

Financial Statement Analysis

Module -3

Financial Statement Analysis: Balance sheet, Profit and Loss Account, Economic vs Accounting Profit, Changes in Financial Position

~~Is~~ the company profitable?

~~Is~~ there enough cash to meet payroll needs?

~~How~~ much debt does the company have?

~~Has~~ the company consistently paid cash dividends?

~~Should~~ the company invest money to expand?

SAMPLE BALANCE SHEET

Jonick Company
Balance Sheet
June 30, 2018

ASSETS		LIABILITIES		
Cash	\$15,000			
Accounts receivable	10,000			
Equipment	5,000			
Truck	30,000			
Total assets	\$60,000			
STOCKHOLDERS' EQUITY				
Common stock				\$15,000
Retained earnings				40,000
Total stockholders' equity				55,000
Total liabilities and stockholders' equity				\$60,000

Assets

Something of value the company owns

Tangible or intangible

- ❖ **Current Assets:**

Cash , marketable securities, accounts and notes receivables,
inventories, prepaid expenses

Generally appear in the BS as most liquid to least liquid

- ❖ **Property, Plant and equipments:**

- ❖ **long-term investments:**

Intangible assets lack physical substances, but they provide substantial
value to the company

Liabilities

*Internal liability → owner
Existing debt and obligations owed to the third parties
Payment / liability and risk transfer*

❖ Current Liabilities (short-term)

Accounts payable and Notes Payables, Current portion of long term obligations, Unearned revenues

❖ Non Current Liabilities

Capital, drawings, NP, - NL
long -term debts such as notes, bonds, and mortgages payables, Long-term lease obligations, Deferred income tax liabilities, Pension obligations

A deferred income tax liability can be thought of as the income tax expected to be paid in future years on income that has already been reported in the income statement but which, because of the tax law, has not been taxed.

The liability is valued using the enacted income tax rates expected to prevail in the future when the income is taxed.

Depreciation → fungible (salvage value) ✓ Amortization → intangible no salvage

Balance sheet example

TEDDY FAB INC. BALANCE SHEET December 31, 2100			
ASSETS		LIABILITIES AND SHAREHOLDERS' EQUITY	
Current assets		Current liabilities	
Cash and cash equivalents	\$ 100,000	Accounts payable	\$ 30,000
Accounts receivable	20,000	Notes payable	10,000
Inventory	15,000	Accrued expenses <i>not paid expense</i>	5,000
Prepaid expense	4,000	Deferred revenue	2,000
Investments	10,000	Total current liabilities	47,000
Total current assets	149,000	Long-term debt	200,000
Property and equipment		Total liabilities	247,000
Land	24,300	Shareholders' Equity	
Buildings and improvements	250,000	Common stock	10,000
Equipment	50,000	Additional paid-in capital	20,000
Less accumulated depreciation	(5,000)	Retained earnings	197,100
Other assets		Treasury stock	(2,000)
Intangible assets	4,000	Total liabilities and shareholders' equity	\$ 472,100
Less accumulated amortization	(200)		
Total assets	\$ 472,100	() ← subtract	

↑
↓es with time

Notes payable
↳ written agreement
by borrower

Unearned Revenue

Advance payment for service
that has to be delivered.

Owner's equity

Amount owed to the owner or owners by the company

Assets-liabilities = owner's equity → net assets

Components:

Owner's investment-owner's drawing = net investments

CHANGES IN STOCKHOLDERS' EQUITY

Common Stock + Retained Earnings = Total Stockholders' Equity

An example of journal entry to showcase stockholders equity change

1. Stockholders' equity before a business opens:

Date	Account	Debit	Credit

- Stockholders' equity after 30 stockholders invest \$1,000 each, for a total of \$30,000:

Date	Account	Debit	Credit
6/1	Cash	30,000	
	Common Stock		30,000

- Common stock + retained earnings = stockholders equity
- $30000 + 0 = 30,000$
- Each investor is now worth \$1,000 in the business.

- **Stockholders' equity after one month of operations**

Fees Earned is \$65,000 and total expenses are \$5,000

Common stock + retained earnings = stockholders equity
?

- **Stockholders' equity after one month of operations and after each of the thirty investors receives a cash dividend payment of \$500**

Common stock + retained earnings = stockholders equity
?

Generally four components:

Outstanding shares:

- it is the amount of company stock that has been sold to investors and not repurchased by the company
- it represents the total amount of stock the company has issued to the public investors, company officers, and company insiders

Additional paid-in capital:

- Shareholders' equity also includes the amount of money paid for shares of stock above the stated par value
- Par value – price of each stock

Retained earning:

- When a company retains income instead of paying it out as dividend a positive balance is created
- It can be mentioned as retention ratio or retained surplus

Treasury stock:

- Number of shares re-purchased from investors by the company
- Treasury stock reduces total shareholders' equity on a company's balance sheet.
- This figure is subtracted from a company's total equity

Balance sheet example

TEDDY FAB INC.
BALANCE SHEET
December 31, 2100

ASSETS

Current assets

Cash and cash equivalents	\$ 100,000
Accounts receivable	20,000
Inventory	15,000
Prepaid expense	4,000
Investments	10,000
Total current assets	149,000

Property and equipment

Land	24,300
Buildings and improvements	250,000
Equipment	50,000
Less accumulated depreciation	(5,000)

Other assets

Intangible assets	4,000
Less accumulated amortization	(200)

Total assets

\$ **472,100**

LIABILITIES AND SHAREHOLDERS' EQUITY

Current liabilities

Accounts payable	\$ 30,000
Notes payable	10,000
Accrued expenses	5,000
Deferred revenue	2,000
Total current liabilities	47,000

Long-term debt

200,000

Total liabilities

247,000

Shareholders' Equity

Common stock	10,000
Additional paid-in capital	20,000
Retained earnings	197,100
Treasury stock	(2,000)

Total liabilities and shareholders' equity

\$ **472,100**

Profit and Loss account

- A Profit and Loss (P&L) statement measures a company's sales and expenses during a specified period of time
- Shows a company's financial progress
- To construct a P&L statements
 - net sales
 - cost of goods sold
 - gross margin
 - selling and administrative expenses (operating expense)
 - net profit.

Why prepare and P&L statements?

- will give owners timely and important information
- adjustments can be done to recoup losses or decrease expenses
- allows outsiders to evaluate your ability to manage and use your company's resources
- It is the record of a business' operation that is used to assess taxes on profits earned

Components of P&L statements

- Net Sales
- Net Operating Profit = Gross Margin - Selling and Administrative Expenses
- Net Profit Before Taxes = Net Operating Profit + (Other Income - Other Expenses)
- Net profit = Net Profit Before Taxes - Income Taxes

Net Sales

- Total sales less allowances, returns and trade discounts
- The amount allowed for returns will vary considerably between different types of businesses
- Trade discounts means the difference between catalog price and the actual price paid by the customer

Cost of good sold \doteq Opening stock +
Net purchases + direct expenses - Closing
stock
or sales - Gross profit

- also called the cost of sales.
- For retailers and wholesalers it is the total price paid for the products
B2C B2B
sold during the accounting period. It is just the price of the goods.
- It does not include **selling or administrative expenses** (these expenses
are listed elsewhere on the P&L statement)
- For retailers and wholesalers the cost of good sold may be computed
either directly or indirectly

Cost of good sold

- Direct method: based on inventory
- CGS: Value of inventory at the beginning + value of good purchased during the accounting period - value of inventory at the end of the accounting period

(inventory consumed)

Indirect method: deflating sales figures

- For example, if a retail store has a storewide gross margin (or markup) of 40 percent and sales of ₹ 100,000 are recorded during the accounting period, the cost of goods sold would be ₹60,000.
- Total sale **x** Gross margin (%) = Gross margin (₹)
- ₹ 100,000 **x** 40% = ₹40,000
- Total sale (₹) – Gross margin (₹) = cost of good sold (₹)
- ₹100,000 - ₹40,000 = ₹60,000

CGS: for manufacturers

- both the acquisition of raw materials to create a product and the costs related to its manufacture
- direct costs and indirect costs.
- Direct cost includes : inventory cost, cost of raw materials, work-in-process inventories and direct labor cost
- Indirect cost includes: indirect labor, factory overhead and material supplies

Phone 1000 → 1500
C of Good

1500 - 1000 500

Net sale - cost of good sold = **Gross profit**

1500
Revenue

Gross Profit - Selling and Administrative Expenses = **Net Operating Profit**

Selling and administrative expenses (operating expense)

Net Operating Profit + (Other Income - Other Expenses) = Net Profit Before Taxes

Net profit before taxes - Income taxes = Net profit

Guess

GP - All costs = Net profit

Other income and other expenses:

- any unusual income or expense items not directly related to the operations of the business
- (+) **Other income** includes income from **interest**, dividends, miscellaneous sales, rents, royalties and gains from the sale of capital assets
- (-) **Other expenses** includes unexpected losses unrelated to normal course of business, and a **loss from disposal of equipment**



Revenue - C of Good

Gross Profit Margin:

$$\frac{\text{Gross Profit}}{\text{Sales Revenue}} \times 100$$

↳ total kitne ka becha

Net Profit Margin:

$$\frac{\text{Net Profit}}{\text{Sales Revenue}} \times 100$$

Revenue - C of Good - Other Expenses

Question:1

From the following P & L account given by a company , calculate the GPM and NPM

Sales revenue		\$73000
Cost of Sales		
	Opening stock	\$8000
	Purchases	13500
	Closing stock	<u>6750</u> = 14750 58250
Gross Profit		
Other Income		\$10267
Expenses		\$43750
Net Profit	Q7	----- (24500)
Taxes (@ 14%)		3430 -----
Net profit	WPA7	21070

Q2. Calculate NPM

Ans Q1 →
GIP → ₹ 8250
NP → ₹ 4500 ₹ 4500 - ₹ 2050
APAT →

- Sales revenue = ₹ 500,000
- Income tax = 20%
- Selling cost = ₹ 80,000
- Sales return = 1% of sales
- Labour cost = ₹ 75,000
- Cost of raw material = ₹ 25,000
- Trade discount = 2% of sales
- Loss estimated due to fire = ₹ 72,000

- Cost of raw material = ₹ 25,000
- Inventory consumed = ₹ 28,000
- Gain from old capital stock = ₹ 9,000
- Royalties earned = ₹ 9,000
- Administration expenditure = ₹ 74,000
- Factory overhead charges = ₹ 28,000
- Interest earned = ₹ 10,000

Tools for Financial Analysis

Financial statement analysis

Techniques

Ratio
analysis

Comparative
statements

Trend
analysis

Common
size analysis

Fund flow
statements

Cash flow
statement

Elizo KD Compare

Comparative statement analysis

*Total Assets and
liability .
capital*

Comparative statement analysis is an analysis of financial statement at different period of time

Again classified into two major parts such as comparative balance sheet analysis and comparative profit and loss account analysis

Comparative Balance Sheet Analysis

- Concentrates only the balance sheet of the concern at different period of time
- This type of analysis helps to understand the real financial position of the concern as well as how the assets, liabilities and capitals are placed during a particular period

Balance Sheet

Let's discuss the operational performance

Capital → Liability → w.r.t Company

As on 31st March

(Rs. in thousands)

Liabilities	2003 Rs.	2004 Rs.	Assets	2003 Rs.	2004 Rs.
Capital	2,845	2,845	Cash and Balance with RBI	27,06,808	22,37,601
Reserve and Surplus	39,66,009	47,65,406	Balance with Banks		
Deposits	4,08,45,783	4,40,42,730	and Money at call & and short notice		
Borrowings			Investments	11,36,781	16,07,975
Other Liabilities	7,27,671	2,84,690	Advances	2,14,21,060	2,35,37,098
Provisions	16,74,165	17,99,197	Fixed Assets	1,95,99,764	2,11,29,869
			Other Assets	4,93,996	5,36,442
				18,58,064	18,35,883
	4,72,16,473	5,08,94,868		4,72,16,473	5,08,94,868

Operational performance

<u>Particulars</u>	<u>Year ending 31st March</u>		Increased/ Decreased amount	Increased/ Decreased (%)
	2003 Rs	2004 Rs		
Assets				
<i>Current Assets</i>				
Cash and balance with RBI	27,06,808	22,37,601	(-) 4,69,207	(-)17.33
Balance with bank and ...	11,36,781	16,07,975	(+) 4,71,94	(+)41.45
Total current asset	38,43,589	38,45,576	1987	0.052

Trend analysis

- ▶ The financial statements may be analyzed by computing trends of series of information
- ▶ Involves the percentage relationship of each and every item of the statement with the common value of 100%
- ▶ These percentages may also be taken as **index number** showing relative changes in the financial information
- ▶ Only major items are considered

Base year ko 100% leta hai

Let's calculate trend analysis

Deposit ka
trend

Year	Deposits	Advances	Profit
1999	2,05,59,498	97,14,728	3,50,311
2000	2,66,45,251	1,25,50,440	4,06,287
2001	3,19,80,696	1,58,83,495	5,04,020
2002	3,72,99,877	1,77,26,607	5,53,525
2003	4,08,45,783	1,95,99,764	6,37,634
2004	4,40,42,730	2,11,39,869	8,06,755

Year	Deposit	
	Amount Rs.	Trend (%)
1999	2,05,59,498	100
2000	2,66,45,251	129.6
2001	3,19,80,696	155.5
2002	3,72,99,877	181.4
2003	4,08,45,783	198.7
2004	4,40,42,730	214.2

Current deposit
ke 1999 valle
deposit se divide

if P/L → Revenue from operations ✓

Common size analysis

Total Assets
→ in common

- Figures reported are converted into percentage to some common base

Particulars	31st March 2003 Amount	Percentage
Fixed Assets		
Investments	2,14,21,060	45.37
Advances	1,95,99,764	41.51
Fixed Assets	4,93,996	1.05
Other Assets	18,58,064	3.94
Total Fixed Assets	4,33,72,884	91.86
Current Assets		
Cash and Balance with RBI	27,06,808	5.73
Balance with banks and money at call and short notice	11,36,781	2.41
Total Current Assets	38,43,589	8.14
Total Assets	4,72,16,473	100.00

' Balance
sheet
✓

6F

Funds flow statements

- ▶ It helps to understand the changes in the financial position of a business enterprise between the beginning and ending financial statement dates
- ▶ It is also called as statement of sources and uses of funds.
- ▶ the requirement of funds and how they are proposed to be raised
- ▶ *next financial year ky liye pesa hai ya nahi?*

∂t

flow → Inflow
outflow

Cash flow statements

↳ cash & cash equivalent { Bank Balance, Cheque Book, marketable securities, current investment }.

- ▶ It shows the sources of cash inflow and uses of cash out-flow of the business concern during a particular period of time
- ▶ Deals with only short-term financial position of the business concern
- ▶ Helps to identify the liquidity position
- ▶ Cash flow statement provides a summary of operating, investment and financing cash flows and reconciles them with changes in its cash and cash equivalents such as marketable securities

$\text{cash} = \text{cash + cash equivalents } \{ \text{Bank Balance, Cheque Book, current investment, marketable securities} \}$

Difference?

Funds Flow Statements

1. Report of the movements of Working capital
2. Explains about how working capital raised and used
3. Indicates the results of current financial management
4. Increase or decrease in working capital is recorded
5. There is no opening and closing balance

Cash Flow Statements

1. Report of the sources and uses of cash
2. Explain the inflow and outflow of cash during a particular period
3. Indicates the factors contributing to the reduction cash balances in spite of profit (+)
4. Only cash receipts and payments are recorded
5. Starts with opening cash balances and ends with closing cash balances