

# Analysis and Interpretation of Financial Accounts

(Common size, Comparative, Trend Analysis)

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# TOOLS OF FINANCIAL STATEMENT ANALYSIS

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graph TD; A[TOOLS OF FINANCIAL STATEMENT ANALYSIS] --> B[Comparative Financial Statements]; A --> C[Common-Size Financial Statements]; A --> D[Trend Analysis]; A --> E[Ratio Analysis];
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**Comparative  
Financial Statements**

T

**Common-Size  
Financial Statements**

**Trend Analysis**

**Ratio Analysis**

## Common Size Statement:

The statement wherein figures reported are converted into percentage to some common base is known as common size statement. Each percentage shows the relation of the individual item to its respective total.

## Vertical Analysis Formula

$$\text{Vertical Analysis Formula (Income Statement)} = \frac{\text{Income Statement Item}}{\text{Total Sales}} \times 100$$

$$\text{Vertical Analysis Formula (Balance Sheet)} = \frac{\text{Balance Sheet Item}}{\text{Total Assets (Liabilities)}} \times 100$$

**Common Size Income Statement**  
for the years ended ...

Particulars  (1)	Absolute Amounts		Percentage of Revenue from Operation (Net Sales)	
	Previous Year (₹)  (2)	Current Year (₹)  (3)	Previous Year (%)  (4)	Current Year (%)  (5)
I. <b>Revenue from Operations</b> (Net sales)	...	...	...	...
II. <b>Other Income</b>	...	...	...	...
III. <b>Total Revenue</b> (I + II)	...	...	...	...
IV. <b>Expenses</b>				
(a) Cost of Materials Consumed	...	...	...	...
(b) Purchases of Stock-in-trade	...	...	...	...
(c) Changes in Inventories of Finished Goods, Work-in-progress and Stock-in-trade	...	...	...	...
(d) Employess Benefit Expenses	...	...	...	...
(e) Finance Cost	...	...	...	...
(f) Depreciation and Amortisation	...	...	...	...
(g) Other Expenses	...	...	...	...
<b>Total Expenses</b>	...	...	...	...
V. <b>Profit before Tax</b> (III – IV)	...	...	...	...
VI. (–) Income Tax	...	...	...	...
VII. <b>Profit after Tax</b>	...	...	...	...

**Common Size Balance Sheet**  
as at ...

Particulars (1)	Absolute Amounts		Percentage of Balance Sheet Total	
	Previous Year (₹) (2)	Current Year (₹) (3)	Previous Year (%) (4)	Current Year (%) (5)
<b>I. EQUITY AND LIABILITIES</b>				
<b>1. Shareholders' Funds</b>				
(a) Share Capital	---	---	---	---
(i) Equity Share Capital	---	---	---	---
(ii) Preference Share Capital	---	---	---	---
(b) Reserves and Surplus	---	---	---	---
<b>2. Non-current Liabilities</b>				
(a) Long-term Borrowings	---	---	---	---
(b) Long-term Provisions	---	---	---	---
<b>3. Current Liabilities</b>				
(a) Short-term Borrowings	---	---	---	---
(b) Trade Payables	---	---	---	---
(c) Other Current Liabilities	---	---	---	---
(d) Short-term Provisions	---	---	---	---
<b>Total</b>	---	---	100	100
<b>II. ASSETS</b>				
<b>1. Non-current Assets</b>				
(a) Fixed Assets				
(i) Tangible Assets	---	---	---	---
(ii) Intangible Assets	---	---	---	---
(b) Non-current Investments	---	---	---	---
(c) Long-term Loans and Advances	---	---	---	---
<b>2. Current Assets</b>				
(a) Current Investments	---	---	---	---
(b) Inventories	---	---	---	---
(c) Trade Receivables	---	---	---	---
(d) Cash and Cash Equivalents	---	---	---	---
(e) Short-term Loans and Advances	---	---	---	---
(f) Other Current Assets	---	---	---	---
<b>Total</b>	---	---	100	100

Q)

<b>Liabilities</b>	<b>2005 (₹)</b>	<b>2006 (₹)</b>	<b>Assets</b>	<b>2005 (₹)</b>	<b>2006 (₹)</b>
Equity Capital	1,00,000	1,65,000	Fixed Assets	1,20,000	1,75,000
Preference Capital	50,000	75,000	Stock	20,000	25,000
Reserves	10,000	15,000	Debtors	50,000	62,500
Profit and Loss Account	7,500	10,000	Bills Receivable	10,000	30,000
Bank Overdraft	25,000	25,000	Prepaid Expenses	5,000	6,000
Creditors	20,000	25,000	Cash at Bank	20,000	26,500
Provision for Taxation	10,000	12,500	Cash in Hand	5,000	15,000
Proposed Dividend	7,500	12,500			
	<b>2,30,000</b>	<b>3,40,000</b>		<b>2,30,000</b>	<b>3,40,000</b>

Prepare common size Balance Sheet and interpret the same.

**Answer****Common Size Balance Sheet as on March 31, 2005 and 2006**

Particulars	2005		2006	
	Amount	Percentage	Amount	Percentage
Equity Capital	1,00,000	43.48	1,65,000	48.53
Preference capital	50,000	21.74	75,000	22.06
Reserves	10,000	4.35	15,000	4.41
Profit and Loss	7,500	3.26	10,000	2.94
Bank Overdraft	25,000	10.86	25,000	7.35
Creditors	20,000	8.69	25,000	7.35
Provision for Taxation	10,000	4.35	12,500	3.68
Proposed Dividend	7,500	3.27	12,500	3.68
<b>Total Liabilities</b>	<b>2,30,000</b>	<b>100.00</b>	<b>3,40,000</b>	<b>100.00</b>
Fixed Assets	1,20,000	52.17	1,75,000	51.47
Stock	20,000	8.69	25,000	7.35
Debtors	50,000	21.74	62,500	18.38
Bills Receivable	10,000	4.35	30,000	8.82
Prepaid Expenses	5,000	2.18	6,000	1.76
Cash at Bank	20,000	8.69	26,500	7.79
Cash in Hand	5,000	2.18	15,000	4.43
<b>Total Assets</b>	<b>2,30,000</b>	<b>100.00</b>	<b>3,40,000</b>	<b>100.00</b>



**Q) .From the following income statement, prepare a common size statement of profit and loss Jayant Ltd for the year ended 31st March, 2011**

Particulars	Amt (₹)
Revenue from Operations	25,38,000
(+) Other Incomes	38,000
<b>Total Incomes</b>	<b>25,76,000</b>
<b>Expenses</b>	
Cost of Revenue from Operations	14,00,000
Operating Expenses	5,00,000
<b>Total Expenses</b>	<b>19,00,000</b>
Profit before Tax	6,76,000
(-) Income Tax	3,38,000
Profit after Tax	3,38,000

**Ans.**

**Common Size Statement of Profit and Loss**  
for the year ended 31st March, 2011

Particulars	Amt (₹)	Percentage of Sales
I. Revenue from Operations (Sales)	25,38,000	100.00
II. Other Income	38,000	1.50
III. Total Revenue (I + II)	25,76,000	101.50
IV. Expenses		
(a) Cost of Revenue from Operations	14,00,000	55.16
(b) Operating Expenses	5,00,000	19.70
<b>Total Expenses</b>	<b>19,00,000</b>	<b>74.86</b>
V. Profit before Tax (III – IV)	6,76,000	26.64
VI. Tax	3,38,000	13.32
VII. Profit after Tax (V – VI)	3,38,000	13.32

# Comparative Financial Statements

Statements used to compare the items of profit and loss account and balance sheet for ascertaining the trend of the performance and profitability of an enterprise are known as comparative financial statements.



# Horizontal Analysis Formula

$$\text{Horizontal Analysis (absolute)} = \text{Amount in Comparison Year} - \text{Amount in Base Year}$$

$$\text{Horizontal Analysis (\%)} = \frac{\text{Amount in Comparison Year} - \text{Amount in Base Year}}{\text{Amount in Base Year}} \times 100$$

**Comparative Income Statement**  
for the years ended ...

Particulars	31st March, 2012 (₹)	31st March, 2013 (₹)	Absolute Change (Increase or Decrease) (₹)	Percentage Change (Increase or Decrease) (%)
<b>I. Revenue from Operations</b>	...	...	...	...
<b>II. Other Income</b>	...	...	...	...
<b>III. Total Revenue (I + II)</b>	...	...	...	...
<b>IV. Expenses</b>				
(a) Cost of Materials 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 Cost	...	...	...	...
(f) Depreciation and Amortisation	...	...	...	...
(g) Other Expenses	...	...	...	...
<b>Total Expenses</b>	...	...	...	...
<b>V. Profit before Tax (III – IV)</b>	...	...	...	...
(–) <b>Income Tax</b>	...	...	...	...
<b>VI. Profit after Tax</b>	...	...	...	...

**Comparative Balance Sheet**  
as at ...

Particulars	Previous Year (₹)	Current Year (₹)	Absolute Change (Increase or Decrease) (₹)	Percentage Change (Increase or Decrease) (%)
<b>I. EQUITY AND LIABILITIES</b>				
<b>1. Shareholders' Funds</b>				
(a) Share Capital				
(i) Equity Share Capital	...	...	...	...
(ii) Preference Share Capital	...	...	...	...
(b) Reserves and Surplus	...	...	...	...
<b>2. Non-current Liabilities</b>				
(a) Long-term Borrowings	...	...	...	...
(b) Long-term Provisions	...	...	...	...
<b>3. Current Liabilities</b>				
(a) Short-term Borrowings	...	...	...	...
(b) Trade Payables	...	...	...	...
(c) Other Current Liabilities	...	...	...	...
(d) Short-term Provisions	...	...	...	...
<b>Total</b>	...	...	...	...
<b>II. ASSETS</b>				
<b>1. Non-current Assets</b>				
(a) Fixed Assets				
(i) Tangible Assets	...	...	...	...
(ii) Intangible Assets	...	...	...	...
(b) Non-current Investments	...	...	...	...
(c) Long-term Loans and Advances	...	...	...	...
<b>2. Current Assets</b>				
(a) Current Investments	...	...	...	...
(b) Inventories	...	...	...	...
(c) Trade Receivables	...	...	...	...
(d) Cash and Cash Equivalents	...	...	...	...
(e) Short-term Loans and Advances	...	...	...	...
(f) Other Current Assets	...	...	...	...
<b>Total</b>	...	...	...	...

**Q) From the following income statement of Hyper Co. Ltd, for the year ending 2002 and 2003, prepare the comparative statement.**

### **Income Statement**

(₹ in lakhs)

<b>Particulars</b>	<b>2005</b>	<b>2006</b>
Net Sales	900	1,050
Cost of Goods Sold	650	850
Administrative Expenses	40	40
Selling Expenses	20	20
<b>Net Profit</b>	<b>190</b>	<b>140</b>

**Answer** Comparative Income statement of Day Dreaming Company Limited for the year ended 2005 and 2006

Particulars	2005	2006	Absolute Change	Change in %
Net Sales	900	1050	150	16.67
(-) Cost of Goods Sold	(650)	(850)	(200)	(30.77)
Gross Profit (A)	250	200	(50)	(20.0)
(-) Operating Expenses				
Administrative Expenses	(40)	(40)		
Selling Expenses	(20)	(20)		
Operating Profit (B)	190	140	(50)	(26.31)

### Working Note

Absolute change = Current year – Previous year

$$\text{Change in \%} = \frac{\text{Absolute change}}{\text{Previous year}} \times 100$$

**Q) .On the basis of the following information extracted from the statement of profit and loss for the year ended 31st March, 2012 and 2013, prepare a comparative statement of profit and loss:**

Particulars	Note No.	31st March, 2013	31st March, 2012
Revenue from Operations		30,00,000	20,00,000
Expenses		21,00,000	12,00,000
Other Income		3,60,000	4,00,000
Tax Rate		50%	50%

**Ans.**

**Comparative Statement of Profit and Loss**  
for the years ended 31st March 2013 and 2012

Particulars	31st March, 2012	31st March, 2013	Absolute Change (Increase or Decrease) (₹)	Percentage Change (Increase or Decrease) (%)
I. Revenue from Operations (Sales)	20,00,000	30,00,000	10,00,000	50.00
II. Other Income	4,00,000	3,60,000	(40,000)	(10.00)
III. Total Revenue (I + II)	24,00,000	33,60,000	9,60,000	40.00
IV. Expenses	12,00,000	21,00,000	9,00,000	75.00
V. Profit before Tax (III – IV)	12,00,000	12,60,000	60,000	5.00
VI. Tax @ 50%	6,00,000	6,30,000	30,000	5.00
VII. Profit after Tax (V – VI)	6,00,000	6,30,000	30,000	5.00



# Trend analysis

In trend analysis First year amount is consider as base year and compares the amounts of all years (2<sup>nd</sup> , 3<sup>rd</sup>, 4<sup>th</sup>) with that base year to ascertain the trend in percentage.

## Calculate trend percentages by:

- Selecting a base year as 100.
- Assigning a weight of 100% to the all amounts appearing on the base-year financial statements.
- $\text{Trend \%} = \text{current year amount} / \text{Base year} \times 100$  to get a percentage.

M/s. Anuraj Ltd. carrying on business, furnished their position as on 31st March, 2012, 2013 and 2014

**Balance Sheet as at 31st March**

Particulars	2012 (₹)	2013 (₹)	2014 (₹)
<b>Assets</b>			
Fixed Assets	30,000	25,500	43,800
Investment	13,000	13,000	18,400
Current Assets	27,000	33,200	18,900
	70,000	71,700	81,100
<b>Liabilities</b>			
Share Capital	33,000	31,350	41,000
Debentures	27,000	28,350	9,500
Liabilities for expenses	10,000	12,000	30,600
	70,000	71,700	81,100

Prepare Trend Balance Sheet in vertical form.

(Oct. 2012, adapted)

**Solution :**

**ANURAJ LTD.**  
**Trend Analysis of Balance Sheet**

	Absolute Amounts			Trend %		
	2012 ₹	2013 ₹	2014 ₹	2012	2013	2014
<b>I. SOURCES OF FUNDS</b>						
Share Capital	33,000	31,350	41,000	100	95.00	124
Debentures	27,000	28,350	9,500	100	105.00	35
<b>Capital Employed</b>	<b>60,000</b>	<b>59,700</b>	<b>50,500</b>	<b>100</b>	<b>99.50</b>	<b>84</b>
<b>II. APPLICATION OF FUNDS</b>						
1. Fixed Assets	30,000	25,500	43,800	100	85.00	146
2. Investments	13,000	13,000	18,400	100	100.00	142
3. Current Assets	27,000	33,200	18,900	100	123.00	70
4. Current Liabilities	10,000	12,000	30,600	100	120.00	306
5. Working Capital (3 - 4)	17,000	21,200	(11,700)	100	125.00	(69)
6. Capital Employed	60,000	59,700	50,500	100	99.50	84

### Illustration )

From the following data relating to the assets of Balance Sheet of ABC Ltd., for the period ended March 31, 2011 to March 31, 2014, calculate trend percentages.

(Rs. in Lakhs)

Particulars	2010-11	2011-12	2012-13	2013-14
Cash	100	120	80	140
Debtors	200	250	325	400
Stock	300	400	350	500
Other current assets	50	75	125	150
Land	400	500	500	500
Buildings	800	1000	1200	1500
Plant	1000	1000	1200	1500

**Solution:**

#### Trend Percentages

(Rs. in lakhs)

Assets	2010-11	Trend %	2011-12	Trend %	2012-13	Trend %	2013-14	Trend %
<b>Current Assets</b>								
Cash	100	100	120	120	80	80	140	140
Debtors	200	100	250	125	325	162.5	400	200
Stock	300	100	400	133.33	350	116.67	500	166.67
Other Current Assets	50	100	75	150	125	250	150	300
	<b>650</b>	<b>100</b>	<b>845</b>	<b>130</b>	<b>880</b>	<b>135.38</b>	<b>1,190</b>	<b>183.08</b>
<b>Non-current Assets</b>								
Land	400	100	500	125	500	125	500	125
Buildings	800	100	1,000	125	1,200	150	1,500	187.5
Plant	1000	100	1,000	100	1,200	120	1,500	150
	<b>2,200</b>	<b>100</b>	<b>2,500</b>	<b>113.64</b>	<b>2,900</b>	<b>131.82</b>	<b>3,500</b>	<b>159.00</b>
<b>Total Assets</b>	<b>2,850</b>	<b>100</b>	<b>3,345</b>	<b>117.36</b>	<b>3,780</b>	<b>132.63</b>	<b>4,690</b>	<b>164.56</b>

**Interpretation:**

1. The assets have exhibited a continuous increasing trend over the period.
2. The current assets increased much faster than the Non-current assets.
3. Sundry debtors and other current assets and buildings have shown higher growth.

Thank you