

## Common Size Ratios

### Introduction

Common size ratios provide a simplified and comparable view of financial performance. Common size ratios standardize financial statements by expressing each line item as a percentage of a key base—typically sales for the income statement and total assets for the balance sheet. This approach removes the impact of company size, enabling meaningful comparisons across periods, companies, and industries. They provide a clear and consistent view of cost structure, asset allocation, and overall financial position, supporting more informed and strategic decision-making.

### Why These Ratios Matter

Common size ratios are important because they:

#### Understand Cost Structure & Profitability

- Break down revenue into key expense components (COGS, SG&A, etc.)
- Highlight gross and net margin performance
- Identify margin expansion or contraction trends
- Assess pricing power and cost efficiency

#### Analyze Asset Allocation & Liquidity

- Show how assets are deployed (cash, receivables, inventory, PPE)
- Evaluate working capital composition
- Provide insight into liquidity levels
- Identify capital intensity of the business

#### Evaluate Capital Structure & Risk

- Clarify the mix of debt versus equity financing
- Assess leverage levels and financial risk
- Highlight short-term liquidity exposure
- Support solvency and risk analysis

### Key Metrics

#### Income Statement Common Size Ratios (as % of Sales)

- Gross Margin =  $\text{Gross Profit} \div \text{Sales}$
- Net Margin =  $\text{Net Income} \div \text{Sales}$
- COGS % =  $\text{Cost of Goods Sold} \div \text{Sales}$
- Operating Expense % =  $\text{SG\&A} \div \text{Sales}$

Each income statement item is expressed as a percentage of total sales.

### Balance Sheet Common Size Ratios (as % of Total Assets)

- Cash % of Total Assets
- Receivables % of Total Assets
- Inventory % of Total Assets
- Liabilities % of Total Assets
- Equity % of Total Assets

Each balance sheet item is expressed as a percentage of total assets.

### Core Formulas

- **Income Statement Common Size %**  
= Income Statement Account ÷ Sales × 100
- **Balance Sheet Common Size %**  
= Balance Sheet Account ÷ Total Assets × 100

### Computation Examples

#### Example 1: Gross Margin (Income Statement)

- Sales = \$2,000,000
- Gross Profit = \$800,000
- **Gross Margin** =  $800,000 \div 2,000,000 \times 100 = 40\%$

#### Example 2: COGS % (Income Statement)

- COGS = \$1,200,000
- Sales = \$2,000,000
- **COGS %** =  $1,200,000 \div 2,000,000 \times 100 = 60\%$

#### Example 3: Cash % of Total Assets (Balance Sheet)

- Cash = \$150,000
- Total Assets = \$1,000,000
- **Cash %** =  $150,000 \div 1,000,000 \times 100 = 15\%$

#### Example 4: Liabilities % of Total Assets (Balance Sheet)

- Total Liabilities = \$600,000
- Total Assets = \$1,000,000

- **Liabilities %** =  $600,000 \div 1,000,000 \times 100 = 60\%$

## Interpretation Guidance

### Cost Structure & Margin Insights

- Rising COGS % → potential supplier pricing pressure or production inefficiencies
- Declining operating expense % → improved cost control or economies of scale
- Higher net margin % → stronger profitability and pricing power

### Asset Allocation Indicators

- High cash % → strong liquidity or underutilized capital
- High receivables % → potential collection issues or lenient credit policies
- High inventory % → slow-moving stock or operational inefficiencies
- High PPE % → capital-intensive business model

### Capital Structure & Risk Signals

- High liabilities % → increased leverage and financial risk
- Low equity % → aggressive financing strategy
- High short-term liabilities % → potential liquidity pressure

## How This Supports Decision-Making

### For Management

- Optimizes cost structure and improves margin performance
- Enhances working capital and liquidity management
- Supports operational efficiency improvements

### For Investors

- Enables comparison across companies of different sizes and industries
- Assesses profitability, risk, and financial structure
- Supports benchmarking and competitive analysis

### For Strategy & Planning

- Identifies long-term performance trends
- Supports capital allocation and financial planning
- Enhances decision-making through standardized financial analysis