

Accounting Ratios as an Important Tool To Financial Statement Analysis

Mr S Mohanty
Assistant Professor,
Department of Finance
KISD, BBSR

ABSTRACT- Most financial statement analyses focus on firms belonging to industries that either contribute significantly to economic figures or posit in a highly competitive business environment. Whatever the motivation may be, financial statement analysis should be made available to all industries for reasons of comparability and benchmarking. This research paper aims to analyze the Accounting ratios and their importance as a tool to analyze the position of various companies and related industries. These included liquidity ratios, activity ratios, leverage ratios, profitability ratios, and market value ratios. For liquidity, the following ratios were used: current ratio; quick or acid-test ratio; cash flow liquidity ratio; average-collection period; and days payable outstanding. For activity, the following ratios were used: accounts receivable turnover; accounts payable turnover; fixed assets turnover; and total assets turnover. For leverage, the following ratios were used: debt ratio; debt to equity ratio; and times interest earned. For profitability, the following ratios were used: operating profit margin; net profit margin; return on total assets; return on equity; and basic earning power ratio. For market value, the following ratios were used: price-earnings ratio; market-book ratio; and dividend yield.

INTRODUCTION

The massive amount of numbers in a company's

financial statements can be bewildering and intimidating to many investors. On the other hand, if you know how to analyze them, the financial statements are a gold mine of information. Financial statements are the medium by which a company discloses information concerning its financial performance. Followers of fundamental analysis use the information taken from financial statements to make investment decisions. In financial management, one of the structured and scientific bases on which firm decisions are anchored is the financial statement analysis.

According to Drake (2010), financial statement analysis is the selection, evaluation, and interpretation of financial data, along with other pertinent information, to assist in investment and financial decision-making. Moreover, it is also the process of identifying financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account. One of the tools in financial statement analysis is financial ratio analysis. As financial statements are usually lengthy, it will be more efficient and strategic to just pick up the figures that matter and plug them in pre-defined formulas developed through time by finance and accounting scholars.

2.0 OBJECTIVES OF FINANCIAL RATIO ANALYSIS

Before starting the analysis of any firm's

financial statements, it is necessary to specify the objectives of the analysis. According to Fraser and Ormiston (2004), the objectives will vary depending on the perspective of the financial statement user and the specific questions that are addressed by the analysis of the financial statement data. Among the several perspectives are that of the creditor, the investor, and the management. Each of these stakeholders would have to have questions that need to be answered. For instance, a creditor is usually concerned with the ability of an existing or prospective borrower to make interest and principal payments on borrowed funds. The investor usually attempts to arrive at an estimation of a company's future earnings stream in order to attach a value to the securities being considered for purchase or liquidation. Lastly, financial statement analysis from the standpoint of management relates to all of the questions raised by creditors and investors because these user groups must be satisfied in order for the firm to obtain capital as needed.

According to Brigham and Houston (2009), financial analysis involves comparing the firm's performance to that of other firms in the same industry and evaluating trends in the firm's financial position over time. One rich source of information for financial statement analysis is the audited financial statements. The financial statements are usually part of the annual report that listed companies submit to regulatory agencies such as SEBI, India.

3.0 KEY FINANCIAL RATIOS

There are five categories of ratios used in financial statement analysis. These are: (1) liquidity ratios, which measure a firm's ability to

meet cash needs as they arise; (2) activity ratios, which measure the liquidity of specific assets and the efficiency of managing assets; (3) leverage ratios, which measure the extent of a firm's financing with debt relative to equity and its ability to cover interest and other fixed charges; (4) profitability ratios, which measure the overall performance of a firm and its efficiency in managing assets, liabilities, and equity (Fraser & Ormiston, 2004); and (5) market value ratios, which bring in the stock price and give an idea of what investors think about the firm and its future prospects

1 Liquidity ratios

Current ratio: The current ratio is a commonly used measure of short-run solvency, the ability of the firm to meet its debt requirements as they come due. Current liabilities are used as the denominator of the ratio because they are considered to represent the most urgent debts, requiring retirement within one year or one operating cycle. The available cash resources to satisfy these obligations must come primarily from cash or the conversion to cash of other current assets.

Quick or acid-test ratio: The quick or acid-test ratio is a more rigorous test of short-run solvency than the current ratio because the numerator eliminates inventory, considered the least liquid current asset and the most likely source of losses.

Cash flow liquidity ratio: Another approach to measuring short-term solvency is the cash flow liquidity ratio, which considers cash flow from operating activities. The cash flow liquidity ratio uses in the numerator, as an approximation of cash resources, cash and marketable securities, which are truly liquid current assets, and cash flow from operating activities, which represents

the amount of cash generated from the firm's operations, such as the ability to sell inventory and collect the cash.

Average collection period: The average collection period of accounts receivable is the average number of days required to convert receivables into cash. The ratio is calculated as the relationship between net accounts receivable and average daily sales. The average collection period helps gauge the liquidity of accounts receivable, the ability of the firm to collect from customers.

Days payable outstanding: The days payable outstanding is the average number of days it takes to pay payables in cash. This ratio offers insight into a firm's pattern of payments to suppliers.

3.2 Activity ratios

Accounts receivable turnover: The accounts receivable turnover ratio measures how many times, on average, accounts receivable are collected in cash.

Accounts payable turnover: The accounts payable turnover ratio measures how many times, on average, payables are paid during the year.

Fixed assets turnover and total assets turnover: The fixed asset turnover and total assets turnover ratios are two approaches to assessing management's effectiveness in generating sales from investments in assets.

The fixed assets turnover considers only the firm's investment in property, plant, and equipment and is extremely important for a capital-intensive firm. The total assets turnover measures the efficiency of managing all of a

firm's assets.

3.3 Leverage ratios

Debt ratio: The ratio of total debt to total assets measures the percentage of funds provided by creditors. It considers the proportion of all assets that are financed with debt.

Debt to equity: The debt to equity ratio measures the riskiness of the firm's capital structure in terms of the relationship between the funds supplied by creditors and investors.

Times interest earned: The times interest earned ratio measures the extent to which operating income can decline before the firm is unable to meet its annual interest costs.

3.4 Profitability ratios

Operating profit margin and net profit margin: Operating profit margin and net profit margin represent the firm's ability to translate sales in peso into profits at different stages of measurement. The operating profit margin, a measure of overall operating efficiency, incorporates all of the expenses associated with ordinary business activities. The net profit margin measures profitability after consideration of all revenue and expense, including interest, taxes, and non-operating items.

Return on total assets and return on equity: Return on total assets and return on equity are two ratios that measure the overall efficiency of the firm in managing its total investment in assets and in generating return to shareholders. Return on total assets indicates the amount of profit earned relative to the level of investment in total assets. Return on equity measures the return to common shareholders.

Basic earnings power ratio: Basic earnings power ratio calculated by dividing operating income (earnings before interest and taxes or EBIT) by total assets. This ratio shows the raw earning power of the firm's assets before the

influence of taxes and debt, and it is useful when comparing firms with different debt and tax situations.

3.5 Market value ratios

Price-earnings ratio: The price- earnings ratio shows how much investors are willing to pay per peso of reported profits.

Market-book ratio: The market-book ratio shows how the investors regard the firm in terms of its stock's market price to its book value.

Dividend yield: The dividend yield shows the shareholders' income earning rate on shares based on market values. Moreover, this ratio shows the return shareholders are actually achieving on their investment, using current market value for listed shares

4.0 LIMITATIONS OF RATIO ANALYSIS

Many things can impact the calculation of ratios and make comparisons difficult. The limitations include:

- The use of estimates in allocating costs to each period. The ratios will be as accurate as the estimates.

The cost principle is used to prepare financial statements. Financial data is not adjusted for price changes or inflation/ deflation

- Companies have a choice of accounting methods (for example, inventory LIFO vs FIFO and depreciation methods). These differences impact ratios and make it difficult to compare companies using different methods.
- Companies may have different fiscal year ends making comparison difficult if the industry is cyclical.
- Diversified companies are difficult to classify for comparison purposes.

Financial statement analysis does not provide answers to all the users' questions. In fact, it usually generates more questions!

5.0 CONCLUSION

Ratios are guides or shortcuts that are useful in evaluating the financial position of a company and the operations of a company from scientific facts. It helps in comparison of changes in static data from previous years to current year and with the comparison of other companies as well. In accounting and financial management ratios are regarded as the real test of earning capacity, financial soundness and operating efficiency of business concern.

The following points highlight the importance of ratio analysis:

Simplifies Accounting Figures: The most significant objective of ratio analysis is that it simplifies the accounting figures in much easier way by which anyone can be understood it quite easily even for those who do not know the language of accounting.

Measures Liquidity Position: Liquidity position of a firm is said to be satisfactory if it is able to meet its current obligation as and when they mature. A firm is said to be capable of meeting its current obligation only, if it has sufficient liquid funds to pay its short-term obligations within a period of year. Hence, the liquidity ratios are used for the purpose of credit analysis by banks and other short-term lenders.

Measures Long-term Solvency: Ratio analysis is equally important in evaluating the long- term solvency of the firm. It is measured by capital structure or leverage ratios. These ratios are helpful to long-term creditors, security analysts and present and prospective investors, as they reveal the financial soundness or weakness of the firm.

Measures operational Efficiency: Ratios are useful tools in the hands of management to evaluate the firm's performance over a period of time by comparing the present ratios with the

past ratios. Various activity or turnover ratios measure the operational efficiency of the firm. These ratios are used in general by the bankers, investors and other suppliers of credit.

Measures Profitability: The management as well as owners of a firm is primarily concerned with the overall profitability of the firm. Profit and loss account reveals the profit earned or loss incurring during a period, but fails to convey the capacity of the firm to earn in terms of money of sales. Profitability ratios help to analysis earning capacity of the firm. Return on investment, return on capital employed, net profit ratios etc. are the best measures of profitability.

Facilities Inter-firm and Intra-firm comparisons: Ratio analysis is the basic form of comparing the efficiency of various firms in the industry and various divisions of a firm. Absolute figures are not suitable for this purpose, but according ratios are the best tools for inter firm and inter firm comparison.

Trend Analysis: Trend analysis of ratios reveals whether financial position of the firm is improving or deteriorating over years because it enables a firm to take the time dimension into account. With the help of such analysis one can ascertain whether the trend may be increasing.

6.0 REFERENCES

- Adolphs, C. and A. Winkelmann, "Personalization research in E-commerce—a state of the art review (2000–2008)," *Journal of Electronic Commerce Research*, Vol. 11, No. 4:326-341, 2010.
- Ahn, T., S. Ryu, and I. Han, "The impact of Web quality and playfulness on user acceptance of online retailin," *Information & Management*, Vol. 44, No. 3:263-275, 2007.
- Ajjan, H. and R. Hartshorne, "Investigating faculty decisions to adopt Web 2.0 technologies: Theory and empirical tests," *The Internet and Higher Education*, Vol. 11, No. 2:71-80, 2008.
- Andreu, L., J. Aldás, J. E. Bigné, and A. S. Mattila, "An analysis of e-business adoption and its impact on relational quality in travel agency–supplier relationships," *Tourism Management*, Vol. 31, No. 6:777-787, 2010.
- Cao, X. and P. L. Mokhtarian, "The intended and actual adoption of online purchasing: a brief review of recent literature," available at <http://www.uctc.net/papers/743.pdf>, Institute of Transportation Studies (ITS), Department of Civil and Environmental Engineering, University of California, Davis, 2005.
- Casanovas, I., "Exploring the current theoretical background about adoption until institutionalization of online education in universities: needs for further research," *Electronic Journal of E-learning*, Vol. 8, No. 2:73-84, 2010.
- Castañeda, J. A., F. Muñoz-Leiva, and T. Luque, "Web Acceptance Model (WAM): Moderating effects of user experience," *Information & Management*, Vol. 44, No. 4:384-396, 2007.
- Chen, L. and C. Holsapple, "E-Business Adoption Research: Analysis and Structure," *Proceedings of AMCIS 2012*, August 9-12, Seattle, WA, 2012.
- Cheng, T., D. Y. Lam, and A. C. Yeung, "Adoption of internet banking: an empirical

study in Hong Kong," Decision Support Systems, Vol. 42, No. 3:1558-1572, 2006.

Cheung, C. M., M. K. Lee, and N. Rabjohn, "The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities," Internet Research, Vol. 18, No. 3:229-247, 2008.

Chitura, T., S. Mupemhi, T. Dube, and J. Bolongikit, "Barriers to electronic commerce adoption in small and medium

Chiemeke, S., A. Ewwiekpaefe, and F. Chete, "The adoption of Internet banking in Nigeria: An empirical investigation," Journal of Internet Banking and Commerce, Vol. 11, No. 3:1-10, 2006.

enterprises: A critical literature review," Journal of Internet Banking and Commerce, Vol. 13, No. 2: 1-13, 2008.

IJARMATE