

## FINANCIAL STATEMENT ANALYSIS

### COMPARATIVE AND COMMON SIZE

#### XLOOKUP

=XLOOKUP(\$A4, IS!\$A\$2:\$A\$27, IS!B\$2:B\$27, "", 0, 1)

part	reason
\$A4	keeps column locked (A) so when you drag right it doesn't change, but row can change while dragging down
IS!\$A\$2:\$A\$27	lookup column must remain constant always
IS!B\$2:B\$27	<b>No \$ before B</b> → so when you drag to right → B becomes C, then D, E automatically
""	blank if not found
0	exact match
1	search from top (default)

**So copy direction works like this**

Cell	return array automatically becomes
B4	IS!B\$2:B\$27 → FY2024
C4	IS!C\$2:C\$27 → FY2023
D4	IS!D\$2:D\$27 → FY2022
E4	IS!E\$2:E\$27 → FY2021
F4	IS!F\$2:F\$27 → FY2020

No manual change required.

## COMPARATIVE INCOME STATEMENT

```
=IFERROR((XLOOKUP($A4,IS!$A$2:$A$27,IS!B$2:B$27,"",0,1)/XLOOKUP($A4,IS!$A$2:$A$27,IS!C$2:C$27,"",0,1))-1,"")
```

### Descriptive Explanation for

This formula is used to compute the **Year-on-Year (YoY) percentage change** for a specific line item in the Income Statement, by comparing the current year value (FY2024) with the previous year value (FY2023). It uses XLOOKUP to fetch the exact numbers from the Income Statement source sheet and then applies the YoY growth formula.

### How the Formula Works Step-by-Step

1. **XLOOKUP(\$A4, IS!\$A\$2:\$A\$27, IS!B\$2:B\$27, "",0,1)**
  - Looks at the account name written in cell A4 (e.g., "(a) Revenue")
  - Finds the same account name in the IS sheet (range A2:A27)
  - Returns the corresponding FY2024 value from column B in the IS sheet
  - "" ensures that if the item is not found, the function returns a blank instead of an error
  - 0 ensures **exact match only** (this prevents wrong match due to partial words)
  - 1 searches from top to bottom in the list
2. **XLOOKUP(\$A4, IS!\$A\$2:\$A\$27, IS!C\$2:C\$27, "",0,1)**
  - Same logic as above, but returns FY2023 value from column C of the IS sheet
3. **(FY2024 value / FY2023 value) - 1**
  - This is the standard financial formula for year-on-year growth percentage
  - e.g., if revenue increased from 60,000 to 72,000 → YoY growth =  $(72,000 / 60,000) - 1 = 0.20$  or 20%
4. **IFERROR( ... , "" )**
  - If division gives an error (for example if FY2023 value is zero or missing), the cell will display **blank** rather than showing an error code like #DIV/0!.

### Why this formula is important

- It gives a **consistent, automated** YoY calculation for all items in the income statement.
- It avoids manual referencing errors.
- It is dynamic — if the data in IS sheet changes, YoY results update instantly.
- Error handling makes reports clean and professional without distracting error messages.

### **Final Understanding Sentence**

This formula compares a specific income statement item across two financial years using XLOOKUP to fetch the correct values, computes the percentage change, and suppresses any error output, making it reliable and presentable for comparative financial analysis.

## comparative Balance Sheet XLOOKUP YoY % change formula

```
=IFERROR(XLOOKUP($A5,BS!$A$2:$A$36,BS!B$2:B$36,"",0,1)/XLOOKUP($A5,BS!$A$2:$A$36,BS!C$2:C$36,"",0,1)-1,"")
```

### What this formula does

This formula calculates the **Year-on-Year (%) change** for a specific Balance Sheet item by comparing the current year value (FY2024) with the previous year value (FY2023). It automatically pulls the correct values from the Balance Sheet sheet using XLOOKUP and then computes the % change between the two years.

### Step-by-Step Functional Explanation

#### 1. XLOOKUP(\$A5, BS!\$A\$2:\$A\$36, BS!B\$2:B\$36, " ", 0, 1)

- Looks at the line item description in cell **A5** (e.g., “Property, Plant and Equipment”)
- Searches for that description in column A of the Balance Sheet (BS sheet) from rows 2 to 36
- Returns the corresponding FY2024 value from column B on the BS sheet
- " " ensures cell returns blank instead of #N/A if item not found
- 0 forces **exact match** (required for financial mapping accuracy)
- 1 searches from top to bottom

#### 2. XLOOKUP(\$A5, BS!\$A\$2:\$A\$36, BS!C\$2:C\$36,"",0,1)

- Same search, but returns the FY2023 value (from column C)

#### 3. Divide FY2024 Value / FY2023 Value – 1

- This gives YoY % movement
- Example: If PPE increased from 40,000 to 50,000 →  $YoY = (50,000/40,000) - 1 = 0.25 = +25\%$

#### 4. IFERROR( ... , "" )

- If either year value is blank or zero → formula returns blank, not error
- This keeps comparative balance sheet analysis clean and professional

### Why this formula is important for Balance Sheet analytics

- It provides consistent, automated year-to-year comparison across all assets, liabilities and equity items.

- You can use it to quickly identify balance sheet growth, shrinkage, leverage trends, liquidity buildup etc.
- Removes manual referencing mistakes and saves time when reconciling YoY movements.

This formula fetches a balance sheet item's value across two consecutive years using XLOOKUP, calculates percentage growth or decline between those two years, and hides any error output, making comparative balance sheet analysis fast, reliable and professional.

### Common-Size Income Statement

=XLOOKUP(\$A4,IS!\$A\$2:\$A\$27,IS!B\$2:B\$27,"",0,1)/XLOOKUP(ISCOMM!\$A\$4,IS!\$A\$2:\$A\$27,IS!B\$2:B\$27,"",0,1)

### What this formula calculates

This formula converts every individual income statement item into a **common-size percentage** of the base item (usually Total Income / Revenue) for FY2024.

This allows easy comparison across years regardless of absolute size changes.

### Step-by-Step Explanation

Component	Meaning in this formula
\$A4	The specific item whose percentage we want to compute (e.g., “Employee Benefit Expenses”, “Other Income” etc.)
IS!\$A\$2:\$A\$27	The list of line items in the original Income Statement (source sheet IS) where we perform matching
IS!B\$2:B\$27	The FY2024 values for each line item in the IS sheet
ISCOMM!\$A\$4	The reference item used as the <b>base denominator</b> (typically “Total Income (I+II)”)
" "	If item not found → return blank
0	Exact match only
1	Search direction top to bottom

### How the formula works logically

#### 1. First XLOOKUP

- Finds the numeric value for the particular item in A4 from FY2024.

#### 2. Second XLOOKUP

- Finds the numeric value of the *base* item (Total Income) in FY2024.

#### 3. Division

- Divides item value by total income to convert the number into a **percentage of total income**.

### Example Interpretation

If Revenue = 73,303 and “Other Income” = 1,149.88

Common size % =  $1,149.88 / 73,303 = 1.57\%$

**Why Common Size Income Statement is useful**

- Makes multi-year comparison possible regardless of company growth
- Excellent for cross sectional industry comparison
- Helps identify cost/expense behavior trends independent of size

This formula converts raw rupee values in the Income Statement into relative proportion percentages by dividing each line item by the Total Income, using XLOOKUP to accurately fetch both numerator and denominator values from the original financial statement.

## Common Size Balance Sheet Formula

```
=XLOOKUP($A5,BS!$A$2:$A$36,BS!B$2:B$36,"
",0,1)/XLOOKUP(BS_COMM!$A$20,BS!$A$2:$A$36,BS!B$2:B$36," ",0,1)
```

### What this formula calculates

This formula converts every Balance Sheet line item into a **percentage of Total Assets** for FY2024.

This helps to understand the structure and composition of assets, liabilities and equity in relative terms — not absolute rupee values.

### Step-by-Step Explanation

Component	Meaning in this formula
\$A5	Specific balance sheet line item whose % we want to calculate (e.g., PPE, Inventory, Share Capital, Borrowings etc.)
BS!\$A\$2:\$A\$36	Range of item descriptions in original Balance Sheet sheet (list of items)
BS!B\$2:B\$36	FY2024 values column for each balance sheet item
BS_COMM!\$A\$20	Cell containing the base item name for denominator (usually " <b>Total Assets</b> ")
" "	If item is not found → return blank
0	Exact match only — prevents mismatched item reference
1	Search direction top to bottom — default sequence

### How this formula works logically

1. The first XLOOKUP finds the FY2024 value for the particular balance sheet item located in \$A5  
(example: PPE value)
2. The second XLOOKUP finds the FY2024 **Total Assets** value  
(this is the denominator for common-sizing)
3. The item value is divided by the Total Assets value

This produces % of Total Assets composition.

### Example Interpretation



If Total Assets = ₹4,50,000 crore  
and PPE = ₹1,80,000 crore

Common Size % of PPE =  $1,80,000 / 4,50,000 = 0.40 = 40\%$

#### **Why Common Size Balance Sheet is useful**

- Highlights which items dominate asset structure
- Shows how liabilities and capital financing composition is changing over time
- Improves comparison across companies of different size (standardization)

This formula expresses each Balance Sheet item as a percentage of Total Assets by using XLOOKUP to dynamically fetch both the specific item value and the Total Assets value, giving structural composition analysis of the Balance Sheet.