UNDERSTANDING BALANCE SHEET, PROFIT & LOSS ACCOUNT AND RATIO ANALYSIS

Umesh Ch Joshi
Chief Manager(Faculty)

WHAT ARE FINANCIAL STATEMENTS?

As per Section 2(40) of Companies Act 2013, financial statements are as under:

- Balance sheet
- Statement of Profit and Loss Account.
- Cash Flow Statement
- Statement of changes in Equity
- Explanatory Notes or Notes to account.

OTHER CONNECTING IMPORTANT/DOCUMENTS/ INFORMATION/STATEMENT

1.Auditor's Report.

2. Companies Auditor's Report Order(CARO)

3. Report on Internal Control over Financial Reporting(ICFR)

UTILITY OF FINANCIAL STATEMENT

- Important tool for financial analysis
- To know the financial position of the concern
- To determine if the concern is worth lending to
- To know the liquidity position
- To know the value of assets available
- To know the contribution/ stake of owners as compared to advances taken
- To know the repaying capacity
- To analyse how the concern has been/ will be using the borrowed funds
- To know the trend of production, sales, profitability etc.

FINANCIAL STATEMENT

1. Balance Sheet: Financial position of a concern on a given date

2. Profit & Loss Account: Financial performance of a concern over a given period of time

WHAT IS A BALANCE SHEET?

It is a statement of assets and liabilities of a person or entity as on a particular date. By convention Liabilities are listed on the left side and Assets on the right.

LIABILITIES

1. Resources mobilized by a concern to acquire assets
2. Source of fund
3. Show credit balance
4. Example: Loan from Bank/ FI, Amount payable etc.

LIABILITIES CAN BE INTERNAL OR EXTERNAL

Internal source:

1. By owners of the concern: Known as Owners' stake/ Owners' equity/ Net worth/Reserves and Surplus.

External Source:

1. Brought from external agencies other than owner
2. Example: Banks, FIs, suppliers, vendors, friends & relatives

ASSETS:

1. Possession or Things of value owned
2. Application/ Use of fund
3. Show debit balance
4. Example: Land, building, machinery, stock, cash etc.

BALANCE SHEET EQUATION:

Assets = Liabilities + Net Worth (Owners' fund)

Any transaction will result to such increase/decrease in the above three components such that the LHS = RHS

INTERESTING FACTS ABOUT BALANCE SHEET

1. The two sides of a balance sheet i.e. assets & the liabilities always balance out
2. All financial transactions have an impact on balance sheet
3. Balance sheet keeps on changing from day to day
4. Any increase/ decrease in asset side is offset by equal increase/ decrease in the liability side
5. Any increase/ decrease in asset or liability side is offset by corresponding decrease/ increase in the same side

STRUCTURE OF A BALANCE SHEET

SOURCES OF FUND(LIABILITY)	USES OF FUND(ASSETS)
Long Term Sources	Long Term Uses
Short Term Sources	Short Term Uses

Outer Body of a Balance Sheet

	Liabilities (Cr)	Assets (Dr)	
Long Term Sources	Capital/ Equity/ Own fund/ Net Worth	Fixed Assets	Long Term Uses
		Non-current Assets	
	Long Term liabilities	Current Assets	Short Term Uses
Short Term Sources	Current liabilities & Provisions	Intangible & Fictitious Assets	Misc Exp not W/O
	Total	Total	

Detailed Format of Balance sheet

LIABILITIES	ASSETS
<u>NET WORTH/EQUITY/OWNED FUNDS</u> Share Capital/Partner's Capital/Paid up Capital/ Owners Funds Reserves (General, Capital, Revaluation & Other Reserves) Credit Balance in P&L A/c	**<u>FIXED ASSETS :</u>** LAND & BUILDING, PLANT & MACHINERIES Original Value Less Depreciation Net Value or Book Value or Written down value
<u>LONG TERM LIABILITIES/BORROWED FUNDS :</u> Term Loans (Banks & Institutions) Debentures/Bonds, Unsecured Loans, Fixed Deposits, Other Long Term Liabilities, Deffered Tax Liabilities	**<u>NON CURRENT ASSETS</u>** Investments in quoted shares & securities Old stocks or old/disputed book debts Long Term Security Deposits Other Misc. assets which are not current or fixed in nature
<u>CURRENT LIABILTIES</u> Bank Working Capital Limits such as CC/OD/Bills/Export Credit Sundry /Trade Creditors/Creditors/Bills Payable, Short duration loans or deposits Expenses payable & provisions against various items	**<u>CURRENT ASSETS</u>** : Cash & Bank Balance, Marketable/quoted Govt. or other securities, Book Debts/Sundry Debtors, Bills Receivables, Stocks & inventory (RM,SIP,FG) Stores & Spares, Advance Payment of Taxes, Prepaid expenses, Loans and Advances recoverable within 12 months **<u>INTANGIBLE ASSETS</u>** Patent, Goodwill, Debit balance in P&L A/c, Preliminary or Preoperative expenses

CAPITAL

1. Authorised capital is the extent upto which capital can be raised.
2. Issued capital is the amount upto which capital is intended to be raised and has been offered to the public
3. Subscribed capital is the extent upto which the issued capital has been subscribed.
4. Paid up capital is the extent upto which capital has been actually called and received.

In case of a **PUBLIC LIMITED COMPANY** the capital would have been contributed by a number of people in the form of shares.

The entire capital is divided into equity shares of smaller denomination.

Balance Sheet of XYZ Ltd' as on 31.03.2021

LIABILITIES		ASSETS	
Particulars	Amt	Particulars	Amt
Authorized share capital : **15000 equity shares of Rs.10 each : 1,50,000** **Paid up share capital :** **10000 equity shares of Rs.10 each : 1,00,000**	**100000**	**Fixed assets (Shop)**	**40000**
Bank Term Loan	**30000**	**Furniture and Fixtures**	**10000**
Creditors	**4000**	**Stock**	**38000**
Bank cash credit (WC)	**22500**	**Receivables**	**2000**
		Cash in hand & at Bank	**66500**
Total	**156500**	**Total**	**156500**

Reserves& Surplus

1.Share premium reserve
2.Revaluation reserve
3.Depreciation reserve
4.Debenture redemption reserve
5.Capital subsidy reserve
6.General reserve

NET WORTH & TANGIBLE NET WORTH

Net Worth is the total of the capital and reserves and Surplus of the company.

Tangible Net Worth (TNW) is the net worth of the company - minus- the intangible assets of the company.

Adjusted Net Worth : Is TNW less investment in associates/group

In this balance sheet, we have" "Equity & "Reserves and Surplus" the total of which will give us the Net Worth of the company. (Rs.100000+Rs.20000=Rs.120000). We also have intangible assets namely "Preliminary expenses". These are not tangible assets and are reduced from the net worth to arrive at the "Tangible Net Worth"(Rs.120000-Rs.20000 =Rs.100000).

Balance Sheet of 'ABC Ltd' as on 31.03.2021

LIABILITIES		ASSETS	
Particulars	Amt	Particulars	Amt
1. Authorized share capital : 15000 equity shares of Rs.10 each : 1,50,000 **2. Paid up share capital :** 10000 equity shares of Rs.10 each : 1,00,000	100000	Land & Building	40000
Reserves and Surplus	20000	Furniture and Fixtures	10000
Bank Term Loan	30000	Stock	38000
Creditors	4000	Receivables	2000
Bank cash credit (WC)	22500	Cash in hand & at Bank	66500
		Preliminary expenses	**20000**
Total	176500	Total	176500

LONG TERM LIABILITIES

Liabilities payable **after one year** from the date of Balance Sheet

1. Term Loan from Banks/ Fis.
2. Debentures
3. Fixed Deposits from public
4. Unsecured loans from friends/ relatives/ associates
5. Security deposits/ advances received from dealers & refundable on termination of the Dealership/ Agency
6. Other liabilities payable after one year

SHORT TERM LIABILITIES

Current Liabilities :-

1.Cash credit/ bills purchased & discounted

2.Short term loans / commercial paper

3.Deposits maturing within one year

4.Sundry creditors

5.Interest charges

6.Term loan installments - payable within one year.

7.Provision for taxation, PF etc.

8.Dividends, gratuity and other provisions.

FIXED ASSETS

1. Assets which are permanent in nature & meant for long term use, generally for a period more than one year
1. Assets supposed to be retained to run the business
2. Not easily convertible to cash
3. Financed from owner fund or term liabilities
4. Land, Building, P&M, Furniture, Fixtures, Vehicles, Capital work in progress etc.
5. Expressed as Net Block/ Net Fixed Assets i.e. **(Gross Block - Depreciation)**

DEPRECIATION

1. Decline in value of an asset as a result of use, wear & tear, passage of time, obsolescence, fall in market value, damage due to accident etc.
2. Usually shown under profit & loss account as an expense & credited to respective fixed asset account. It does not result in out go of cash from the business
3. Calculated by SLM or Written WDVM
4. Depreciation is not charged on land

DEPRECIATION

Balance Sheet of " ABC Ltd as on 31.03.2021

LIABILITY		ASSETS	
Particulars	Amt	Particulars	Amt
Authorized share capital : 15000 equity shares of Rs.10 each : 1,50,000 Paid up share capital : 10000 equity shares of Rs.10 each : 1,00,000	100000	Land & Building : 40000 Furniture and Fixtures : 10000 Less: Depreciation : 1000 49000	49000
Reserves and Surplus	19000		
Bank Term Loan	30000	Stock	38000
Creditors	4000	Receivables	2000
Bank cash credit (WC)	22500	Cash in hand & at Bank	66500
		Royalty	10000
		Preliminary expenses	10000
Total	175500	Total	175500

NON CURRENT ASSETS

Neither fixed nor current in nature

1. Slow moving/ obsolete stocks
2. Receivables/ Debtors more than six months old
3. Receivables not related to the business e.g. Adv. to staff/ directors/ partners / associate concerns
4. Advance for purchase of fixed assets
5. Investment in subsidiary companies/ firms
6. Security deposits for tenders
7. Long Term Investments

CURRENT ASSETS

1. Change in shape/ convertible into cash within a short period i.e. **within one year** from B/S date
2. Temporary in nature
3. Required in business for sale & circulation
4. Financed from current liabilities & partly from Long Term Sources

EXAMPLES OF CURRENT ASSETS

1. Stocks/ Inventories
2. Receivables/ Debtors
3. Cash in hand/bank
4. Advance paid for purchase of stocks/ RM
5. Prepaid expenses
6. Advance payments (Tax, Rent etc.)
7. Short Term Investments

INTANGIBLE ASSETS

1. Assets having no physical existence
2. These assets are not available with value at the time of liquidation of the concern
3. Goodwill, Copyright, Patents, Trademarks, Franchise, Preliminary & Pre-operative Expenses, Loss etc. not written off

The entire LIABILITIES are **Sources Of Funds** and the entire ASSETS represents the **Uses Of Funds.**

Some Sources Of Funds are repayable within 12 months **(CURRENT LIABILITIES).**

Some Assets can be converted into cash within 12 months **(CURRENT ASSETS)**

Liabilities repayable only after 12 months **(LONG TERM SOURCES) .**

Some of the funds have been put to **LONG TERM USES**

Balance Sheet of 'ABC Ltd' as on 30.03.2021

LIABILITIES		ASSETS	
Particulars	Amt	Particulars	Amt
Term Liabilities / Long Term Sources		**Fixed Assets / Long Term Uses**	
Authorized share capital : 15000 equity shares of Rs.10 each : 1,50,000 Paid up share capital : 10000 equity shares of Rs.10 each : 1,00,000	100000	Fixed assets (Shop)	40000
Bank Term Loan	30000	Furniture and Fixtures	10000
Current Liabilities / Short Term Sources		**Current Assets / Short Term Uses**	
Creditors	4000	Stock	38000
Bank cash credit (WC)	22500	Receivables	2000
		Cash in hand & at Bank	66500
Total	156500	Total	156500

NET WORKING CAPITAL

Net Working Capital (NWC) is :

Long Term Source – Long Term Use

Short Term Use – Short Term Source

(or in other words)

Current Assets – Current Liabilities

NET WORKING CAPITAL

LIABILITIES	ASSETS
Long Term Sources **or** **Term Liabilities**	**Long Term uses** **or** **Fixed Assets**
Short Term Sources **or** **Current Liabilities**	**Short Term Uses** **or** **Current Assets**

NWC

Remember:- The entire Long Term Sources should not be used for Long Term Uses. A part of it should be used for Short Term Uses.

Short Term Sources should never be used for Long Term Uses.

Long Term Sources - Long Term Uses = Short Term Assets (Current Assets) minus Short Term Liabilities (Current Liabilites).

This difference is called Net Working Capital (NWC)

Balance Sheet of 'MNO Ltd' as on 30.03.2021

LIABILITIES		ASSETS	
Particulars	Amt	Particulars	Amt
Long Term Sources:		**Long Term Uses :**	
Authorized share capital : **15000 equity shares of Rs.10 each : 1,50,000** **Paid up share capital :** **10000 equity shares of Rs.10 each : 1,00,000**	**100000**	**Fixed assets (Shop)**	**40000**
Bank Term Loan	**30000**	**Furniture and Fixtures**	**10000**
Current Liabilites (Short Term Sources):		**Current Assets :**	
Creditors	**4000**	**Stock**	**38000**
Bank cash credit (WC)	**22500**	**Receivables**	**2000**
		Cash in hand & at Bank	**66500**
Total	**156500**	**Total**	**158500**

NET WORKING CAPITAL

LTS = 130,000	CA = 106,500
- LTU = 50,000	- CL = 26,500
NWC = 80,000	NWC = 80,000

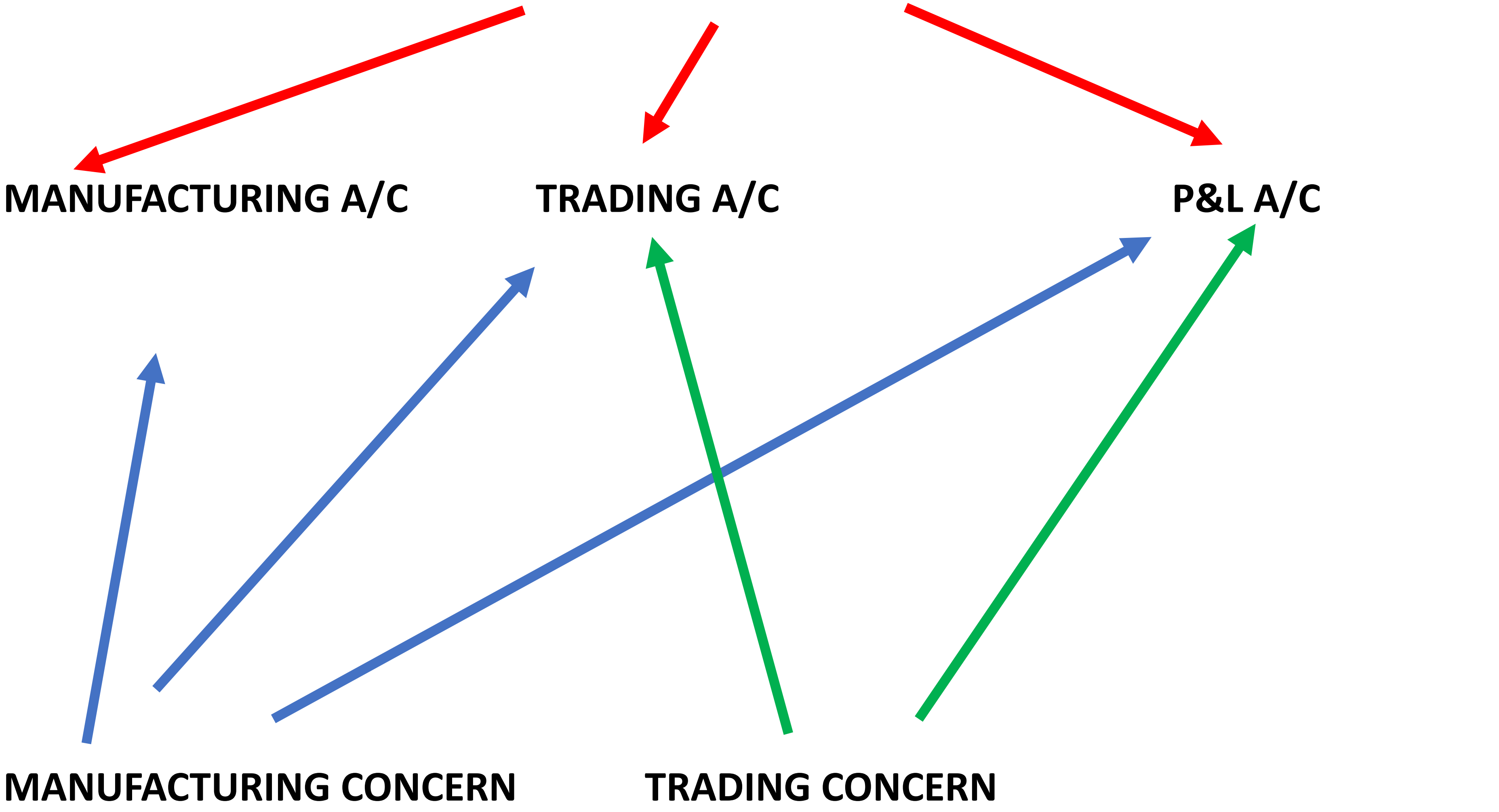
PROFIT AND LOSS ACCOUNT

1. It is like heart of a business entity.
2. It pumps income to business.
3. It tells the various activities of an entity such as sales, other Income
4. Purchases, various expenditure incurred on labour, power and fuel throughout the year.
5. Technically it provides information relating to revenue from operation, cost of material consumed, operating margin, EBITDA, PBT,PAT, earning per share .

WHAT PROFIT AND LOSS ACCOUNT TELLS?

1. Quality of revenue from operation.
2. Is other Income regular or one time
3. Is manufacturing cost in line with revenue from operation.
4. Is power and fuel cost consumption costs commensurate with the production?
5. What is the operating margin?
6. What is interest cost?
7. Has depreciation been provided?
8. Is there any exceptional expenditure?
9. What is the quality of profit?

HOW PROFIT AND LOSS ACCOUNTS IS PREPARED



MANUFACTURING ACCOUNT

PARTICULARS	Amnt	PARTICULARS	Amnt
To opening Stock(WIP)		By Closing Stock (WIP)	
To Raw Material Consumed Opening Stock of RM Add: Purchase of RM Less Closing Stock of RM			
To Factory/Manufacturing/Production		*By Cost of Production (Balancing Figure)*	

TRADING ACCOUNT

PARTICULARS	AMNT	PARTICULARS	AMNT
To OPENING Stock of Finished Goods		By Sale of Finished Goods	
To Cost of Production		By Closing Stock of Finished Goods	
To Gross Profit (Balancing Figure)			

PROFIT AND LOSS ACCOUNT

	By Gross Profit (b/d)
	By Non operating Income
To Selling General and Administrative Expenses	
Op Profit Before Interest	
Interest	
Op Profit after Interest	
Non Operating expenses	
Profit Before Tax	
Provision for Tax	
Profit After Tax(Transferred to Capital A/c)	

PROFIT AND LOSS APPROPRIATION ACCOUNT

All adjustments like partner's salary, commission, bonus, interest on capital, loans, drawings and sharing of profits are passes through a separate account called Profit & Loss Appropriation Account.

Thus, profit and loss Appropriation account is prepared to show how net profit is distributed among the partners.

Date	**Particulars**	**Amnt**	**Date**	**Particulars**	**Amnt**
	To Interest On Capital A/c			By Profit And Loss A/c (Profit transferred from P&L A/c)	
	To Partner’s Salary A/c			By Interest on Drawings A/c	
	To Reserves A/c				
	To Partner’s Commission A/c				
	To Profit transferred to Partner’s Capital/Current Account				

1. **Raw Material Consumption**=Opening Raw Material + Purchase of Raw Material-Closing Raw Material.

2. **Cost of Production**: Raw Material Consumption + Manufacturing Expenses + Opening WIP –Closing WIP.

3. **Cost of Sales**=Cost of Production+ Opening Finished Good-Closing Finished Good

4. **Gross Profit**=Net Sales-Cost of Sales.

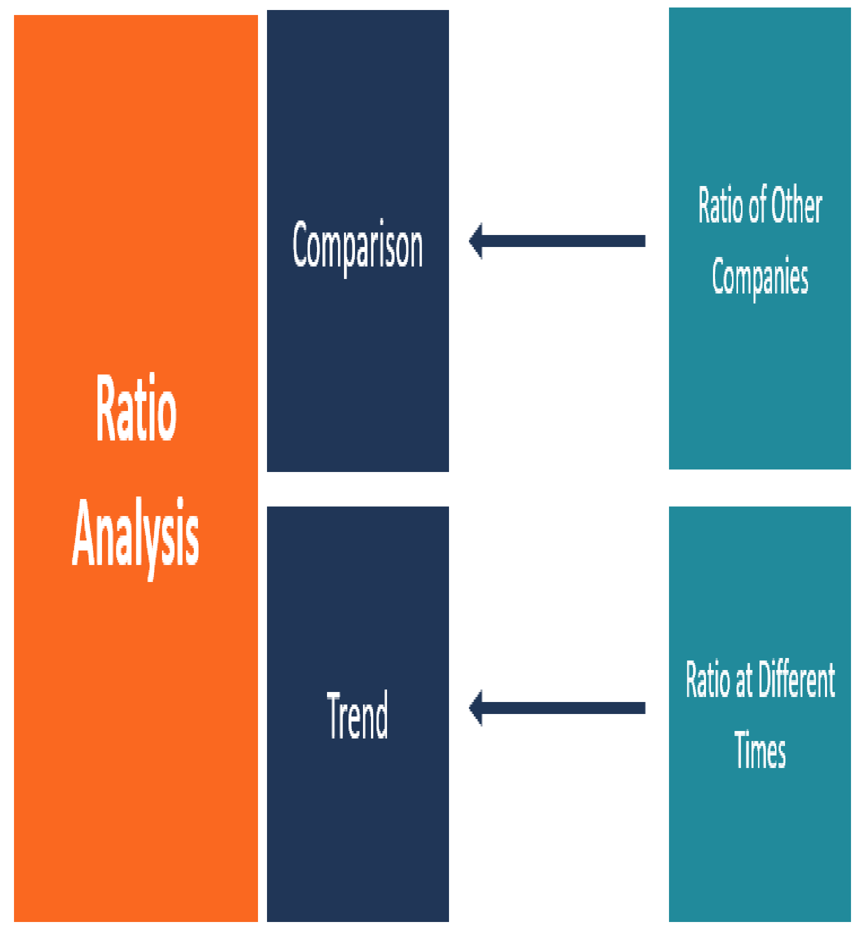
5. **Operating Profit(PBIT)**=Gross Profit-Operating Expenses

6. **Net Profit**=Operating Profit + Non Op Income-Non Op Expenses

RATIO ANALYSIS

Ratio analysis refers to the analysis of various pieces of financial information in the financial statements of a business. They are mainly used by analysts to gain insights into various aspects of a business, such as its profitability, liquidity, and solvency. *Examination of relationships between financial statement numbers!*

- ***Peer Comparison:*** It helps identify market gaps and examine its competitive advantages, strengths, and weaknesses. The information to formulate decisions that aim to improve the company's position in the market.
- ***Trend Analysis:*** To see if there is a trend in financial performance. Established companies collect data from the financial statements over a large number of reporting periods. The trend obtained can be used to predict the direction of future financial performance, and also identify any expected financial turbulence that would not be possible to predict using ratios for a single reporting period.
- ***Operational Efficiency***: To determine the degree of efficiency in the management of assets and liabilities. Inefficient use of assets such as motor vehicles, land, and building results in unnecessary expenses that ought to be eliminated.



CLASSIFICATION OF RATIOS

Liquidity ratios

Leverage ratios

Turnover / Activity ratios

Profitability ratios

❖Liquidity Ratio

Measures the liquidity of the company

ndicates the ability of the firm to meet its
nort term obligations

❖Leverage Ratio

Indicates the proportion of debts compared to
; equity/capital

valuates company's debt level and ability to
ervice the debt

❖ **Activity / Turnover Ratio:** Indicate how effectively funds / resources have been used in the business

❖ **Profitability Ratio**: Measures the performance of the Company in terms of profits generated

IMPORTANT RATIOS

- ***Liquidity ratios***
  - Current Ratio
  - Acid Test Ratio

- ***Leverage ratios***
  - Debt Equity Ratio
  - Total Outside Liability / Tangible Networth

IMPORTANT RATIOS

- ***Turnover / Activity ratios***

  - Stock Turnover Ratio
  - Receivables / Sales
  - Sundry Creditors / Purchases

- ***Profitability ratios***
  - Gross Profit Ratio
  - Net Profit Margin
  - Return On Capital Employed

KEY RATIOS: CREDIT POLICY

- Current Ratio
- Debt Equity Ratio
- Total Outside Liabilities / Tangible Networth
- Debt Service Coverage Ratio
- Interest Coverage Ratio
- Fixed Assets Coverage Ratio
- Security Coverage Ratio

CURRENT RATIO

MEANING:

1. It indicates how the liquidity of current assets will be able to settle current debt and payables / current liabilities
2. It also shows the margin the company has for it's current assets

FORMULA :CURRENT ASSET/CURRENT LIABILITY

INTERPRETATION: *If current assets (numerator) are higher than short-term liabilities (denominator), the company is said to have a 'liquid surplus' available.*

- ***Current Ratio > 1.00 only if Long term sources > Long term uses OR NWC is positive:*** This means that long term sources, after funding the long term uses, are also funding part of the working capital; implying a comfortable liquidity position over the next one year.

- ***Current Ratio < 1.00 only if Long term uses > Long Term sources OR NWC is negative:*** This means that long term assets have been funded from short term funds/liabilities. While the liabilities will fall due for repayment, the corresponding assets are unlikely to fall due in near future causing strained liquidity.

IMPORTANT POINTS TO REMEMBER IN CURRENT RATIO

- Current assets can often get ***inflated due to 'Other Current Assets***' that may not be core to the operations of the company.
- One of the most common factors causing the liquidity ratio to fall is the accounting treatment of **Term Debt falling due for repayment in the next year.**
- Funds placed in fixed deposits with banks as security for off-balance sheet liabilities also need to be considered.
- Value of the Current Ratio is **NOT an indicator of the quality** of the assets/liabilities.

Higher the ratio, better is the liquidity. But a very high CR> 2.00 may not add value to the company's credit quality.

The relative size of the short term assets /liabilities vis –a- vis the overall balance sheet size determines the impact of a low CR. If ST liabilities form a very small part of the overall B/S, the impact of low CR shall be muted. Otherwise, It may require enormous funds to correct the liquidity position.

CURRENT RATIO

(Rs in lacs)	Year 1	Year 2
Short Term Borrowings	50.00	65.00
Trade Payables	40.00	48.00
Other Current Liabilities	20.00	18.00
Short Term Provisions	5.00	7.00
Total Current Liabilities	115.00	138.00
Inventories	60.00	72.00
Receivables upto 180 days	50.00	65.00
Cash and Bank Balance	5.00	8.00
Short Term Loans & advances	22.00	28.00
Total Current Assets	137.00	173.00
Current ratio (Current Assets / Current Liabilities)	137 / 115 1.19	173 / 138 1.25

DEBT EQUITY RATIO

MEANING: 'Debt-Equity ratio' (DER) tells us about the composition of the long term sources or ratio between Owners fund and Long Term Borrowed Funds.In case of a new project, it is usually financed through a mix of loans and equity.

FORMULA : Debt/Equity

INTERPRETATION:

- Unsecured loans from promoters are considered as Quasi-Equity., if there is a letter of Backing.
- A debt equity of 4:1 means that against own funds of Rs1, the firm has raised long term loan of Rs4.00.

DE RATIO

(Rs in lacs)	Year 1	Year 2
Capital	25.00	25.00
Reserves & Surplus	63.00	75.00
Intangible asset	8.00	12.00
TNW	80.00	88.00
Term Loans	105.00	83.00
Long Term Debt	105.00	83.00
DE Ratio	1.31 (105 / 80)	0.94 (83 / 80)

TOL/TNW RATIO

1. This gives an idea on the promoter's stake in the business.
2. A high ratio means owner's / promoter's money in the business is less.
3. A low ratio means owner's / promoter's money is more in the business.
4. A high stake of the owners in the business implies sufficient safety margin and protection against shrinkage in assets.

TOL/TNW RATIO

**TOL / TNW = ** Total Outside Liabilities / Tangible Networth

1. **TOL** = Current liabilities + Term Liabilities

2. **Tangible Net worth (TNW)** = Net Worth - Intangible Assets

Net Worth = Paid up equity capital, free reserves (excluding revaluation reserve)

Intangible Assets = Items such as goodwill, miscellaneous expenditure, deferred payment expenditure, Preliminary / Pre operative Expenses, Deferred Tax Asset, Accumulated Losses etc.,

RATIO OF TOL / TNW

(Rs in lacs)	Year 1	Year 2
Capital	25.00	25.00
Reserves & Surplus	63.00	75.00
Intangible asset	8.00	12.00
TNW	80.00	88.00
Long Term Borrowings	105.00	83.00
Current Liabilities	115.00	138.00
TOL	220.00	221.00
TOL / TNW	2.75 (220 / 80)	2.51 (221 / 88)

GROSS PROFIT RATIO

MEANING: GPR is the ratio of Net Sales as a percentage of the Net Sales.

FORMULA : Gross Profit Margin = (Net Sales- COGS) /Net Sales * 100

Cost of goods sold (COGS) includes all of the costs and expenses directly related to the production of goods. COGS excludes indirect costs such as Sales, General and Admn Expenses

INTERPRETATION:

- **It is an indicator of a company's ability to pass on any input cost increase to its customers.**
- **The gross margin is a straight and direct indicator whether the actual product or service of the company is fetching a profitable price in the market.** So long as this ratio is high, the core business of the company remains valuable. Erosion or decline in this ratio calls for corrective measures to be taken by the company management.
- *While calculating gross margin, finance cost, selling and administration expenses, extraordinary income and expenses are excluded.*

Gross Margin Ratio, is thus used to check the core business viability.

NET PROFIT RATIO

MEANING: **'Net profit margin' measures the net profit as a percentage of the Net Sales for a given year. It is a direct reflection of the company's profitability.**

FORMULA : **Net Profit Margin = Net profit /Net Sales * 100**

INTERPRETATION:

PAT is the final amount available to a company to reward its shareholders and to plough back to strengthen its net worth.

- *Consistently low net profitability means the company is vulnerable to fluctuations in its income and/or expenses.*
- *Consistently high net profitability means the company can absorb any spikes in expenses if it is unable to pass it on to its customers in a particular year. If the spike is likely to remain unabated next year, the company may be able to re-price its products and get back to earlier level of profitability.*

RETURN ON CAPITAL EMPLOYED

MEANING: **'Return on capital employed' (RoCE) refers to the returns generated by a company on the total debt and equity capital it has deployed.**

FORMULA

ROCE = PBIT / Capital Employed

Capital Employed = TNW + Total Debt

PBIT = Profit Before Interest and Tax

INTERPRETATION:

It measures how efficiently a company is using its capital to generate profits. The return on capital employed metric is considered one of the best profitability ratios and is commonly used by investors to determine whether a company is suitable to invest in or not.

Example: Apple Inc has ROCE of 23% in 2017. This means for every 100$ invested in the company, it generates an income of 23$.

- RoCE indicates management efficiency.
- It is independent of leveraging because it considers the total capital employed.
- Determine the benchmark ROCE of the industry. For example, a company with a ROCE of 20% may look good compared to a company with a ROCE of 10%. However, if the industry benchmark is 35%, both companies are considered to have a poor ROCE.

TURNOVER OR ACTIVITY OR EFFICIENCY RATIOS

- Inventory Turnover Ratio
- Debtors Turnover Ratio
- Creditors Turnover Ratio

STOCK TURNOVER RATIO

MEANING: **The 'Stock turnover ratio' is an indicator of how quickly the stocks are processed and converted into sales.** ***It is also known as the 'Inventory turnover ratio'.*** **Establishes the relationship between Cost of goods sold and inventory.**

FORMULA : **COGS /Average Inventory**

COGS= Opening stock+ Purchases+ Direct expenses-Closing stock

COGS= Sales – Gross Profit OR Sales + Gross Loss

This ratio is expressed in 'Times'

Sales can be used if COGS cannot be computed

Inventory Holding (months)= 12/ Inventory Turnover Ratio

INTERPRETATION:

- The ratio may vary depending on the nature of business and must be compared with similar companies and past levels.
- A higher Inventory turnover ratio means working capital is not blocked in inventory in the form of excess raw material or unsold goods. It shows that processing is efficient, sales are steady and working capital funds are being used optimally.

DEBTOR TURNOVER RATIO

MEANING: **The 'debtors to sales ratio' determines how many times sales receivables outstanding (book debts) are collected annually.** ***Also called Debtor's Velocity- how fast debtors converted to cash.***

FORMULA : **Net Credit Sales /Average Debtors Outstanding**

Net Credit Sales = Net Sales -Cash Sales

Average debtors= (Opening debtors + closing debtors)/2

This ratio is expressed in 'Times'

To calculate Debtors' Holding (months) = 12/ Debtors Turnover Ratio- Indicates Average Collection period

INTERPRETATION:

- This ratio indicates the degree of management of debtors. Higher the ratio the better it is as it indicates faster collection of receivables & better management.
- If credit sales are not available, use Total Sales

CREDITOR TURNOVEER RATIO

MEANING: **The 'creditor turnover ratio' indicates the speed at which payments are made to trade creditors for raw materials.** ***Also called creditors velocity***

FORMULA : **Net Credit Purchases/Average Trade Creditors Outstanding**

Net Credit Purchases = Credit Purchases- Purchase return

Average trade creditors =(Opening trade creditors + closing trade creditors)/2

This ratio is expressed in 'Times'. No of times/ how fast creditors are being settled or paid.

To calculate Creditors' Holding (months) = 12/ Creditors Turnover Ratio

Holding period- How long is the payment period to the creditors. Some reputed companies enjoy a high credit period from their suppliers

INTERPRETATION:

- Higher ratio implies that purchases made on credit terms are quickly settled and continuity in raw material availability is assured. It also indicates there are no liquidity or cash flow issues in the company.
- Net Credit Purchases may not always be available. Hence, Total Purchases can also be used.

FIXED ASSET TURNOVER RATIO

MEANING: **Fixed Asset Turnover (FAT) is an efficiency ratio that indicates how well or efficiently a business uses fixed assets to generate sales. It establishes the relationship between the : Net Sales & Fixed Assets**

FORMULA : Net Sales/Average Net Fixed Assets

Net Fixed Assets = Fixed Assets- Depreciation (average of opening and closing values)

INTERPRETATION:

- This ratio divides net sales by net fixed assets, calculated over an annual period.
- Indicates the firm's ability to generate sales per rupee of investment in fixed assets.
- Generally, a higher fixed asset ratio implies more effective utilization of investments in fixed assets to generate revenue. This ratio is often analyzed alongside leverage and profitability ratios.
- When the business is underperforming (in terms of revenues) and has a relatively high amount of investment in fixed assets, the FAT ratio may be low.
- This is especially true for manufacturing businesses that utilize big machines and facilities.
- A declining ratio may also suggest that the company is over-investing in its fixed assets.

DEBT SERVICE COVERAGE RATIO

MEANING: **'Debt service coverage' ratio (DSCR) is the ability of a business to repay its loans, as well as the interest on those loans. DSCR is not measured in percentages, but as a fraction.**

FORMULA :

$$\frac{\textbf{PAT+ Depreciation +Interest (usually TL)}}{\textbf{Loan repayments due within 1 year + Interest on the loan}}$$

- PAT +Depreciation is also called **Net Cash Accruals**.
- **Debt payable within one year (CPLTD)** primarily constitutes the present portion of long-term debt (the portion of a long-term debt that is slated to mature during the ongoing year)

INTERPRETATION:

- DSCR is to be calculated for each year of the loan tenure including the moratorium period where interest is payable.
- As in other ratios/indicators, the DSCR may get distorted due to effect of extraordinary items and change in composition of cost components. Hence, DSCR should also be seen in conjunction with EBIDTA and gross margin.
- ***A higher ratio implies that the entity is more creditworthy because they have sufficient funds to service their debt obligations – to make the required payments on a timely basis.***

DSCR

Year	NPAT	Depreciation	Interest	Cash accruals Total A	Principal Instalment	Total repayment obligation D+F	DSCR E / G
A	B	C	D	E	F	G	H
I	18.33	10.00	8.10	36.43	20.00	28.10	1.30
II	18.40	10.00	6.30	34.70	20.00	26.30	1.32
III	18.62	10.00	4.50	33.12	20.00	24.50	1.35
IV	19.25	10.00	2.70	31.95	20.00	22.70	1.41
V	19.50	10.00	0.90	30.40	20.00	20.90	1.45
	Average DSCR	(166.60 / 122.50) 1.36		166.60		122.50	

INTEREST SERVICE COVERAGE RATIO

MEANING: **'Interest service coverage ratio' (ISCR) is the ability of a business to pay interest on its Cash Credit Limit.**

FORMULA : **PBDIT/Interest on the borrowings**

INTERPRETATION:

- ISCR as a ratio is generally used to measure **comfort levels in paying interest on borrowed funds.**

- From lender's point of view, a high ratio provides reasonable assurance that the company is comfortable in servicing its interest servicing. Failure to service interest obligations can render an account NPA.

INTEREST SERVICE COVERAGE RATIO

	Year 1	Year 2
Net Profit before tax	10.00	12.00
Depreciation	8.00	7.00
Interest on Bank Borrowings	11.00	13.00
PBDIT	29	32
Interest Service Coverage Ratio	29/ 11 2.63	32/ 13 2.46

FIXED ASSET COVERAGE RATIO

Term Loans are usually secured by Fixed Assets.

This ratio shows the number of times the value of fixed Assets cover the amount of loan and indicates the margin of security.

Fixed Assets Coverage Ratio =

Net Fixed Assets (Including Capital Work In Progress) / Long Term Debt

FIXED ASSET COVERAGE RATIO

(Rs in lacs)	Year 1	Year 2
Gross Block	65.00	65.00
Depreciation	23.00	26.00
Net Block	42.00	39.00
Net Fixed Assets	42.00	39.00
Term Loans	35.00	30.00
Fixed Assets Coverage Ratio	(42 / 35) 1.20	(39 / 30) 1.30

SECURITY COVERAGE RATIO

Security Coverage Ratio =

Total value of securities / Total credit limits

	Year 1	Year 2
Value of fully paid stocks	20.00	25.00
Value of book debts	32.00	38.00
Value of property held as collateral	10.00	10.00
Total value of securities	62.00	73.00
Total WC limits	37.00	42.00
Security Coverage Ratio	(62 / 37) 1.67	(73 / 42) 1.73

KEY FINANCIAL RATIOS FOR MSME

Covenant	Benchmark	ZLCC	FGMCAC	COLCC
Current Ratio	1.10	1.00	1.00	1.00
TOL/TNW	5:1	6:1	6:1	6:1
DER	4:1	5:1	5:1	5:1
DSCR	Avg. 1.50 Min 1.25	Avg. 1.50 Min 1.25	Avg. 1.00 Min 1.00	Avg. 1.00 Min 1.00
Interest Coverage ratio	1.50	1.25	1.10	1.10
Fixed Asset Coverage ratio	1.20	1.20	1.00	1.00
Security coverage ratio	1.20	1.20	1.00	1.00

THANK YOU