

A THEORETICAL STUDY ON FINANCIAL RATIO

Kurbanhusain A. Kadiwala

Research Scholar

Department of Business Studies

Sardar Patel University, Vallabh Vidyanagar,
Gujarat, India.

Abstract: Financial ratios are most important tool for financial analysis and management decision. In this paper, researcher analyzed financial ratios, its effectiveness and its usefulness with using various past published research articles. This research paper is based on review of literature. There are so many ratios are used by different research scholar as research tool and statistic tool. Now day's ratios are developed by its user. As finance researcher, knowledge of ratio is very useful for financial management and decision. This article contain theoretical concept of financial ratio analysis. The ratio analysis has long history in its own field.

Keywords: Ratio, Analysis, Finance.

1. Introduction

A financial ratios or accounting ratios are relative significance of two selected numerical figure taken from a company's financial statements. Financial statement shows images of the company and financial ratios are an important tool for financial statement analysis. There are many financial ratios used to evaluate financial condition of company or organization. Financial ratios may be used by investor, creditors, borrowers, shareholders, financial advisor etc. All interested parties are analyzed strengths and weaknesses of various organizations. It requires understanding of the way and the rules used for preparing financial statements. The theory of ratio analysis has long history of its development. This study is based on review of published papers, article, books, news etc.

2. Literature Review

Horrigan (1965) examined on financial ratio analysis. The researcher has briefly explained Solvency Ratio, Liquidity Ratio, Capital Turnover Ratio, Return on Investment and Profit Margin Ratio with practical example.

Patton (1982) studied on ratio analysis and economical markets in inaugural financial accounting. Researcher has given possible contributions of ratio analysis.

Chabotar (1989) examined on financial ratios analysis in non-profits organization. The researcher used financial ratios for analysis. Ratios like Current ratio, Quick ratio, Available fund ratio, Debt structure ratio, Debt Service ratio, Source of fund, Net operating results. This researcher analyzed by financial ratios.

Nissim & Penman (2001) analyzed financial statement by various financial ratios. Ratios like Residual earnings, rate of return on common equity, Return on Net Operating Assets, Return on Invested Capital, Minority Sharing Ratio etc. so all research and measurement is possible by only financial ratios.

Martin (2002) studied on the corporate finance way of used the return parameters of the company with target P/E. Researcher presented ROA and P/E vs. Debt Ratio for Specified Levered ROE.

Gonzalez-Bravo (2007) studied on previous ratio analysis method to enhance data enclosure analysis for work measurement; investigator introduced data enclosure analysis for six ratios; profit/fixed assets, profit/total assets, value-added/total assets, profit/labor, value-added/fixed assets, sales revenue/fixed assets and sales revenue/total assets were used.

Kumbirai and Webb (2010) analyzed to performance of South African commercial banks by financial ratios. This researcher used financial ratios like Return on Assets, Return on Equity, Cost to Income Ratio, Liquid assets to deposit-borrowing ratio, Net Loans to total asset ratio, Net loans to deposit and borrowing, Loan loss reserve to gross loans. So this researcher gave to concluded by financial ratios.

Marginean et al. (2015) analyzed on ratios of P&L account to work analysis with the data from 2006 to 2013; using grand business with more than 700 employees of Romania.

There are such a lot of researches done by using varied ratios as per demand of research. Investigator has tried to list a number of the formulas in next point.

3. Objectives

1. The main objective of see about the improvement of ratio analysis.
2. The second objective of see relationship between ratio analysis and research.

4. Development of Ratio

Euclid in his book 5, 'Elements' in about 300 B.C presented ratio analysis. At that time, ratios were not used as financial tool. American industries present first time financial statement analysis in 19th Century. They have two purposes. There was a lot of overlap; the development path of ratio analysis was different for creditor purposes and for managerial purposes. Credit analysis emphasized measures of ability to pay while managerial analysis emphasized profitability measures. During the period of World War I, there were some significant developments in ratio analysis.

In 1912 Alexander Wall has used plan of business paper brokers. In 1919, Wall studied 981 to credit measuring instrument study. At that point, the Du-Pont company used high 3 ratio; ROI (profit/total assets), PMR (profit/sales) and CTR (sales/total assets) to analysis of it's in operation results. In 1920, interest in quantitative relation analysis was redoubled by trade associations, universities, credit agencies and individual analysts. This method was known as "scientific quantitative relation analysis". Wall tried to mitigate the results of quantitative relation proliferation by developing a quantitative relation index. Bliss presented a models ratio analysis in 1920. (Bliss, 1923)

In 1925 Gilman objected that their changes over time can't be interpreted because the numerator and denominator, ratios are artificial measures, magnitude relation divert the analyst's attention from comprehensive read of the firm and their irresponsiblensness as indicators varies wide between ratios. In 1930, there have been two important developments during this decade relating on to the magnitude relation analysis.

In 1933, Foulken analyzed fourteen ratios for comparison of various entity or company. In 1940, ratios expansion was on the bottom of direct and indirect implementation. After 1940 to date, the development of ratio analysis within the universal has continuing on varied ways. (JeanNataf, 1957) In Indian nation, there seems to have been intensive borrowing from American sources of not solely types of ratios however their criteria similarly. (Economic Statistics of Japan, 1963) In Russia and China, working capital turnover and return on investment ratios are used to comparisons and measuring. And then after the step by step, each country has developed their ratios as interest and demand for company analysis.

5. Various Types of Ratios

Here following, a listing of some ratios, that are used in Financial and Accounting analysis by investigator in past as analytical and applied statistical tools.

• Profitability Ratios

1. Gross Profit Rate = $\text{Gross Profit} \div \text{Net Sales}$
2. Return on Sales = $\text{Net Income} \div \text{Net Sales}$
3. Return on Assets = $\text{Net Income} \div \text{Average Total Assets}$
4. Return on Equity = $\text{Net Income} \div \text{Average Stockholders' Equity}$

• Liquidity Ratios

1. Current Ratio = $\text{Current Assets} \div \text{Current Liabilities}$
2. Cash Ratio = $(\text{Cash} + \text{Marketable Securities}) \div \text{Current Liabilities}$
3. Net Working Capital Ratio = $\text{Net Working Capital} \div \text{Total Assets}$
4. Net Working Capital = $\text{Current Assets} - \text{Current Liabilities}$
5. Quick Ratio = $\text{Quick Assets} \div \text{Current Liabilities}$

• Management Efficiency Ratios

1. Accounts Payable Turnover = $\text{Net Credit Purchases} \div \text{Ave. Accounts Payable}$
2. Cash Conversion Cycle = $\text{Operating Cycle} - \text{Days Payable Outstanding}$
3. Days Inventory Outstanding = $365 \text{ Days} \div \text{Inventory Turnover}$
4. Days Payable Outstanding = $360 \text{ Days} \div \text{Accounts Payable Turnover}$
5. Days Sales Outstanding = $365 \text{ Days} \div \text{Receivable Turnover}$
6. Inventory Turnover = $\text{Cost of Goods Sales} \div \text{Average Inventory}$
7. Operating Cycle = $\text{Days Inventory Outstanding} + \text{Days Sales Outstanding}$
8. Receivable Turnover = $\text{Net Credit Sales} \div \text{Average Accounts Receivable}$
9. Total Asset Turnover = $\text{Net Sales} \div \text{Average Total Assets}$

• Leverage Ratios

1. Debt Ratio = $\text{Total Liabilities} \div \text{Total Assets}$
2. Debt-Equity Ratio = $\text{Total Liabilities} \div \text{Total Equity}$
3. Equity Ratio = $\text{Total Equity} \div \text{Total Assets}$
4. Times Interest Earned = $\text{EBIT} \div \text{Interest Expense}$

• Valuation and Growth Ratios

1. Dividend Pay-out Ratio = $\text{Dividend per Share} \div \text{Earnings per Share}$
2. Dividend Yield Ratio = $\text{Dividend per Share} \div \text{Market Price per Share}$
3. Earnings per Share = $(\text{Net Income} - \text{Preferred Dividends}) \div \text{Numbers of Equity Shares}$
4. Price-Earnings Ratio = $\text{Market Price per Share} \div \text{Earnings per Share}$

There square measure different financial ratios additionally those listed on top of. Those listed here square measure the foremost common ratios utilized in evaluating a business. In describing the ratios, it's higher to possess a basis for comparison, like past performance and business standards.

6. Importance of Financial Ratio

- a) Final accounts of any company is analyzed by means of ratios, thereby all of them banker, investors, creditors etc. are in a position to explain the financial position of such Company.
- b) These ratios compile shortly the results of comprehensive and complicated accounting competition.
- c) Ratios are practical tools in determining the firm's capacity to meet its short term liabilities. Liquidity ratios play a vital role.
- d) Ratio analysis is helpful in analyzing the long term financial strengthens of a business entity. Profitability ratio's role is important in determining such capacity of firm.
- e) Activity ratio is very helpful in examining the operating ability of an entity concern. Sales revenue mobilized by active utilization of assets is best determined by using Activity Ratios.
- f) Ratios are very much helpful in planning, execution and anticipating of any corporate related activities.
- g) The performance of different units belonging to the same business firm can be easily compared with ratio analysis. In a unit of the same entity, growth can be excited and slackness can be avoided by such intra- firm comparisons.
- h) To move among the other companies, to know the direction of moment, this trend analysis can render the required assistant.

7. Conclusion

The offered proof proves that the ratios do have prophetic worth, a minimum of in respect of financial difficulties. Hence, the financial ratios are definitely terribly attractive tools as a result of its straight forward and its prophetic value. In present days, ratios don't seem to be solely used for financial analysis. However also used for the economical, scientific and alternative analysis. The long run of role of ratio analysis is also vital one. Everywhere, would like for fairly straight forward analytical tool, ratios are going to be helpful. There's no any finish for development of ratio analysis.

8. Reference

1. Chen, K. H., & Shimerda, T. A. (1981). An empirical analysis of useful financial ratios. *Financial Management*, 51-60.
2. Nissim, D., & Penman, S. H. (2001). Ratio analysis and equity valuation: From research to practice. *Review of accounting studies*, 6(1), 109-154.
3. Kumbirai, M., & Webb, R. (2010). A financial ratio analysis of commercial bank performance in South Africa. *African Review of Economics and Finance*, 2(1), 30-53.
4. Chabotar, K. J. (1989). Financial ratio analysis comes to nonprofits. *The Journal of Higher Education*, 60(2), 188-208.
5. Horrigan, J. O. (1965). Some empirical bases of financial ratio analysis. *The Accounting Review*, 40(3), 558.
6. Patton, J. M. (1982). Ratio analysis and efficient markets in introductory financial accounting. *Accounting Review*, 627-630.
7. Chabotar, K. J. New Yardsticks to Measure.
8. Marginean, R., Mihaltan, D. C., & Todea, N. (2015). Structure ratios of Profit and Loss Account—source of information for performance analysis. *Procedia Economics and Finance*, 26, 396-403.
9. Gonzalez-Bravo, M. I. (2007). Prior-Ratio-Analysis procedure to improve data envelopment analysis for performance measurement. *Journal of the Operational Research Society*, 58(9), 1214-1222.
10. Rajasekaran, V., & Lalitha, R. (2013). *Financial Accounting*. Pearson.