

Hey my buddies !!

How are you all ?? All good ? I hope everything is going very - very - very good

I am presenting to you all my first creation . The first ever **HAND - WRITTEN NOTES** for CA Intermediate **FINANCIAL MANAGEMENT**

It took a lot of efforts . dedication . patience and obviously writing practice to simplify all the concepts and make this subject most interesting . scoring and fun loving. This book is a **one - stop solution** for all your FM related doubts and I assure that this single book is self - sufficient for :-

- (i) First Time Learners
- (ii) Subsequent Revision
- (iii) Final 15 days revision

and we will use only this single book for all of our main lectures . revisionary video and last day revision

So thank you so much  for choosing me for this interesting subject and now **GET READY AND FASTEN YOUR SEAT BELTS** as you are going to witness a super exciting journey.

Thanking you all :-
CA AMIT SHARMA
aka yours - amitbhai

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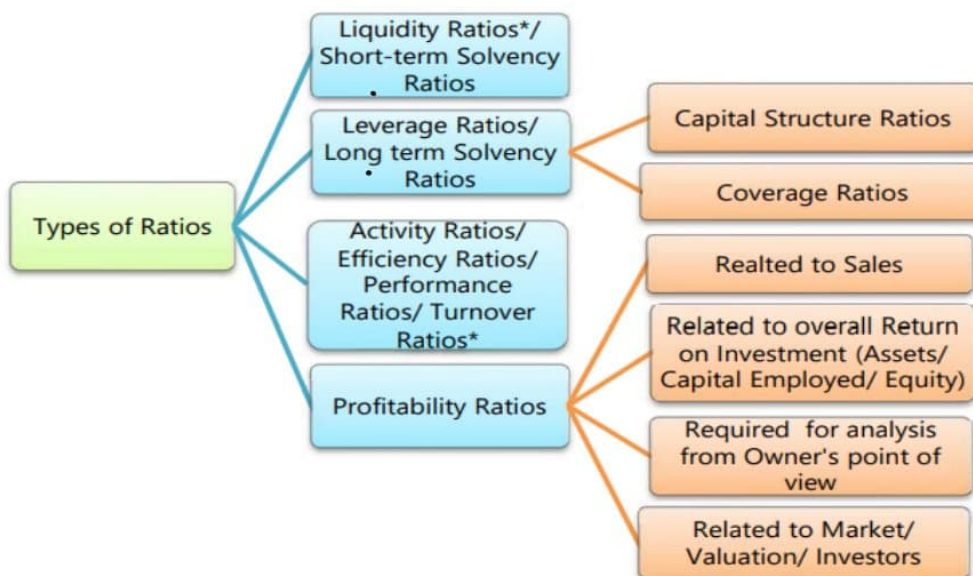
1 CHAPTER

RATIO ANALYSIS

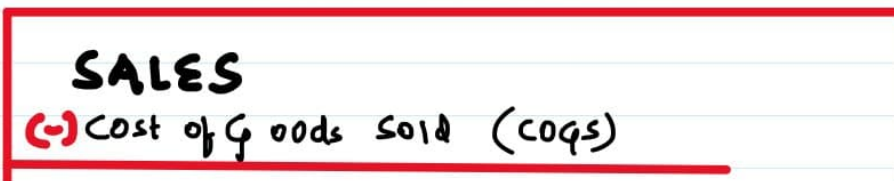
Whenever "TWO NUMBERS" are expressed in form of $\frac{P}{Q}$ then it is said to be ratio.

Generally one single variable does not provide us meaningful data but when expressed in terms of another variable, it gives us meaningful info.

① DIFFERENT TYPES OF RATIO



P/L STATEMENT



Gross profit

(-) Operating expenses
(admin, selling & dist)

Earning before Int & Tax (EBIT or operating profit)

(-) Interest expense

Earning before Tax (EBT or PBT)

(-) Tax expenses

Earning After Tax (EAT or PAT or Net profit)

(-) Dividend to preference s/holders

Earnings Available To Equity shareholders (EATESH)

(-) Dividends to equity s/holders

RETAINED EARNINGS

② PROFITABILITY RATIOS (BASED ON SALES)

$$\text{Basic Ratio} = \frac{\text{Any Income or Any Expense}}{\text{Sales}} \times 100\%$$

Imp:- Answer is calculated in %.



$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

$$(i) \text{ Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Sales}} \times 100 \quad \text{Or} \quad \frac{\text{Earnings after taxes (EAT)}}{\text{Sales}} \times 100$$

$$(ii) \text{ Pre-tax Profit Ratio} = \frac{\text{Earnings before taxes (EBT)}}{\text{Sales}} \times 100$$

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Sales}} \times 100$$

or,

$$\frac{\text{Earnings before interest and taxes (EBIT)}}{\text{Sales}} \times 100$$

$$(i) \text{ Cost of Goods Sold (COGS) Ratio} = \frac{\text{COGS}}{\text{Sales}} \times 100$$

$$(ii) \text{ Operating Expenses Ratio} = \frac{\text{Administrative exp.} + \text{Selling \& Distribution OH}}{\text{Sales}} \times 100$$

$$(iii) \text{ Operating Ratio} = \frac{\text{COGS} + \text{Operating expenses}}{\text{Sales}} \times 100$$

$$(iv) \text{ Financial Expenses Ratio} = \frac{\text{Financial expenses}^*}{\text{Sales}} \times 100$$

*It **excludes** taxes, loss due to theft, goods destroyed by fire etc.

BALANCE SHEET

LIABILITIES	ASSETS
EQUITY S/CAP RESERVE & SURPLUS PREF S/CAP DEBENTURES LOANS CREDITORS O/S EXPENSES ADVANCE INCOME	FIXED ASSETS - Plant - Machine - Furniture CURRENT ASSETS - Inventory - Debtor - Cash/Bank ACCUMULATED LOSSES PRELIMINARY EXPENSES

**ADVANCE PAY
ACCURED INCOME**

• Total Assets = Capital + Liabilities

• SHAREHOLDER'S EQUITY = Equity S/cap (+) Reserve & surplus (-) Prelim/Exp / Accumulated loss

• NETWORTH = Fixed Assets (+) Current Assets (-) Total Liab

08 Equity S/cap (+) Reserve & surplus (+) Pref. s/cap (-) Prelim/Exp / Acc. loss

• CAPITAL EMPLOYED = Equity S/cap (+) Reserve & surplus (+) Pref. s/cap (-) Debtventure (-) Preliminary Expenses / Accumulated loss.

08 Fixed Assets (+) Current Assets (-) Current Liab

08 Fixed Assets (-) W. Capital

3) PROFITABILITY RATIOS (OVERALL RETURN) ON ASSETS

Return simply means Profit / Earnings

ie what we got in return of our efforts.

$$\text{Return} = \frac{\text{क्या मिला}}{\text{क्या लगाया}}$$



$$\text{RETURN ON EQUITY} = \frac{\text{Earnings available to equity shareholder}}{\text{Equity shareholder's fund}}$$

$$\text{RETURN ON CAPITAL EMPLOY} = \frac{\text{Earnings before Interest \& Tax (EBIT)}}{\text{Capital Employed}}$$

$$\text{Or} \quad \frac{\text{Earnings after tax (ie EBIT - tax)}}{\text{Capital Employed}}$$

$$\text{RETURN ON ASSETS} = \frac{\text{Earnings after tax (ie EBIT - tax)}}{\text{Average (Total or Fixed or Intangible) Assets}}$$

$$\begin{aligned} \text{Return on Investment} &= \frac{\text{Return/Profit/Earnings}}{\text{Investment}} \times 100 \\ \text{Or,} \\ &= \frac{\text{Return/Profit/Earnings}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Investment}} \end{aligned}$$

$$\begin{aligned} &\text{Or,} \\ &= \text{Profitability Ratio} \times \text{Investment Turnover Ratio} \\ \text{Since, Profitability Ratio} &= \frac{\text{Return/Profit/Earnings}}{\text{Sales}}, \text{ and} \\ \text{Investment Turnover Ratio} &= \frac{\text{Sales}}{\text{Investments}} \end{aligned}$$

ROI can be improved either by improving Profitability Ratio or Investment Turnover Ratio or by both.

Imp:- Answer is calculated in times



④ PROFITABILITY RATIOS (OWNER'S P.O.V)

$$(i) \text{ EARNING PER SHARE} = \frac{\text{Net profit available to equity s/holders}}{\text{Total no. of equity s/holders}}$$

$$(ii) \text{ DIVIDEND PER SHARE} = \frac{\text{Total dividend paid to equity s/holders}}{\text{Total no. of equity s/holders}}$$

$$(iii) \text{ DIVIDEND PAYOUT RATIO} = \frac{\text{Dividend paid per share}}{\text{Earnings per share}} = \frac{\text{DPS}}{\text{EPS}}$$

$$(iv) \text{ DIVIDEND YIELD RATIO} = \frac{\text{Dividend paid per share}}{\text{Market price per share}} = \frac{\text{DPS}}{\text{MPS}}$$

⑤ PROFITABILITY RATIOS (Related to market)

$$\text{Price-Earnings per Share (P/E Ratio)} = \frac{\text{Market Price per Share (MPS)}}{\text{Earning per Share (EPS)}}$$

$$\text{Dividend Yield} = \frac{\text{Dividend} \pm \text{Change in share price}}{\text{Initial share price}} \times 100$$

Or,

$$= \frac{\text{Dividend per Share (DPS)}}{\text{Market Price per Share (MPS)}} \times 100$$

$$\text{Earnings Yield* or EP Ratio} = \frac{\text{Earnings per Share (EPS)}}{\text{Market Price per Share (MPS)}} \times 100$$

$$\text{Market Value / Book Value per Share (MV/BV)} = \frac{\text{Average share price}}{\text{Net worth} \div \text{No. of equity shares}}$$

Or,

$$= \frac{\text{Closing share price}}{\text{Net worth} \div \text{No. of equity shares}}$$



$$\begin{aligned}
 \text{Q Ratio} &= \frac{\text{Market Value of equity and liabilities}}{\text{Estimated replacement cost of assets}} \\
 &\text{Or,} \\
 &= \frac{\text{Market Value of a Company}}{\text{Assets' Replacement Cost}}
 \end{aligned}$$

Imp:- Answer is calculated in times

⑥ ACTIVITY RATIOS

It simply shows us How BETTER OUR ACTIVITIES / ACTIONS are i.e. How efficiently we are using our assets or capital to generate sales.

$$\text{Activity Ratio} = \frac{\text{Sales}}{\text{Whatever given}}$$

$$\text{Total Asset Turnover Ratio} = \frac{\text{Sales / Cost of Goods Sold}}{\text{Total Assets}}$$

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Sales / Cost of Goods Sold}}{\text{Fixed Assets}}$$

$$\text{Capital Turnover Ratio} = \frac{\text{Sales / Cost of Goods Sold}}{\text{Net Assets}} \text{ or Capital}$$

$$\text{Current Assets Turnover Ratio} = \frac{\text{Sales / Cost of Goods Sold}}{\text{Current Assets}}$$

$$\text{Working Capital Turnover Ratio} = \frac{\text{Sales / Cost of Goods Sold}}{\text{Working Capital}}$$

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold / Sales}}{\text{Average Inventory}}$$

$$\text{Raw Material Inventory Turnover Ratio} = \frac{\text{Raw Material Consumed}}{\text{Average Raw Material Stock}}$$

$$\text{Receivables (Debtors) Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Accounts Receivable}}$$

(Debtors + Bills Receivable)

$$= \frac{\text{Average Accounts Receivables}}{\text{Average Daily Credit Sales}} \quad \text{Or} \quad \frac{12 \text{ months} / 52 \text{ weeks} / 360 \text{ days}}{\text{Receivable Turnover Ratio}}$$

$$\text{Average Daily Credit Sales} = \frac{\text{Credit Sales}}{\text{No. of days in year (say 360)}}$$

$$\text{Payables Turnover Ratio} = \frac{\text{Annual Net Credit Purchases}}{\text{Average Accounts Payables}}$$

(Creditors + B/Payable)

$$= \frac{\text{Average Accounts Payable}}{\text{Average Daily Credit Purchases}} \quad \text{Or} \quad \frac{12 \text{ months} / 52 \text{ weeks} / 360 \text{ days}}{\text{Payables Turnover Ratio}}$$

Imp:- • Answer is calculated in times

- If opng & closing given, use average
- We can use "both sales or COGS."

⑦ COVERAGE RATIOS

It simply asks us How much ARE WE COVERED FOR THE PAYMENTS or How many times is my earnings as compared to my expense

$$\text{Coverage Ratio} = \frac{\text{EARNINGS}}{\text{Expense we want to cover}}$$

$$\text{Interest Coverage Ratio} = \frac{\text{Earnings before interest and taxes (EBIT)}}{\text{Interest}}$$



$$\text{Debt Service Coverage Ratio} = \frac{\text{Earnings available for debt services}}{\text{Interest} + \text{Installments}}$$

$$\text{Preference Dividend Coverage Ratio} = \frac{\text{Net Profit / Earning after taxes (EAT)}}{\text{Preference dividend}}$$

$$\text{Equity Dividend Coverage Ratio} = \frac{\text{Earning after taxes (EAT) - Preference dividend}}{\text{Equity dividend}}$$

$$\text{Fixed Charges Coverage Ratio} = \frac{\text{EBIT} + \text{Depreciation}}{\text{Interest} + \text{Repayment of Loan}}$$

⑧ SOLVENCY RATIOS

Short Term

Long term

Solvency
Ability of business to
pay short term liabilities

Solvency

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Asset = Inventories + Sundry Debtors + Cash and Bank Balances + Receivables/ Accruals + Loans and Advances + Disposable Investments + Any other current assets.

Current Liabilities = Creditors for goods and services + Short-term Loans + Bank Overdraft + Cash Credit + Outstanding Expenses + Provision for Taxation + Proposed Dividend + Unclaimed Dividend + Any other current liabilities.

$$\text{Quick Ratio or Acid Test Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

Where,

Quick Assets = Current Assets – Inventories – Prepaid expenses

Current Liabilities = As mentioned under Current Ratio.

$$\text{Cash Ratio} = \frac{\text{Cash and Bank balances} + \text{Marketable Securities}}{\text{Current Liabilities}}$$

Or,

$$= \frac{\text{Cash and Bank balances} + \text{Current Investments}}{\text{Current Liabilities}}$$



$$\text{Basic Defense Interval} = \frac{\text{Cash and Bank balances} + \text{Net Receivables} + \text{Marketable Securities}}{\text{Operating Expenses} \div \text{No. of days (say 360)}}$$

Or

$$= \frac{\text{Current Assets} - \text{Prepaid expenses} - \text{Inventories}}{\text{Daily Operating Expenses}}$$

$$\text{Daily Operating Expenses} = \frac{\text{Cost of Goods Sold} + \text{Selling Administration and other General expenses} - \text{Depreciation and other non cash expenditure}}{\text{No. of days in a year}}$$

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities (Excluding short-term bank borrowing)}$$

LONG TERM RATIO

Net Assets :- Total FA (-) Total CA (-) CL

$$\text{Equity Ratio} = \frac{\text{Shareholder's Equity}}{\text{Net Assets}}$$

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Net Assets}}$$

$$\begin{aligned} \text{Debt to Equity Ratio} &= \frac{\text{Total Outside Liabilities}}{\text{Shareholders' Equity}} = \frac{\text{Total Debt}^*}{\text{Shareholder's Equity}} \\ &= \frac{\text{Long-term Debt}^{**}}{\text{Shareholders' equity}} \end{aligned}$$

can include pref. s/cap

$$\text{Debt to Total Assets Ratio} = \frac{\text{Total Outside Liabilities}}{\text{Total Assets}}$$

Or,

$$= \frac{\text{Total Debt}}{\text{Total Assets}}$$

$$\text{Capital Gearing ratio} = \frac{\text{Preference Share Capital} + \text{Debentures} + \text{Other Borrowed funds}}{\text{Equity Share Capital} + \text{Reserves \& Surplus} - \text{Losses}}$$

$$\text{Proprietary Ratio} = \frac{\text{Proprietary Fund}}{\text{Total Assets}}$$

**2**

CHAPTER

LEVERAGE

Leverage means act of using a lever to uplift something
 In Financial management, leverage means use of Fixed costs to increase earnings.

let's take a basic example of SHOWROOM .

- bigger showroom = bigger sales
- better area = better sales

① DIFFERENT TYPES OF FIXED COST

Operating Fixed cost

Used to calculate (DOL)
 Degree of operating
 leverage

eg Rent, Depreciation,
 Salary

Financial Fixed cost

Used to calculate
 (DFL) Degree of
 Financial leverage

eg Interest,
 Preference Divid

Ques 1 :- Is leverage risky or beneficial ??

BOTH - it can increase sales or income

- but it also creates one extra fixed
 burden to pay.

P/L STATEMENT

SALES

(-) Variable costs

Contribution

(-) Fixed operating cost

(salary, rent, dep)

Earning before Int & Tax (EBIT or operating profit)

(-) Fixed Financial Cost (Interest)

Earning before Tax (EBT or PBT)

(-) Tax expenses

Earning After Tax (EAT or PAT or Net profit)

(-) Fixed Financial cost (Pref-dividend)

Earnings Available To Equity shareholders (EATESH)

(-) Dividends to equity s/holders

RETAINED EARNINGS

② DEGREE OF OPERATING LEVERAGE



- Since, fixed cost doesnot change, so if we increase our sales by 10%. increase in VC is 10%, but there is no increase in FC, so change in EBIT is disproportionate

Sales	1000	50%	1500
VC	800	50%	1200
Contri	200		300
FC	150	0%	150
EBIT	50	300%	150

- So Degree of operating leverage, measures this disproportionate change in EBIT, due to change in sales.
- It is mainly due to fixed operating cost.

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

$$\begin{aligned} \text{DOL} &= \frac{\left[\frac{\text{New EBIT} - \text{Old EBIT}}{\text{Old EBIT}} \right]}{\left[\frac{\text{New Sales} - \text{Old sales}}{\text{Old sales}} \right]} \\ &= \frac{\% \text{ change in EBIT}}{\% \text{ change in sales}} = \frac{\text{Contribution EBIT}}{\text{Contribution EBIT}} \end{aligned}$$

Important Hint

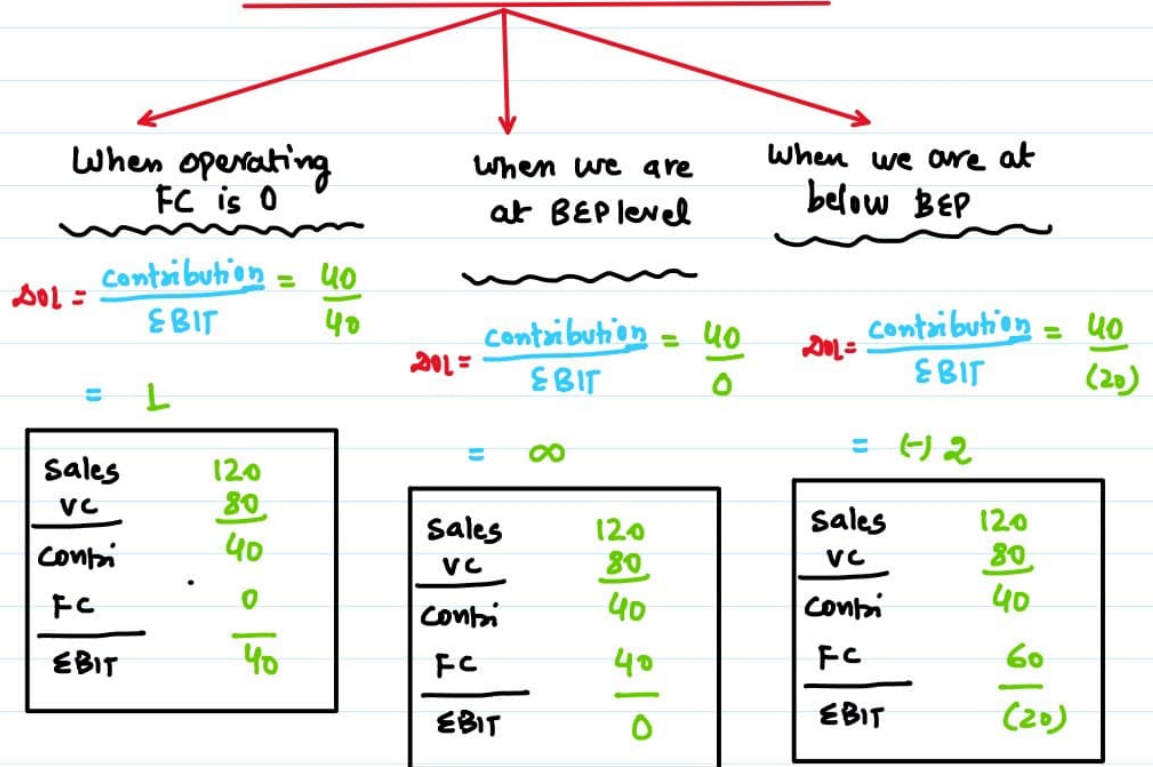
(i) Since VC also changes in same proportion as Sales
So instead of :- $Sales_1 - Sales_0$

We can use :- $(Sales_1 - VC_1) - (Sales_0 - VC_0)$

Change of Contribution = $Contribution_1 - Contribution_2$

(ii) Degree of operating leverage can never be 1

DIFFERENT LEVELS OF DOL



TYPES OF QUESTIONS ASKED

ALWAYS MAKE INCOME STAT FIRST

(a) Calculate DOL
Simply by using

(b) Calculate change in
Sales or change in



$$\text{formula} \\ \frac{\text{Contribution}}{\text{EBIT}}$$

$$\frac{\text{EBIT}}{\% \text{ change in EBIT}} \\ \% \text{ change in sales}$$

③ MARGIN OF SAFETY ♥ DOL

MOS is the level of sales which is beyond the break even sales, so let's understand in detail

$$\text{MOS} = \text{Total Sales} - \text{Break even sales}$$

$$\text{MOS in } \% = \frac{\text{Total Sales} - \text{Break even sales}}{\text{Total Sales}}$$

(let's multiply & divide by P/V ratio)

$$= \frac{(\text{Total sales} \times \text{P/V ratio}) - (\text{BE sales} \times \text{P/V ratio})}{(\text{Sales} \times \text{P/V ratio})}$$

$$= \frac{(\cancel{\text{Sales}} \times \frac{\text{Contribution}}{\cancel{\text{Sales}}}) - (\frac{\text{Fixed cost}}{\cancel{\text{PV ratio}}} \times \cancel{\text{P/V ratio}})}{(\text{Sales} \times \frac{\text{Contribution}}{\text{Sales}})}$$

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

$$\text{MOS \%} = \frac{\text{EBIT}}{\text{Contribution}}$$

$$\text{MOS \%} = \frac{1}{\text{DOL}}$$

④ DEGREE OF FINANCIAL LEVERAGE

- It measures change in EPS due to change in EBIT

$$\text{DFL} = \frac{\% \text{ change in EPS}}{\% \text{ change in EBIT}}$$

$$= \left[\frac{\text{New EPS} - \text{Old EPS}}{\text{Old EPS}} \right]$$

$$\left[\frac{\text{New EBIT} - \text{Old EBIT}}{\text{Old EBIT}} \right]$$

DFL if no pref. dividend given

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

DFL if pref. dividend is given

$$= \frac{\text{EBIT}}{(\text{EBIT} - \text{Int}) - \frac{\text{Pref dividend}}{(1 - \text{tax})}}$$



$$= \frac{EBIT}{EAE}$$

DIFFERENT LEVELS OF DFL

When financing
FC is 0

$$DFL = \frac{EBIT}{EBT} = \frac{40}{40}$$

= 1

Sales	120
vc	80
Contri	40
FC	0
EBIT	40
Int	0
EBT	40

When we are
at BEP level

$$DFL = \frac{EBIT}{EBT} = \frac{10}{0}$$

= ∞

Sales	120
vc	70
Contri	50
FC	40
EBIT	10
Int	10
EBT	0

When we are at
below BEP

$$DFL = \frac{EBIT}{EBT} = \frac{40}{(20)}$$

= (-) 2

Sales	120
vc	60
Contri	60
FC	20
EBIT	40
Int	60
EBT	(20)

Types OF QUESTIONS ASKED

(a) Calculate DFL
Simply by using
formula

$$\frac{EBIT}{PBT}$$

(b) Calculate change in
EBIT or change in
EBT

$$\frac{\% \text{ change in EPS}}{\% \text{ change in EBIT}}$$



5) DEGREE OF COMBINED LEVERAGE

$$= DFL \times DOL$$

$$= \frac{\% \text{ change in EBIT}}{\% \text{ change in sales}} \times \frac{\% \text{ change in EPS}}{\% \text{ change in EBIT}}$$

$$= \frac{\% \text{ change in EPS}}{\% \text{ change in sales}}$$

or $\frac{\text{Contribution}}{\text{EBIT}} \times \frac{\text{EBIT}}{\text{PBT}}$

$$= \frac{\text{Contribution}}{\text{PBT}} \times \frac{\text{Contribution}}{\text{PBT} - \frac{\text{pref. divid}}{(1-\text{tax})}}$$

Let's re-write	in % terms	in absolute
DOL		
DFL Only Int.		
Interest & pref. div.		

**3**

CHAPTER

CAPITAL STRUCTURE

It is simply the combination of capital raised by the company from different sources available to it. eg: **Equity - Debt - Pref.**

P/L STATEMENT**SALES**

(-) Variable costs

Contribution

(-) Fixed operating cost

(Salary, rent, dep)

Earning before Int & Tax (EBIT or operating profit)

(-) Fixed financial cost (Interest)

Earning before Tax (EBT or PBT)

(-) Tax expenses

Earning After Tax (EAT or PAT or Net profit)

(-) Fixed financial cost (Pref. dividend)

Earnings Available To Equity shareholders (EATESH)

(-) Dividends to equity s/holders

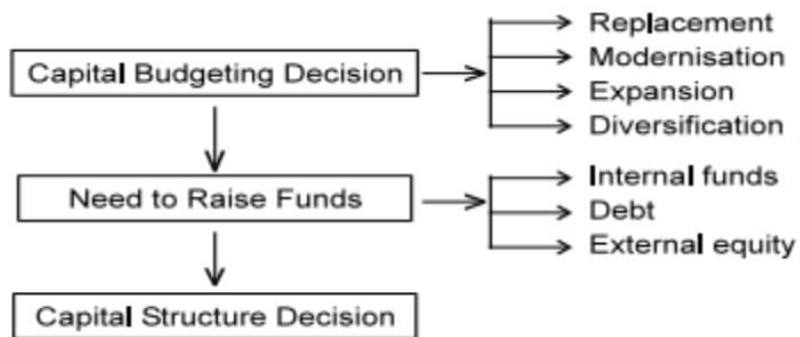
RETAINED EARNINGS

Ques 1 :- What is available to eq s/holder → earnings avail to eq s/holder

Ques 2 :- what is available to pref s/holders → pref divi'd

Ques 3 :- what is available to debenture holders → Interest

So can we say that for all three sources of capital, the amount available is → EBIT



TYPES OF QUESTIONS ↓

- Company will need to raise funds and Three option will be given with three different types of ways to raise funds
- pure equity
 - pure preference
 - debt + preference
 - pure debt
 - debt + equity
 - debt + eq. + pref.



So we are required to calculate earnings avail. to equity shareholders in each case

or if P/E ratio is given then MPS in each case and choose the one with highest MPS or earnings

TYPES OF QUESTIONS 2 :- Question will not provide data wrt EBIT, earnings or MPS

so we have to choose the best method of financing by choosing :-

the option which has "LEAST WACC"

$$WACC = \left[\begin{array}{l} \text{Weight} \\ \text{of equity} \end{array} \times \begin{array}{l} \text{cost of} \\ \text{equity} \end{array} \right] + \left[\begin{array}{l} \text{Weight of} \\ \text{debt} \end{array} \times \begin{array}{l} \text{cost of} \\ \text{debt} \end{array} \right] + \left[\begin{array}{l} \text{weight of} \\ \text{preference} \end{array} \times \begin{array}{l} \text{cost of} \\ \text{preference} \end{array} \right]$$

$$W_e \times k_e + W_d \times k_d + W_p \times k_p$$

① CHANGE IN EBIT WITH CHANGE IN CAPITAL

Uptill here we always found that EBIT remained same in all the cases if we raise funds or unless specifically

mentioned, so we chose the option

which gave Highest EPS or which gave Lowest WACC

But now question will specifically mention that EBIT will change and two important "words" be written

ROI on new capital
is same as old capital

ROI on new capital will
be X %.

and then question may ask us to calculate EPS in both cases

② ROI ON NEW CAPITAL IS SAME AS OLD

Option 1 :- Question will itself give the ROI
so no computation is required

Option 2 :- Question does not provide existing ROI

$$\text{ROI} = \frac{\text{EBIT}}{\text{Capital Invested}}$$

Important tricks

- (i) equity will be given and reserve & surplus be given
- (ii) rate of pref. divid will be given so calculate pref share
by $\frac{\text{Preference dividend}}{\text{Rate of pref divid}}$



(ii) Similarly int on debenture will be given so calculate debenture by
$$\frac{\text{Interest}}{\text{Rate of Interest}}$$

"We will finally multiply the ROI - with total capital employed to get new EBIT $(ROI = \frac{EBIT}{\text{Capital empl.}})$ "

"then we will calculate Earnings or MPS as asked"

③ ROI ON NEW CAPITAL IS X%.

Option 1. If ques directly says that return on new capital is X%. - Use it.

Option 2:- If question says ROI on new capital is x% greater than old ROI, then first calculate old ROI and add x%.

Important tricks

- (i) equity will be given and reserve & surplus be
- (ii) rate of pref. divid will be given so calculate pref sl/eq by
$$\frac{\text{Preference dividend}}{\text{Rate of pref divid}}$$

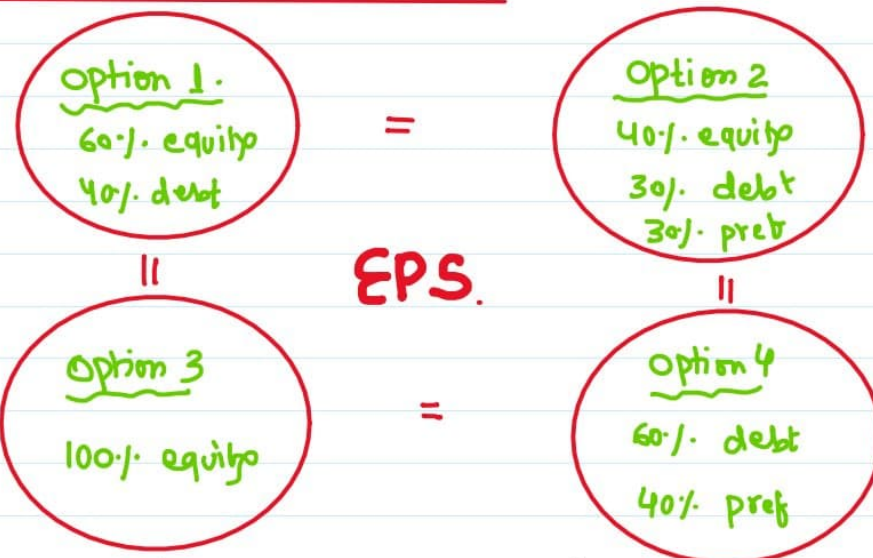
(iii) Similarly Int on debenture will be given so calculate

$$\text{debt} \times \frac{\text{Interest}}{\text{Rate of Interest}}$$

"We will finally multiply the new ROI - with total capital after raising new capital to get EBIT" $\left(\text{ROI} = \frac{\text{EBIT}}{\text{Capital employ.}} \right)$

"then we will calculate Earnings or MPS as asked to take our decision"

④ INDIFFERENCE POINT



Indifference point means such a level where EPS in two different types of capital structure is same

$$\frac{\text{EPS}_1}{\text{No. of equity shares}} = \frac{\text{EPS}_2}{\text{No. of equity shares}}$$

$$\frac{[\{ \text{EBIT} - \text{Int}_1 \} \times (1 - \epsilon)] - \text{pref divid}_1}{\text{No. of equity shares}} = \frac{[\{ \text{EBIT} - \text{Int}_2 \} \times (1 - \epsilon)] - \text{pref divid}_2}{\text{No. of equity shares}}$$



Type of Question = we are required to calculate EBIT or any other missing figure or Indifference point.

5 DECISION ON BASIS OF INDIFF. POINT

If EBIT is lower than Indiff point

Chose plan with less $\frac{EBIT}{EBT}$

If EBIT is same as Indiff point

If EBIT is more than Indiff point

Choose plan with high $\frac{EBIT}{EBT}$

“

NOTES

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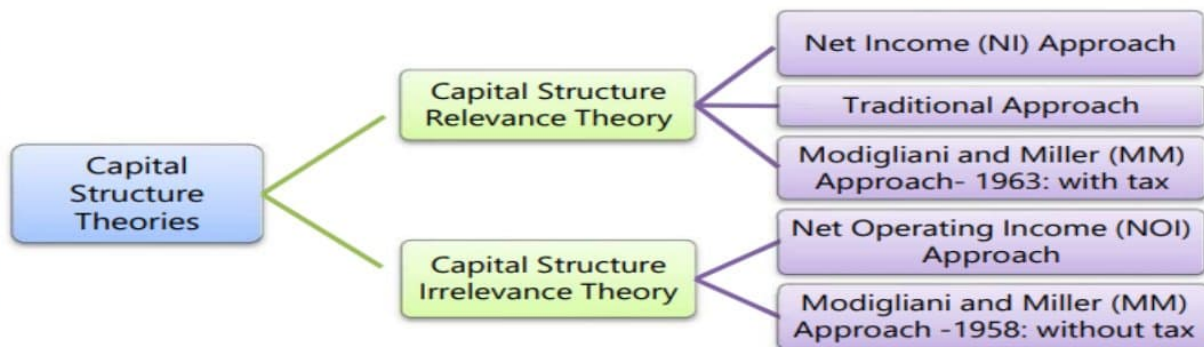




4 CHAPTER

CAPITAL STRUCTURE THEORY

It shows us relationship between $\begin{cases} \text{COST OF CAPITAL} \\ \text{CAPITAL STRUCTURE} \\ \text{VALUE OF FIRM} \end{cases}$



Some basic assumptions for all theories

- ◆ There are only two kinds of funds used by a firm i.e. debt and equity.
- ◆ The total assets of the firm are given. The degree of leverage can be changed by selling debt to purchase shares or selling shares to retire debt.
- ◆ Taxes are not considered.
- ◆ The dividend payout ratio is 100%.
- ◆ The firm's total financing remains constant.
- ◆ Business risk is constant over time.
- ◆ The firm has perpetual life.
- EBIT is constant

① CONCEPT OF PRESENT VALUE

$$\begin{array}{ccccc} \text{Yr1} & \text{Yr2} & \text{Yr3} & \text{Yr4} & \text{Yr5} \\ 10 & 10 & 10 & 10 & 10 \\ \hline \frac{10}{(1.1)} & \frac{10}{(1.1)^2} & \frac{10}{(1.1)^3} & \frac{10}{(1.1)^4} & \frac{10}{(1.1)^5} \end{array}$$

Similarly,



(i) To get present value of anything all we need to do is discount all future cash flows.

(ii) If we take Debentures

Value of debentures = discount cashflows

Cashflows = Interest Disc. rate = k_d

(iii) If we take equity shares

Value of equity shares = discount cashflows

Cashflows = dividend or EAES Disc. rate = k_e

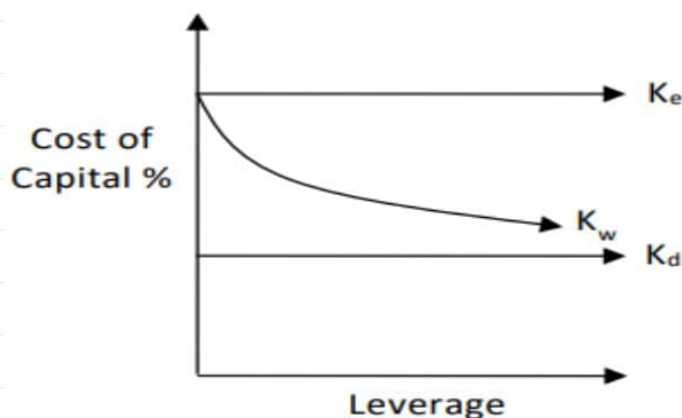
(iv) So, value of Firm = Value of debt + value of equity

$$= \frac{Int}{k_d} + \frac{EAESH}{k_e}$$

$$\text{value of firm} = \frac{EBIT}{k_0}$$

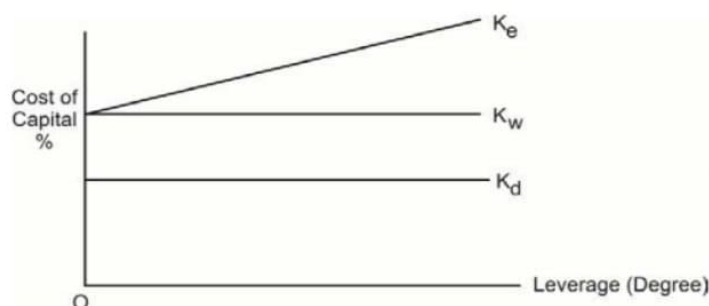
② NET-INCOME THEORY

This theory says that as soon as we start increasing debt in our capital structure, WACC will fall, assuming that k_e and k_d is constant.



③ NET-OPERATING INCOME THEORY

This theory says that as soon as we start increasing debt in our capital structure, K_e will rise so as to keep WACC constant, assuming that K_d is constant.

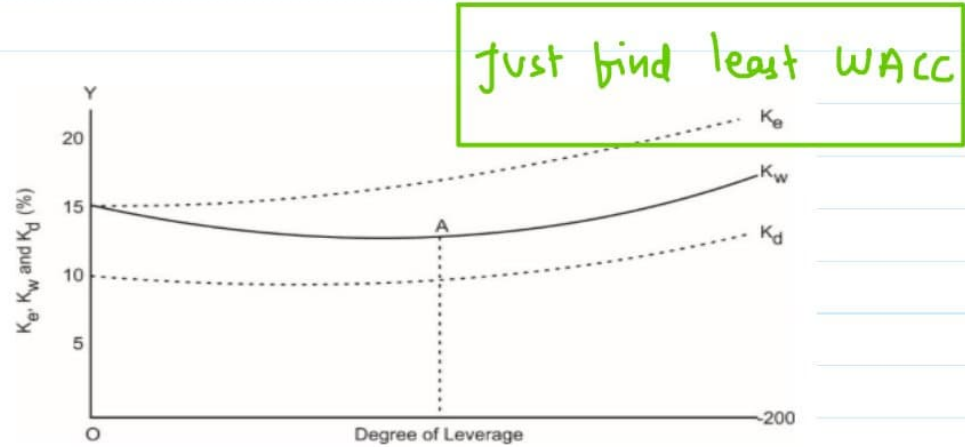


④ TRADITIONAL APPROACH

It is an advanced version of Net Income & Net operating Income approach.

- At start K_d will be constant
- But as soon as we raise more debt, K_e rises

- Further if we increase more debt, then both k_d & k_e rises.



⑤ MM APPROACH (MODIGILANI MILLER)

WITHOUT TAX

just like net operating
Income

$$\text{i.e. } V_F = \frac{\text{EBIT}}{k_0 \text{ (capitalisation)}}$$

$$V_{\text{equity}} = V_0 - V_d$$

$$k_e = k_0 + (k_0 - k_d) \times \frac{D}{E}$$

WITH TAX

Here we have two types
of firm :- levered, unlevered

$$V_F \text{ (unlevered)} = \frac{\text{EBIT} (1-t)}{k_0}$$

$$\text{or } = \frac{\text{EBIT} (1-t)}{k_e}$$

$$V_F \text{ (levered)} = V_F \text{ unlevered} + \text{Tax Saving}$$



$$= V_F \text{ Unlevered} + (\text{Debt} \times \text{tax})$$

$$\text{MV of Firm} = \frac{\text{Net operating Income}}{k_0 \text{ (capitalisation rate)}}$$

$$k_e = \frac{\text{EATESH}}{\text{MV of equity}}$$

$$\text{MV of equity} = (\text{MV of Firm} - \text{MV of debt})$$

“

NOTES



**5**
CHAPTER**COST OF CAPITAL**

Ques :- What is cost

Ans :- It is the amount paid to receive something.

Ques :- What is capital

Ans :- All long term source of finance used by co.

Ques :- What is Cost of capital

Ans :- So it means the amount co. has to pay to raise finance.

eg :- Interest to debentures

pref divid to PSC

eq. divid to ESC

Cost of capital can also be termed as minimum return or profit or earnings the company has to earn so as to pay or satisfy all the providers of funds.

① DIFFERENT TYPES OF CAPITAL

Equity s/cap	Reserves & surplus	Preference s/cap	Debentures	Total Capital
(k_e)	(k_{re})	(k_p)	(k_d)	(k_o)

Cost of equity	Cost of R & surplus	Cost of preference	Cost of debentures	Overall cost of Capital
----------------	---------------------	--------------------	--------------------	-------------------------

Always remember :-

First we pay Debenture Holders (Interest)
then preference s/holders (pref. divid)
then equity s/holders (eq. dividend)

② DEBENTURE AND K_d

It is a source of capital wherein the borrower pays a fixed payment called as Interest over fixed interval.



Only Interest is paid for infinite period & principal is not paid back

Both Interest & principal will be paid back.

③ COST OF DEBT OF IRREDEEMABLE DEBT

Since we are paying "Interest" to debentureholders so is cost of debt = Interest ??



No, because whenever we pay interest we get benefit in tax expenses i.e. our tax exp. fall.

without debt	with debt
Profit = 100	= 100
Interest = 0	= 20
<hr/>	<hr/>
Net profit = 100	= 80
Tax @ 30% = 30	= 24
<hr/>	<hr/>
	(6)

From the above example, we can say even if profit was same but tax expense reduced because interest exp. was high in 2nd case so Net profit fell, so tax also fell down.

So our true cost was = ₹ 20 - Savings in tax.

$$= ₹ (20 - 6) = ₹ 14$$

Interest - Interest × tax %

k_d

$$= \text{Interest} (1 - \text{tax \%})$$

$k_d \%$ =

$$\frac{\text{Interest} (1 - \text{tax \%})}{\text{Net proceeds received on raising debt}}$$

Few Important Points

$$\text{Interest} = \text{Interest rate (or Coupon rate)} \times \text{Face value}$$

$$\text{Tax Rate} = \text{Tax Rate applicable to company}$$

$$\begin{aligned} \text{Net proceeds} = & \text{Face value} \\ & (+) \text{ Premium on Issue} \\ & (-) \text{ Discount on Issue} \\ & \text{---} \\ & \text{Issue price} \\ & (-) \text{ Floatation / Issue cost} \\ & \text{---} \end{aligned}$$

Premium & Discount calculated on **Face Value**

Floataion cost is always calculated on **Issue Price**

4) COST OF DEBT OF REDEEMABLE DEBT (APPROX METHOD)

$$k_d \% = \frac{\text{Interest (1-tax)} + \left[\frac{\text{Redemp. Value} - \text{Net proceeds}}{\text{life}} \right]}{\left[\frac{\text{Redemp. Value} + \text{Net proceeds}}{2} \right]}$$

COST OF DEBT OF REDEEMABLE DEBT (YTM METHOD)



Did we ever learn that PV of all future cash flows shows us the current value

$$\therefore \text{Issue price} = \text{PV of } CF_1 + \text{PV of } CF_2 + \dots + \text{PV of } CF_n$$

$$= \frac{CF_1}{(1+r)} + \frac{CF_2}{(1+r)^2} + \dots + \frac{CF_n}{(1+r)^n}$$

Steps to calculate k_d

Discount rate means the minimum return which capital providers want to earn

(i) Prepare the table

Years	(I) CF	(II) PVF @ disc. rate ₁	I x II	(III) PVF @ disc. rate ₂	I x III
0	(100)				
1	10	1	—		
2	10	0.909	—		
3	10+100	0.826	—		
		0.751	—		

(ii) Use any two different interest rates

(iii) For cash outflow use (negative)

(iv) For cash inflows use +ve

$$k_d = \left[\frac{\text{Total value when low int rate used} - \text{Final value required}}{\text{Total value when low int rate used} - \text{Total value when high int rate used}} \right] \times \left[\text{Higher Interest Rate} - \text{Lower Interest Rate} \right] + \text{Lower Interest Rate}$$



⑤ COST OF CONVERTIBLE DEBENTURE

These are types of debentures where on conversion, debenture holders can convert them into equity shares.

Everything will be same as Redeemable Debenture just in place of Redemption value we will use higher of

- Redemption value
- Price per equity shares \times No of equity Shares recieved on conversion

⑥ COST OF PREFERENCE SHARES

The Entire Concept is same as Debentures.

$$k_p \text{ (irredeem.)} = \frac{\text{Preference dividend}}{\text{Net proceeds}} \times 100$$

$$k_p \text{ (redeemable)} = \frac{\text{pref divid} + \frac{[\text{Redemp. value} + \text{Net proceeds}]}{\text{life}}}{\frac{[\text{Redemp. value} + \text{Net proceeds}]}{2}}$$

⑦ COST OF CAPITAL OF EQUITY SHARES

Dividend Discount Model

$$MPS = \frac{\text{Dividend CF}}{k_e}$$

(P₀)

$$\therefore k_e = \frac{\text{Dividend}}{\text{MPS or Net proceeds}}$$

Earnings Price Model

$$MPS = \frac{EPS}{k_e}$$

$$k_e = \frac{EPS}{\text{MPS or Net proceeds}}$$

$$EPS = \frac{\text{Earnings avail to eq. holder}}{\text{No. of eq. shares}}$$

Gordan's Model (Growth model)Some important points

If word "declared" or "declares" or "in past" or it is given in current year B/sheet then its Δ_0 else Δ_1 .

$$P_0 = \frac{\Delta_1}{k_e - g}$$

$$P_0 = \frac{\Delta_0 (1+g)}{k_e - g}$$

$$\therefore k_e = \frac{\Delta_0 (1+g)}{P_0} + g$$

(deduct floatation cost from P_0)

$$g = b \times r$$



$$\begin{aligned}
 &= \text{retention ratio} \times \text{rate of return} \\
 &= \frac{\text{retained earning}}{\text{EPS}} \times \frac{\text{earned}}{\text{invested}} \\
 &= (100 - \text{DPS} \%) \times \frac{1}{\text{P/E ratio}}
 \end{aligned}$$

⑧ REALISED YIELD APPROACH

We will not be using this formula to calculate k_e .

We will use it to calculate growth rate (g) and then apply it in dividend growth model.

$$g = \sqrt[n]{(\text{Yield}_1 \times \text{Yield}_2 \times \text{Yield}_3 \times \dots \times \text{Yield}_n)} - 1$$

$$k_e = \frac{\text{Dividend during year} + \text{Price at end of year}}{\text{Price at start of year}}$$

$$\textcircled{08} g = \frac{\text{Dividend of Year}_1}{\text{Dividend of Year}_0}$$

$$\textcircled{08} g = \frac{\text{Price at end of Year}_1}{\text{Price at end of Year}_0}$$

$$n = \text{No of times we calculated yield}$$



9) CAPM METHOD

$$k_e = R_f + \beta(R_m - R_m)$$

β = Beta = Risk

R_m = Risk of market

R_f = Risk free rate of return on govt bond / T-Bill

$R_m - R_f$ also called as Risk premium.

Types of Risk

SYSTEMATIC RISK

It is risk for entire market and can't be avoided (Beta)
eg.: govt policies.

UNSYSTEMATIC RISK

It is the company specific risk which can be avoided
eg.: strikes

10) CALCULATING VALUE OF EQUITY SHARES

Case I !: Same cash flows for ∞ years

$$\begin{aligned} P_0 &= \frac{CF_1}{1+k_e} + \frac{CF_1}{(1+k_e)^2} + \dots + \frac{CF_1}{(1+k_e)^{\infty}} \\ &= \frac{CF}{k_e} = \frac{\text{Dividend}}{k_e} \end{aligned}$$

Case II !: Same cash flows for ∞ years (+) same growth

$$P_0 = \frac{CF_1}{1+k_e} + \frac{CF_1(1+g)}{(1+k_e)^2} + \frac{CF_1(1+g)^2}{(1+k_e)^3} + \frac{CF_1(1+g)^\infty}{(1+k_e)^\infty}$$

$$= \frac{CF}{k_e} = \frac{D_1}{k_e - g}$$

Case III !: Same cash flows for ∞ years (+) unequal growth

$$P_0 = \frac{CF_1}{1+k_e} + \frac{CF_2}{(1+k_e)^2} + \dots + \frac{CF_\infty}{(1+k_e)^\infty}$$

For example growth rate in Yr 1 & 2 = 5%.
and from 3 years = 7%.

" First calculate PV of all CF that have same growth rate & then discount it to bring to present. "

II) COST OF RETAINED EARNINGS

method I

same as k_e

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

(don't deduct flotation)
Cost from P_0

method II

$k_e (1 - \text{tax}) (1 - \text{brokerage})$

(if personal tax)

$k_e (1 - \text{tax})$



12) WEIGHTED AVERAGE COST OF CAPITAL

<u>Capital</u>	<u>Amount</u>	<u>Weight</u>	<u>Cost of cap</u>	<u>WACC</u>
equity	xx (P)	$\frac{P}{(P+R+r+S)}$	x	x
retained	xx (R)	$\frac{R}{(P+R+r+S)}$	x	x
pref.	xx (r)	$\frac{r}{(P+R+r+S)}$	x	x
debentures	xx (S)	$\frac{S}{(P+R+r+S)}$	x	x
				<u>Total</u>

Book value weight = In the amount column we use Book Values to calculate ratio

Market value weight = In the amount column we use Market Values to calculate ratio

To calculate market value of equity & Pfs, just distribute market value of Equity between equity & Retained earnings in ratio of "Book values".

13) MARGINAL COST OF CAPITAL

Sometimes Questions can ask that company wants to raise extra capital through equity or debt or pref or all.

Marginal cost of capital = WACC of new capital raised

<u>newCapital</u>	<u>Amount</u>	<u>Weight</u>	<u>Cost of cap</u>	<u>WACC</u>
equity	xx (P)	$\frac{P}{(P+R+r+S)}$	x	x
retained	xx (R)	$\frac{R}{(P+R+r+S)}$	x	x
pref.	xx (r)	$\frac{r}{(P+R+r+S)}$	x	x
debentures	xx (S)	$\frac{S}{(P+R+r+S)}$	x	x
				xxx

“

NOTES



**6**

CHAPTER

DIVIDEND

This chapter will simply help us take decisions wrt **how much dividend is to be declared.**

① DIFFERENT TYPES OF METHOD FOR DIVIDEND

Dividend is important or relevant

- (i) Gordon's model
- (ii) Walter's model

Dividend is not relevant

- (i) MM Approach

② GORDON'S MODEL

$$P_0 = \frac{D_1}{(k_e - g)}$$

$$P_0 = \frac{E_1 (1 - b)}{k_e - b \times r}$$

$$\begin{aligned} D_1 &= \text{Dividend of next year} \\ &= D_0 (1 + g) \\ &= \text{Earnings}_1 \times (1 - b) \end{aligned}$$

b = retention ratio
= amount of earnings not distributed

$(1-b)$ = earnings distributed
= dividend payout ratio

σ = Return on capital employed actually earned

k_e = Cost of equity or returned required by eqs/holder

SOME BASIC ASSUMPTIONS FOR THIS MODEL

- CONSTANT $\therefore k_e, IRR, g, b$
- No DEBT, only equity
- Any investment is financed by retained earnings
- $k_e > g$

③ WALTER'S MODEL

$$P_0 = \frac{D}{k_e} + \frac{[E - b] \times \frac{\sigma}{k_e}}{k_e}$$

Imp. point

If $\sigma > k_e$, optimum payout ratio = 0%.

If $\sigma < k_e$, optimum payout ratio = 100%.



If $r = k_e$, optimum payout r

SOME BASIC ASSUMPTIONS FOR THIS MODEL

- CONSTANT = r and k_e
- LIFE = ∞ (perpetual)
- No tax and transaction cost

④ MM APPROACH

- This approach assumes that Market Value of a share is not affected by dividend and is only effect of its earning.
- It always considers that period involved = 1 year.

SOME BASIC ASSUMPTIONS FOR THIS MODEL

No tax and floatation cost.

Investment amount raised through equity only.

Future can be predicted for one year.

VARIOUS STEPS UNDER MM APPROACH

Step 1: Let's calculate P_0

$$P_0 = \frac{D_1 + P_1}{[1 + k_e]}$$



D_L = Dividend declared at end of period.
(If divid not declare, take it as 0)

P_1 = Price at the end of the period.

P_0 = Price Today or at start of period.

Step 2 :- Let's calculate No. of new eq. shares to be issued

$$m = \frac{\text{Investment (I)} - [\text{earnings (e)} - \text{dividend (d)}]}{P_1}$$

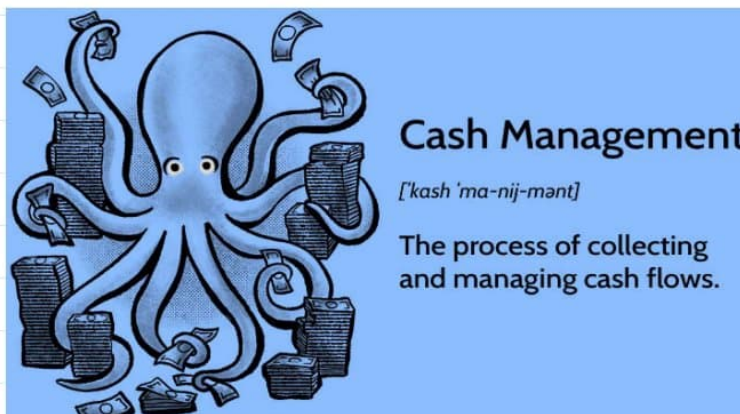
$$\text{Dividend (d)} = \text{Old eq. shares (n)} \times \text{dividend at end of period}$$

Step 3 :- Finally, lets calculate Value of company

$$\frac{[n + m] \times P_1 + E - I}{[1 + k_e]}$$

TYPE OF QUESTION ASKED

- (i) Calculate value if divid paid
 - (ii) Calculate value if divid. not paid
- Answer in both cases should match.

**7**
CHAPTER**CASH MANAGEMENT****①** OPTIMUM CASH BALANCE

$$EOQ = \sqrt{\frac{2 \times A \times O}{C}}$$

$$OCB = \sqrt{\frac{2 \times A \times T}{C}}$$

A = annual requirement

T = Transaction cost per transaction

C = carrying cost per unit per annum

$$\text{No. OF TRANSFERS} = \frac{\text{ANNUAL REQUIREMENT}}{\text{optimum cash balance}}$$

② PREPARING CASH BUDGETS



Particulars	Month ₁	Month ₂	Month ₃
Opening cash & Bank (A)	xxx	xxx	xxx
+ Receipts (B)	xx	xx	xx
- Payments (C)	(xx)	(xx)	(xx)
Balance (A+B-C)	xxx	xxx	xxx
Investment bought	(bal. fig)		
Investment sold		(bal. fig)	
<u>Borrowings taken</u>			(bal. fig)
Closing cash & bank	xxx	xxx	xxx

③ RECEIPTS AND PAYMENTS

- | | |
|----------------------------------|---------------------------|
| (i) Cash sales | (i) Cash purchases |
| (ii) collected from debtors | (ii) payment to creditors |
| (iii) Sale of Asset | (iii) purchase of Asset |
| (iv) Refund of Tax | (iv) payment of Tax |
| (v) Interest received | (v) Interest paid |
| (vi) Dividend received | (vi) Dividend paid |
| (vii) Loan taken | (vii) Loan repaid |
| (viii) Share cap issued for cash | (viii) Debenture repaid |

④ LONG PERIOD CASH BUDGET



Opening cash and Bank Balances

Additions :-

- profit expected to be earned (before tax)
- Non cash expensed deducted in P/L (depreciation)
- Sale of Assets
- Issue of share capital for cash
- Loan Taken
- Fall in working capital (if $CA < CL$ except cash)

Deductions :-

- Dividends to be paid
- Tax to be paid
- Loan - repayment
- Redemption of Debenture or preference shares
- Assets purchased
- Increase in working capital (when $CA > CL$)

**8**

CHAPTER

DEBTORS MANAGEMENT**① CREDIT POLICY**

It refers to the guidelines about whether credit be granted to customer or not, and if granted then amount of credit and also no. of days for which credit is to be granted.

Ques :- Why do we want to give credit

Ans :- It is simple, when we give credit, we can attract more and more customers, so we can sell more and earn more profit.

Ques :- Then why do we hesitate to give credit

Ans :- Because there may be situation of Bad debt where customers don't pay us back and also there is opportunity cost involved when our funds are blocked.

TYPE OF QUESTION ASKED

Evaluate credit policy Old v/s New₁ v/s New₂

② EVALUATION ON TOTALITY BASIS

EXISTING NEW₁ NEW₂

PART A :- Calculate Net profit earned after tax



TOTAL SALES	XXX	XXX	XXX
(-) Variable cost	(XX)	(XX)	(XX)
(-) Fixed cost	(XX)	(XX)	(XX)
(-) BAD DEBTS	(XX)	(XX)	(XX)
(-) COLLECTION EXPENSES	(XX)	(XX)	(XX)
(-) CASH DISCOUNT	(XX)	(XX)	(XX)
<hr/> Net profit before tax	<hr/> XXX	<hr/> XXX	<hr/> XXX
(-) tax	(XX)	(XX)	(XX)
<hr/> EXPECTED NET PROFIT AFTER TAX	<hr/> XXX	<hr/> XXX	<hr/> XXX
<u>PART B</u> :- Opportunity cost locked up in debtor	(XXX)	(XXX)	(XXX)
<hr/> NET BENEFIT (A-B)	<hr/> XXX	<hr/> XXX	<hr/> XXX

③ EVALUATION ON INCREMENTAL BASIS

	EXISTING	NEW ₁	NEW ₂
CREDIT SALES	XXX	XXX	XXX
Contribution	(XX)		
Incremental Contri.		(XX)	(XX)
Bad debts	(XX)		
Incremental Bad debts		(XX)	(XX)



Collection expenses	(xx)		
Incremental collection exp		(xx)	(xx)
Cash Discount	(xx)		
Incremental cash discount		(xx)	(xx)
Fixed Cost	(xx)		
Incremental Fixed cost		(xx)	(xx)
Opportunity cost blocked in debtor	(xx)		
Incremental opportunity cost		(xx)	(xx)

Opportunity cost :-

Total sales

Total sales x Credit Sales %

Total sales x credit sales % x Cost %

Total sales x credit sales % x cost % x Average collection period

Total Sales	x	credit sales %	x	cost %	x	Average collection period	x	Rate of return
-------------	---	----------------	---	--------	---	---------------------------	---	----------------

• Total credit sales = Total sales x credit sales %





- Total cost of credit sales = Total sales × Credit Sales % × Cost %.
- Total Debtors = $\frac{\text{Total sales} \times \text{Credit sales \%} \times \text{Average collection period}}{100}$

Important point :-

When Fixed cost also changes in different options then opportunity cost is calculated on total cost.

$$\text{Variable cost} = \frac{\text{Total sales} \times \text{Credit sales \%} \times \text{variable cost \%}}{100}$$

$$\text{Fixed Cost} = \frac{\text{Incremental fixed cost in each option}}{\text{Total cost}}$$

$$\text{Opportunity cost} = \frac{\text{Total cost} \times \text{Average collection period} \times \text{Rate of Return}}{100}$$

4) CONCEPT OF TAXATION

Option 1
Both Net profit and Opportunity cost are taken after cost

Option 2
Both Net profit and Opportunity cost are taken before cost

$$\text{Profit after Tax} = \text{PBT} (1 - \text{tax rate})$$



5 CONCEPT OF DISCOUNT

$1/10$ net 60 = 1% discount if pay is done in 60 days
and normal credit period is 60 days

Total Discount = Sales \times discount % \times % of total debtors availing discount

6 ADDITIONAL METHOD FOR AVERAGE COLLECTION PERIOD

% Debtors availing discount \times No of days in which payment was made

eg: $1/10$ net 30 days, 20% debtors paid in 10 days and next 80% in 30 days

Avg. collec. period = $20\% \times 10 + 80\% \times 30$
= 26 days

7 DEBTOR'S TURNOVER RATIO

DTO = $\frac{\text{Total Sales}}{\text{Avg. Debtors}}$

8 PROFIT - VOLUME RATIO

P/v = contribution
es

9 FACTORING



Ques : What is Factoring ??

Ans :- It is an arrangement or agreement where a firm or individual takes the responsibility to collect our debts and charges certain commission for it.

e.g let's say we have ₹100,000 debtors & factor charges 3%.

So he has now responsibility to collect debt ,
he will charge 3% = 3,000
he will pay us 97% = 97,000

RECOURSE

If any bad debt occurs ,
it will not be borne by
factor & he will ask us
to help

NON-COURSE

If any bad debt occurs ,
it will ~~not~~ be borne by
factor & he will not ask us
to help



10 WHETHER TO GO FOR FACTORING

PART A :- cost saved due to factoring

Bad debts	xx
(+) Collection cost	xx
(+) Administration cost	xx
(+) Interest saved due to less collection period	xx
$\left[\frac{\text{Total Sales} \times \text{credit Sales}\% \times \text{cost}\% \times \text{Rate of Return} \times (\text{old credit period} - \text{new credit period})}{360 \text{ days}} \right]$	

PART B :- Cost incurred due to factoring

Commission paid	(xx)
$\left[\frac{\text{Total Sales} \times \text{credit Sales}\% \times \text{Average credit period} \times \text{Commission}\%}{\text{period}} \right]$	
(+) Interest paid on advance from factor	(xx)

Effective savings due to Factoring in ₹ (A-B) xxx

Effective savings due to Factoring in % $\frac{A-B}{\text{Net amount paid by factor}}$

Important point :-

- If savings > cost due to Factoring = Effective savings
- If savings < cost due to Factoring = Effective cost.

