309.32 cr 24,036.12 cr 21.15 cr

PL

→ Total operating revenue:- the sale of + the sale of product + other operating revenue services

→ Total operating revenue (3436 cr)

→ PBT = Total revenue - Total operating Expenses (-) (if Extraordinary items)

→ PAT = PBT - Tax expense (current tax)

→ EPS = PAT / Total number of outstanding ordinary shares

Balance sheet

→ shareholder equity = Assets - Liabilities

→ share Capital = fv * number of share

→ number of shares = share Capital / fv

→ Total Liability = share holder's funds + non Current Liabilities + Current Liabilities

→ share holders equity = share Capital + Reserves + Surplus

→ Net Block = Gross block - Accumulated Depreciation - Accumulated Impairment

→ example:- previous year's value of + additions during - deduction during the year

building depreciation this year

Gross block

example = Previous years Value + Current year's depreciation — deduction for the year

total depreciation

Net block = gross block — Total depreciation

Total Assets = fixed Asset + Current Asset

Asset = share holders' funds + Liabilities

8408.3

fa 7671.64

ca = 12,986.10

cash flows

→ cash flow = Net cash flow from (OA) + net Cash flow from (IA) + net cash flow from (FA)

Profitability ratios

→ Ebitda = operating revenues - operating Expense (average of 15% good)

→ operating revenues = Total revenue - other income

→ operating Expense = Total expense - finance Cost - Depreciation & Amortization

→ Ebitda margin = Ebitda / (Total Revenue - other income)

[Total revenue - other income] - [Total Expense - finance Cost - Depreciation & Amortization

= [3482 - 46] - [2942 - 07 - 65]

→ CAGR = $\left(\frac{\text{Ending Value}}{\text{Beginning Value}}\right)^{\left(\frac{1}{\#\text{ of yrs}}\right)} - 1$

= $\left(\frac{2011 - 257}{2014 - 560}\right)^{\left(\frac{1}{4}\right)} - 1$

- Ebitda margin
- PAT margin
- ROE
- ROA
- ROCE

PAT margin = [PAT / Total Revenues] (20% ↑)

ROE : [net profit / share holder Equity * 100] (15% ↑)

ROE = $\frac{\text{net profit}}{\text{net sales}} \times \frac{\text{net sales}}{\text{Avg total asset}} \times \frac{\text{Avg Total asset}}{\text{Shareholder Equity}}$ → Dupont model

① net profit margin = net profit / net sales * 100

② Asset Turnover = Net Sales / Average Total asset

③ Financial Leverage = Average total asset / shareholder Equity

② Asset turnover = ① net sales in fy14 = 3439
② Total asset in fy13 = 1770
③ Total asset in fy14 = 2139

= (1770 + 2139) / 2 = 1955

= 3439 / 1955

asset turnover 1.75

ROE = net Profit margin × Asset turnover × Financial leverage

= 9.2% * 1.75 * 1.61

= 25.9% (good)

ROE = net Profit / Avg Shareholders Equity

= 367 / 1211

= 30.31 %

→ ROA (Return on Asset) = [Net income + interest * (1 - tax rate)] / Total Average assets

the average tax rate 32% / interest = finance cost / Average

→ 7* (1 - 32%) = 4.76 (ROA = [367.4 + 4.76] / 1955

= 372.16 / 1955 ~ 19.03%

ROCE = [Profit before interest & Taxes / Overall Capital Employed]

EBIT

overall Capital Employed = Short term Debt + Long term Debt + Equity

(long term borrowing) (Stockholder equity)

The leverage Ratio:-

1. Interest Coverage ratio = (EBIT / finance cost)

[Earning before Interest and Tax / interest payment]

EBIT

→ EBIT = Ebitda - depreciation & Amortization

= Ebitda = [Revenue - Expenses]

2. Debt to Equity Ratio = [Total debt / Total Equity] → share capital + Reserves

→ Total debt = Long term borrowing + short term borrowing

3. Debt to Asset Ratio = Total debt / Total Assets

4. Financial leverage ratio = [Average Total Asset / Average Total equity]

1. Interest Coverage ratio
2. Debt to equity Ratio
3. Debt to Asset Ratio
4. financial leverage Ratio

The Valuation Ratio:

1. Price to Sale ratio = Current share price / Sale per share

Sales per share = Total Revenue / Total no of share

1. Price to sales (P/S) ratio
2. Price to book value (P/BV) ratio and
3. Price to Earning

under 3.0

2. Price to Book Value (P/BV) ration
   - BV = [share Capital + Reserves - (revaluation Reserves)] / total no of share
   - P/BV = Current share price / BV (↑ = overvalued / ↓ = undervalued

3. Price to Earning (P/E) ratio
   - EPS = PAT / Total no of shares
   - P/E = Current price / EPS
     = 661 / 21.49
     = 30.76

(The limit of buy stock should not more than 25 or 30 times their earning)

Operating Ratios

1. Fixed Asset Turnover =
   = [operating revenues / Total Average assets]

2. working Capital Turnover =
   - working Capital = Current asset - Current liabilities
   - working Capital Turnover = [Revenue / Average working Capital]

3. Total asset Turnover = [operating revenue / Avg Total Assets]

4. Inventory Turnover = [Cost of Good Sold / Avg Inventory]
   = The Cost of Good Sold = Cost of material Consumed + purchased of stock in trade + store & Space Consumed + power & fuel
   = FY13 = 292.85 Cr, FY14 = 335.00 Cr, avg = 313.92
   = Inventory Turnover = 2449.74 / 313.92
   = 7.8 times ~ 8.0 times

5. Inventory no of day = 365 / Inventory Turnover

6. Receivable Turnover ratio = revenue / Avg Receivable
   - Trade receivable FY13 = 380.67, FY14 = 452.78; Avg receivable = 416.72, op = 3477
   - 3432 / 416.72 => 8.24
   - = 8.0

(1. Fixed Asset Turnover ratios
2. working Capital Turnover ratio
3. Total Asset Turnover ratio
4. Inventory Turnover ratio
5. Inventory no of days
6. Receivable Turnover ratio
7. Days Sales outstanding (DSO))

vs why t

7) Day Sales outstanding (DSO) / Avg Collection period / Day Sales in

=> DSO = 365 / Receivable turnover ratio

B Due Diligence :-

① understanding the business - require reading the annual report
② Application of the checklist
③ Valuation - to estimate the intrinsic value of the business

→ stage 1: understanding the business :-

what business is the Company involved in?

- what does it signify
- variable
- Comment

→ stage 2: Applying the Checklist

1.	Gross profit margin (GPM)	>20%	Higher the margin, higher is the evidence of a sustainable moat
2.	Revenue Growth	In line with the gross profit growth	Revenue growth should be in line with the profit growth
3.	EPS	EPS should be consistent with the net profit	If a Company is diluting its equity, then it is not good for its shareholders
4.	Debt level	The Company should not be highly leveraged	high debt means the Company is operating on high leverage. plus the fixed cost easy away the earning
5.	Inventory	Applicable for manufacturing Companies	A growing inventory, along with a growing PAT margin is a good sign. Always check the inventory no of days

6.	Sales vs Receivable	Sales backed by receivable is not a great sign	This signifies that the Company is just pushing its product to show revenue growth
7.	Cash flow from operation	Has to be positive	If the Company is not generating cash from operations then it indicates operating stress.
8.	Return on Equity	>25%	Higher the ROE better it is for the investor, however, make sure you check the debt level along with this
9.	Business Diversity	1 or 2 Single business lines	Avoid Companies that have multiple business interest stick to companies that operate in 1 or 2 segments
10.	Subsidiary	Not many	If there are too many Subsidiaries, it could sign the Company siphoning off money. Be Cautious while investing in such Companies

Stage 1:- (Question) :- (understanding the business)

1. what does the Company do?

→ To get a base understanding of the business

2 who are its promoter? what are their backgrounds?

→ To know the people behind the business. A Sanity check to eliminate Criminal background, intense political affiliation etc.

3) what do they manufacture (in case it is a manufacturing Company?

→ To know their product better, help us get a sense of the product's demand supply dynamic.

4) How many plant do they have and where are they located?

→ To get a sense of their geographic presence. Also at times their plant could be located in a prime location, and the value of such location could go off balance sheet, making the Company highly undervalued.

5) Are they running the plant in full Capacity?

→ Gives us an idea on their operation abilities, demand for their product, and their positioning for future demand.

6) what kind of raw material is required?

→ Helps us understanding the dependency of the Company. for example the raw material could be regulated by Govt (like Coal) or the raw material need to be imported either of which need further investigation.

7) who are the Company's client or end user?

→ By knowing the Client base we can get a sense of the Sale Cycle and efforts required to sell the Company's product

8) who are the Competitors?

→ Help in knowing the Competitors. Too many Competing Companies mean margin pressure. In such a case the Company has to do Something Innovation. Margin are higher if the Company operates in - monopoly, duopoly or oligopoly market structure

9. who are the major shareholders of the Company?

→ Beside the promoter and promoter group, it help to know who else owns the shares of the Company. If a highly successful investor hold the shares in the Company then, it could be a good Sign

10. Do they plan to launch any new product?

→ Give a sense on how ambitious and innovative the Company is. while at the Same time a Company lauching product outside their domain raise Some red flags - Is the Company losing focus?

11. Do they plan to expand to different Countries?

→ Same rational as above

12. what is the revenue mix? which product sell the most?

→ Help us understand which segment (and therefore the product) is Contributing the most to revenue. This in turn help us understand the driver for future revenue growth.

13. Do they operate under a heavy regulatory environment?

→ This is both good and bad - Good because it acts a natural barrier from new Competition to enter the market, bad because they are limited with choice when it comes to being innovation in the industry

14) who are their bank auditor?

→ Good to know, and to rule out the possibility of the Companies association with Scandalous agencies.

15) How many employee do ~~have~~ they have? does the Company have labor issue?

→ Gives us a sense of how labor intensive the Company's operation are also, if the Company require a lot of people with niche skill set then this could be another red flag

16) what are the entry barrier for new participants to enter the industry

→ Help us understand how easy or difficult it is for new Companies to enter the market and eat away the margins.

17) Is the Company manufacturing product that can be easily replicated in a Country with cheap labor?

→ If yes, the Company maybe sitting on a time bomb - think about Companies manufacturing ~~Compare~~ Computer hardware, mobile handset garments etc.

18) Does the Computer have too many subsidiaries?

→ If yes, you need to question why? Is it a way for the Company to Siphon off funds?

→ Gross profit margins =

→ Gross profit / net sales
→ Gross profit = [net sale - Cost of Good Sold]

→ COGS : Cost of material Consumed + purchased of stock in trade + Store & Space Consumed + power & fuel.

Future Value = Amount * (1 + opportunity cost rate / Compounding rate)^ no of years

= 5000 * (1 + 8.5%)^5

= 7518.3

Present Value = Amount / (1 + discount rate)^ no of years

= 10000 / (1 + 8.5%)^6

= 6129.5

This means ₹10,000 receivable after 6 yr in the future is Comparable to ₹ 6,129.5 in today's term assuming a discount rate of 8.5%.

The sum of all the present value of the future cash flow is called "the net present value (NPV)"

FCF = Cash from Operating Activities - Capital Expenditures (previous yrs fixed asset)

Step 1 = Estimate the average free cash flow (3 yr)

Step 2 = Identify the growth rate

↳ use 1st 5 yrs (12%) (large cap - 11%)

↳ use 2nd 5 yr (10%) (" " - 10%

Step 3 = Estimate the future cash flow

= PV * (1 + growth rate)

Terminal Value = fcf * (1 + Terminal Growth rate) / (Discount rate - terminal growth rate)

The rate at which the fcf grow beyond 10 yr (2024 onward) is called "Terminal Growth rate"

The terminal growth rate is considered to be less than 5%

The pv of cashflow = NPV of future free cash flow + PV of terminal value (NPV) (The present value)

example in 2015-16 receive = ₹ 195.29. At a 9% discount rate the present value = 195.29 / (1+9%)^2 (NPV of fcf)
= ₹164.37

NPV = Terminal value / (1 + discount rate)^ no of yr (10)

Net debt = Current year total debt - Cash & Cash balance

⇒ Total pv of fcf = Pv of Cashflow - net debt

Share price = Total pv of fcf / Total no of share

Lower intrinsic value = 368 * (1 - 10%) = ₹331
upper intrinsic value = ₹ 405 (368 (1+10%))