

Profitability Ratios **نسب الربحية**

- Profitability ratios reflects the final result of business operations.
- There are two types of profitability ratios, i.e.

(i) Profit Margin Ratios ,like **نسب هامش الربح**

(1) Gross Profit Margin

The gross profit margin calculates the cost of goods sold as a percent of sales—both numbers can be found on the income statement. This ratio looks at how well a company controls the cost of its inventory and the manufacturing of its products and subsequently passes on the costs to its customers. The larger the gross profit margin, the better for the company.

Calculate gross profit margin by first subtracting the cost of goods sold from sales. If sales are \$100 and the cost of goods sold is \$60, the gross profit is \$40. Then divide gross profit by sales which would be: $\$40 / \$100 = 40\%$. The gross profit margin, which is the amount of sales revenue that can be devoted to utilities, inventory, and manufacturing costs is 40% of sales.

Gross Profit Margin = Gross Profit / sales

(2) Operating Profit Margin

The operating profit is usually called earnings before interest and taxes or EBIT on a business's income statement. The operating profit margin is EBIT as a percentage of sales. It is a measure of a company's overall operating efficiency. It differs from the gross profit margin by further subtracting out the expenses of ordinary, daily business activity from sales.

The operating profit margin is calculated using this formula: $EBIT / Sales$. If EBIT is \$20 and sales are \$100, then the operating profit margin is 20%. Both terms of the equation come from the company's income statement.

Operating Profit Margin = $EBIT / sales$

Operating Income (EBIT) = Gross Income - (Operating Expenses + Depreciation & Amortization Expenses)

(3) Net Profit Margin

When doing a simple profitability ratio analysis, the net profit margin is the most often margin ratio used. The net profit margin shows how much of each sales dollar remains as net income after all expenses are paid. For example, if the net profit margin is 5%, that means that 5 cents of every dollar of sales made are profit. The net profit margin measures profitability after consideration of all expenses including taxes, interest, and depreciation. The calculation is:

$$\text{Net Profit Margin} = \text{Net Income} / \text{Net Sales}$$

Both terms of the equation come from the income statement.

(ii) Rate of Return Ratios.

معدل نسب العائد

(1) Return on Assets

The return on assets ratio is an important profitability ratio because it measures the efficiency with which the company is managing its investment in assets and using them to generate profit. It measures the amount of profit earned relative to the firm's level of investment in total assets. The return on assets ratio is related to the asset management category of financial ratios. The calculation for the return on assets ratio is:

$$\text{Return on Assets} = \text{Net Income} / \text{Total Assets}$$

(2) Return on Equity

The return on equity ratio is perhaps the most important of all the financial ratios to a publicly-held company's investors. It measures the return on the money the investors have put into the company. It is the ratio potential investors look at when deciding whether or not to invest in the company. The calculation is

$$\text{Return on Equity} = \text{Net Income} / \text{Stockholders Equity}$$

**Example : follow the balance sheet and income statement to apple co.
calculate the Profitability Ratios**

Assets		LIABILITIES & EQUITY	
Cash	76,000	Current liabilities	350,000
Marketable securities	110,000	Non-current liabilities	900,000
Trade and receivables	230,000	Stockholders' equity	725,000
Inventories	167,000	TOTAL LIABILITIES & EQUITY	1,975,000
Prepayments	42,000		
Total current assets	625,000		
Non-current assets:			
Long-term investments	450,000		
Fixed assets	900,000		
Total current assets	1,350,000		
TOTAL ASSETS	1,975,000		

Income statement	
Revenue	5,000,000
Cost of sales	(4,000,000)
Gross profit	1,000,000
Depreciation	(300,000)
Distribution costs	(60,000)
Administration expenses	(40,000)

Operating profit	600,000
Tax paid	(200,000)
Net profit	400,000

(1) Gross Profit Margin = Gross Profit / sales
= 1000000/5000000 = 0.2

(2) Operating Profit Margin = EBIT/ sales
Operating Income (EBIT) = Gross Income - (Operating Expenses +
Depreciation & Amortization Expenses)
= 1000000 – (60000+ 40000 + 300000) = 600000

Operating Profit Margin = 600000/ 5000000 = 0.12

(3) Net Profit Margin = Net Income / Net Sales
= 400000/5000000 =0.08= 8%

(4) Return on Assets= Net Income / Total Assets
= 400000 / 1,975,000 = 0.202

(5) Return on Equity= Net Income / Stockholders Equity
= 400000 / 725,000 =0.55