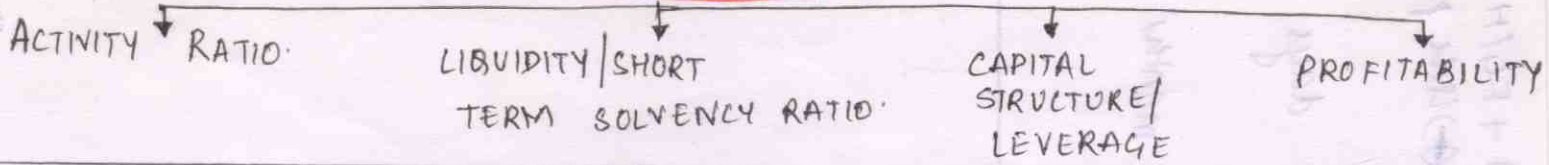


RATIO ANALYSIS.



CAPITAL EMPLOYED.

| SHAREHOLDERS APPROACH / Proprietary fund / share holders fund / equity / <u>net worth</u> . | long term fund approach. |
|--|---|
| Eq. Sh. capital. (+) Reserve & surplus (+) Pref. share cap. (-) Preliminary / misc exp. | Eq. sh. cap: (+) Reserve & surp (+) pref. sh. cap (+) LONG TERM LOAN (-) Prelim / misc exp. |
| FA. (+) Invsts (+) Current Assets (-) Current Liab. (-) LONG TERM LOAN | FA (+) Invst (+) C.A (-) C.L |

EQUITY SHAREHOLDERS FUND.

| | |
|--|---|
| Eq. sh. cap (+) Reserve & surplus (-) Prelim / misc exp. | FA (+) Invst (+) CA (-) CL (-) long term loan. (-) Pref sh. cap. |
|--|---|

CURRENT ASSET

| | | |
|--|--|---|
| Quick Debtors, B/R, Bank bal / mark. secu. ↓ all other than stock & prepaid exp. | Super Quick cash Bank Mark. secu. | Non Quick. stock / inventory Prepaid exp. |
|--|--|---|

CURRENT LIABILITIES.

| | |
|--|--------------------------------------|
| Quick. ↓ all other than Bank OD & cash credit. | Non Quick. Bank OD / cash credit. |
|--|--------------------------------------|

LIQUIDITY RATIO

(solvency of enterprise)

- 1) Net working capital
- 2) Current Ratio [2:1]
- 3) Quick / Acid test / Liquidity [1:1]
- 4) Super Quick.
- 5) Defensive interval / absolute cash coverage ratio.

$$CA - CL$$

$$\frac{CA}{CL}$$

$$\frac{QA}{QA}$$

$$\frac{S.Q.A}{A.L}$$

$$DIR = \frac{\text{Cash} + \text{Mark. sell}}{\text{Daily exp.}}$$

$$\text{Daily exp} = \frac{\text{Total annual exp}}{365}$$

ACTIVITY / TURNOVER RATIO

$$\frac{\text{Credit sales}}{\text{Avg abds. (incl. CR)}}$$

$$\frac{\text{Credit purchase}}{\text{Avg udts. (incl. CR)}}$$

$$\frac{COGS}{\text{Avg stk.}}$$

$$\frac{\text{Sales}}{\text{Avg FA}}$$

$$\frac{\text{Sales}}{\text{Avg CA}}$$

$$\frac{\text{Sales}}{\text{Avg WC}}$$

$$\frac{\text{Sales}}{\text{Total assets}}$$

$$\frac{\text{Sales}}{\text{Cap emp (long term)}}$$

- 1) Debtor t/o.
- 2) Creditor t/o
- 3) Stock t/o
- 4) FA t/o.
- 5) CA t/o
- 6) WC t/o
- 7) Total asset t/o.
- 8) Capital t/o

9) Operating cycle = $RM(HP) + WIP(HP) + FG(HP) + \text{Debt collection period}$

10) x velocity / period of collection / pay = $\frac{365}{\text{Days}}$ in days

(Debt, l/d, stk) = $\frac{12}{\text{Months}}$ in months

Sales
(-) COGS

Q.P
(-) admin exp
(-) selling exp.

operating profit **EBIT**
b4 interest & tax.

(-) interest
Profit b4 tax

(-) tax
Profit after tax **PAT**

b4 tax → for entity.
After tax → for shareholders, their distribution.

PROFITABILITY RATIOS.

a) Sales

- 1) GP $\frac{GP}{sales} \times 100$
- 2) NP $\frac{NP \text{ b4 Tax \& NPAT}}{sales} \times 100$
- 3) Operating profit $\frac{OP \text{ profit}}{sales} \times 100$

b) expenses

- 1) COGS $\frac{COGS}{sales} \times 100$
- 2) Admin exp $\frac{Admin \ exp}{sales} \times 100$
- 3) S & D $\frac{S \ \& \ D}{sales} \times 100$
- 4) Operating exp. ratio $\frac{Admin + S \ \& \ D \ exp}{sales} \times 100$
- 5) operating ratio $\frac{- COGS + Admin + selling}{sales} \times 100$
 $\frac{- cost \ (op^n)}{sales} \times 100$

(c) Capital employed (CE)

1) Return on invest/
Capital emp. $\frac{ROCE \ NP(OP^n \ profit)}{CE(LT)} \times 100$

2) Return on
proprietors fund/
shareholder equity
fund. $\frac{NPAT}{C.E \ (shareH)} \times 100$

3) Return on equity
shareholders fund. $\frac{NPAT - Pref \ div}{C.E \ (S.H)} \times 100$

4) Earnings per
share (EPS) $\frac{NPAT - Pref \ div}{no. \ of \ equity \ shares}$

5) Dividend per
share (DPS) $\frac{Total \ div \ declared}{No. \ of \ equity \ shares}$

P.E RATIO / P.E multiples.

- price earning ratio.

$$PER = \frac{Price}{earning} = \frac{MPS}{EPS}$$

- reflects how much
price is required to
pay to get earning
on Re 1.

- LT (10-20).
- calculated industry
wise.

NPAT - Pref. div.

some part
|
decreased
dividend.

Reinvested
in business.

[Retained Earnings]

DIVIDEND

Dividend Rate

Dividend pay out ratio

Dividend Yield Ratio

↓
% of Paid up share capital

↓
as a % of total earnings

↓
as a % of market price

↓
Div = Paid up share cap × div rate

↓
Div = earnings × div. pay out ratio

↓
GROSS YIELD RATIO

↓
 $\frac{DPS}{MPS} \times 100$ $\frac{\text{Total div} \times 100}{\text{Total mp}}$

CAPITAL STRUCTURE RATIO

a) Balance sheet based

1) Debt r. $\frac{T. \text{ debts} / T. \text{ cap. emp. (LT)}}{100}$

2) equity v $\frac{T. \text{ equity} / T. \text{ CE (LT)}}{100}$

3) Debt - equity $\text{Debt} / \text{equity} \times 100$

4) Capital gearing r. $\frac{\text{funds with fixed income}}{\text{equity} \cdot \text{sn. fund}}$

5) Proprietary ratio 65% $\frac{\text{eq.} + \text{pref. s.} \cdot \text{Proprietor's fund}}{\text{Total assets}}$

6) Debt asset 35% $\frac{\text{Debt}}{\text{Total assets}}$

7) ~~Interest coverage~~

b) Coverage Ratio

1) interest to coverage $\frac{PBIT}{\text{interest}}$

2) Pref div coverage $\frac{PAT}{\text{Pref. div.}}$

3) Equity div coverage $\frac{PAT - \text{Pref div}}{\text{Eq. div.}}$

4) Total coverage $\frac{PAT}{\text{Pref} + \text{eq. div}}$

DEBT SERVICE COVERAGE RATIO

$$DSCR = \frac{\text{Earning available for debt holders}}{\text{Installments}}$$

$$= \frac{PAT + \text{Int} + \text{dep (non cash exps)} + \text{loss on sale (non opn exps)}}{\text{principal} + \text{int.}}$$

* no. non-opn income to be included.

EQUITY MULTIPLIER (3)

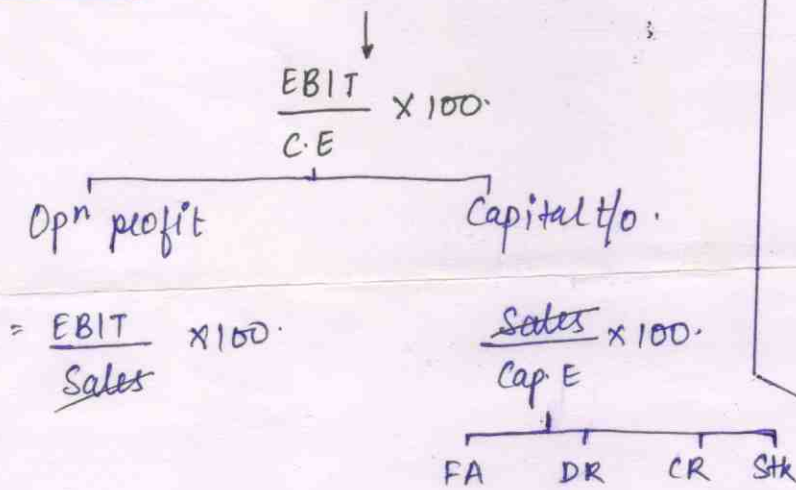
$$\text{equity multiplier} = \frac{\text{Asset}}{\text{Equity}}$$

For equity SH

DU PONT RETURN ON EQUITY

DU PONT CONTROL CHART DU PONT ANALYSIS

For Investments EARNING POWER.



$$\frac{NP}{Sales} \times 100$$

Net profit margin

$$\frac{Sales}{Asset} \times 100$$

Asset t/o

$$\frac{Asset}{Equity}$$

Equity multiplier

$$\frac{PAT}{Net \text{ wealth}} \times 100$$

$$\text{Proprietary ratio} = \frac{FA}{P. fund}$$

$$= \frac{FA}{FA + \frac{CA - CC}{WC} - LT}$$

$$C.E (SH) = E + P + R - M.C.$$