Topic 7:

Profitability analysis

Ana Mª Arias Alvarez

University of Oviedo
Department of Accounting
amarias@uniovi.es

School of Business Administration
Course: Financial Statement Analysis and Management Control
Bachelor's Degree in Economics

7.1. Analysis of the Income Statement.

7.2. Profitability ratios.

7.3. Financial leverage (gearing).

7.1: ANALYSIS OF THE INCOME STATEMENT.

$$\frac{\text{Revenue from sales 201X}}{\text{Revenue from sales 201X} - 1} \rightarrow \text{Sales growth}$$

$$\frac{\text{Company's revenue from sales}}{\text{Industry's revenue from sales}} \rightarrow \text{Market share}$$

$$\frac{\text{Revenues from sales of new products}}{\text{Total revenues from sales}} \rightarrow \text{Innovation}$$

7.2: PROFITABILITY RATIOS.

Companies exist with the primary purpose of creating wealth for their owners. Profitability ratios provide information about the degree of success in achieving this purpose. They express the profit made in relation to other figures in the financial statements or to some business resource:

$$\textbf{Profitability} = \frac{\textbf{Profit}}{\textbf{Resources}}$$

Return on assets (ROA)

$$\text{ROA (before tax)} = \frac{\text{Profit before interest and tax}}{\text{Average assets}}$$

It measures how efficient management is at using its assets to generate earnings.

It is also referred to as ROI (Return on Investment).

Breaking down “Return on Assets”

$$\text{ROA} = \frac{\text{Profit before interest and tax}}{\text{Average assets}} =$$

$$= \frac{\text{Profit before interest and tax}}{\text{Sales revenue}} \text{ x } \frac{\text{Sales revenue}}{\text{Average assets}} =$$

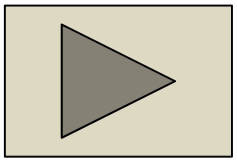
$$= \text{Net profit margin x Asset turnover}$$

- Net profit margin measures the percentage of each euro of sales that results in net profit.
- Asset turnover measures how efficiently a company uses its assets to generate sales.

Residual Income

Net Profit – (Equity x Required return or cost of capital)

Residual income is net profit less a deduction for shareholders' opportunity cost in generating net profit. It is the remaining profit after considering the costs of all of a company's capital.



Task: try to solve problem 7.1.

RETURN ON EQUITY (ROE)

$$\mathbf{ROE} = \frac{\mathbf{Net\ profit}}{\mathbf{Average\ Equity}}$$

ROE represents the amount of profit that is attributable to the owners.

7.3: FINANCIAL LEVERAGE (GEARING).

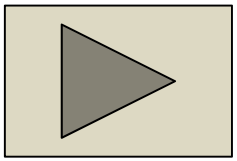
Borrowing can be used to increase the returns to owners (if the returns from borrowed funds > the cost of paying interest):

$$ROE = ROA' + (ROA' - \text{interest rate}) \times \frac{\text{Average liabilities}}{\text{Average equity}}$$

Financial leverage (gearing)

$$ROA' = \frac{\text{Net profit} + \text{Interest payable } (1 - t)}{\text{Average equity} + \text{Average liabilities}}$$

Taxation rate



Task: try to solve problem 7.2.