# 4. Profitability KPIs

## Introduction to Profitability KPIs

Profitability KPIs are a class of financial metrics which are used to assess a company's ability to generate earnings compared to its expenses as well as other relevant costs incurred during a specific period of time. Having a higher value for most of these ratios relative to a competitor's ratio or relative to the same ratio from a previous period, indicates that the business is doing well.

Many industries experience seasonality in their operations. For exmaple the retail industry typically experiences higher revenues and earnings for the Christmas season. This means it would not be reasonable to compare a retailer's fourth-quarter profit margin with its first-quarter one. Instead, a comparison of a retailer's fourth-quarter profit margin with the profit margin from the same period a year before would be much more informative.

In this section information on return on assets (ROA) ratio is provided. In additoin, the operating margin and the gross profit margin and its importance to SME's as well as creditors are explained. Some simple tasks to practise calculation of the ratios is also provided. Finally, the solutions of the tasks is provided.[37]

**Profitability**

**KPIs**

# Return on Assets (ROA)

**Example of calculation of return on assets (ROA):**[38]

$$\text{Return on assets (10 \%)} = \frac{\text{Net income (10 \$)}}{(\text{Beginning total assets (80 \$)} + \text{Ending total assets (120 \$)})/2}$$

RETURN

ON

ASSETS

**Why is it important?**

| COMPANY | BANK |
|---|---|
| • In the example above the return on assets is 10%.<br>• It is an indicator how profitable the company is relative to its total asssets.<br>• ROA gives an idea as to how efficient management is in using its assets to generate earnings.<br>• ROA can often be seen as a return on investment for the company since capital assets are often the biggest investments for most companies.[39] | • It only makes sense that a higher ratio is more favorable to investors and creditors because it shows that the company is more efffectively managing its assets to produce greater amounts of net income.<br>• Banks typically compare the ROA to the interest rates the assets are financed by.<br>• If the company has a return on assets equal or close to the interest rates of its loans, then the company is not very profitable.[40] |

**How can a company improve the return on assets (ROA)?**

- Reduce your asset base! Decide if each asset contributes to revenue generation or productivity gains. You may find you have obsolete inventory that can be liquidated for cash.
- Improve productivity and lower costs! Replace outdated equipment and technology with updated versions that help your employees to improve their productivity – which means generate more output with the same human resources.[41]

# Operating Profit Margin

**Example of calculation of operating profit margin:**[42]

$$\text{Operating profit margin (15 \%)} = \frac{\text{Operating income (\$ 15)}}{\text{Net sales (\$ 100)}}$$

OPERATING

PROFIT

MARGIN

**Why is it important?**

| COMPANY | BANK |
|---|---|
| • The operating profit margin in the example above is 15%.<br>• It is a profitability ratio that measures what percentage of total revenues are made up by operating income.<br>• It demonstrates how much revenues are left over after all the variable or operating costs have been paid.<br>• Conversely, this ratio shows what proportion of revenues is available to cover non-operating costs like interest-expense.[43] | • This ratio is also important for creditors, like banks, and investors because it shows how strong a company's operations are.<br>• If a company can make enough money from its operations to support the business, the bank will consider it being more stable.<br>• The bank will be more likely to approve loans because the company is able to pay them back out of operating income.[44] |

**How can a company improve the operating profit margin?**

- Reduce costs of goods sold! Research other suppliers or explore other contract options with your current suppliers to reduce initial expenses. Identify more efficient manufacturing methods to reduce the salaries associated with your manufacturing operations.
- Increase sales revenue! Raising your sales revenues can help you increase your operating income. Target your high-margin products, marking them down or offering specials to sell more of them. If you can increase the quantity that you sell, you will make more money, even if you reduce the price.
- Reduce labor and operations costs! Look for areas where you can reduce the hours worked to help save on overall payroll costs.[45]

# Gross Profit

### Example of calculation of gross profit:[46]

$$\text{Gross profit } (\$\ 50) = \text{Sales revenue } (\$\ 100) - \text{Costs of goods sold } (\$\ 50)$$

GROSS

PROFIT

### Why is it important?

| COMPANY | BANK |
|---|---|
| • The gross profit in the example above is $50.<br>• It is the profit a company makes after deducting the costs associated with making and selling its products, or the costs associated with providing its services.<br>• Therefore gross profit assesses a company's efficieny at using labor and supplies.<br>• Thus gross profit can be used to calculate the gross profit margin.[47] | • For creditors, like banks, and investors it is important that a company has a stable gross profit.<br>• The higher the gross profit is the more likely the company is to generate a positive operating cash flow.<br>• The higher this operating cash flow is, the better a company can finance necessary investments and the better a company can pay back loans from the bank. |

### How can a company improve the gross profit?

- Increase your selling price without increasing your costs of goods sold. With all factors being equal, any increase in selling price that is not accompanied by an increase in cost of goods sold will increase your gross profit.
- Increase your sales volume without increasing your costs of goods sold per unit or lowering your selling price. Increasing sales volume can reduce the cost of goods sold since the fixed manufacturing costs per unit become smaller as production volume becomes bigger.
- Reduce the cost of goods sold without changing your selling price. Finding lower-priced suppliers, cheaper raw materials, using labor-saving technology, and outsourcing, are some ways to lower the cost of goods sold.[48]

# Task

**Assume you are given the following information on a company:**

| | |
|---|---|
| Net income | $ 1000 |
| Beginning total assets | $ 8000 |
| Ending total assets | $ 12000 |
| Net sales | $ 20000 |
| Sales revenue | $ 25000 |
| Costs of goods sold | $ 15000 |

**Please feel free to solve the following questions in order to practice the contents of profitability key performance indicators:**

1) Calculate the return on assets (ROA)?
2) How could a company improve the ROA?
3) Calculate the operating profit margin.
4) How could a company improve the operating profit margin?
5) Calculate the gross profit.
6) How could a company increase the gross profit?


# Solution

1)

$$\textbf{Return on assets}\ (\textbf{10}\ \%) = \frac{\text{Net inome}\ (\$\ 1000)}{(\text{Beginning total assets}\ (\$\ 8000) + \mathit{Ending\ total\ assets}\ (\$\ 12000))/\ 2}$$

2) You may liquidate obsolete inventory for cash (reduce your asset base), improve productivity and lower cost.

3)

$$\textbf{Operating profit margin}\ (\textbf{5}\ \%) = \frac{\text{Net inome}\ (\$\ 1000)}{\text{Net sales}\ (\$\ 20000)}$$

4) Reduce costs of goods sold, increase sales revenue, reduce labor and operations costs.

5) **Gross profit ($ 10000)** = Sales revenue ($ 25000) **–** Costs of goods sold ($ 15000)

6) Increase your selling price and/ or sales volume without increasing your costs of goods sold per unit, if possible. Reduce the costs of goods sold without changing your selling price.

SOLUTION