



# Activity Ratios and Profitability Ratios

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### Introduction

- An activity ratio broadly describes any type of financial metric that helps investors and research analysts determine how efficiently a company uses its assets to generate revenues and cash.
- It measures the efficiency of a business in using and managing its resources to generate maximum possible revenue.
- The different types of activity ratios show the business' ability to convert different accounts within the balance sheet such as capital and assets into cash or sale.
- These ratios are also known as asset management ratios or performance/ efficiency ratios.

### What Is Meant by Activity Ratio?

- The activity ratios show the connection between sales and a given asset. It indicates the investment in one particular group of assets and the revenue the assets are producing.
- Assets such as raw materials and machinery are introduced to generate sales and thereby, profits. The activity ratios show the speed at which the assets are converted into sales.
- Activity ratios play an active role in evaluating the operating efficiency of the business as it not only shows how the company generates revenue but also how well the company is managing the components in its balance sheet.

### What Are the Different Activity Ratios?

- Stock Turnover ratio or Inventory Turnover Ratio
- Debtors Turnover ratio or Accounts Receivable Turnover Ratio
- Creditors Turnover ratio
- Working capital turnover ratio.
- Total Asset Turnover ratio
- Fixed Asset Turnover ratio
- Current Asset Turnover ratio

### Stock Turnover ratio or Inventory Turnover Ratio

- highlights the relationship between the inventory or stock in the business and cost of the goods sold. It shows how fast the inventory gets cleared in an accounting period or in other words, the number of times the inventory or the stock gets sold or consumed. For this reason, it is also known as the inventory turnover ratio.
- It is calculated by the following formula
  Stock Turnover Ratio = Cost of Goods Sold / Average Inventory
  where, Average Inventory = (Opening Stock + Closing Stock)/2
- A high stock turnover ratio is indicative of fast moving goods in a company while a low stock turnover ratio indicates that goods are not getting sold and are being stored at warehouses for an extended period of time.
- The inventory turnover ratio details the efficiency with which inventory is managed.
- A low inventory turnover ratio may indicate overstocking, poor marketing or a declining demand for the product. A high ratio is an indicator of good inventory management and a higher demand for the product.

### Debtors Turnover ratio or Accounts Receivable Turnover Ratio

- It measures how many times a business can turn its accounts receivables into cash.
- It is calculated by dividing the net credit sales during a specific period by the average accounts receivables. The average accounts receivable is calculated by adding the value of the accounts receivable at the beginning of the desired period to the value at the end and then dividing it by two.
- Accounts Receivable Turnover = Net Credit Sales / Average Accounts Receivable
- The ratio indicates the efficiency with which the business is able to collect credit it issues its customers.
- While a high ratio may indicate the company operates on a cash basis or has quality customers that pay off their debts quickly, a low ratio can suggest a bad credit policy and poor collecting process. It helps in assessing if its credit policies are helping or hurting the business.
- This ratio is an important indicator of a company which shows how well a company is able to provide credit facilities to its customers and at the same time is also able to recover the due amount within the payment period.
- The formula for calculating Debtor Turnover ratio is

Debtor Turnover Ratio = Credit Sales / Average Debtors where, Average Debtor = (Opening Debtor + Closing Debtor)/2

### **Creditors Turnover Ratio**

- Creditors turnover ratio is a measure of the capability of the company to pay off the amount for credit purchases successfully in an accounting period.
- It shows the number of times the account payables are cleared by the company in an accounting period. For this reason, it is also known as the Accounts payable turnover ratio.
- The formula for calculating creditors turnover ratio is Creditors Turnover ratio = Net Credit Purchases / Average Creditors
  - where, Average Creditor = (Opening Creditor + Closing Creditor)/2
- Where average creditors are also known as average accounts payable.
- A high ratio is indicative that a company is able to finance all the credit purchases and vice versa.

### **WORKING CAPITAL RATIO**

- The working capital turnover ratio indicates a business effectiveness in utilizing its working capital. Working capital is the total amount of current assets minus the current liabilities.
- The ratio is calculated by dividing the net sales by the working capital. The ratio helps you figure out the net annual sales generated by the average amount of working capital during a year.

Working Capital Ratio = Net Sales or Costs of Goods Sold / Working Capital

- A high working capital ratio shows that the business is efficiently using its short-term liabilities and assets for supporting sales. A low ratio could indicate bad debts or obsolete inventory.
- This ratio is helpful in determining the effectiveness with which a company is able to utilise its working capital for generating sales of its goods.

### **ASSET TURNOVER RATIO**

- The asset turnover ratio measures the efficiency with which a company utilizes its assets to generate sales.
- measures the company's ability to generate sales from its assets. The total asset turnover ratio calculates how much sales the assets are producing.

Asset Turnover Ratio = Sales / Average Total Assets

• This ratio is calculated at the end of a financial year and can vary widely from one industry to another. The higher the asset turnover ratio, the better the company is performing.

#### FIXED ASSET TURNOVER RATIO

• This ratio measures the business' ability to generate sales from fixed assets such as property, plant and equipment. To calculate the ratio, you need to divide the net sales by the total property, plant, and equipment net of accumulated depreciation.

Fixed Asset Turnover Ratio = Net Sales / (Fixed Assets – Accumulated Depreciation)

- A high turnover ratio indicates the assets are being utilized efficiently for generating sales.
- It is generally used as a performance indicator for manufacturing industries.

#### **Current Asset Turnover Ratio**

- Current Asset Turnover Ratio is an activity ratio or turnover ratio that measures a firm's ability in generating sales from the current assets, which includes cash, accounts receivables, inventory etc.
- The current asset turnover ratio is calculated as follows
  - Current Asset Turnover Ratio = Net Sales / Current Assets
- A higher current turnover ratio is indicative of the company's ability to generate more sales using minimum investment in the current assets.



### Introduction

- Profitability ratios are metrics that assess a company's ability to generate income relative to its revenue, operating costs, balance sheet assets, or shareholders' equity.
- Profitability ratios show how efficiently a company generates profit and value for shareholders.
- Higher ratio results are often more favorable, but ratios provide much more information when compared to results of similar companies, the company's own historical performance, or the industry average.

### Meaning

- Profitability refers to the financial performance of the business. Accounting Ratios that measure profitability are known as Profitability Ratios. We express these ratios in '**Percentage**'.
- A **profitability ratio** is a measure of profitability, which is a way to measure a company's performance. Profitability is simply the capacity to make a profit, and a profit is what is left over from income earned after you have deducted all costs and expenses related to earning the income

### Types of Profitability Ratios

- Gross Profit Ratio
- Operating Ratio
- Operating Profit Ratio
- Net Profit Ratio
- Return on Investment
- Earning per share
- Dividend per share

### **Gross Profit Ratio**

- Gross Profit Ratio establishes the relationship between gross profit and Revenue from Operations, i.e. Net Sales of an enterprise.
- **Gross Profit Ratio** = (Gross Profit/Revenue from Operations) x 100
- Revenue from operations means revenue earned by the enterprise from its operating activities. It includes Net Sales and <u>commission</u>, etc., in the case of non-finance companies and interest earned, dividend, profit on the sale of securities, etc., in the case of finance companies.
- **Gross Profit** = Revenue from Operations Cost of Revenue from Operations

(Cost of operations is also called as Cost of Goods Sold)

**Cost of Revenue from Operations** = Opening Inventory + Net Purchases + Direct Expenses – Closing Inventories.

Or

Revenue from Operations – Gross Profit

- The main objective of computing Gross Profit Ratio is to determine the efficiency of the business.
- Higher Gross Profit Ratio is better as it leaves a higher margin to meet operating expenses and the creation of reserves.

### **Operating Ratio**

- It establishes the relationship between operating costs and Revenue from operations.
- Operating cost includes Cost of Revenue from Operations and Operating Expenses. These are those costs which are incurred for operating activities of the business.
- **Operating Ratio** = (Cost of Revenue from Operations + Operating Expenses/Revenue from Operations) x 100

Or

=(Operating cost/revenue from Operations) x 100

**Operating Expenses** = Employees Benefit Expenses + Depreciation and Amortization Expenses + Other Expenses (Other than Non-operating Expenses)

Or

- = Office Expenses + Selling and Distribution Expenses + Employees Benefit Expenses + Depreciation and Amortization Expenses.
- We should keep in mind that Operating Profit Ratio and Operating Ratio are complementary to each other and thus if we deduct one of the two ratios from 100, another ratio will obtain.
  - Operating Ratio + Operating Profit Ratio = 100
- The objective of computing Operating Ratio is to assess the operational efficiency of the business.
- Lower Operating Ratio is better because it leaves a higher profit margin to meet nonoperating expenses, to pay the dividend, etc. A rise in the Operating Ratio indicates a decline in efficiency.

### **Operating Profit Ratio**

- Operating Profit Ratio measures the relationship between Operating Profit and Revenue from Operations, i.e. Net Sales.
- We compute Operating Profit Ratio by dividing operating profit by revenue from operations (Net Sales).
- **Operating Profit Ratio** = (Operating Profit/Revenue from Operations) x 100

**Operating Profit** = Gross Profit + Other Operating Income – Other Operating Expenses

Or,

= Net Profit (Before Tax) + Non-operating Expenses - Non-operating Incomes

Or,

- = Revenue from Operations Operating Cost
- The objective of computing Operating Profit Ratio is to determine the operational efficiency of the business. An increase in the ratio over the previous period shows improvement in the operational efficiency of the business enterprise.

### **Net Profit Ratio**

- Net Profit Ratio measures the relationship between Net Profit and Net Sales. It shows the percentage of Net Profit earned on Revenue from Operations.
- Net Profit Ratio = (Net Profit/Net Sales) x 100
  Net Profit = Revenue from Operations Cost of Revenue from Operations Operating Expenses Non-operating Expenses + Non-operating Incomes Tax
- Net Profit Ratio indicates the overall efficiency of the business.
- Higher the Net Profit Ratio, better is the business. An increase in the ratio over the previous year shows improvement in operational efficiency.

#### **Return on Investment**

- Return on Investment or Return on Capital Employed shows the relationship of profit (profit before interest and tax) with capital employed.
- The funds or sources used in the business to earn profit/loss are proprietors' (shareholders') funds and loans.
- **Return on Investment** = (Net Profit before Interest, Tax and Dividend/Capital Employed) x 100
- Liabilities Approach:
  - **Capital Employed** = Shareholder' Fund + Non-current Liabilities.

(In case, Surplus balance is there in Statement of Profit and Loss, we will deduct the amount of surplus to calculate the Shareholder' Fund)

- Assets Approach:
  - **Capital Employed** = Non-current Assets + Working Capital.

Where,

**Non-current Assets** = Fixed assets + Non-current Trade Investments + Long-term Loans and Advances.

**Working Capital** = Current Assets – Current Liabilities

### **Earnings Per Share**

- This ratio measures profitability from the point of view of the ordinary shareholder. A high ratio represents better the company is.
- Formula: Net Profit ÷ Total no of shares outstanding

#### **Dividend Per Share**

- This ratio measures the amount of dividend distributed by the company to its shareholders.
   The high ratio represents that the company is having surplus cash.
- Formula: Amount Distributed to Shareholders ÷ No of Shares outstanding

## Thank You