

Financial Ratios as a Veritable Tool for Investment Decision Making in an Organization

Andabai, Priye Weribgelegha¹ & Egoro, Stephen . A²

¹ Department of Finance and Accountancy, Niger Delta University, Bayelsa State, Nigeria, E-mail: privehc@yahoo.com, Tel: 08037046538

² Department of Finance and Accountancy, Niger Delta University, Bayelsa State, Nigeria, E-mail: steven_egoro@yahoo.com TEL: 08034367383

Abstract

The role of financial ratios in evaluating the financial performances of an organization cannot be over-emphasized. Therefore, this study premised on the concept of ratios analysis as a veritable tool for investment decision making in an organization. Hence, the aim and objective of the study is to examine why ratios are computed and used by management as a tool for investment decision making. Data for this study were collected with the aid of questionnaires and chi-square was also used to test the formulated hypotheses. The study reveals that it do not pay a company to either be highly liquid rather it should strike a balance. There should also be an appropriate mix of debt and owners' equity in financing the firm's assets, sales and the various assets of the company. Assets should be adequately and efficiently be managed to ensure proper balance. The study recommends that financial analyst should identify ways and methods of making ratio analysis simpler and easy to interpret. Management should endeavor to understand and interpret the current ratio of the company so as to know the operational performance of the company in several areas of evaluation with conclusion.

Keywords: financial ratios, financial performance, organization

1.0 Introduction

Investment decision has been a major cause of business failure in Nigeria; because, the need to take and when to take the right decision in any investment proposal to ensure maximum profitability and survival of the business (Oluwe, 2002). According to Pandey (2004), decisions require proper assessment in order to obtain needed facts through analytical study of present operations, future prospects and the outcome of such decisions (Ogam, 2001). The operating results of business establishment are usually contained in financial or accounting reports. Barth (2008) stressed that these information would aid users of such reports in their judgment or decision about economic and financial matters about the business.

The information contained a report primarily in monetary terms, when absolute naira amount of data items reported were considered incidentally. The significant relationship may not be different from the absolute naira amount because it does not give insight whether the particular item is good, bad or adequate for the firm. One important tool which has helped business over the years in this area is financial ratio analysis. Ratio Analysis is the analysis of financial performance and efficient utilization of the resources of a business. The company balance sheet, profit and loss account and funds flow statement are essential, but are only the starting point for successful financial management. Ratio Analysis is applied to financial statement to analyze the efficiency and effectiveness of the use of company resources to assess the success, failure and progress of any business (Ezra, 1963). Barth et al (2008) observed that, ratio analysis enables the business owner/manager to know the trends of the business and to compare its performance and condition which the average performance of similar business in the same industry. According to Pandey (2004), to do this, the ratio is compared with the industry average of similar business.

Helfert (1997) argued that, comparing, the ratios for several successive years and observing especially for any unfavourable ends, ratio analysis may provide the important early warning signals that allow for the solving of business problems before it becomes too late. While investment decision according to Pandey (2004), is the allocation of firms capital funds to investment proposal to yield future benefits that meet the expectation of all investors question to, how and to what extend do ratio analysis effects financial decision making. Donaldson (1985) observed that, ratios are adequate for analysis and to what extend are they used in industry for investment decision making.

2.0 Conceptual Issues

Tasler and Bill (2010) analyzed company's risk by constructing a statistical techniques from which he derived a two score, so that comparisons could be made a previous bankrupt firms and financial sound companies. Winaker and Smith carried out a research in the early (1930s) on the various causes for corporate failure. Their conclusion was that ratio of the working capital to total asset fit in best in measuring corporate failure. In contrast to his conclusion based on this own research on thirteen unsuccessful companies and concluded that the best predictor to corporate failure were the net total debt ratio.

Horrigach (1965) maintained that, Winaker and Smiths research lacked a contrasting control group of successful firms while Fitzpatrick sample was too small and selective, but both studies were significant in evaluating the predictive power of financial ratio. Argenti (1977) states that, failure is a process that take many years to complete quite contrary to the belief of most people who fall suddenly, almost overnight and companies seems to go through three district stages on their way to insolvency. First, there is something wrong with them, pre-emptily will they respond to changes. Finally, there finance deteriorates to have the sequence defeat, mistakes and symptoms. The classic mistake as listed by Argenti is gearing overtrading on the big project.

Robertson (1984) observed that, through the use of ratio they were able know the success and failure of laker Airways whether or not they were parent as financial indicators by March 1980. He concluded that, a company could fail by making only mistakes while another keep going making exactly the same mistake or two. John (1989) asserted that, strength of financial ratio is that it focuses attention of financial strength as reflected in the capital structure. High gearing results from the corporate fund expansion policy which if and when implemented dictated both the corporate financial structure and the financial lost requirement for current and future period in generals.

The existence of high percentages of stock holder capital indicates that the "financial" risk is relatively low, and there is little danger or forced liquidation of reorganization as a result of defaulted obligation (Brown 1998). Financial analysts have given the strength of financial ratio as a critical evaluation comparing two companies' performances. Horrigan (1989) commented that, it is difficult to imagine that one would think about firms much and analyze them without resulting to ratio measures. Financial ratios further serve as a pressure of important characteristics such as liquidity, profitability, operations, efficiency, and divided policy to mention a few financial ratios can also be used to predict other useful luckless financials distress is an area where ratio have been used for this purposes. Conclusion drawn by Hicwarn (1958) was that, the time interest earned ratio and the net profit sales useful predictors of defaults on bond issue.

2.2 Development of Ratios

Samuel et al (1988) asserted that, development and the application of ratio in financial statement is a function of the ever increasing information by the various groups of users. The careful analysis of Balance Sheet often involves a clear perception and understanding of the financial statement. These, therefore necessitated the existence of performance indicators among which financial ratio had constituted a vital element. John (1989) stated that, the development of financial ratios for analysis of accounting statement is a product of accounting in United State,

where the ratio were originally developed as a short term credit analytical devices and their origin can be traced as far back as the 19th century.

Lucey (1984) observed that, a variety of financial ratios were developed by analysis in the early decades of this century and by the end of the 1920s a great out pouring of ratio data began to flow from many individual analysis and institutions. Liquidity ratio among the early ratios to be used, the current ratios dates back to the later years of the 19th century which the quick or Acid test ratio followed a few years later however, most of the main ratios used today were developed before 1930 and little changes have taken place in the way they are calculated or interpreted (Durury, 1980). Succeeding researches of significant importance had been undertaken by meaning (having to shown a great knowledge that is show from academic study) erudite scholars and researches of repute in the field of financial ratio analysis among which were James O Hooligan (1968) Wall and Dunning (1928) A. Hinan (1968) Foulke (1933) Green (1978) and Robertson (1984) to mention a few.

The use of weight in producing an index of credit strength in ratio analysis was first introduced by Wall and Dunning in 1928 by combining a group of ratios. However, there is evidence in index being widely used or accepted and in 1968; Altman published the result of his finding using statistical techniques, which discriminates between two groups—a failed group and an on-going group of companies. Despite its early discovery financial ratios is still significant as a vital tool in company appraisal and management performances. (Andabai, 2008).

2.3 Modigliani-Miller Hypotheses of Debt-Equity

A company can finance its investment through a variety of sources such as debt, preference share capital, common share capital and reserve the use of fixed charge source of fund such as the owner's equity. The primary motive of a company using debt financing is to magnify the shareholders earning under favourable economic conditions. Modigliani and Miller (1958) maintained that in the real scene of taxes a firm's market value and the cost of capital remain invariant to the capital structure changes.

Their hypothesis is based on the following assumptions: (i) That there is no restriction on the banking and selling of securities hence there is a perfect market situation (ii) That firms may be grouped into risk classes in terms of their homogeneity. It generally implied that firms within the same industry make up homogenous classes. The expected net operating income is a random variable with a constant mean probability distribution and a future variance (iii) That firms have a low percent payout. (iv) that there is no corporate income tax.

Modigliani and Millar argued that for firms in the same risk classes. The total market value is not a function of the total equity combination and is given by capitalizing the expected net operation income by the appropriate risk classes. Since the cost of capital is defined as the expected net operating income dividend by the total market value of the firms so not affected by the financing mix, it invariably means that the cost of capital structure and is synonymous to the capitalization ratio of a pure equity stream of its class.

Alihe and Anao (1986) maintained that in line with Modigliani and Miller hypothesis, that a company can raise its levels of debt to the maximum the directors borrowing power. They however, suggested that “the existence of a tax advantages does not necessary mean that corporation should at all times seek to use maximum possible amount of debt in the capital structure”. However, Modigliani and Millar hypothesis is defective on some grounds. The assumption that term and individuals can borrow and lend at the same rate of interest is questionable. It is irrational to assume that there is no corporation tax. Firms can rarely be grounded into risk classes. And finally, in practice, the probability that firm's will have 100% payout ratio is Zero.

According to Van Horne (1990), to evaluate a firm financial analyst needs certain yardsticks must be used to measure the strength. Analysis and interpretation of various ratios he noted, should give experienced skilled analysts and better understanding of the financial conditions and performance of the firm's than they would obtain from analysis of the financial data alone. Ratios Similarly, Energy and Finnerty (1990) pointed that, financial ratio are used as bench market by analysts, investors, lenders and managers to judge the financial performance and financial condition of the business firm. Ratios could be used for different purpose both by management and external groups (Soyode, 1995).

2.4 International comparison

The analysis of financial ratios involves two types of comparison. First the analyst can compare a present ratio with past and expected ratios for the same company. The current ratio (the ratio of current assets to current liabilities) for the present year and could be compared with the current ratio for the previous years end. When financial ratios are arranged on speed sheet over a period of year, the analyst can study the comparison of change and determine whether there has been an improvement or deterioration in the firm's financial ratios also can be computed for project statement and compared with present and past ratios (Bentein, 2002).

2.5 External comparisons

The second method of comparison involves comparing the ratios of one firm with these of similar firms or with industry averages at the same point in time. Such a comparison gives insight into the relative financial conditions and performance of the firm with respect to others. Besides the internal and external comparisons of financial ratios, may dives groups of people are interested in analyzing information to indicate the operation efficiency and the various aspects of the firm's financial position (Amao et al, 1992).

2.6 Users of Financial Ratios

The users of financial ratios have been identified to include creditors stock holders potential investors, management, government agencies of labour leaders. Naturally, Lieson and Weygandt (1985) have stated, the type of financial analysis that takes place dependent on the particular interest that analyst has in the enterprise. Short term creditors, such as banks are primarily interested in the ability of the firm to pay the currently maturing obligations (Andabai, 2008).

As a result of this Higgins (1989) has noted that, short term creditors are interested in the composition of the current assets and their relations to short term liability by examining the closely to evaluate the short term solvency of the firms stockholders, present prospective, also are interested in many of the features considered by a long term creditors. Brown (1989) Postulated that, the examination of ratio analysis the greatly affects the market price of their investment. Stock holders also are concerned with financial position of the firms because its affects indirectly the stability of the earnings (Amao et al, 1992).

John (1984) observed that, the management of a company is of necessary concerned about the composition of its capital structure and about the changes and trends in earnings. The financial information has a direct influence on the type of amount and cost of external financing the company may obtain to find financial ratios useful on a day operating basis in such are as good as the data upon which they are based and the information with which they are compared. According to Flum one important limitations of ratio is that they are based on historical cost, which can lead to distortions in measuring performance. This view is quite in place because by failing to incorporate assessment of the enterprise financial conditions and performance results. Also investors must remember that where estimated item (such as depreciation and amortization) significant income ratio loses some of their credibility, income recognized before the termination of business approximation (Lucey, 1984).

3.0 Methodology

The sources of data for the purpose of this study include primary and secondary. The primary sources covers questionnaires distributed among the sample units. Secondary data include textbooks journals and other relevant publications. The descriptive and analytical methods of data were used in testing the formulated hypotheses. The research hypotheses to be tested include: **H₀₁**: There is no significant relationship between financial ratios and the performance of the company. **H₀₂**: There is no significant relationship between the use of financial ratios and investment decision making of the company. The chi-square X^2 was used to be test the hypotheses formulated for the study.

4.0 Analysis and Discussion

The information was gathered through administered questionnaires demanding “yes or no” answers from the respondents.

Table 1: the manner of distribution.

Department	Properly filled	Not returned	Total
Accounting	25	7	32
Management	24	4	28
	49	11	60

Sources: Field data, 2014.

From the total of 60 questionnaire that was given out only 49 of them were returned successfully which from the basis of the sample size. The table 1 shows the manner in which the questionnaires were distributed to respondents, according to their department. It shows that 32 was administered to the accounting department and 25 were properly filled and returned and 28 issued to management and 24 properly filled and returned and 28 issued to management and 24 properly filled and returned.

Table 2: Responses to Questions.

Response	No of response of staff		Total
	ACCT	MGT	
Yes	18	21	39
No	7	3	10
Total	25	24	49

Sources: Field Data, 2014.

Table 2 shows that, eighteen percent of accounting staff response positive to the question been asked while 7 disagree with it. Twenty one management staff agrees with the question and three percent disagree. The result of the above will be used for further statistical analysis to test the hypothesis.

Table 3: Computation of the expected cell frequencies

Response	No of response of staff		Total
	ACCT	MGT	
Yes	$39 \times 25/49 = 19.90$	$39.24/49 = 19.10$	39
No	$10 \times 25/49 = 5.10$	$10 \times 24/49 = 4.90$	10
Total	25	24	49

Sources: computed from table 2.

Test of Hypothesis Ho₁: There is no significant relationship between financial ratios and the performance of the company.

Table 4: showing the computation of χ^2 value

Cells	F _o	F _e	F _o -f _e	(f _o -f _e) ²	F _e /(f _o -f _e) ²
1	18	19.90	-1.9	3.61	5.51
2	21	19.10	1.9	3.61	5.29
3	7	5.10	1.9	3.61	1.41
4	3	4.90	1.9	3.61	1.36
Total	49	49			$\chi^2 = 13.57$

Sources: computed from table 2 and 3.

Decision rule: With a 0.05 significant level the difference is significant, if χ^2 with a degree of freedom is above 3.841 the value is above the critical value. Hence we reject the null hypothesis generalizing that financial ratios are effective tools of company performance appraisal. Therefore, between the two variables a positive relationship exist.

Table 5: The responses to question 2 and 1 are presented

Response	No of Response of Staff		Total
	ACCT	MGT	
Yes	15	18	33
No	7	9	16
Total	22	27	49

Source: survey data, 2014.

The result of table 5 is used for further statistical analysis to test the hypothesis.

Table 6: Computation of the expected cell frequencies

RESPONSE	No of Response(Staff)		TOTAL
	ACCT	MGT	
Yes	14.82	33 x 27/49 = 18.18	33
No	16 x 22/49 = 7.18	16 x 27/49 = 8.82	16
Total	22	27	49

Sources: computed from table 5.

Test of Hypothesis Ho₂: There is no significant relationship between the use of financial ratios and investment decision making of the company.

Table 7: Computation of the χ^2 value

Cells	F _o	F _e	F _o -f _e	(f _o -f _e) ²	F _e /(f _o -f _e) ²
1	15	14.82	0.18	0.03	494
2	18	18.18	-0.18	0.03	606
3	7	7.18	-0.18	0.03	239
4	9	8.82	0.18	0.03	294
Total	49	49			1633

Source: Computed from table 5 and 6.

Decision Rule: With a 0.05 significant level the different is significant, if χ^2 with a degree of freedom is above 3.841 the value of the computed chi-square χ^2 is 16.33 as above the critical value. Hence we reject the null hypothesis generalizing that there is significant relationship between the financial ratio and investment decision making of the company. Therefore between the two variables a positive relationship also exists.

5.0 Conclusion and Recommendations

Financial ratios quantify many aspect of the business and are an integral part of financial system analysis. Financial ratios are categorized according to the financial aspect of the business which the ratio measure. Liquidity ratios measure the availability of cash to pay debt. Actually this ratios measure how quickly firm converts non cash assets to cash assets. Debt ratios measure the firm ability to pay long term debt. Profitability ratio measure the firm use of its assets and control of its expenses to generate acceptable rate of return. Financial ratio allows comparison between companies and industries at different time periods for them to know their industrial average.

Ratios generally hold no meaning unless they are bench marked against something else like past performances or of another company. Thus, the ratio of firms in different industries which face different risks, capital requirement and competition are usually hard to compare. The potential shareholders should not only be interested in the huge amount declared by the company, but also determine if the earnings ratio of the company is normal. Existing creditors of the company should put their interest in the liquidity position of the company its ability to pay its debt especially the debt ratio of the company. Long term creditors such as debenture holder and banks, are advised to see that the earning of the company covers their interest rates. While short term creditors, such as the suppliers should be interested in the current ratio of the company since one way or another they are affected by such ratios. As much as the management computes these ratios, it should endeavour to indicate its annual report and as much as possible increase. Its indication for those indicated presently are not enough. Important also to note that the indication of the “winning through change” programme in 2006 is highly commendable as it will go a long way as to improving the company’s performances. The financial analysts should be advised to research into ways and methodology of making ratio analysis similar in interpretation and understanding as this could bring about easy understanding of findings made available by ratio analysts.

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