CONTRIBUTION OF RATIO ANALYSIS IN EFFECTIVE DECISION MAKING

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ABSTRACT
Significance changes have taken place in recent years in the size and complexity of both private and public organizations. As a result, the methods of arriving at the decision have become more difficult accounting activity of the organization. This research is devoted to examination of some major impact of ratio analysis. Accounting information provided by means of financial statements i.e. the income statement and the Balance Sheet are often in summarized form. Viewed on the surface, the truths about the results and the financial position of a business hidden in them remain implied. To be of optimal benefit and as well enable the users make well – informed decisions, financial statements need to be analyzed by means of ratios. Therefore, in order to establish the role of ratio analysis in business decisions will be considered. Financial analysis is a specialty in accounting that aimed at formulating a diagnosis and a prognosis relative to the condition and the financial performance of an organization. This study aims to define the importance of ratio analysis in evaluation of firms’ financial position and performance. It is possible to predict the corporate failure through the use of financial ratios. Ratio analysis is essential to the management, owners, suppliers, competitors, regulatory agencies, customers, tax payers and lenders each having their views in applying financial statement analysis in their assessments and making judgments about the financial health of organization. The general objective of this study is to analyze the contribution of Ratio analysis to make decisions effective.

Keywords: Financial Statement; Ratio Analysis; Firm Performance and Decision Making

INTRODUCTION
The two primary objectives of every business are profitability and solvency. Profitability is the ability of a business to make profit, while solvency is the ability of a business to pay debts as they become due. However, the achievement of these objectives requires efficient management of resources of the business through planning, budgeting, forecasting, control, and decision making. Also, the strengths and weakness of the business need to be identified and necessary corrective measures applied. Stimulatingly, Accounting provides information that facilitate these functions. Basically, accounting measures and communicates economic information that is needed for decision making. Thus, the American Accounting Association defined accounting as “the process of identifying, measuring and communicating economic information to permit in-formed judgments and decisions by the information”. The Income Statement shows the profitability or operational result of a business, while the balance sheet shows the solvency or financial position of a business. Decision-making calls information. Bittel et al. (1984:340) observed: “Managers want information because they need to make decisions. The proper use of information is an important part of decision-making.” Remarkably, one effective way of providing information needed for decision-making is ratio analysis.
Yes, business decisions of make or buy, expansion or contrition, investment or divestment, capital-organization and reconstruction, and so on cannot be properly made without the support of financial ratios. They give signal to the financial strengths and weaknesses of a business, and highlight aspects of a business requiring further investigation. Financial information provided in financial statements is useful in business decisions. However, it must be noted that financial statements are means to an end not an end in themselves. Thus the use of financial statements in decision-making is not always easy owing to the problem of concise nature of the information contained in financial statements, they need to be analyzed and interpreted by means of financial ratios to assist management and stakeholders understand them and make well-informed business decisions. Therefore, this research paper is carried out to show how ratio analysis aid managers, shareholders, investors, creditors, and other stakeholders make informed findings and decisions about the past performance, present condition, and futures potential of a business.

An efficient information system can provide relevant pointers to users based on accurate and factual information and financial analysis results are based on a diagnosis of return and risk. Financial ratio analysis is a process of determining and understanding relationships between the items of financial statements to provide a meaningful understanding of the performance and financial position of an enterprise. Ratio analysis is an accounting tool to present accounting variables in a simple, intelligible, concise, and understandable form. Ratio analysis is a study of relationship among various financial aspects in a business. Thus, it seeks to measure the value of the entity and purpose which it pursues, financial analysis develops the steps of collecting, shaping and treatment of a range of management information which may elucidate the wanted diagnosis and prognosis.

Financial ratios have played an important measure in evaluating the performance and financial position of any firm. It helps to express the accurate picture of the firm with respect to strengths or weaknesses and survival position of the firm and helps in forecasting the prospect of the firm and thereby enabling the decision makers to take different operational decisions of the firm and take corrective actions for the betterment of the firm. Ratio analysis doesn’t mean just comparing different numbers or figures from financial statements like income statement, balance sheet and cash flow statement. It’s a comparison of current numbers or figures with previous years, other companies, the industry, or even against the economy in general. Ratios define the relationship between individual values and relate these values with previous values that how a company had performed in the past, how is performing in present and might perform in the future. There are numbers of financial ratios used in analysis to evaluate and analyze the financial performance and survival position of a firm.

As a tool of financial management, ratios are more important. It defines facts on a comparative basis & enables us to draw an exact picture of a firm. Ratio analysis allows to analyst to judge, analyze and evaluate the performance of a firm in respect to the following different aspects:

1. Overall profitability
2. Operating efficiency
3. Liquidity position
4. Long-term solvency
5. Inter firm comparison
6. Trend analysis
7. Growth Position/ Growth Trend

LITERATURE REVIEW

According to Hermanson et al, “financial statement analysis consists of applying analysis tools and techniques to financial statements and other relevant data to show important relationships and obtain useful information.” Therefore, financial statement analysis can be defined as the breaking down,
interpretation, and translation of data contained in financial statements to provide information and show important relationships among the items of financial statements and drawing conclusion about the past performance, current financial position, and future potentials of a business.

Accounting ratios play an important role in determining the financial position of the firm. It identifies firms’ debt, profitability, liquidity, leverage, activity position of firm with respect to short term and long term prospective. Chen Kung H. and Shimerda (1981) studied the Empirical Analysis of Useful Financial Ratios to identify which ratios should be deleted, and which should be included among the hundreds that have been used by different researchers and can be computed easily from the available financial data, should be analyzed to attain the relevant information.

Lasher (1997:69) noted that ratios are most meaningful when used in comparison. For that reason, it is difficult to make a generalization about with a good or acceptable value is for any particular figure. One measure alone does not tell the whole story about a company and one measure should never be the sole basis for a financial decision”. Hermanson et al. added: “standing alone, a single financial ratio may not be informative, Greater insight can be obtained by computing and analyzing several related ratios for a company”.

OBJECTIVE OF THE STUDY

The purpose of this study is to present predominantly the relationship between financial analysis and accounting, and the fundamental role which accounting grasps, through the information it produces, into analysts’ work. To analyze the contribution of ratio analysis in effective decision making

1. To determine the effect of ratio analysis on the effective decision making
2. To measure the extent to which ratio analysis affects decision making
3. To assess the role of ratio analysis in the effective decision making
4. To assess the usefulness of Ratio analysis in evaluating and prediction the performance of a business
5. To measure the usefulness of ratio analysis to management investors, shareholders and creditors in their business divisions
6. To know the truth hidden in financial statements

If ratio analysis is to assess the earning capacity, financial soundness and operating efficiency of a business organization, then, the use of ratios in financial analysis would be of help for the management to identify the profitability, operating efficiency and financial position of an enterprise.

RATIO ANALYSIS

Dansby et al. defined ratio as “fractional relationship of one number to another”. Ratio analysis is the course of examining and comparing financial information by calculating meaningful financial statement figure percentages instead of comparing line items from each financial statement. Ratios are guides or shortcuts that are helpful in evaluating a company’s financial position and operations and making comparisons with results of previous years, with other companies or with the industry. The primary drive of ratio analysis is to point out areas needing further investigation. They should be used in association with a general understanding of the company and its environment.

USES AND OBJECTIVES OF RATIO ANALYSIS

Basically, ratio analysis is used in determining:

1. The short-term and long-term liquidity or the ability of the firm to meet its short-term as well as long-term financial obligations.
2. The riskiness or long-term solvency of a business organization. That is, the leverage or the level of gearing or the extent to which the firm is financed by debt.
3. The Performance, profitability or overall earning power of a business organization.
4. The assets utilization or proficiency in the use of assets of a business to generate sales revenue.
5. The potential risk and return allied with owing shares or investing in the stock a company.

**TYPES OF RATIO ANALYSIS**

**Liquidity (short-term solvency) ratios:**

Liquidity Ratios include Current Ratio and Quick or Acid Test Ratio

**Current Ratio:**

Current ratio can be calculated as follows:

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liability}}
\]

**Quick (Acid Test) Ratio:**

Quick or acid Test Ratio can be calculated as follows:

\[
\text{Quick or Acid Test Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}, \quad \text{Quick Assets} = \text{Current Assets} - \text{Inventory} - \text{Prepaid expenses}
\]

**Profitability ratios:**

**Gross profit margin**

This is known as the percentage of Gross profit to Net sales.

**Net profit margin**

It is a measure of the proportion of net sales that remains after the deduction of all costs and expenses. It indicates the ability of a firm to control operating and non-operating expenses. Net profit margin can be calculated as follows:

\[
\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Net Sales}} \times 100
\]

**Return on assets (ROA)**

ROA can be divided into two, namely; Return on operating Assets and Return on Total Assts.

**Return on operating assets**

The formula is: Return on Operating Assets = Net Operating Income/ Average Operating Assets or Net Operating Assets

**Return on total assets**

Return on Total Assets quantifies the success of the efforts of a business in using its assets to earn profit by stating net income after tax as a percentage of total assets.

\[
\text{Return on Total Assets} = \frac{\text{Net Income}}{\text{Average Total Assets}} \times 100
\]

**Return on equity (ROE)**

ROE can be calculated as follows ROE = Net Income X 100/Average Stockholder’s Equity

**Assets management (efficiency) ratios**

Asset management Ratios include: Inventory Turn-over, Average Days’ Inventory On Hand, and Accounts Receivable Turnover, Average Collection period for Ac-counts Receivable, Total Assets Turnover, and Fixed Assets Turnover.
Inventory turnover Ratio

Inventory Turnover measures the number of times in which the average inventory or stock is sold in a given period. The ratio is calculated as follows:

\[
\text{Inventory Turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average Inventory}}
\]

Average days’ inventory on hand

This is a measure of average number of days taken to sell inventory. It is an extension of inventory turnover and thus helps a firm to know the speed at which it sells inventory or stock. The ratio computed as follows.

\[
\text{Average days’ inventory on hand} = \frac{365 \text{ days}}{\text{Inventory Turnover Ratio}}
\]

Receivable Turnover Ratio = Net Credit Sales/ Average Accounts Receivable Or Net Sales/ Accounts Receivable

A comparison of the average collection period with the credit extended customers by a company, credit extension policy will provide further insight into the quality of accounts receivable.

ACP = 365 days/ Accounts Receivable Turnover

Total assets turnover (tat) TAT = Net Sales/ Average Total Assets (excluding in-vestments)

Fixed assets turnover (fat) FAT = Nest Sales /Average fixed Asset

Debt Ratio

Debt Ratio measures the relationship between total debt and equity in supporting assets of a business. Debt ratio calculated as follows:

\[
\text{Debt ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}} \times 100
\]

proprietary Ratio

This is the opposite of debt ratio. It measures the extent to which assets of the firm are financed by stockholders or owners of the business. Equity Ratio can be calculated as follows:

\[
\text{Equity (proprietary) Ratio} = \frac{\text{Stockholders’ Equity}}{\text{Total Assets}} \times 100
\]

Debt To Equity Ratio

This ratio is a measure of mix of debt (total liabilities) and equity within the firm’s total capital.

\[
\text{Leverage (Gearing) Ratio} = \frac{\text{Long-term Liabilities}}{\text{Stockholders’ Equity}}
\]

SIGNIFICANT OF THE STUDY

The significance impact of ratio analysis in financial organization cannot be over emphasized. It is therefore expected that, this research work is bound to be constructive to the following:

a. Management: Most management decisions are based on information derived from ratio analysis. Management planning is also very much supported by vital information from ratio analysis.

b. Shareholders: For shareholders to determine their wealth maximization, they depend on information from ratio analysis such as stability ratio and leverage ratio.

c. Potential Investor: For potential infestation is and for them to know or find out the organization is based on important information from ratio analysis.

d. Employees: The interest of employees in the organization is how their welfare can be improved. They are able to obtain information for their improvement or their well-being through ratio analysis such as profitability ratio.
e. **Student**: It is expected that students mostly undergraduate stand to assistance from this research work because it serve as a source of ratio analysis.

f. **Government**: The Government is interested in profit earning capacity and the effective utilisation of firms’ capacity. Therefore, Gross Profit Ratio, Ratio of Net Profit to Capital Employed, Net Profit to Sales, etc., are of much significance to a Government.

g. **Creditors**: Creditors’ interest lies in the ultimate solvency and liquidity position of an business organization and in the interest covered. These they can judge from the analysis of Current Ratio, Liquid Ratio, Debt Equity Ratio etc.

h. **Investors and Lenders**: Investors and lenders are interested to know the solvency position of an organization. They analyze the ratios to know about the safety of their investment and capability to pay interest and repayment of principle amount on due date.

### ADADVANTAGES OF RATIO ANALYSIS

Financial ratios are based on accounting data which recognize the significant accounting data relationships, which give the insight financial information and performance of a company to decision maker. The advantages and usefulness of financial ratio analysis are as follows:

- Ratios help in identification of trend analysis, which is useful in forecasting future and decision making process.
  
  1. Analysis of ratios helps in assessing and evaluating of enterprises’ profitability, liquidity, operations, and leverage that outlines the true performance picture of an enterprises / firm
  
  2. It provides a basis for both types of comparisons and evaluations, intra-firm as well as inter-firm comparisons and evaluation.

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<th>Effective Decision Making</th>
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- Analysis and comparison of financial ratios of current year with previous year or standard ratios help the management and decision makers to analyze and evaluate the financial performance of the enterprises/firm.

- Financial ratios are the only variable that is used in determining the bond ratings.

Ratio Analysis is extensively used as a powerful tool of financial statement analysis. It establishes the numerical or quantitative relationship between two figures of a financial statement to determine strength and weakness of a firm as well as its current financial position and historical performance. It supports various interested parties to makes an evaluation of certain aspect of a firm’s performance.

### CONCLUSION

Financial statements comprise lots of information summarized in figures. Viewed on the surface, they do not provide sufficient information about the practicability of the reporting entity. Thus, they need to
be analyzed by means of financial ratios to unravel the mass of truth concealed in them, and to enrich
decision-making. Ratio analysis helps to disclose, compare and interpret significant features of
financial statements. When applied to a set of financial statements, financial ratios highlight important
aspects of the financial position and operational outcomes of a business organization requiring further
investigation. They help to recognize the strengths and weaknesses of a business.

In fact, ratio analysis helps to assess the past performance, the present condition, and the future
prospects of a business/firm. It facilitates us to ask the right questions about a business, and paves way
to finding the suitable answers. Such analysis therefore, supports planning, control, forecasting and
decision making.

Ratios are significant tools that are used by trained professionals in their bid to deliver value to those
that have entrusted them with the management of their businesses and investments. Ratio analysis is
the application of the tools (ratios) in a fruitful and efficient way with the purpose of understanding
relationships that exists amongst different variables.

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