

Ratio Analysis Assignment

Author

Affiliation

Course

Instructor

Due Date

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1. What are the advantages of Ratio Analysis?

Ratio analysis helps validate or disprove a firm's investment, financing, and operating decisions. They summarize the company's financial statements into comparative figures and symbols, hence guiding the management to establish comparisons while evaluating the firm's financial situation and the results gained after their initial decisions (Utami, 2017). The ratios facilitate the decision-making process. They simplify complex financial data and accounting statements into simple financial efficiency ratios, operating efficiency, solvency, and long-term positions.

Ratio analysis also helps identify weak areas in the firm and bring them to the management's attention for effective action. Vital information is usually lost in the complex accounting book statements; hence the ratios help pinpoint such problems and retrieve the data. They allow comparisons with other organizations, intra-firm comparisons, and industry standards. This facilitates understanding of the market and the firm's fiscal standing in the economy.

2. What are the limitations of ratio analysis?

Although ratios are useful tools for financial analysis, they also have some limitations (Utami, 2017):

- The company can alter its financial statements' year-end results to indicate improved ratios, ending up being nothing less than *window dressing*.
- The ratios usually ignore changes in price levels necessitated by inflation. Most of the ratios are computed using historical costs while overlooking the changes in price levels between distinct periods. Therefore, they can fail to reflect the exact financial situation.
- The accounting ratios completely *overlook the qualitative aspects of the company*. They only consider monetary factors of quantitative situations.

- With the absence of standard formula for the ratios, companies can have different and distinct *definitions*, as they may be using different formulas and parameters for the computations. For instance, some firms consider all liabilities in calculating the Current Ratio, while others ignore bank overdrafts.
- It must be noted that accounting ratios are not the real solution to the firm's financial challenges, but rather are the means to the end.

3. What do you understand by Liquidity ratios? Discuss their significance.

Liquidity ratios are financial ratio that indicates a company's ability to off-set its short term bills, debts, and obligations. Coulon (2020) states that it is a metric that facilitates the company's decision whether to use its liquid or current assets in covering its current liabilities. The common liquidity ratios include the quick ratio, current ratio, and cash ratio. Each of the ratios follow a pattern, whereby the amounts of the liquid assets are placed in the numerator, while the current liabilities are set as denominators.

Creditors and potential investors are interested in liquidity ratios above 1.0. Organizations with sound liquidity ratios, such as two or three, would most likely get credit approvals (Coulon, 2020). A less than one ratio indicates that the business faces negative working capital and may be experiencing a liquidity crisis. In contrast, those with higher ratios indicate the likelihood of managing the payments of their short-term bills. The ratios indicate financial capabilities; thus, they are used to determine creditworthiness, as lending institutions want to be sure of getting back their financial resources. Furthermore, the ratios help investors analyze the company and forecast if it is worthy to receive their investment.

Complete the calculations and provide interpretation:

1. You are required to find out the Current Ratio, Net Profit, and Gross Profit Ratio from the following particulars.

Stock	USD.50,000	Cash in Hand	USD.30,000
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Debtors	USD.40,000	Creditors	USD.60,000
Bills Receivable	USD.10,000	Bills Payable	USD.40,000
Advances	USD.4,000	Bank Overdraft	USD.4,000
		Sales (Net)	USD.700,000
		Gross Profit	USD.50,000
		Net Profit	USD.30,000

a) Current Ratio

$$\text{Current Assets} = (50,000 + 40,000 + 10,000 + 4,000 + 30,000) = \text{USD. } 134,000$$

$$\text{Current Liabilities} = (60,000 + 40,000 + 4,000) = \text{USD. } 104,000$$

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities} = 134,000 / 104,000 = 1.288$$

Therefore, the Current Ratio is **1.3:1**

b) Net Profit

$$= \text{Net Sales} - \text{Total Liabilities}$$

$$= 700,000 - 104,000$$

$$= \text{USD. } 596,000$$

c) Gross Profit Ratio.

$$= \text{Net Profit} / \text{Net sales} * 100\%$$

$$= 596,000 / 700,000 * 100 = \textbf{85.14\%}$$

2. Calculate Current Assets, Liquid Assets, and Inventory.

$$\text{Current Ratio} = 2.6:1$$

$$\text{Liquid Ratio} = 1.5:1$$

$$\text{Current Liabilities} = \text{USD. } 40,000$$

a) Current Assets

$$\text{Current Assets} = \text{Current Ratio} * \text{Current Liabilities}$$

$$= 2.6 * \text{USD. } 40,000 = \text{USD. } 1,04,000$$

b) Liquid Assets

Liquid Assets = Liquid Ratio*Current Liabilities

$$= 1.5 * \text{USD. } 40,000 = \text{USD. } 60,000$$

c) Inventory.

= Current Assets – Liquid Assets

$$= 1,04,000 - 60,000$$

$$= \text{USD. } 44,000$$

3. From the following information, calculate the following ratios: Debt Equity Ratio, Interest Coverage Ratio, Debt to Total Fund Ratio, Return on Investment Ratio, and Capital Turnover Ratio.

Share Capital	USD.320,000
General reserve	USD.120,000
Profit and Loss A/c	USD.200,000
Loan @ 15% interest	USD.400,000
Sales for the year	USD.1,120,000
Tax paid during the year	USD.80,000
Profit for the year after interest and tax	USD.160,000

a) Debt Equity Ratio

$$\text{Total Liabilities} = 120,000 + 200,000 + 400,000 + 80,000 = \text{USD. } 800,000$$

$$\text{Shareholder Equity} = \text{USD. } 320,000$$

Therefore, Debt Equity Ratio = Total Liabilities / Shareholder Equity

$$= 800,000 / 320,000 = 2.5$$

The ratio is **2.5:1**

b) Interest Coverage Ratio

= EBIT (Earnings Before Interest and Taxes) / Interest Expenses

$$\text{EBIT} = 160,000 + 400,000 + 80,000 = 640,000$$

$$\text{Therefore, Interest Coverage Ratio} = 640,000 / 400,000 = \textbf{1.6:1}$$

c) Debt to Total Fund Ratio

= Total Liabilities / Total Capital

Total Capital = 320,000 + 400,000 = USD. 720,000

Hence, Debt to Total Fund Ratio = 800,000 / 720,000 = **1.1:1**

d) Return on Investment Ratio

= Net Profit / Total Investment * 100%

= 120,000 / 320,000 * 100%

= **37.5%**

e) Capital Turnover Ratio.

= Net Sales / Average Working Capital

= 1,120,000 / 320,000 = **3.5:1**

References

- Coulon, Y. (2020). Key liquidity and solvency ratios. *Rational Investing with Ratios*, 47-62. https://doi.org/10.1007/978-3-030-34265-4_3
- Utami, W. B. (2017). Analysis of current ratio changes effect, asset ratio debt, total asset turnover, return on asset, and price-earnings ratio in Predicting growth income by considering corporate size in the company joined in LQ45 index year 2013 - 2016. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 1(01). <https://doi.org/10.29040/ijebar.v1i01.253>