \frac{\text{NPV at LR}}{\text{NPV at LR- NPV at HR}} \times (HR-LR)$$

OR

$$LR + \frac{\text{PV at LR-CI}}{\text{PV at LR - PV at HR}} \times (HR-LR)$$

Where,

LR = Lower Rate
HR = Higher Rate

Acceptance Rule

If IRR ≥ Cut-off Rate or WACC	Accept the Proposal
If IRR < Cut-off Rate or WACC	Reject the Proposal

Summary of Decision criteria of Capital Budgeting techniques

Techniques		For Independent Project	For Mutually Exclusive Projects
Non-Discounted	Pay Back	(i) When Payback period ≤ Maximum Acceptable Payback period: **Accepted** (ii) When Payback period ≥ Maximum Acceptable Payback period: **Rejected**	Project with least Payback period should be selected
	Accounting Rate of Return (ARR)	(i) When ARR ≥ Minimum Acceptable Rate of Return: **Accepted** (ii) When ARR ≤ Minimum Acceptable Rate of Return: **Rejected**	Project with the maximum ARR should be selected.
Discounted	Net Present Value (NPV)	(i) When NPV ≥ 0: **Accepted** (ii) When NPV < 0: **Rejected**	Project with the highest positive NPV should be selected
	Profitability Index(PI)	(i) When PI ≥ 1: **Accepted** (ii) When PI < 1: **Rejected**	When Net Present Value is same, project with Highest PI should be selected
	Internal Rate of Return (IRR)	(i) When IRR ≥ K: **Accepted** (ii) When IRR < K: **Rejected**	Project with the maximum IRR should be selected

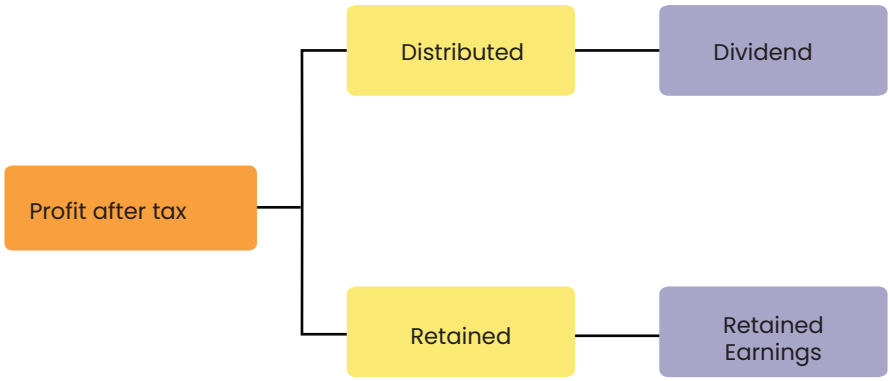
Dividend Decisions

Points of Discussion

- Meaning of Dividend and its significance
- Forms of Dividend
- Determinants of Dividend Decisions
- Theories of Dividend
- Meaning, Advantages and Limitations of Stock split

Meaning of Dividend and its Significance

Dividend is the part of profit after tax which is distributed to the shareholders of the company.



Significance of Dividend policy

Long Term Financing Decision:

Equity can be raised externally through issue of equity shares or can be generated internally through retained earnings. But retained earnings are preferable because they do not involve floatation costs.

Whether to retain or distribute the profit forms the basis of the Dividend decision. Since payment of cash dividend reduces the amount of funds necessary to finance profitable investment opportunities thereby restricting it to find other avenues of finance.

Dividend Decisions

The decision is based on the following

- Whether the organization has opportunities in hand to invest the amount of profits, if retained?
- Whether the return on such investment (ROI) will be higher than the expectations of shareholders i.e. K_e?

Dividend Decisions

Wealth Maximization Decision:

Because of market imperfections and uncertainty, shareholders give higher value to near dividends than future dividends and capital gains.

Payment of dividends influences the market price of the share. Higher dividends increase value of shares and low dividends decrease it.

When the firm increases retained earnings, shareholders' dividends decrease and consequently market price is affected.

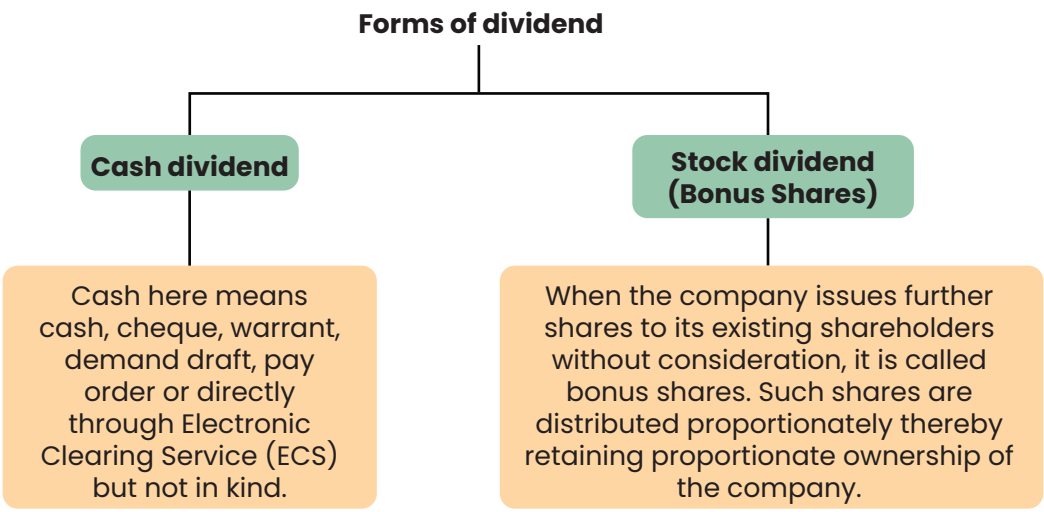
Use of retained earnings to finance profitable investments increases future earnings per share.

On the other hand, increase in dividends may cause the firm to forego investment opportunities for lack of funds and thereby decrease the future earnings per share.

Thus, management should develop a dividend policy which divides net earnings into dividends and retained earnings in an optimum way so as to achieve the objective of wealth maximization for shareholders.

Such policy will be influenced by investment opportunities available to the firm and value of dividends as against capital gains to shareholders.

Forms of Dividend



Advantages and Limitations of Stock Dividend

Advantages Of Stock Dividend
- Policy of paying fixed dividend per share and its continuation increases total cash dividend of the shareholders in future.
- Conservation of cash for meeting profitable investment opportunities.
- Cash deficiency and restrictions imposed by lenders to pay cash dividend.

Limitations Of Stock Dividend
- Stock dividend does not affect the wealth of shareholders and therefore it has no value for them.
- Stock dividends are more costly to administer than cash dividend.

Determinants of Dividend Decisions

Factors affecting Dividend Decision

- Availability of funds
- Cost of capital
- Capital structure
- Stock price
- Investment opportunities in hand
- Internal rate of return
- Trend of industry
- Expectation of shareholders
- Legal constraints
- Taxation

Practical Considerations in Dividend Policy

A discussion on internal financing ultimately turns to practical considerations which determine the dividend policy of a company.

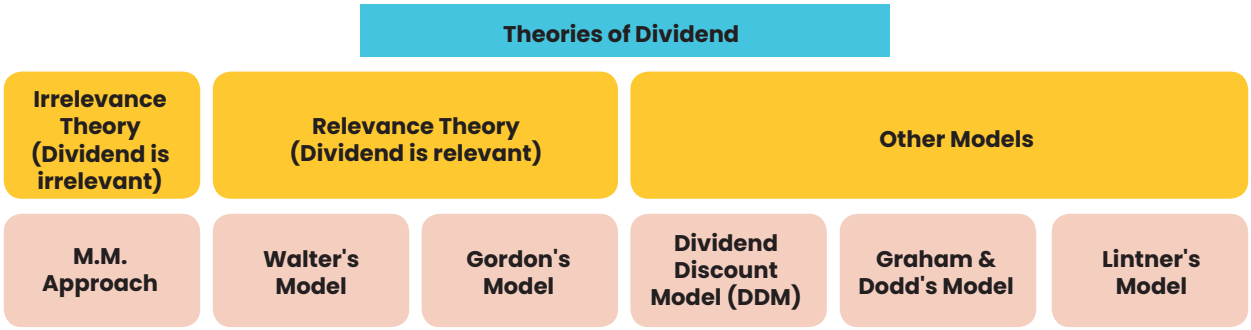
The formulation of dividend policy depends upon answers to the questions:

Whether there should be a stable pattern of dividends over the years.

Whether the company should treat each dividend decision completely independent.

Dividend Decisions

Theories of Dividend



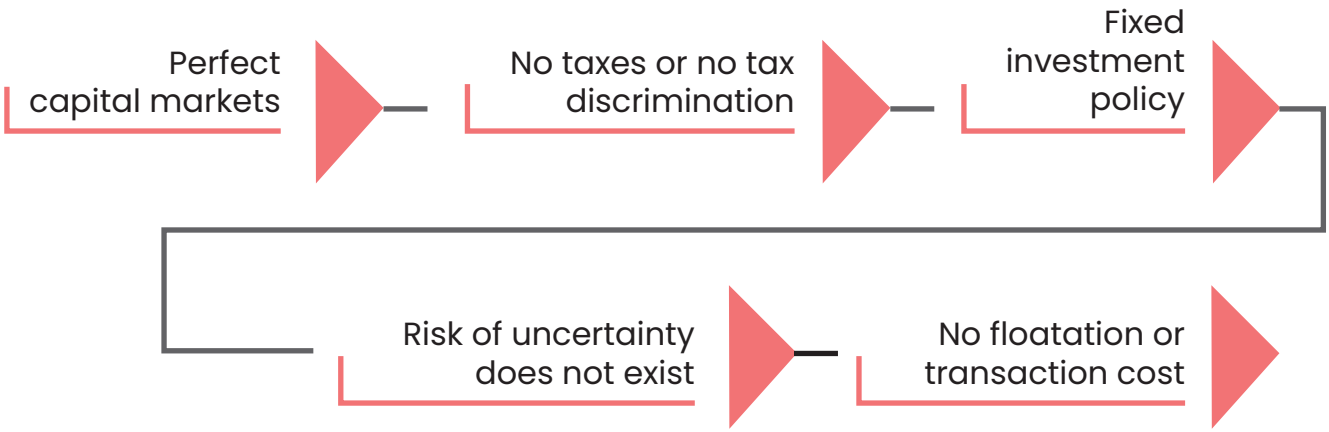
Dividend's Irrelevance Theory

- MODIGLIANI and MILLER (M.M) HYPOTHESIS

According to MM hypothesis, market value of equity shares depends solely on its earning power and is not influenced by the manner in which its earnings are split between dividends and retained earnings.

Market value of equity shares is not affected by dividend size.

Assumptions of MM Hypothesis:



Price of shares is calculated as below:

$$P_0 = \frac{P_1+D_1}{1+K_e}$$

Where,

P_0 = Price in the beginning of the period.
P_1 = Price at the end of the period.
D_1 = Dividend at the end of the period.
K_e = Cost of equity/ rate of capitalization/ discount rate.

As per MM hypothesis, the value of firm will remain unchanged due to dividend decision.

Price of shares is calculated as below:

$$V_f \text{ or } nP_0 = \frac{(n + \Delta n)P_1 - I + E}{(1 + K_e)}$$

Where,

V_f = Value of rm in the beginning of the period
n = number of shares in the beginning of the period
Δn = number of shares issued to raise the funds required
I = Amount required for investment
E = total earnings during the period

Advantages and Limitations of MM Hypothesis

ADVANTAGES of MM Hypothesis

- This model is logically consistent.
- It provides a satisfactory framework on dividend policy with the concept of Arbitrage process.

LIMITATIONS of MM Hypothesis

- Validity of various assumptions is questionable.
- This model may not be valid under uncertainty.

Dividend's relevance Theory

- WALTER'S MODEL

As per Walter's Model, in the long run, share prices reflect only the present value of expected dividends. Retentions influence stock prices only through their effect on further dividends.

As per Walter's Model, two factors which influence the market price of a share are (i) Dividend per share and (ii) Relationship between IRR and Ke.

The relationship between dividend and share price based on Walter's formula is shown below:

$$\text{Market Price (P)} = \frac{D + \frac{r}{K_e}(E - D)}{K_e}$$

Where,

P = Market Price of the share.
E = Earnings per share.
D = Dividend per share.
K_e = Cost of equity/ rate of capitalization/ discount rate.
r = Internal rate of return/ return on investment

Dividend Decisions

Assumptions of Walter's Model

- All investment proposals are financed through retained earnings only.
- 'r' rate of return & 'Ke' cost of capital are constant.
- Perfect capital markets.
- No taxes or no tax discrimination between dividend and capital gain.
- No floatation or transaction cost.
- The firm has perpetual life.

Conclusion of Walter's Model

Company	Condition of r vs K_e	Correlation between Size of Dividend and Market Price of share	Optimum payout dividend ratio
Growth	$r > K_e$	Negative	Zero
Constant	$r = K_e$	No correlation	Every payout ratio is optimum
Decline	$r < K_e$	Positive	100%

Growth Company:

- Company is able to invest/utilize the fund in a better manner. Shareholders can accept low dividend because their value of share would be higher.

Decline Company:

- Company is not in a position to cover the cost of capital; shareholders would prefer a higher dividend to utilize their funds in more profitable opportunities.

Advantages and Limitations of Walter's Model

ADVANTAGES of Walter's Model

- Simple to understand and easy to compute.
- It can envisage different possible market prices in different situations and considers internal rate of return, market capitalisation rate and dividend payout ratio in the determination of market value of shares.

LIMITATIONS of Walter's Model

- The formula does not consider all the factors affecting dividend policy and share prices.
- Determination of market capitalisation rate is difficult.
- The formula ignores such factors as taxation, various legal and contractual obligations, management policy and attitude towards dividend policy and so on.

Dividend's relevance Theory • GORDON'S MODEL

According to Gordon's model, when IRR is greater than cost of capital, the price per share increases and dividend pay-out decreases. On the other hand when IRR is lower than the cost of capital, the price per share decreases and dividend pay-out increases.

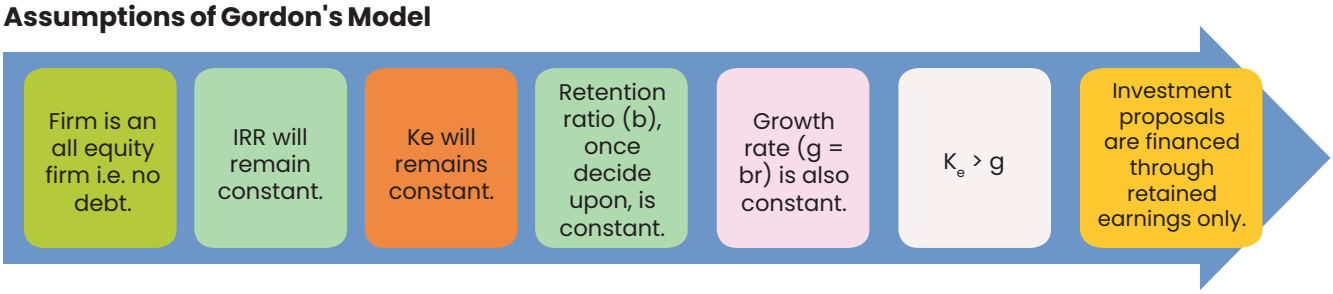
The following formula is used by Gordon to find out price per share:

$$P_0 = \frac{E_1 (1-b)}{K_e - br (g)}$$

Where,

P_0 = Price per share
E_1 = Earnings per share
b = Retention ratio; (1 - b = Payout ratio)
K_e = Cost of capital
r = IRR and br = Growth rate (g)

Assumptions of Gordon's Model



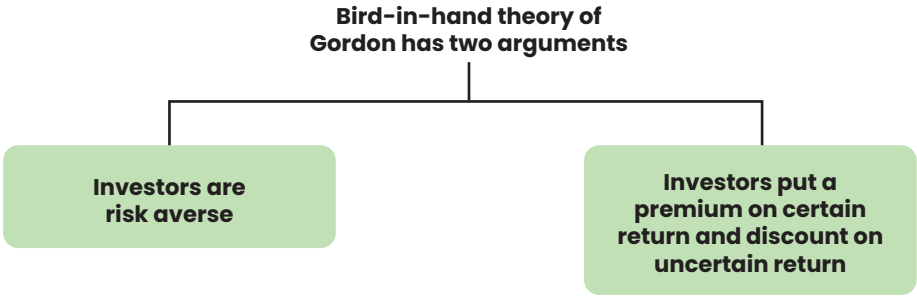
Conclusion of Gordon's Model

Company	Condition of r vs Ke	Optimum dividend payout ratio
Growth	r > Ke	Zero
Constant	r = Ke	There is no optimum ratio
Declining	r < Ke	100%

Dividend Decisions

The "Bird-in-Hand" Theory

Myron Gordon revised his dividend model and considered the risk and uncertainty in his model.



Gordon argues that what is available at present is preferable to what may be available in the future. As investors are rational, they want to avoid risk and uncertainty. They would prefer to pay a higher price for shares on which current dividends are paid. Conversely, they would discount the value of shares of a firm which postpones dividends. The discount rate would vary with the retention rate.

Relationship between Dividend and Share Price on the basis of Gordon's formula

$$\text{Market price per share } (P_0) = \left[\frac{D_0(1+g)}{K_e - g}\right]$$

Where,

P_0 = Market price per share (ex-dividend)
D_0 = Current year dividend
g = Constant annual growth rate of dividends
K_e = Cost of equity capital (expected rate of return).

Advantages and Limitations of Gordon's Model

ADVANTAGES of Gordon's Model

- A useful heuristic model that relates the present stock price to the present value of its future cash flows.
- Easy to understand.

LIMITATIONS of Gordon's Model

- Model depends on projections about company growth rate and future capitalization rates of the remaining cash flows, which may be difficult to calculate accurately.
- The true intrinsic value of a stock is difficult to determine realistically.

Other Models • DIVIDEND DISCOUNT MODEL (DDM)

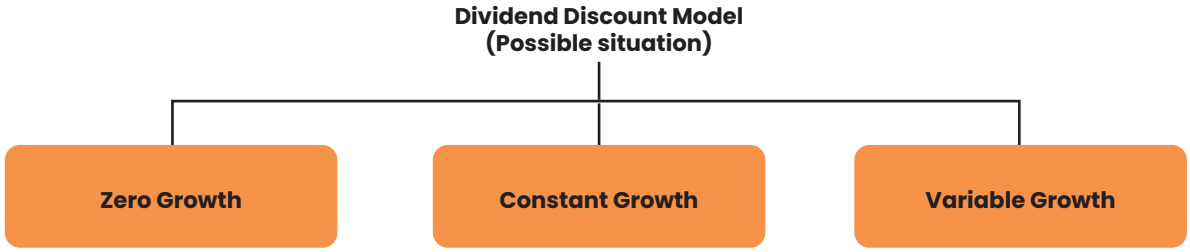
It is a financial model that values shares at the discounted value of the future dividend payments. Under this model, the price of a share will be traded is calculated by the PV of all expected future dividend payment discounted by an appropriate risk- adjusted rate. The dividend discount model price is the intrinsic value of the stock.

Intrinsic value = **Sum of PV of future cash flows**

Intrinsic value = **Sum of PV of Dividends** + **PV of Stock Sale Price**

$$\text{Stock Intrinsic Value} = \frac{D_1}{(1+K_e)^1} + \frac{D_2}{(1+K_e)^2} + ... + \frac{D_n}{(1+K_e)^n} + \frac{RV_n}{(1+K_e)^n}$$

Dividend Discount Model (Possible situation)



Zero growth rates: It assumes all dividend paid by a stock remains same.

In this case the stock price would be equal to:

$$\text{Stock's intrinsic Value} = \frac{\text{Annual dividend}}{\text{Required rate of return}}$$

$$\text{i.e. } P_0 = \frac{D}{K_e}$$

Where,

D = Annual dividend
K_e = Cost of capital
P_0 = Current Market price of share

Dividend Decisions

Constant Growth Rate (Gordon's Growth Model): It assumes constant growth of dividend.

The relationship between dividend and share price on the basis of Gordon's formula is:

$$\text{Market price per share (P)} = \frac{D_0 (1+g)}{K_e - g}$$

Where,
- P = Market price per share (ex-dividend)
- D_0 = current year dividend
- g = growth rate of dividends
- K_e = cost of equity capital/ expected rate of return

Notes:
- g = b × r
- b = proportion of retained earnings or (1- dividend payout ratio)

Variable growth rate: Variable-growth rate models (multi-stage growth models) can take many forms, even assuming the growth rate is different for every year.

However, the most common form is one that assumes 3 different rates of growth: an initial high rate of growth, a transition to slower growth, and lastly, a sustainable, steady rate of growth.

Basically, the constant-growth rate model is extended, with each phase of growth calculated using the constant-growth method, but using 3 different growth rates of the 3 phases.

The present values of each stage are added together to derive the intrinsic value of the stock.

Sometimes, even the capitalization rate, or the required rate of return, may be varied if changes in the rate are projected.

Other Models

- GRAHAM & DODD's MODEL

The stock market places considerably more weight on dividends than on retained earnings.

The formula is given below:

$$P = m\left(D+\frac{E}{3}\right)$$

Where,
P = Market price per share
D = Dividend per share
E = Earnings per share
m = a multiplier

Other Models • LINTNER's MODEL

Under Lintner's model, the current year's dividend is dependent on current year's earnings and last year's dividend.

Parameters

- **The target payout ratio**
- **The spread at which current dividends adjust to the target**

The formula is given below:

$$D_1 = D_0 + [(EPS \times Target\ payout) - D_0] \times Af$$

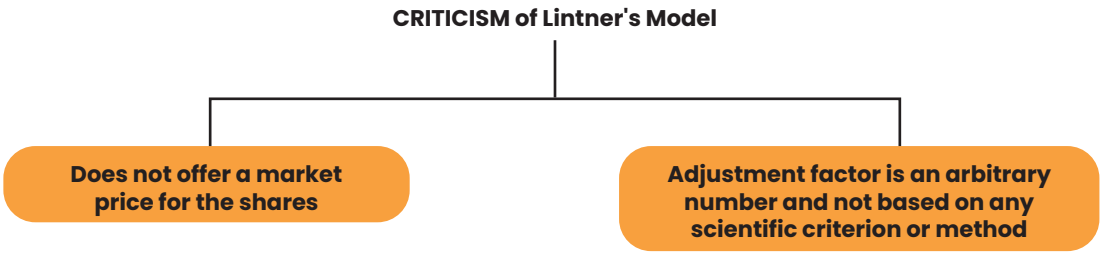
Where,
D_1 = Dividend in year 1
D_0 = Dividend in year 0 (last year dividend)
EPS = Earnings per share
Af = Adjustment factor or Speed of adjustment

The following are the assumptions of Linter's Model:

- Firm have a long term dividend payout ratio.
- More concern on changes in dividends than the absolute amounts of dividends.
- Dividend changes follow changes in long run sustainable earnings.
- Managers are reluctant to affect dividend changes that may have to be reversed.

Dividend Decisions

Criticism of Lintner's Model



Stock Splits

Stock Splits — Splitting one share into many, say, one share of ₹500 into 5 shares of ₹100

Advantages and Limitations of Stock Splits

ADVANTAGES of Stock Splits

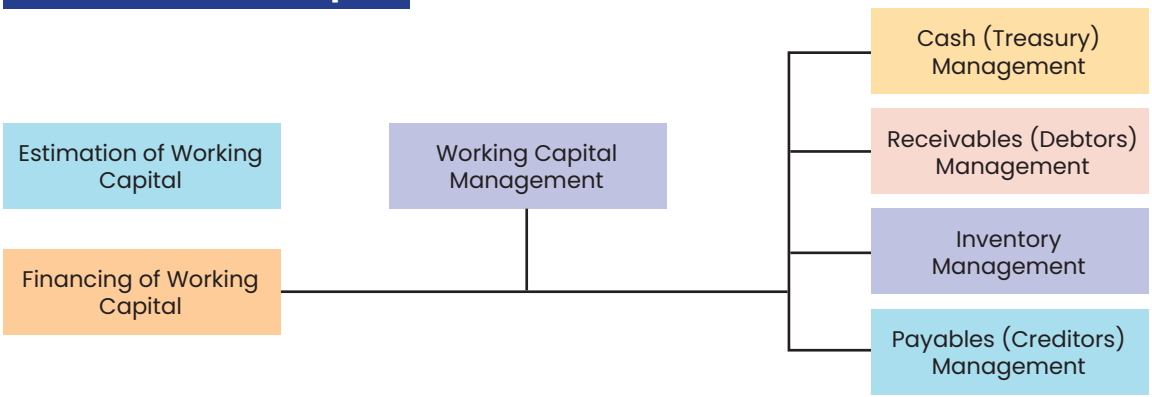
- Makes the share affordable to small investors.
- Number of shares may increase the number of shareholders.

LIMITATIONS of Stock Splits

- Additional expenditure need to be incurred on the process of stock split.
- Low share price may attract speculators or short term investors, which are generally not preferred by any company.

Management Of Working Capital

Overview Of The Topic



Accounting Equation Of Working Capital

Managing of Working Capital is about the managing of current assets and current liabilities in a business. In a broad classification current assets that need management attention are Receivables (Debtors), Inventories (Stocks), Cash and Advances like prepaid expenses etc. In the liabilities side current liabilities are like Payables (Creditors) and other outstanding dues.

Each components of working capital as classified above are managed separately, but the managerial approach and policies like Liquidity vs Profitability, Conservative to Aggressive Investment in Working Capital are at the core of every decision taken by the management.

Management Of Working Capital

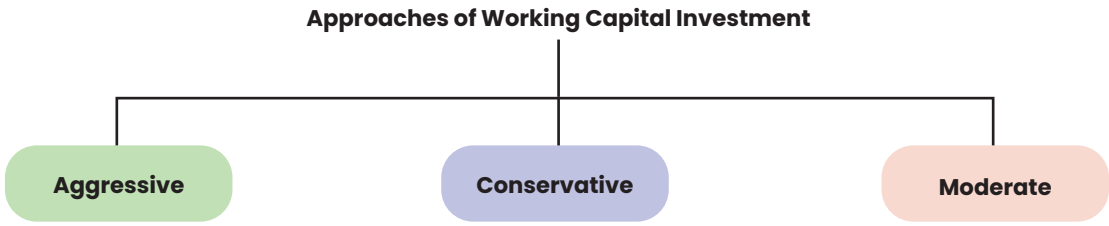
For smooth functioning of the day-to-day business, maintaining of liquidity of funds evenly during the operating cycle is important but unnecessary tying up of funds in idle assets not only reduces the liquidity but also reduces the opportunity to earn better returns from a productive asset. Trade-off between the liquidity and profitability can be attained following the techniques tabulated below:

Component of Working Capital	Advantages of higher side (Profitability)	Advantages of lower side (Liquidity)	Trade-off (between Profitability and Liquidity)
Inventory	Fewer stock-outs increase the profitability.	Lower inventory requires less capital but endangered stock-out and loss of goodwill.	Use techniques like EOQ, JIT, etc. to carry optimum level of inventory.
Receivables	Higher Credit period attracts customers and increases revenue.	Cash sales provide liquidity but fails to boost sales and revenue.	Evaluate the credit policy; use the services of debtor management (factoring) agencies.
Pre-payment of Expenses	Reduces uncertainty and profitable in inflationary environment.	Improves or maintains liquidity.	Cost-benefit analysis required.
Cash and Cash Equivalents	Capital can be used in some other investment avenues.	Cash can be invested in some other investment avenues.	Cash budgets and other cash management techniques can be used.
Payables and Expenses	Payables are honoured in time, improves goodwill and helpful in getting additional discounts.	Payables are honoured in time, improves the goodwill and helpful in getting future discounts.	Evaluate the credit policy and related cost.

Investment and Financing of Working Capital

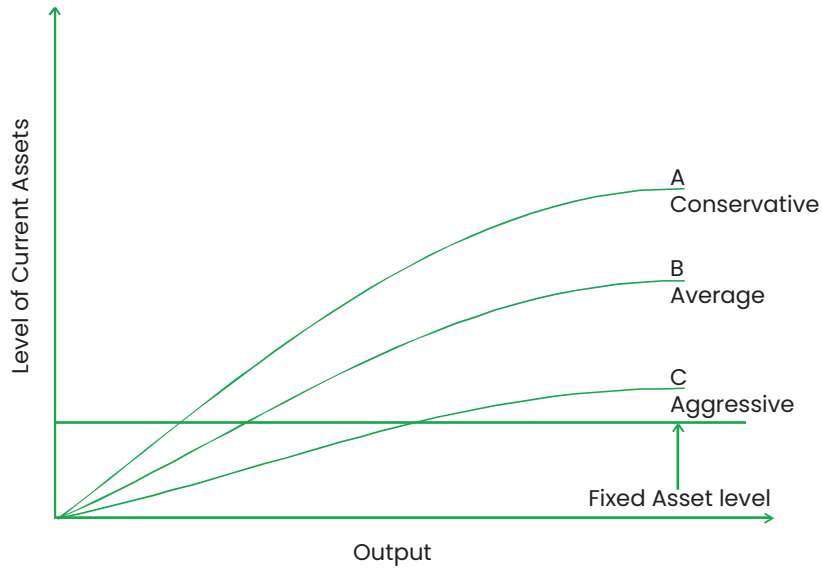
Investment in working capital is concerned with the level of investment in the current assets.

Financing decisions concerned with the arrangement of funds to finance the Working Capital.



Aggressive	Investment in Working Capital (current assets) is kept at minimum. Entity holds lower level of inventory, follows strict credit policy, keeps less cash balance, etc.
Conservative	Investment in Working Capital (current assets) is increased. Entity maintains higher level of inventories, follows liberal credit policies and keeps cash balance as high as to settle any current liability immediately.
Moderate	Under this approach a balance between the risk (cost) and return is maintained to gain more by using the funds in a very efficient manner.

A graphical representation of the above approaches towards investment in Working Capital is depicted as below:



Management Of Working Capital

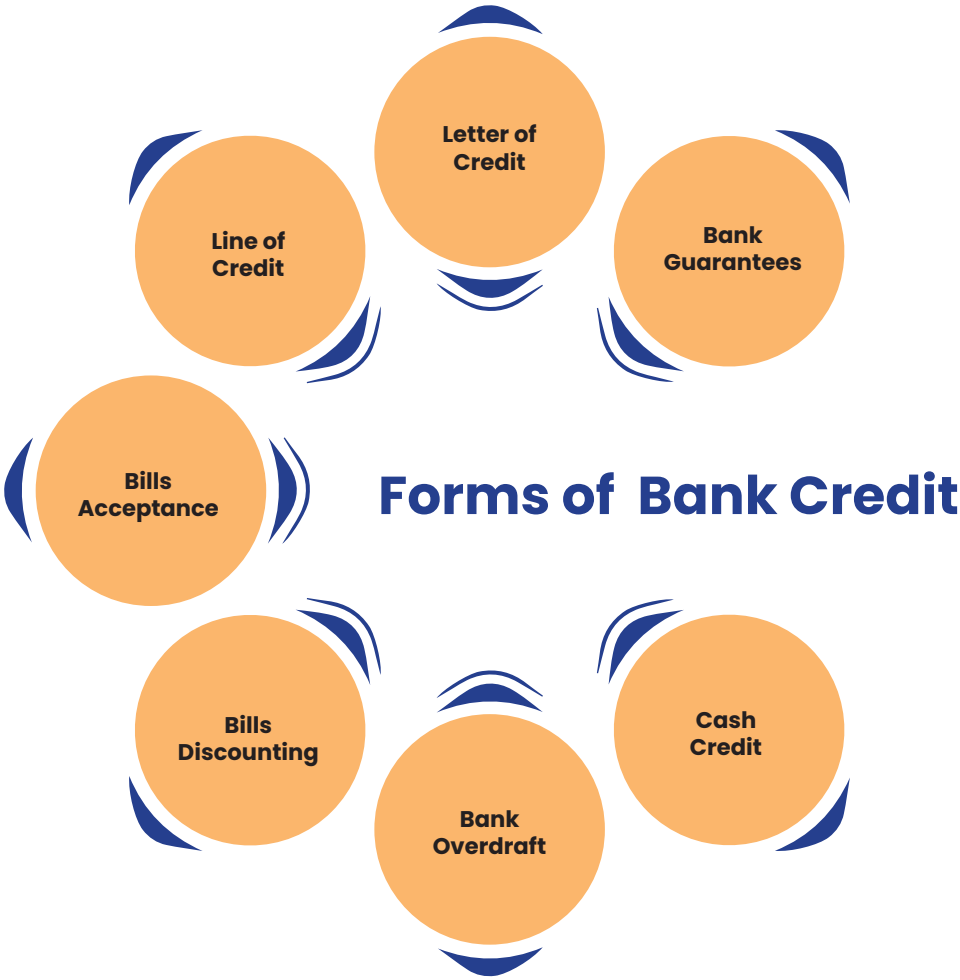
Financing Of Working Capital

When management of an entity decides the quantum of investment to be kept in the form of Working Capital, the next question to be answered is: how the decided quantum of investment will be arranged. Management explores the avenues (sources) to get the Working Capital financed. The sources can be internal to the entity known as spontaneous sources and external sources which is arranged by negotiating with financial institutions, banks and other specialised entities (debt factors).

Sources Of Working Capital

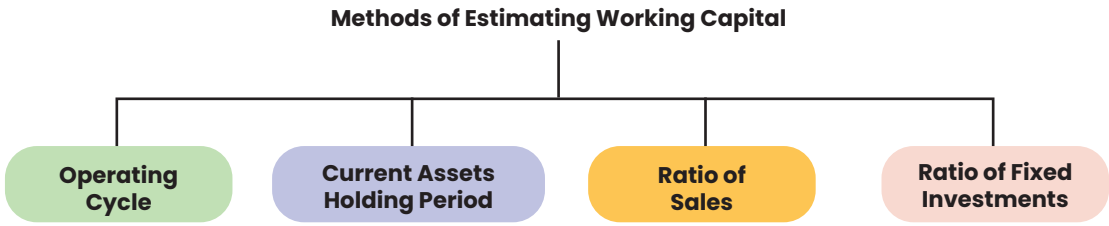
Spontaneous Sources
Trade Credit
Bills Payable
Accrued Expenses

Negotiated Sources
Inter-corporate loans and deposits
Credit from Financial Instituitions/ Banks
Commercial Papers & Public deposits
Bills Discounting & Rediscounting and Factoring

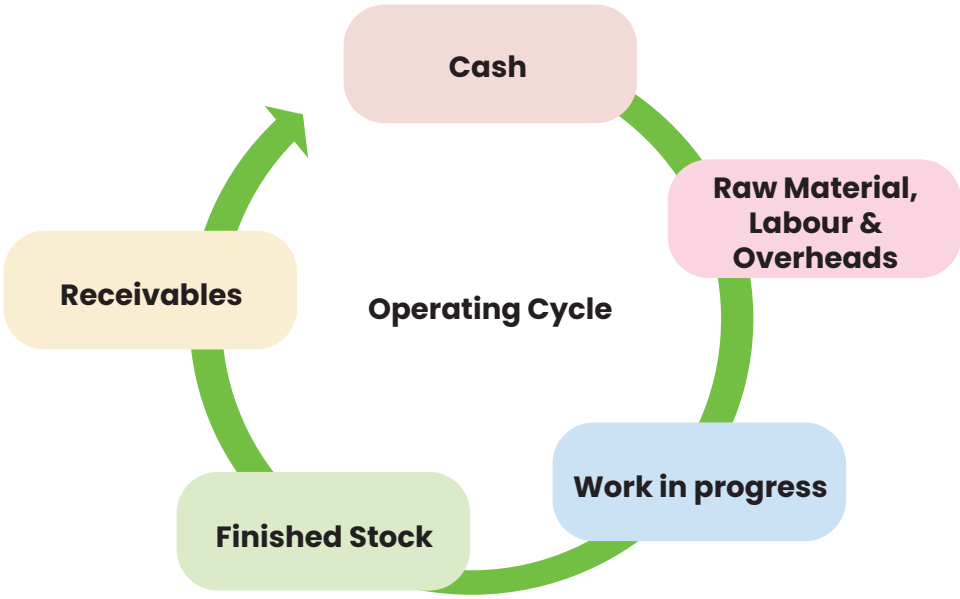


Estimation Of Working Capital

Amount of Working Capital required to keep the normal business operating without any interruption is made before the operating cycle begins. There are various methods which are used by the Management to assess the amount of Working Capital required to keep operations on.

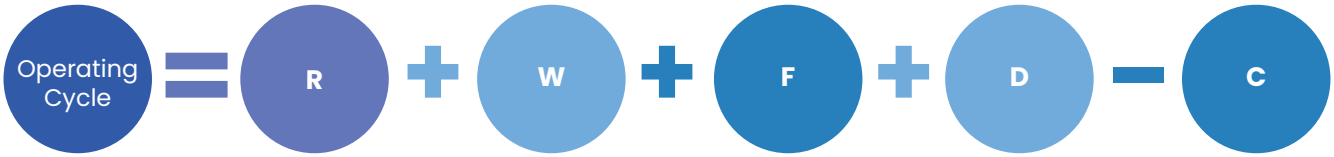


Operating Cycle: Also known as Working Capital cycle indicates the length of time between paying for materials entering into the stock to reaslisation from sales of finished goods.



Management Of Working Capital

In the form of an equation, the Operating Cycle can be expressed as follows:



Where,
R = Raw material storage period
W = Work-in-progress holding period
F = Finished goods storage period
D = Receivables (Debtors) collection period.
C = Credit period allowed by suppliers (Creditors)

The various components of Operating Cycle may be calculated as shown below:

(1)	Raw Material Storage Period	= Average stock of Raw Material / Average Cost of Raw Material Consumption per day
(2)	Work-in-Progress holding period	= Average Work-in-progress inventory / Average Cost of Production per day
(3)	Finished Goods storage period	= Average stock of finished goods / Average Cost of Goods Sold per day
(4)	Receivables (Debtors) collection period	= Average Receivables / Average Credit Sales per day
(5)	Credit period allowed by suppliers (Creditors)	= Average Payables / Average Credit Purchases per day

Estimation Of Amount Of Different Components Of Current Assets And Current Liabilities

(i) Raw Materials Inventory:

$$\frac{\text{Estimated production (units)}}{\text{12 months / 365 days*}} \times \text{Estimated cost per unit} \times \text{Average raw material storage period}$$

(ii) Work-in-Progress Inventory:

$$\frac{\text{Estimated production (units)}}{\text{12 months / 365 days*}} \times \text{Estimated WIP cost per unit} \times \text{Average WIP holding period}$$

(iii) Finished Goods:

$$\frac{\text{Estimated production (units)}}{\text{12 months / 365 days*}} \times \text{Estimated cost of production per unit} \times \text{Average storage period}$$

(iv) Receivables (Debtors):

$$\frac{\text{Estimated credit sales (units)}}{\text{12 months / 365 days*}} \times \text{Cost of sales (excluding depreciation) per unit} \times \text{Average collection period}$$

(v) Cash and Cash equivalents:

Minimum desired Cash and Bank balance to be maintained

(vi) Trade Payables (Creditors):

$$\frac{\text{Estimated credit purchase}}{\text{12 months / 365 days*}} \times \text{Credit period allowed by suppliers}$$

(vii) Direct Wages:

$$\frac{\text{Estimated labour hours x wage rate per hour}}{\text{12 months / 365 days*}} \times \text{Average time lag in payment of wages}$$

(viii) Overheads (other than depreciation and amortization):

$$\frac{\text{Estimated overheads}}{\text{12 months / 365 days*}} \times \text{Average time lag in payment of overheads}$$

*Number of days in a year may be taken as 365 or 360 days.

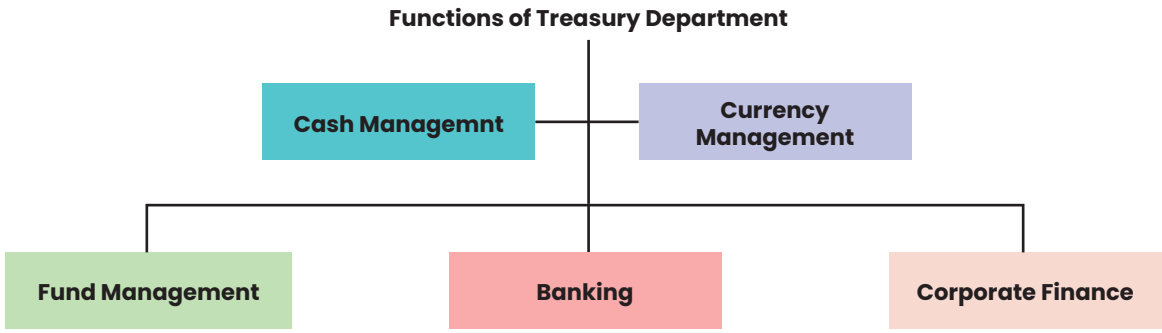
Management Of Working Capital

		Amount	Amount	Amount
I.	**Current Assets:**			
	Inventories:			
	Raw Materials	---		
	Work-in-progress	---		
	Finished Goods	---	---	
	Receivables:			
	Trade Debtors	---		
	Bills	---	---	
	Minimum Cash Balance		---	
	Gross Working Capital		---	---
II.	**Current Liabilities:**			
	Trade Payables		---	
	Bills Payables		---	
	Wages Payables		---	
	Payables for Overheads		---	---
III.	**Excess of Current Assets over Current Liabilities [I – II]**			---
IV.	Add: Safety Margin			---
V.	**Net Working Capital [III + IV]**			---

Treasury And Cash Management

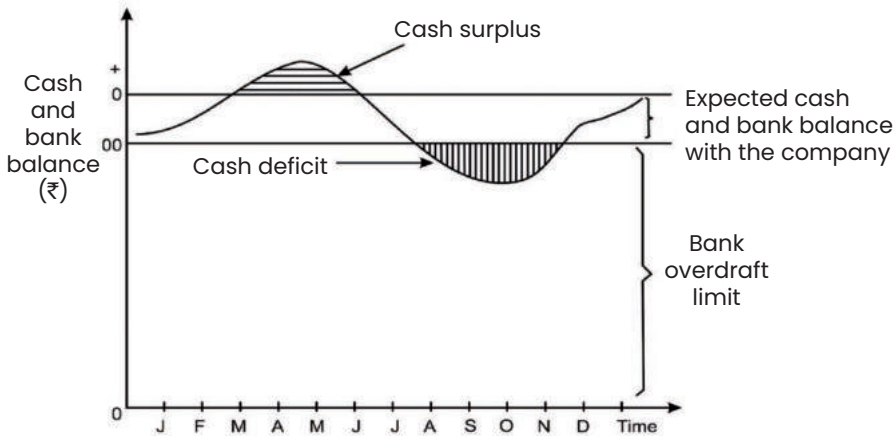
Treasury Management

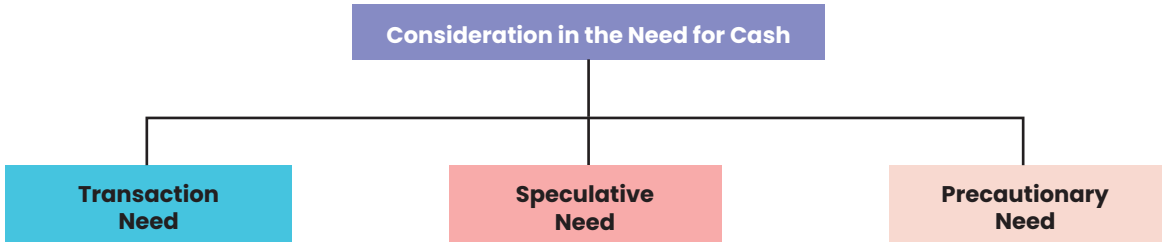
Treasury Management encompasses planning, organising and controlling the funds & Working Capital of an entity in order to ensure best use of funds, maintain liquidity, reduce overall cost of funds and mitigating operational & financial risk.



Management Of Cash

The following figure highlights the cash surplus and cash shortage position over the period of cash budget for preplanning to take corrective and necessary steps.





Treasury And Cash Management

Methods Of Cash Flow Budgeting

Receipts and Payments Method

Expected Receipts and Payments are considered. Cash inflow and outflow of all functional budgets, including capital expenditure budgets, are also considered.

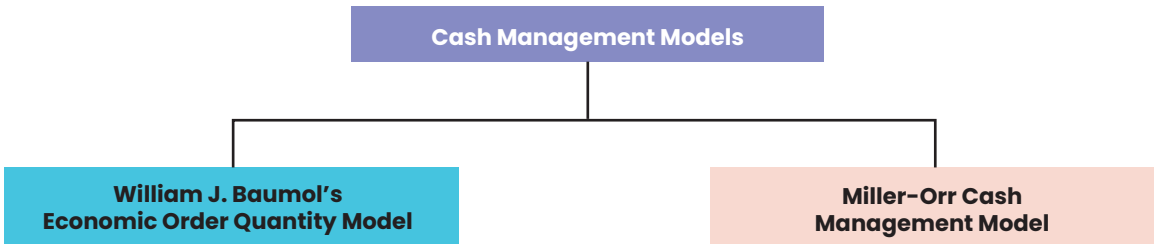
Adjusted Income Method

Annual cash flows are calculated by adjusting the sales revenue and cost figures for delays in Receipts and Payments (change in debtors and creditors) and eliminating non-cash items such as depreciation.

Adjusted Balance Sheet Method

Items of Balance sheet are predicted by expressing each type of asset (except cash & bank) and short-term liabilities as percentage of the expected sales. The profit is also calculated as a percentage of sales Adjustments to long-term liabilities is also made.

Cash Management Models



William J. Baumol's Economic Order Quantity Model

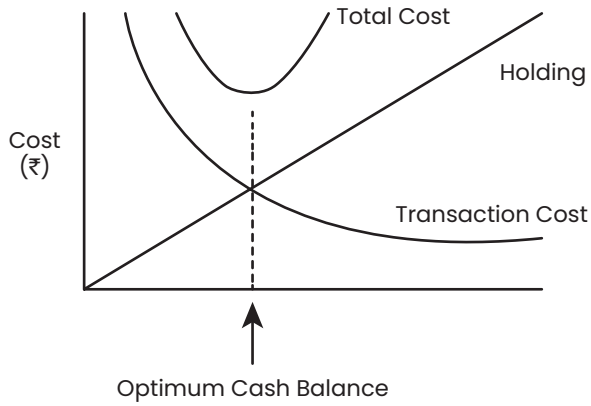
According to this model, optimum cash level is that level of cash where the carrying costs and transactions costs are the minimum. The formula for determining optimum cash balance is:

$$C = \sqrt{\frac{2UxP}{S}}$$

Where,

C = Optimum cash balance
U = Annual (or monthly) cash disbursement
P = Fixed cost per transaction.
S = Opportunity cost of one rupee p.a. (or p.m.)

This can be explained with the following diagram:



Assumptions Of William J. Baumol's EOQ Model

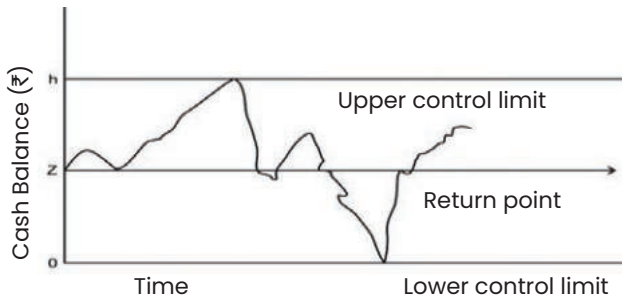
- Cash needs of the firm are known with certainty.
- The cash is used uniformly over a period of time and it is also known with certainty.
- The holding cost is known and it is constant.
- The transaction cost also remains constant.

Miller-ORR Cash Management Model

According to this model the net cash flow is completely stochastic.

This model is designed to determine the time and size of transfers between an investment account and cash account. In this model control limits are set for cash balances. These limits may consist of 'h' as upper limit, 'z' as the return point; and zero as the lower limit.

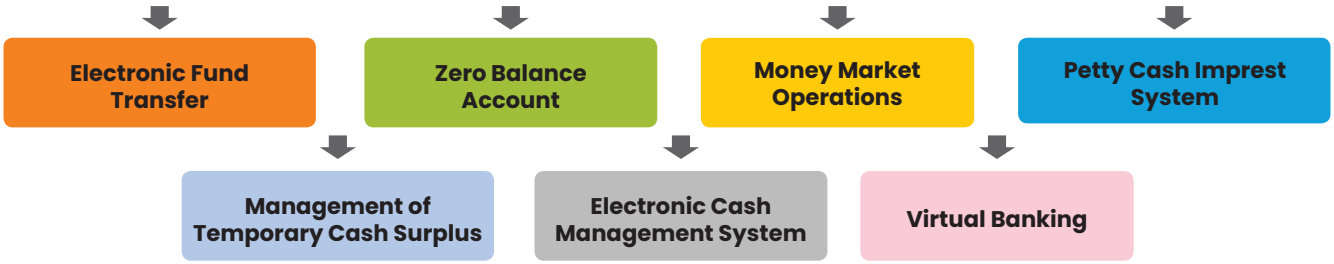
The following diagram illustrates the Miller-Orr Model;



- When the cash balance reaches the upper limit, the transfer of cash equal to h-z is invested in marketable securities account.
- When it touches the lower limit, a transfer from marketable securities account to cash account is made.
- During the period when cash balance stays between (h, z) and (z, 0) i.e. high and low limits no transaction between cash and marketable securities account is made.

Treasury And Cash Management

Recent Development In Cash Management



Management Of Receivables

Approaches Of Evaluation Of Credit Policies

There are basically two methods of evaluating the Credit Policies to be adopted by a Company – Total Approach and Incremental Approach. The formats for the two approaches are given as under:

Statement showing the Evaluation of Credit Policies (based on Total Approach)

Particulars	Present Policy	Proposed Policy I	Proposed Policy II	Proposed Policy III
	₹	₹	₹	₹
A. Expected Profit				
(a) Credit Sales	.....	.....	.....	.....
(b) Total Cost other than Bad Debts and Cash Discount	.....	.....	.....	.....
(i) Variable Costs	.....	.....	.....	.....
(ii) Fixed Costs	.....	.....	.....	.....
	.....	.....	.....	.....
(c) Bad Debts	.....	.....	.....	.....
(d) Cash Discount				
(e) Expected Net Profit before Tax (a-b-c-d)	.....	.....	.....	.....
(f) Less: Tax	.....	.....	.....	.....
(g) Expected Profit after Tax	.....	.....	.....	.....
B. Opportunity Cost of Investments in Receivables locked up in Collection Period	.....	.....	.....	.....
Net Benefits (A – B)	.....	.....	.....	.....

Statement showing the Evaluation of Credit Policies (based on Incremental Approach)

Particulars	Present Policy days	Proposed Policy I days	Proposed Policy II days	Proposed Policy III days
	₹	₹	₹	₹
A. Incremental Expected Profit:				
Credit Sales	.....	.....	.....	.....
(a) Incremental Credit Sales	.....	.....	.....	.....
(b) Less: Incremental Costs of Credit Sales	.....	.....	.....	.....
(i) Variable Costs	.....	.....	.....	.....
(ii) Fixed Costs	.....	.....	.....	.....
(c) Incremental Bad Debt Losses	.....	.....	.....	.....
(d) Incremental Cash Discount	.....	.....	.....	.....
(e) Incremental Expected Profit (a-b-c-d)	.....	.....	.....	.....
(f) Less: Tax	.....	.....	.....	.....
(g) Incremental Expected Profit after Tax	.....	.....	.....	.....
	.....	.....	.....	.....
B. Required Return on Incremental Investments:	.....	.....	.....	.....
(a) Cost of Credit Sales	.....	.....	.....	.....
(b) Collection Period (in days)	.....	.....	.....	.....
(c) Investment in Receivables (a x b/365 or 360)	.....	.....	.....	.....
(d) Incremental Investment in Receivables	.....	.....	.....	.....
(e) Required Rate of Return (in %)	.....	.....	.....	.....
(f) Required Return on Incremental Investments (d x e)	.....	.....	.....	.....
Incremental Net Benefits (A – B)	.....	.....	.....	.....

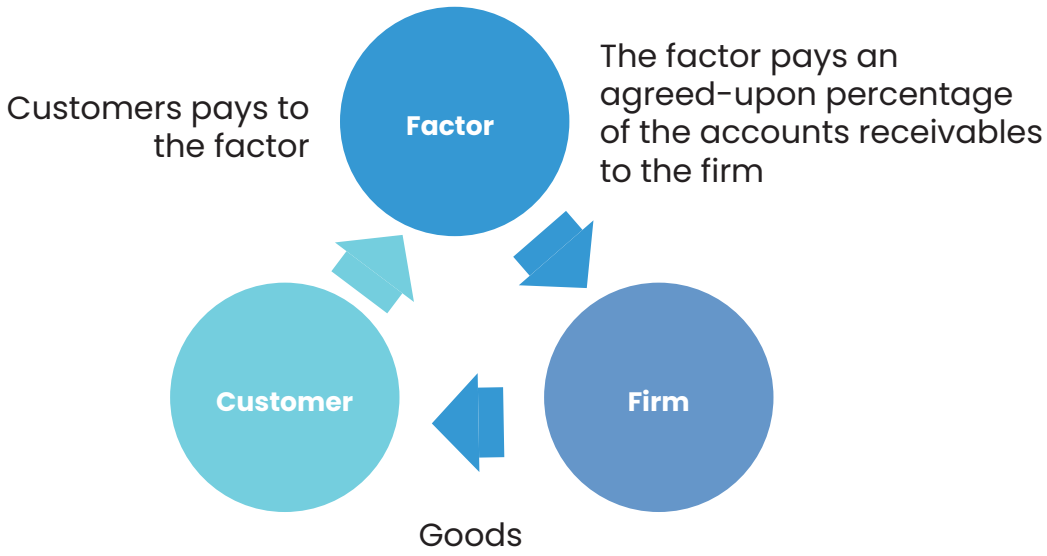
Financing Of Receivables

(i) Pledging

This refers to the use of a firm's receivables to secure a short-term loan.

(ii) Factoring

This refers to outright sale of accounts receivables to a factor or a financial agency.



The basic format of evaluating Factoring Proposal is given as under:

Statement showing the Evaluation of Factoring Proposal

	Particulars	Amount
A.	**Annual Savings (Benefit) on taking Factoring Service**	
	Cost of Credit Administration saved	.....
	Bad Debts avoided	.....
	Interest saved due to reduction in Average collection period (Wherever applicable) [Cost of Annual Credit Sales × Rate of Interest × (Present Collection Period – New Collection Period)/360 days]	.....
	Total	.....
B.	**Annual Cost of Factoring to the Firm:**	
	Factoring Commission [Annual credit Sales × % of Commission (or calculated annually)]	.....
	Interest Charged by Factor on advance (or calculated annually)	.....
	[Amount available for advance or (Annual Credit Sales – Factoring Commission – Factoring Reserve)] × $\left[\frac{\text{Collection Period (days)}}{360^*} \times \text{Rate of Interest}\right]$	
	Total	.....

	Particulars	Amount
C.	**Net Annual Benefits/Cost of Factoring to the Firm:**	**A-B**
	Rate of Effective Cost of Factoring to the Firm $= \frac{\text{Net Annual Cost of Factoring}}{\text{Amount available for advance}} \times 100$ or $\frac{\text{Net Annual Cost of Factoring}}{\text{Advances to be paid}} \times 100$ Advances to be paid = (Amount available for advance – Interest deducted by factor)	

*Number of days in a year may be taken as 365 or 360 days.

(iii) Forfaiting

Forfaiting is an arrangement of bill discounting in which a Financial Institution or Bank buys the trade bills (invoices) or trade receivables from exporters of goods or services, where the exporter relinquishes his right to receive payment from importer.

The functionality can be understood in the following manner:

1. Exporter sells Goods/Services
2. Importer draws Letter of Credit

Exporter → **Importer**

Exporter → **Exporter's bank**

3. Exporter approaches bank
4. Bank pays the Exporter

Management Of Payables

Cost And Benefits Of Trade Credit

Cost of Availing Trade Credit	Cost of Not Taking Trade Credit
Price	Impact of Inflation
Loss of Goodwill	Interest
Cost of Managing	Inconvenience
Conditions by Suppliers	

Computation Of Cost Of Payables

Formula for calculating the cost of not taking the discount:

Without Compounding Effect:

$$\frac{d}{100-d} \times \frac{365 \text{ days}}{t}$$

With Compounding Effect:

$$\left(\frac{100}{100-d}\right)^{\frac{365 \text{ days}}{t}} - 1$$

Where,

d = Size of discount i.e. for 6% discount, d = 6

t = The reduction in the payment period in days, necessary to obtain the early discount or Days Credit Outstanding – Discount Period.

NOTES

NOTES

The Institute of Chartered Accountants of India

(Set up by an Act of Parliament)

Board of Studies

The Institute of Chartered Accountants of India
ICAI Bhawan, A-29,
Sector-62, Noida 201 309
E-mail: bosnoida@icai.in
Phone: 0120 - 3045930

https://boslive.icai.org
www.icai.org