Financial Management

Chart Book for Revision

1.SCOPE & OBJECTIVES OF FINANCIAL MANAGEMENT

1.Introduction

4 Stages of New Business

- How many Assets/PPE to buy
- cost Required for above assets.
- cash for day to day operations.
- sources of Finance

2.Meaning

It is a Managerial Activity concerned with effective procurement & utilization of Funds

3.Aspects of FM

A.Procurement of funds

a) Keeping in mind

1. **R->Risk**
2. **C ->Control**
3. **C-> Cost**

b) Sound knowledge of Various sources of Finance.

c) knowledge on Risk Coverage **[Hedging]**

B. Use of Funds

For Fixed assets [FA]

a) Adequate FA to ensure optimum Operation capacity

b) Without Endangering Financial Insolvency.

c) Through capital Budgeting Technique

For Working capital Management

a) Maintain optimum level.

b) Don't block too much funds in Inventory, Debtors, cash

1.SCOPE & OBJECTIVES OF FINANCIAL MANAGEMENT

4.Tasks of FM

- **S** → Setting Sales Target
- **T** → Tax Planning to Minimizing tax
- **O** → Avoid Over Investment in FA
- **B** → Balancing Cash Inflows & outflows
- **S** → Ensure Sufficient short term working capital

5.Objectives of FM

A. Profit Maximization (PM)

a) Traditional Approach

b) Over Emphasis of profit Objective can lead to problems

- **N** → Narrow
- **T** → Ignore Time Value of Money
- **R** → Ignores Risk Factor
- **V** → Vague

B. Wealth Maximization (WM)

a) Wealth = PV of Benefits – PV of Cost

b) Ascertaining wealth

- Cash flow approach & Not a/c profit
- Cost benefit analysis
- Apply Time Value of money

6.PM

Advantages

- Easy to Calculate
- Easy to link PM objective with Financial Decision

Disadvantages

- Refer 5A

7.WM

Advantages

- It's long term Nature
- It considers Time Value of Money
- It Considers risk Factor

Disadvantages

- Not Easy to link WM to Financial decision
- Might leads to Management Distress

1.SCOPE & OBJECTIVES OF FINANCIAL MANAGEMENT

8.Role of Finance Executive / CFO

- B → Budgeting
- I → Overseeing IT Function
- M → Manage Mergers& Acquisitions
- O → Outsourcing decisions
- R → Risk Mgmt.
- P → Pricing Analysis
- H → Oversee HR Functions

9.Financial Distress (FD)

Cash Inflow not Sufficient to pay off Current obligations

10. Insolvency

Inability to pay off debts due to continuous FD

11.Agency Problem (AP) & Agency Cost (AC)

a) Principal & Agent relationships exists b/w Manager & Providers of Funds

b) Mangers should keep interest of Provides of funds & Make financial decisions

c) If Interest of Manager ≠ Interest of providers of finance

Then it Creates AP

d) AC is incurred by company to Control & Monitor Manager behaviour and actions

e) SORT OUT

- Negative Covenants (Borrowing Restrictions)
- Link Manager compensation with overall objectives of the company & Profits

2.TYPES OF FINANCE

1.Financial Needs

a) Long Term [PPE]
b) Medium Term [Ad Campaign]
c) Short Term [Working Capital]

2.Equity Shares

A.Advantages
i. Permanent Capital
ii. No Obligation To pay Dividend

B.Disadvantages
i. No tax benefit on dividend
ii. Control Dilution
iii. EPS↓
iv. Relatively Costly

3.Preference Shares

Preference

Dividends

Repayment Of Capital

A. Advantages
i. Relatively Cheaper
ii. No Control Dilution

B. Disadvantages
i. Not a permanent Capital
ii. Obligation to pay dividend Exists

4.Retained Earnings

Ploughing back of Profits

a) Profits are retained in the Business to fund Future Growth
b) No Floatation Cost
c) No Control Dilution
d) No EPS↓

2.TYPES OF FINANCE

5.Debentures

Documents acknowledging the debt taken by the company

Advantages:

a) Tax Benefit On Interest
b) Relatively Cheaper

Disadvantages:

a) It is Not a permanent Capital
b) Obligation to pay Interest at Regular Intervals

6.Bonds

Types

Callable

Company Has right to redeem bonds before maturity at a predetermined price

Puttable

Investor has a right to sell bonds back to a company at a predetermined price

7.Indian Bonds

A. Masala Bonds

a) Denoted in INR
b) Issued by Indian Companies
c) Issued to Investors Outside India
d) NTPC raised 2000 Cr. By Masala Bonds

B. Municipal Bonds

a) For Infrastructure projects
b) Ahmedabad Municipal corporation raised 100 Cr By issuing Municipal bonds in Asia

C. Govt Bonds

Issued by Central Govt/ State Govt / RBI / Govt Dept.

2. TYPES OF FINANCE

8. Foreign Bonds

A. Plain Vanilla
a) Only Interest and Principal repaid
b) No Other features Attached

B. Drop Lock Bonds
a) Has floating rate of Interest
b) If Interest rate falls below certain limit then company needs to pay fixed Interest

C. Yankee Bonds
a) Denoted in US $
b) Issued in USA
c) Issued by non US companies
d) To access Funds of US markets

D. Samurai Bonds
a) Japanese Yen
b) Issued In Japan
c) By Non Japanese Company
d) To Access Funds of Japanese Market

E. Bulldog Bonds
a) In UK pound
b) Issued in UK
c) Issued by Non UK company
d) To access funds of UK market

9. Bridge Finance
a) Short term loan taken when original Loan is sanctioned but yet to disbursed
b) Bridge Finance gets repaid when original loan get disbursed
c) Interest rate is Higher when Compared to original loan

2. TYPES OF FINANCE

10. Venture Capital Financing (VCF)

a) Funding of new risky projects promoted by qualified entrepreneurs who lack fund & Experience

b) Types of VCF

i. Equity Financing: Eq Share given to VC firms but note more than 49%

ii. Conditional Loan: Interest free, But royalty B/W 2 – 15% on sales Guaranteed

iii. Income Note: Interest & Royalty on sales paid but at lower rate

iv. Participation Debenture

- ➜ Start up phase = No Interest
- ➜ Up to Certain level of operation = Low Interest
- ➜ Beyond that level = High Interest

11. Debt Securitization

a) It is a process through which liquid assets are Converted into Marketable Securities & sold to Investors

b) Financier pools finance given to Borrower

c) SPV act as a trustee for Investors

d) The financier pool of assets is transferred to Special Purpose Vehicle (**SPV**)

e) Investors are paid when Borrowers pays the Instalment

f) It is Non Recourse Arrangement & Investors bears the default risk

2.TYPES OF FINANCE

12.Lease Financing

Particulars	OL	FL
Cancellable	Yes	No
Term	Short	Long
Repairs	Lessor	Lessee
Risk & Reward	Lessor	Lessee
Obsolescence Risk	Lessor	Lessee
Single Pay-out Lease	No	Yes
Option To Buy Asset	No	Yes
PV of LP Approximately = Fair Value of Asset	No	Yes

13.Other Types of Lease

A. Sale & Lease Back:
- Seller = L'E
- Buyer = L'R

B. Leverage Lease:
- 3 Parties Financier,L'R,L'E
- L'E pays Financier,L'R

C. Sale Aid Lease:
- 3 Parties = Manufacturer, L'R & L'E
- L'R earn from Both Parties
- L'R gets Commission or Credit from Manufacturer
- L'R get lease rent from L'E

D. Open Ended & Close Ended:
- Open Ended: L'E has Option to Purchase the Asset
- Close Ended: Asset goes back to L'R

14.Short Term Creditors

a) Trade Creditors
b) Accrued Expenses
c) Advance From Customers
d) Bank Advance:
   i. Short term loans
   ii. Overdraft
   iii. Cash credit
   iv. Bill Discounting

2. TYPES OF FINANCE

15. Export Finance From Banks

Pre Shipment

Packing Credit (PC)

PC is loan given by bank for Purchasing, Manufacturing ,processing, packing goods to be sold to overseas buyer

Types of PC

a) Clean PC = Only Personnel guarantee of borrower
b) PC against Hypothecation of goods (goods are pledged for Security)
c) ECGC guarantee

Post Shipment

a) Discounting Bills
b) Advance against export bill sent for collection
c) Advance against Duty drawback, Subsidy

16. Seed Capital Assistance

a) Scheme of IDBI
b) Interest free
c) Service charge at 1% for first 5 years
d) Moratorium period for first 5 years (No EMI required)

17. Other Bonds

A. <u>DEEP DISCOUNT / ZERO COUPEN BONDS</u>

- Issued at Discount
- Redeemed at Face Value
- No Interest is paid

B. <u>INFLATION BONDS</u>

- Projects Investors against inflation
- Interest rate is Adjusted with Inflation rate

2.TYPES OF FINANCE

18. International Finance

a) Commercial Banks (Foreign Currency loans)
b) Discounting of trade bills
c) External Commercial Borrowing (ECB)

- Commercial loans taken from non-residential lenders
- Lenders are foreign banks or international financial institutions like AOB etc.
- Minimum Term of Loan = 3 years
- Automatic (No approval necessary)
- Approval Route (RBI/Govt approval is required

19.EURO issues

Euro Commercial Paper:

- Less than 1 year
- Denoted in US $

Euro Convertible Bonds

- Get Converted into Eq. Share
- May have call/put option

Euro Convertible Zero Bonds

- No Interest
- Get Converted into Eq. Share
- May have call/put option

20.ADR,GDR & IDR

American Depositary Receipt:

- offered by Non US companies
- To Investors In US
- Non US companies deposit their Company share with US banks
- Which inturn is converted into ADR & Sold to Investor

Global Depositary Receipts

- They are negotiable certificated held in the bank of one country representing a specific No of shares traded on Stock exchange of another country

Indian Depositary Receipts

- Issued By Non Indian Companies
- Issued to Indian Investors
- To Access Indian Capital Market

2.TYPES OF FINANCE

21.Comtemporary Sources of Funding

Crowd Funding

a) Raising money for an Individual or organisation from a group of a people to fund a project typically via Internet
b) Helps Start ups to Substantiate demand for their product before enter into Production
c) Parties Involved
   i. Fund Raiser
   ii. Mediator
   iii. Fund Investor

Equity Funding

Investor invest in organisation and receive securities of the organisation in return

Peer to Peer Lending (P2P)

In this types where lender matched with borrowers in order to provide Unsecured loans through Online platform

Start - Up funding

Through crowd funding a start up company can raise money from large group of people

It includes in the form of equity funding and P2P lending

Donation Based Crowd funding

Where large group of people donate money as a charity for some cause with no expectation of any ownership or debt

3. Ratio Analysis

1. Liquid Ratios

$$\text{Current Ratio} = \frac{\text{Current Assets (CA)}}{\text{Current Liabilities (CL)}}$$

$$\text{Quick Ratio} = \frac{\text{CA} - \text{Stock}}{\text{Current Liabilities (CL)}}$$

2. Capital Structure Ratios

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

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

PF = Equity Share Capital + Preference Share Capital + Reserves & Surplus

3. Coverage Ratios

$$\text{Interest coverage Ratio} = \frac{\text{EBIT}}{\text{Interest}}$$

$$\text{Preference Dividend coverage Ratio} = \frac{\text{EAT}}{\text{Preference Dividend}}$$

$$\text{Equity Dividend coverage Ratio} = \frac{\text{EAESH}}{\text{Equity Dividend}}$$

4. Efficiency Ratios

$$\text{Total Asset Turnover Ratio} = \frac{\text{Sales}}{\text{Avg. Total Assets}}$$

$$\text{Inventory Turnover Ratio} = \frac{\text{COGS}}{\text{Avg. Inventory}}$$

$$\text{Debtor Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Avg. Debtors}}$$

$$\text{Debtor Collection Period} = \frac{\text{12M or 365 DAYS}}{\text{Debtors Turnover Ratio}}$$

$$\text{Creditor's Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Avg. Creditors}}$$

$$\text{Creditor Payment Period} = \frac{\text{12M or 365 DAYS}}{\text{Creditors Turnover Ratio}}$$

3. Ratio Analysis

5. Profitability Ratios

GP Ratio $= \frac{GP}{Sales} x\ 100$

NP Ratio $= \frac{NP}{Sales} x\ 100$

Operating Profit Ratio $= \frac{EBIT}{Sales} x\ 100$

Operating Cost = COGS + Operating Expenses

Return on Assets $= \frac{EBIT(1-T)}{Avg. Total\ Assets} x\ 100$

Return on Capital employed (ROCE) Pre Tax $= \frac{EBIT}{Capital\ Employed} x\ 100$

(ROCE) Post Tax $= \frac{EBIT\ (1-T)}{Capital\ Employed} x\ 100$

Return on Equity $= \frac{EAESH}{Networth} x\ 100$

Net worth = Eq. Sh. Capital + Reserves and Surplus

Dividend Pay-out Ratio $= \frac{DPS}{EPS}$

PE ratio $= \frac{MPS}{EPS}$

Dividend Yield ratio $= \frac{DPS}{MPS} x100$

Equity = Eq. Sh. Capital + Pref. Sh. Capital + R&S

Capital Employed = Eq. Sh. Capital + Pref. Sh. Capital + R&S +Long term debt

6. Limitation of Ratios

a) Impacted by Inflation
b) Impacted by seasonal nature of Business
c) Affected by accounting Policies
d) Can be manipulated by year end Adjustments
e) Difficult to generalize whether particular ratio is good or bad

4. Cost Of Capital

1. Meaning

Expected Return of Providers of Finance

2. Importance

1. Investing Decisions
2. Financing Decisions
3. Optimum Credit limit for Debtors

3. Long Term Debt (kd)

Redeemable

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

Irredeemable

$$kd = \frac{I(1-T)}{NP}$$

1. Known as Approximation Method
2. If Difference B/w Redeemable Value & Net Proceeds is Higher then use IRR method
3. IRR →
   i. Select any 2 discount factors & Find out NPV
   ii. IRR = $L + \frac{NPV_L}{NPV_L - NPVH} x (H - L)$
   iii. Net Proceeds
      - New Debts = Issue Proceeds – Floatation Cost
      - Existing = MPS – Floatation Cost

4. Cost Of Capital

4. Cost of Convertible Debentures

a) RV at Cash Value
b) RV at Equity

Choose a or b whichever is higher

Then go for Approx. method or IRR for Kd

5.Cost of Preference Shares(Kp)

Redeemable

$$kp = \frac{PD + \frac{RV - NP}{n}}{\frac{RV + NP}{2}}$$

Irredeemable

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

6.Cost of Equity Shares(Ke)

A. Dividend Approach (Ke) $= \frac{D}{P}$

B. Earnings Approach (Ke) $= \frac{EPS}{MPS}$

C. Growth (Ke)$= \frac{D_0(1+g)}{P_0 - F} + \mathbf{g}$ (g = b X r)

b= retention ration
r= return on equity

D. CAPM (Ke)$= \mathrm{Rf} + \beta\ (\mathrm{Rm} - \mathrm{Rf})$

E. Realized Yield

i. Find out cash flow
ii. Use IRR method to get Ke

Growth

i. Find out Current Dividend
ii. Find out Dividend n^{th} year
iii. Step i / Step ii
iv. Look for step iii answer in RV annuity table for n^{th} year

4. Cost Of Capital

7. Cost of Retained Earnings

Kr = Apply 6A,6B,6C } Without floatation Cost

(NP = MPS)

$$Kr = Ke \times (1 - tp) \times (1 - f)$$

9. Marginal cost of Capital

A. Cost of Raising Additional Funds
B. Limit beyond which new Equity shares are to be sold by company
   a) Find out RE
   b) Find out % of RE on Total Capital
   c) Total Capital $= \frac{RE \times 100}{\% \text{ as per } (b)}$

8. WACC

A. Overall Cost of Capital
B. Weights can be either Book/Market Value
C. Format

Source of finance (1)	MV/BV (2)	Weights (3)	After tax cost of Capital (4)	Ko 5=(4)x(3)

4. Cost Of Capital

10. Debenture Interest rate from Expected Rate

$$NP = \frac{Actual\ Debenture\ Interest}{Expected\ Debenture\ Interest\ Rate} x 100$$

11. Others

A. If Preference Shares / Debentures are issued & redeemed at Par then

Kd = I (1-T)

Kp = Preference dividend %

5. Capital Structure Theories

1. Objectives

Find out Capital Structure (CS) which Maximizes Value of Firm

2. Theories

Relevance Theories

Net Income Approach

a) Use Debt as much Possible

b) Debt is Cheaper

→ Ko↓ , V↑

Traditional Approach

a) Use Debt & Equity Judiciously

b) Though Debt is Cheaper & Initially Ko↓ later on Kd ↑, Ke ↑ , Ko ↑& V↓

Irrelevance Theories

$$V = \frac{EBIT}{Ko}$$

Or

$$V = S + D$$

S = MV of Equity

D = MV of Debt

$$S = \frac{NI \text{ or } EAESH}{Ke}$$

5. Capital Structure Theories

2. Irrelevance Theory

Net Operating Income (NOI)

a) Use of Debt has no Impact on Value of Firm
b) Debt is cheaper = Ke ↑ = Both of Will get set off hence no Impact on value

MM Approach

No Tax

a) Ko of 'U' firm = Ko of 'L' firm
b) V of 'U' firm = V of 'L' firm

Tax

Value of 'L' firm = Value of 'U' firm + Tax Advantage (Debt × Tax Rate)

Arbitrage

a) Find out the Value of U&L firm
b) Sells shares of that firm whose value is higher & Buys other firm's share
c) L→U | UL → L

L→U	UL → L
• Borrowings • ↑ returns or get surplus with same equity %	• No Borrowings • Invest in Debt & Equity of L firm in D:E Ratio • ↑ returns or keep surplus with same equity %

3. Trade off Theory

a) Get Balance of D & E right
b) By cost Benefit analysis
c) Cost
   1. Kd
   2. Financial Distress
   3. Financial Insolvency
   4. Non Bankruptcy cost
d) Benefits
   1. Cheaper
   2. Tax Advantage

5. Capital Structure Theories

4. Pecking Order Theory

a) Different Persons has access to different levels of Information

b) Choice of Source of Finance is based on that source which reveals highest Info.

c) Priority
- Retained Earning
- Debt {Earnings Outlook = Positive}
- Equity {Least Priority}

5. Factors Affecting Capital Structure

- S → Stability in sales & Growth
- L → Leverage
- R → Risk
- F → Flexibility
- C → Cost
- C → Control

6. Financial Breakeven Point (FBP)

A. Point At which EPS = 0 (EBIT)

B. FBP
- Equity → 0
- Debt → Interest Charges
- Preference Shares → $\frac{Preference\ Dividend}{(1-T)}$

5. Capital Structure Theories

7. Indifference Point (IP)

a) EBIT at which both alternatives gives Same EPS

b) $\frac{(EBIT - I_1)(1-T) - PD}{E_1} = \frac{(EBIT - I_2)(1-T) - PD}{E_2}$

c) No IP for Debt Plan & Pref Share only.
(Debt plan will dominate pref. Share Plan)

8. Over Capitalization

a) Scenario where firm has more Capital when it compared to its earning Capacity /Returned

b) Causes
   i. Too Much of Borrowings
   ii. Higher Rate

c) Remedy
   i. Reorganisation
   ii. Buyback of Equity Shares

9. Under Capitalization

a) Scenario where firm has lesser Capital when it compared to its earning Capacity

b) Dividend Pay-out Ratio is ↑

c) Entrance of Competitors

d) Remedy
   i. Bonus
   ii. Share Split up

6. LEVERAGES

1. Meaning

Influence of One financial Variable with Another Financial Variable

2. Types of Leverages

Operating Leverage OL

a) OL is relationship b/w EBIT & Sales

b) OL = Business Risk

c) OL = $\frac{C}{EBIT}$ *or* $\frac{\%\triangle \text{ in EBIT}}{\%\triangle \text{ in Sales}}$ *or* $\frac{1}{MOS}$

d) If OL = 2 then if Sales ↑ by 10% then EBIT ↑ by 20%

Financial Leverage FL

a) Firm is using fixed cost Instruments to maximise EPS

b) FL is relationship b/w EBIT & EPS

c) FL = $\frac{EBIT}{EBT}$ *or* $\frac{\%\triangle \text{ in EPS}}{\%\triangle \text{ in EBIT}}$

Combined Leverage CL

a) CL measures relationship between Sales & EPS

b) CL = Total Risk

c) CL = $\frac{C}{EBT}$ *or* OL X FL

3. FL = Double Edge Sword

Advantages

a) Debt is cheaper

b) Tax Advantage

Disadvantages

a) Financial Distress

b) Insolvency

c) Bankruptcy or Non Bankruptcy cost

a) If ROI > Kd = Favourable Leverage

b) If ROI < Kd = Unfavourable Leverage

c) ROI = Return on Investment

6. LEVERAGES

4. Trading On equity

Using Debt Along with Equity & percentage of Debts is higher when compared to Equity % = Trading On Equity

5. Others

a) Contribution = Sales (-) Variable Cost

b) Break even Point = $\frac{\text{Fixed Cost}}{\text{Contribution Per Unit}}$ or $\frac{\text{FC}}{\text{PV ratio (Value)}}$

c) Margin of Safety = $\frac{\text{Actual Sales} - \text{Break Even Sales}}{\text{Actual Sales}}$

d) PV Ratio = $\frac{\text{Contribution}}{\text{Sales}} \text{X} 100$

e) Relationship

i. FC ↑ => BEP ↑ => OL↑

ii. If MOS ↑ => Risk↓ => OL↓

f) EBT = EBIT – Interest

g) If EBIT & FL are given in problem then check if there is any interest Charges

7. INVESTMENT DECISIONS

1. Capital Budgeting (CB)

Techniques which determines proposals are providing desired rate of return

2. Purpose of CB

a) Huge Expenditure
b) Impacts Business for Longer period Time
c) Irreversible
d) Complex Decision

3. CB process

a) Planning
b) Evaluate
c) Selection
d) Implementation
e) Review
f) control

4. Types of Capital Investment Decision

R → Replacement &Modernization
E → Expansion
D → Diversification
C → Contingent Decision
A → Accept/Reject
M → Mutually Exclusive

5. Estimation of Cash flow

A. Depreciation -> Tax Shield
B. Opportunity cost -> Outflow
C. Sunk cost -> Ignore
D. Working Capital
- Initially = Outflow
- End = Inflow

7. INVESTMENT DECISIONS

6. Payback Period (PP)

a) PP is a period by which investment will be recovered

b) Net cash flow [NCF] is constant

Yes → $PP = \frac{Investments}{Annual\ NCF}$

No → Cumulative Approach

Advantages:

Easy to Calculate & Understand

Disadvantages

Ignores Time Value of Money

Ignore Cash flow after PP

7. Pay back Reciprocal (PR)

a) $PR = \frac{1}{PP}$

b) PR = IRR (Approximates) if life of Project = 2 x PP

8. ARR

a) $ARR = \frac{\text{Avg.Net Income}}{\text{Initial Investment or Avg.Ivestment}}$

b) $\text{Avg.Net Income} = \frac{TCIF - TCOF}{n}$

c) $\text{Avg.Investment} = \frac{\text{Initial Investment} + \textit{Salvage Vale}}{2}$

d) TCIF = Total Cash Inflow

e) TCOF = Total Cash Outflow

7. INVESTMENT DECISIONS

9. NPV

a) NPV = PV of NCIF - PV of COF

b) Advantages
   i. Time Value of Money
   ii. Full Stream of Cash flow is Considered

c) Disadvantages
   i. Forecasting Problem

10. PI

$$PI = \frac{\text{PV of Cash inflow}}{\text{PV of Cash Outflow}}$$

Same

11. IRR

a) Rate at which PV of CIF = PV of COF

b) $IRR = L + \frac{NPV_L}{NPV_L - NPVH} x (H - L)$

12. MIRR

a) Consider Reinvestment Element

b) Find out cash outflow

c) Find out terminal Cash flow (TCF) for each year & Total TCF

$$TCF = NCF \times (1+i)^n$$

d) PV at 'x' % n^{th} year = $\frac{PV\ of\ Cash\ Outflow}{TCF}$

e) Look for closest PVIF at 'x' % n^{th} year in PVIF table (OR)

f) MIRR is rate at which PV of TCF = PV of COF

7. INVESTMENT DECISIONS

13. CB under Capital Rationing

a) Find out NPV for RS 1 of Capital Invested

$$\frac{\textbf{NPV}}{\textbf{Cash Outflow}}$$

b) Assign Ranks based on above & select the project with Higher rank

14. Projects with Unequal Life

a) Equivalent Annualized criteria [EAC]

b) $\text{EAC} = \frac{\text{NPV}}{\text{PVAF}}$

EAC

Inflow → Select Project with Higher EAC

Cost → Select Project with Lower EAC

15. Decision Rule for Project Acceptance

Technique	Individual Project	Multiple Project
PP	Lower than Expected Period	Lower PP
ARR	Higher than Expected Return	Higher ARR
NPV	NPV > 0	Higher NPV
PI	PI >1	Higher PI
IRR	IRR > Ko	Higher IRR

7. INVESTMENT DECISIONS

16.Others

a) Find out Incremental inflow & Incremental Outflow for Replacement of Old Asset with new assets Decisions:
   i. Consider Incremental Salvage Value (SV) [New Asset SV (-) Old Asset SV]
   ii. Tax on sale of old asset should be considered for Incremental outflow Calculations

b) If Earnings before Tax (EBT) is (loss)
   i. Loss Cannot be Carried forward = Tax in the year of loss is zero
   ii. Loss can be set off in next 2 or 3 years = Tax in the Year of loss is Zero. Tax in 2 or 3 years should be calculated After adjusting loss of Previous year

c) Depreciation on written down Value Basis
   i. No depreciation in the Last year of project
   ii. WDV of Last year (-) Salvage Value = Short term Capital Loss (STCL)
   iii. First deduct STCL from earnings & add back STCL at end to get Net cash flow (Same like depreciation)

8. DIVIDEND DECISIONS

1. Types of Dividend

a) Cash Dividend
b) Stock Divided (Bonus Shares)

2. Advantages of Stock Dividend

a) Non Taxable for Shareholders
b) No Cash flow

3. Factors Affecting Dividend Decision

A → Availability of Funds
S → Stock Price
C → Cost of Capital
E → Expectation of SH.
T → Trend In Industry
I → Investment Opportunities
C → Capital Structure

4. Stability in Dividend

a) Constant Dividend per Share (DPS)
b) Constant % on earnings
c) Small constant DPS & Extra Dividend in case of prosperity

8. DIVIDEND DECISIONS

5. Dividend Theory

Irrelevance Theory

MM Theory

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

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

$$\triangle n = \frac{\text{Shortage in funds}}{P_1}$$

Assumptions:

i. Perfect Capital Market (Information Freely available)

ii. No Tax

iii. No Transaction Cost

SAME ASSUMPTIONS

Relevance Theory

Walter

$$P_0 = \frac{D + \frac{r}{ke}(E - D)}{Ke}$$

Gordon

$$P = \frac{E_1(1 - b)}{Ke - br}$$

$$P = \frac{D_0(1 + g)}{Ke - g}$$

8. DIVIDEND DECISIONS

6. Stock Split

a) Once share get split into many shares
b) It is done to regulate price shares
c) It makes share affordable
d) It has certain Compliance & Additional Cost

7. Optimum Dividend Pay-out (GORDON & WALTER)

CASE	OPTIMUM DIVIDEND PAYMENT RATIO
$r > Ke$	0%
$r < Ke$	100%
$r = Ke$	No optimum Ratio/whatever is paid is optimum ratio

9. WORKING CAPITAL MANAGEMENT (WCM)

- 1. WCM
  - CA - CL
    - a) Get balance of CA & CL Right
    - b) WCM is a trade of Liquidity & profitability
- 2. WCM → 2 Angles
  - Value
    - Gross WC → Net Investments in Current Assets
    - Net WC → CA - CL
  - Time
    - Permanent WC → WC portion that is fixed is buffer stock, Minimum cash etc.
    - Temporary WC → Other than Permanent working capital
- 3. Factors Affecting WC
  - **M** → Market & Demand
  - **I** → Inventory
  - **C** → Cash
  - **R** → Receivables
  - **O** → Operationally Efficiency
  - **N** → Nature of Business
  - **S** → Short term Finance

CA = Current Assets
CL = Current Liabilities

9. WORKING CAPITAL MANAGEMENT (WCM)

4. Inventory Increases ↑

Advantages (A)

a) Keep up with demand
b) Take price advantage inflationary condition
c) Discount

Disadvantages (D)

a) Funds Blocked
b) Storage Cost ↑
c) Inventory Risk ↑
d) Liquidity risk ↑

5. Debtors ↑

(A)

a) Higher Sales
b) Higher Profits

(D)

a) Bad Debts ↑
b) Funds Blocked
c) Liquidity risk ↑

6. Creditors ↑

(A)

a) Sources of Finance

(D)

a) Goodwill loss
b) Creditor may stop supplying the goods
c) Creditor May increase the price of the goods
d) Creditor may stop supplying goods on credit basis

7. Cash ↑

(A)

a) Day today Exp. Are met
b) Precautionary needs
c) Encash Investment Opportunities

(D)

a) Less Returns

9. WORKING CAPITAL MANAGEMENT (WCM)

8. Operating Cycle (OC)

a) Time gap b/w payment for purchase of materials & till date goods are sold & money is collected
b) OC indicates Number of days for which funds are getting blocked
c) OC = R+W+F+D-C

9. Factors Affecting Investment in WC

a) Nature of Business
b) Types of Products / Services
c) Manufacturer/ Traders
d) Volume of Sales

10. Approach to WC Investment

a) Aggressive → CA ⬇ => OC ⬇
→Return on Assets ⬆
→Liquidity ⬇
b) Conservative →→ CA ⬆ => OC ⬆
→Return on Assets ⬇
→Liquidity ⬆
c) Moderate → In b/w (a) & (b)

11. Things to Keep in mind for WC Requirement Calculation Problems

a) Old/New Company
b) New Company
   i. Consider Closing stock of RM for Creditors Calculation
   ii. Consider Closing stock of FG for cost of sales (Debtor's Calculation)
   iii. Calculate on cash cost basis

9. WORKING CAPITAL MANAGEMENT (WCM)

12. Treasury Management

Functions
- a) Cash Mgmt.
- b) Currency Mgmt.
- c) Funds Mgmt.
- d) Point of Contract of Banker

Calculation of Cash Budget
- a) Receipts & Payment Method
- b) Adjusted Income Method
- c) Adjusted B/S method

13. Accelarating Cash Collection

- a) Concentration banking
- b) Lock Box System

14. Different Kind of Float

- a) Billing float = Billing delay
- b) Mail Fail = Cheque Receipt delay/courier Time
- c) Change Processing Float = Deposit delay
- d) Bank processing Float = Clearance Delay

15. Cash Management Model

William Baumol Model

- a) Transaction Cost & Opportunity Cost @ Minimum
- b) Minimum Cash Balance $=\sqrt{\frac{2AT}{I}}$
- c) A = Annual Cash Requirement
- d) T =Transaction Cost per
- e) I = Interest Rate per Rs.

Miller Orr Model

- a) Upper Limit (UL)
- b) Return Point (RP)
- c) Lower Limit (LL)

- a) Cash goes to UL ➔ Make Investment
- b) Cash Balance goes to LL ➔ Sell Investment
- c) Maintain Cash balance at RP

9. WORKING CAPITAL MANAGEMENT (WCM)

16. Virtual Banking

Banking Transaction Done Without Vising the bank

a) Process Time reduce
b) Reduction of Transaction Cost
c) Operation Cost reduction

17. Recievables Management

a) Assessing Credit worthiness of Customer
b) Setting Credit Limit
c) Invoicing & Prompt Collection
   - Reminder Emails
   - Phone Calls
   - Withholding Supply
   - Factoring
   - Legal Action
d) Review → Agewise Analysis Report

18. Financing Receivables

a) Pledging
b) Factoring
   - Credit collection process outsourced
   - Factor gives Advance (charges commission)
   - With recourse & Without recourse
     - With recourse → Bad debt risk with seller / supplier
     - Without recourse → Factor has Bad debt risk

9. WORKING CAPITAL MANAGEMENT (WCM)

19. Working Capital finance

- **Permanent Portion** → Fund through Long sources like debts & Equity
- **Temporary Portion** → Fund Thorough Short term Source

Source

- **Spontaneous Source:** Arising in Course of Business (Creditors credit Period)
- **Negotiated Source:** Arising though negotiations with banker, FI,Public

20. Maximum Possible Banking Finance (Tandon Committee)

Methods

i. 75% of (CL-CL)
ii. (75% of CA) – CL
iii. 75% (CA – CCA) - CL

21. Other

i. No of WC cycles $= \frac{No\ of\ Days\ in\ a\ year}{OC}$

ii. WC under OC $= \frac{\text{Annual Operating Cost}}{\text{No of WC cycles}}$

iii. Cash OC = I + D - C

iv. Cash Turnover ratio $= \frac{\text{No of days in a year}}{\text{Cash Operating Cycle}}$

v. Cash Requirement $= \frac{\text{Annual Cash Outlay}}{\text{Cash Turnover ratio}}$

vi. Receivables Credit Period $= \frac{\text{No of Days in a year}}{\text{Recievables Turnover Ratio}}$

9. WORKING CAPITAL MANAGEMENT (WCM)

22.Factoring Format

Particulars	Present policy
A. Annual Benefits of Factoring to the firm	
Credit Administration cost Avoided	XXX
Bad Debts avoided	XXX
Interest saved due to reduction in average collection period { Cost of Annual Credit Sales X rate of interest X (Present period - New Period)/365 }	XXX
TOTAL	XXX
B. Annual Cost of Factoring to the firm	
Factoring Commission	XXX
Interest Charged by the Factor On Advance	XXX
C. NET BENEFIT (A-B)	XXX

23.Other

Opportunity Cost of Investment in Receivables

i. Cost of Credit Sales X $\boldsymbol{Collection\ period\ in\ days} \div \boldsymbol{365\ days}$ X Required rate of return
ii. Bad Debts will not be consider as a part of Cost of Credit Sales for calculation of Opportunity cost
iii. Cash discount also not be consider for the Opportunity cost calculation

9. WORKING CAPITAL MANAGEMENT (WCM)

24. Working Capital Requirement

Current Asset		
RM		XXX
WIP		XXX
Material	xxx	
Labour	xxx	
OH	xxx	XXX
FG		XXX
Drs		XXX
Prepaid , Cash and bank		XXX
Other CA		XXX
Total (A)		XXX
Current Liabilities		
Crs		XXX
O/S labour/OH		XXX
Other CL		XXX
Total (B)		XXX
WC before Safety Margin (A-B)		XXX
Safety Margin		XXX
WC after Safety Margin		XXX

25. Other

$$\text{RM holding Period} = \frac{\text{Avg Stock of RM}}{\text{Avg cost of RM consumption per day}}$$

$$\text{WIP holding Period} = \frac{\text{Avg Stock of WIP}}{\text{Avg cost of WIP per day}}$$

Cost of WIP = Material + Labour + Factory OH

$$\text{FG holding Period} = \frac{\text{Avg Stock of FG}}{\text{Avg cost of goods produced per day}}$$

Cost of FG = Material + Labour + FOH + AOH + S&D OH

$$\text{Drs Collection Period} = \frac{\text{Avg total Drs}}{\text{Avg cost of Credit sales per day}}$$

$$\text{Crs Payment Period} = \frac{\text{Avg Creditor Expenses}}{\text{Avg cost of Creditor payment per day}}$$