

CHAPTER 3

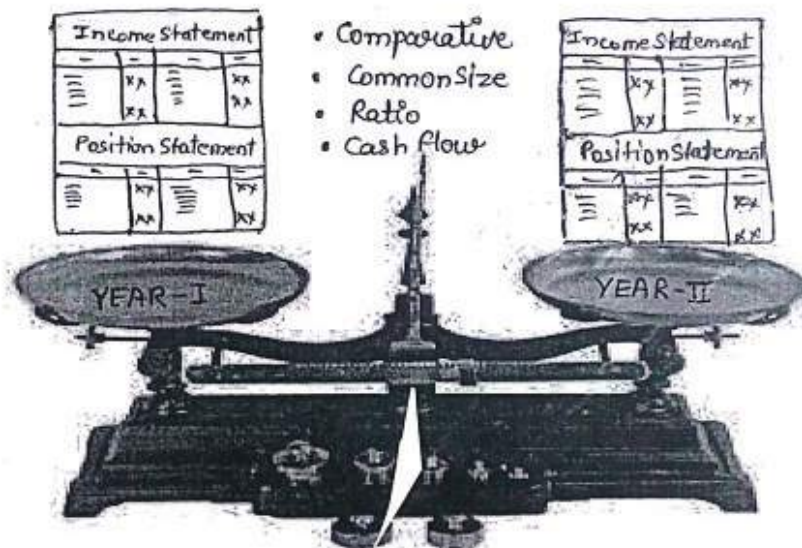
TOOLS FOR FINANCIAL STATEMENT ANALYSIS

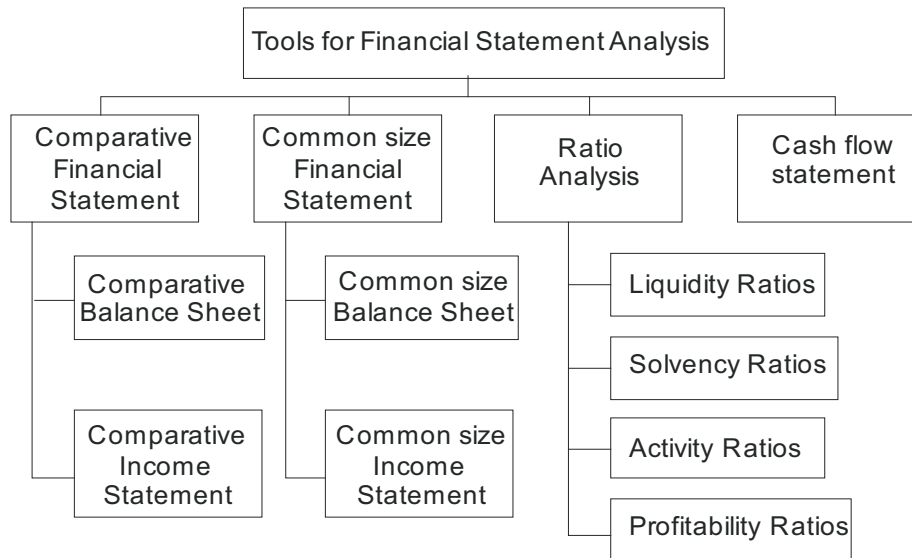
Points to remember:

1. In comparative statement deviation for current year to previous year is always divided by previous year amount.
2. In common size statement of Profit & Loss take revenue from operation as common base not the total revenue.
3. In common size Balance Sheet take Balance Sheet total amount either total assets or total liabilities as common base.

The various tools used for analysis of financial statements are:

- **Comparative Statement: Financial Statements of two years are compared** and changes in absolute terms and in percentage terms are calculated. It is a form of Horizontal Analysis.
- **Common Size Statement: Figures of Financial Statements are converted** in to percentage with respect to some common base.
- **Ratio Analysis:** It is a technique of study of relationship between various items in the Financial Statements.
- **Cash Flow Statement:** It is a statement that shows the inflow and outflow of cash and cash equivalents during a particular period which helps in finding out the causes of changes in cash position between the two balance sheet dates.





Comparative Financial Statements

It is a tool of financial Analysis that shows changes in each item of the financial statement in absolute amount and in percentage, taking the amounts of the preceding accounting period as the base.

Types of Comparative Statement:

1. Comparative Balance Sheet; and
2. Comparative Statement of Profit and Loss.

1. **Comparative Balance Sheet:** It shows the increases and decreases in various items of assets, equity and liabilities in absolute term and in percentage term by taking the corresponding figures in the previous year's balance sheet as a base.

Format for a Comparative Balance Sheet as per CBSE Circular No. 43 dated 2, July 2013

Comparative Balance Sheet ofLtd.

As at 31st March 2018-2019

Particulars	2018 ₹	2019 ₹	Absolute Change ₹	Percentage Change %
EQUITY AND LIABILITIES:				
Shareholders' funds				
Share Capital				
Reserve and Surplus				
Non-Current Liabilities				
Long term Borrowings				
Other long term liabilities				
Long term provisions				
Current liabilities				
Short term Borrowings				
Trade payables				
Other current liabilities				
Short term provision				
Total				
ASSETS:				
Non-current Assets				
Fixed Assets				
Non-current investments				
Long term Loans and Advances				
Current Assets				
Current investments				
Inventories				
Trade receivables				
Cash and cash equivalents				
Short term loans and advances				
Other current assets				
Total				

Absolute Change = Current year figure – Previous year figure

$$\% \text{ change} = \frac{\text{Related absolute change}}{\text{Related figures of Previous year}} \times 100$$

Illustration 1: From the following Balance Sheet of XYZ Ltd. as at 31st March 2016 and 2015. Prepare a comparative Balance Sheet.

Particulars	Note No.	31-3-2016	31-3-2015
I. Equity & Liabilities:			
Shareholder's funds		20,00,000	10,00,000
(a) Share Capital		4,00,000	6,00,000
(b) Reserves & Surplus		16,00,000	10,00,000
Non-current Liabilities			
Long term borrowings		8,00,000	4,00,000
Current liabilities			
Trade payables			
Total		48,00,000	30,00,000
II. Assets:			
Non-current Assets			
Fixed Assets:			
i. Tangible Assets		28,00,000	16,00,000
ii. Intangible Assets		6,00,000	4,00,000
Current Assets			
(a) Inventories		10,00,000	8,00,000
(b) Cash & Cash equivalents		4,00,000	2,00,000
Total		48,00,000	30,00,000

Solution:

Comparative Balance Sheet of XYZ Ltd.

As at 31st March 2015 & 2016

Particulars	Note No.	31-3-2015	31-3-2016	Absolute change ↑ OR ↓	% Change ↑ OR ↓
		I	II	II - I = III	$\frac{III}{I} \times 100$
Equity & Liabilities:					
(1) Shareholder's funds		10,00,000	20,00,000	10,00,000	100%
(a) Share Capital		6,00,000	4,00,000	(2,00,000)	(33.33%)
(b) Reserves & Surplus		10,00,000	16,00,000	6,00,000	60%
(2) Non-current Liabilities		10,00,000	16,00,000	6,00,000	60%
Long term borrowings					
(3) Current liabilities		4,00,000	8,00,000	4,00,000	100%
Trade payables					
Total		30,00,000	48,00,000	18,00,000	60%

Assets:					
(1) Non-current Assets					
Fixed Assets:	16,00,000	28,00,000	12,00,000		75%
(i) Tangible Assets	4,00,000	6,00,000	2,00,000		50%
(ii) Intangible Assets					
(2) Current Assets	8,00,000	10,00,000	2,00,000		25%
(a) Inventories	2,00,000	4,00,000	2,00,000		100%
(b) Cash & Cash equivalents	30,00,000	48,00,000	18,00,000		60%
Total					

Steps for Capital Calculations:

- Absolute amount of share capital for 31-3-2015 = 10,00,000
& for 31-3-2016 = 20,00,000
Absolute change in share capital = Current year figure – Previous year figure
= 20,00,000 – 10,00,000 = 10,00,000

$$\% \text{ change} = \frac{\text{absolute change}}{\text{Previous year figure}} \times 100$$

$$= \frac{10,00,000}{10,00,000} \times 100 = 100\%$$

- For Reserves & Surplus = $\frac{2,00,000}{6,00,000} \times 100 = 33.33\%$

Here absolute change is in negative figure

∴ % change will also be in bracket indicating -ve%

- So on _____

COMPARATIVE STATEMENT OF PROFIT AND LOSS/COMPARATIVE INCOME STATEMENT

Comparative Income Statement: It shows the increases and decreases in various items of income Statement in absolute amount and in percentage amount by taking the corresponding figures in the previous year's Income Statement as a base.

Format for a Comparative statement of Profit & Loss as per CBSE Cr. No. 43 dated 2 July 2013

Comparative Statement of Profit and Loss For the year ended on 31st March, 2018 and 2019

Particulars	2018 ₹	2019 ₹	Absolute Change ₹	Percentage Change %
I. Revenue from Operations				
II. Add: Other Income				
III. Total Revenue I + II				
IV. Expenses:				
a. Cost of Material Consumed				
b. Purchases of Stock-in-Trade				
c. Changes in inventories of Finished Goods, work-in-progress and Stock-in-Trade				
d. Employees benefit expenses				
e. Finance costs				
f. Depreciation				
g. Other expenses				
Total Expenses				
V. Profit before tax (III-IV)				
Less: Income Tax				
VI. Profit after tax				

Importance of Comparative Financial Statement

- To make the data simple and more understandable.
- To indicate the trend with respect to the previous year.
- To compare the firm's performance with the performance of other firm in the same business.

Illustration 2: From the following information of 'Anjali' Ltd. Prepare comparative statement of Profit & Loss.

Particulars	Note No.	31 st March 2016 (₹)	31 st March 2015 (₹)
Revenue from operations		20,00,000	16,00,000
Employees Benefit Expenses		10,00,000	8,00,000
Depreciation & Amortisation Expenses		25,000	20,000
Other expenses		75,000	1,80,000

Tax Rate 30%

Solution:

Comparative statement of profit & Loss For the year ended 31st March 2015-2016

Particulars	Note No.	31-3-2015 (₹)	31-3-2016 (₹)	Absolute change(₹) ↑ OR ↓	% Change(%) ↑ OR ↓
		I	II	III=II - I	$\frac{III}{IV} \times 100$ IV= I × 100
A. Revenue from Operations		16,00,000	20,00,000	4,00,000	25%
B. Expenses					
(i) Employee Benefit Expenses		8,00,000	10,00,000	2,00,000	25%
(ii) Depreciation & Amortisation Expenses		20,000	25,000	5,000	25%
(iii) Other Expenses		1,80,000	75,000	1,05,000	58.33%
Total Expenses		10,00,000	11,00,000	1,00,000	10%
C. Profit before tax(A-B)		6,00,000	9,00,000	3,00,000	50%
D. Less		1,80,000	2,70,000	90,000	50%
E. Profit after tax(C-D)		4,20,000	6,30,000	2,10,000	50%

Common Size Financial Statements 100% statements

Common Size Financial Statements are the statements in which amounts of the various items of financial statements are converted into percentages to a common base.

Types of Common Size Statements:

1. Common Size Balance Sheet; and
2. Common Size Statement of Profit and Loss.

Common Size Balance Sheet: It is a statement in which every item of assets, equity and liabilities is expressed as a percentage to the total of all assets or to the total of Equity and Liabilities.

Total Assets or Total Equity & Liabilities are taken as Common base

Format for a Common Size Balance Sheet:

As per CBSE Cr. No. 43 dated 2 July 2013

Common Size Balance Sheet of Ltd.

As at 31st March 2016 and 2017

Particulars	Absolute Amounts		Percentage of Balance Sheet Total	
	2016 ₹	2017 ₹	2016 %	2017 %
EQUITY AND LIABILITIES:				
Shareholders' Funds				
Share Capital				
Reserve and Surplus				
Non-Current Liabilities				
Long term Borrowings				
Other long term liabilities				
Long term provisions				
Current liabilities				
Short term Borrowings				
Trade payables				
Other current liabilities				
Short term provision				
Total			100	100
ASSETS:				
Non-current Assets				
Fixed Assets				
Non-current investments				
Long term Loans and Advances				
Current Assets				
Current investments				
Inventories				
Trade receivables				
Cash and cash equivalents				
Short term loans and advances				
Other current assets				
Total			100	100

Common Size Income Statement or Statement of Profit & Loss: It is a statement in which every item of Statement of Profit and Loss is expressed as a percentage to the amount of Revenue from Operations.

Sales (Revenue from operations) is taken as base

Format for a Common Size Statement of Profit and Loss

As per CBSE Cr. No. 43 dated 2 July 2013

Common Size Statement of Profit and Loss
For the years ended on 31st March, 2016 and 2017

Particulars	Absolute Amounts		Percentage of Revenue from operation (Net Sales)	
	2016 `	2017 `	2016 %	2017 %
I. Revenue from operations			100	100
II. Add: Other Income				
III. Total Revenue I+II				
IV. Expenses:				
a. Cost of Material Consumed				
b. Purchases of Stock in Trade				
c. Changes in inventories of Finished Goods, work in progress and Stock-in-Trade				
d. Employees benefit expenses				
e. Finance costs				
f. Depreciation				
g. Other expenses				
Total Expenses				
V. Profit before tax (III-IV)				
Less: Income Tax				
VI. Profit after tax				

Illustration 3: Prepare a 'Common Size Balance Sheet' on the basis of the information given in the Balance Sheet of Z Ltd. as at 31st March 2016.

Particulars	Note	31-3-16
	No.	₹
I. EQUITY AND LIABILITIES		
1. Shareholders' Funds		
(a) Share Capital		6,00,000
(b) Reserve and Surplus		1,00,000
2. Non-Current Liabilities		
(a) Long term borrowings		2,50,000
3. Current Liabilities		
(a) Trade Payable		50,000
Total		10,00,000
II. ASSETS		
1. Non-Current Assets		
(a) Fixed Assets		
(i) Tangible Assets		6,50,000
(b) Non-Current Investments		1,50,000
2. Current Assets		
(a) Inventories		70,000
(b) Trade Receivables		50,000
(c) Cash and cash equivalents		80,000
Total		10,00,000

Solution:

Common Size Balance Sheet of Z Ltd.

As at 31st March, 2016

Particulars	Note No.	Absolute Amount (₹)	Percentage of Balance Sheet Total
EQUITY AND LIABILITIES:			
1. Shareholders' Funds			
(a) Share Capital		6,00,000	60%
(b) Reserve and Surplus		1,00,000	10%
2. Non-Current Liabilities			
(a) Long term Borrowings		2,50,000	25%
3. Current liabilities			
(a) Trade payable		50,000	5%
Total		10,00,000	100%
ASSETS:			
1. Non-current Assets			
(a) Fixed Assets		6,50,000	65%
i. Tangible Assets		1,50,000	15%
(b) Non-current investments			
2. Current Assets			
(a) Inventories		70,000	7%
(b) Trade receivables		50,000	5%
(c) Cash and cash equivalents		80,000	8%
Total		10,00,000	100%

Step for calculation:

- Absolute Amount of share capital = ₹ 6,00,000% of Balance Sheet Total =

$$\frac{6,00,000}{10,00,000} \cdot 100 = 60\%$$
- For Reserves & Surplus $\frac{1,00,000}{10,00,000} \cdot 100 = 10\%$
- Similarly, for tangible Assets $\frac{6,50,000}{10,00,000} \cdot 100 = 65\%$
& so on.....

Illustration 4: From the following information for the years ended on, 31 March, 2015 and 2016, prepare a 'Comparative Statement of Profit & Loss' of Beta Ltd.

Particulars	Note No.	2015-2016	2014-15
Revenue from operations		7,00,000	5,00,000
Expenses		4,50,000	3,75,000
Other Incomes		75,000	1,00,000

Rate of Income Tax was 50%

Solution:

**Comparative Statement of Profit and Loss of Beta Ltd for the years ended
31st March, 2015 and 2016**

Particulars	Note No.	2014-15	2015-16	Absolute change	Change in %
Revenue from operations		5,00,000	7,00,000	2,00,000	40%
Add: Other Income		1,00,000	75,000	(25,000)	(25%)
Total Revenue		6,00,000	7,75,000	1,75,000	29.17%
Less: Expenses		3,75,000	4,50,000	75,000	20%
Profit before tax		2,25,000	3,25,000	1,00,000	44.44%
Less: tax @ 50%		1,12,500	1,62,500	50,000	44.44%
Profit after tax		1,12,500	1,62,500	50,000	44.44%

Illustration 5: Prepare a Comparative Income Statement and Common Size Statement of Profit and Loss from the following information:

Particulars	31 st March 2015	31 st March 2016
Revenue from operations	125%	140%
(% of cost of Material Consumed)		
Cost of Material Consumed	2,40,000	2,50,000
Other expenses (% of Revenue from Operations)	10%	12%
Other Income	15,000	20,000
Tax Rate	30%	30%

Solution

COMMON SIZE STATEMENT OF PROFIT AND LOSS OF
For the years ended on 31st March 2015 and 2016

Particulars	Amounts		Percentage of Revenue from operation (Net Sales)	
	31 st March 2015(₹)	31 st March 2016(₹)	31 st March 2015 %	31 st March 2016 %
I. Revenue from operations	3,00,000	3,50,000	100.00	100.00
II. Add: Other Income	15,000	20,000	5.00	5.71
III. Total Revenue (I+II)	3,15,000	3,70,000	105.00	105.71
IV. Expenses:				
a) Cost of Material Consumed	2,40,000	2,50,000	80.00	71.43
b) Other expenses	30,000	42,000	10.00	12.00
Total Expenses	2,70,000	2,92,000	90.00	83.43
V. Profit before tax (III-IV)	45,000	78,000	15.00	22.28
Less: Income Tax	(13,500)	(23,400)	(4.50)	(6.69)
VI. Profit after tax	31,500	54,600	10.50	15.59

COMPARATIVE INCOME STATEMENT

For the years ended on 31st March 2015 and 2016

Particulars	Absolute	Amount	Absolute Change	Percentage Change
	31 st March 2015(₹)	31 st March 2016(₹)	(₹)	%
I. Revenue from operations	3,00,00	3,50,000	50,000	16.67
II. Add: Other Income	15,000	20,000	5,000	33.33
III. Total Revenue (I+II)	3,15,000	3,70,000	55,000	17.46
IV. Expenses:				
a. Cost of Material Consumed	2,40,000	2,50,000	10,000	4.16
b. Other expenses	30,000	42,000	12,000	40.00
Total Expenses	2,70,000	2,92,000	22,000	8.15
V. Profit before tax (III-IV)	45,000	78,000	33,000	73.33
Less: Income Tax	(13,500)	(23,400)	(9,900)	(73.33)
VI. Profit after tax	31,500	54,600	23,100	73.33

Illustration 6: Fill in the missing information in the following comparative statement of profit and loss.

Comparative Statement of Profit and Loss for the year ended 31st March 2014 and 2015.

Particulars	Note No.	2014-15 (₹)	2015-16 (₹)	Absolute Change (₹)	Percentage Change %
I. Revenue from operations		-----	-----	-----	-----
II. Add: Other Income		25,000	-----	65,000	-----
III. Total Revenue (I+II)		-----	-----	-----	-----
IV. Expenses:					
a. Cost of Material Consumed		-----	6,00,000	2,00,000	-----
b. Other expenses		---	-----	-----	60%
Total Expenses		25,000			
V. Profit before tax (III-IV)		-----	-----	-----	-----
Less: Income Tax @ 30%		-----	-----	-----	-----
VI. Profit after tax		60,000	75,000	-----	-----
		-----	-----	-----	-----

Solution

Comparative Statement of Profit and Loss

For the year ended 31st March 2015 and 2016

Particulars	Note No.	2014-15 (₹)	2015-16 (₹)	Absolute Change (₹)	Percentage Change %
I. Revenue from operations		6,00,000	8,00,000	2,00,000	33.33%
II. Add: Other Income		25,000	90,000	65,000	260%
III. Total Revenue I+II		6,25,000	8,90,000	2,65,000	42.4%
IV. Expenses:					
a. Cost of Material Consumed		4,00,000	6,00,000	2,00,000	50%
b. Other expenses		25,000	40,000	15,000	60%
Total Expenses		4,25,000	6,40,000	2,15,000	50.59%
c. Profit before tax (III-IV)		2,00,000	2,50,000	50,000	25%
Less: Income Tax @ 30%		60,000	75,000	15,000	25%
d. Profit after tax		1,40,000	1,75,000	35,000	25%

Illustration 7: From the following statement of profit and loss of the Sakshi Ltd. for the year ended 31st March, 2017, Prepare comparative statement of Profit & Loss.

Statement of Profit & Loss

For the year indeed 31st March, 2017

Particulars	31 st March 2015-16	31 st March 2016-17
Revenue from operations	50,00,000	80,00,000
Expenses:		
a. Employee benefit expenses were 5% of Revenue form operation		
b. Other Expenses	11,80,000	13,60,000
Rate of Tax 35%		

Solution

Comparative Statement of Profit and Loss

For the year ended 31st March 2016 and 2017

Particulars	2015-16 (₹)	2016-17 (₹)	Absolute Change (₹)	Percentage Change
(i) Revenue from operations	50,00,000	80,00,000	30,00,000	60
Expenses :				
(a) Employee benefits Exp.	2,50,000	4,00,000	1,50,000	60
(b) Other expenses	11,80,000	13,60,000	1,80,000	15.25
	14,30,000	17,60,000	3,30,000	23.08
(ii) Total Expenses:	35,70,000	62,40,000	26,70,000	74.79
(iii) Profit before tax (I-II)	12,49,500	21,84,000	9,34,500	74.79
(iv) Less : Taxes @ 35%				
(v) Profit after tax (III-IV)	23,20,500	40,56,000	17,35,500	74.79

Things to Remember

∅ Why do we use tools for financial Analysis?

Financial statements are not ready to use/understand to the users. Therefore, we require tools to analyse them to be easily understandable by all the users.

∅ What are the tools for financial Analysis? Comparative financial statements common size financial statements Ratio Analysis cash flow statement

∅ List any two purposes of comparative statements?

1. To make the information simple & easily understandable.

2. To show the trend of changes.

∅ What are the steps for formation of comparative financial statement?

Step 1: Take the figure of previous year

Step 2: Take the figure of current year

Step 3: Find absolute change=current year figure-Previous year figure

Step 4: Find % change = $\frac{\text{Absolute change of an item}}{\text{Previous year figure of that item}} \times 100$

ØHow to show the negative change in any item

By putting brackets, we can show the negative change

ØName the types of comparative financial statements

1. Comparative Balance sheet
2. Comparative Income Statement/comparative statement of profit & loss

What is change in Inventories in inventories=opening stock-closing stock

ØCommon Size statements are also known as

Vertical Analysis and 100% statements

ØWhy do we call common size statements as vertical Analysis?

Why do we call common size statements as 100% statements?

Because all the items of financial statements have to be expressed in terms of a base i.e. 100.

Give any 2 utility of common size statements.

1. To create a relationship between base items & other items of financial statements
2. To establish common base for comparison purposes.

ØList 2 types of common size financial statements.

1. Common size Balance sheet
2. Common size income statement or common size statement of Profit & Loss

ØWhat are the steps for formation of common size financial statement?

Step 1: Take the figure of previous year

Step 2: Take the figure of current year

Step 3: Calculate % total of each item to total of base which is 100 for previous year.

Step 4: Calculate % total of each item to total of base which is 100 for current year.

Ø What is the common base in common size Balance sheet?

Total of equity & Liabilities or total Assets.

Ø What is the common base in common size income statement?

Revenue from operations

Ø What are the 2 types of comparisons in comparative financial statement.

1. Intra firm comparison
2. Inter firm comparison

Ø Give any 2 limitation of comparison financial statement

1. Historical records only
2. Affected by personal judgement

Ø Can we prepare common size statement for a year.

(yes)

Ø Can we prepare comparative financial statements for a year.

(no)