# The Impact of Liquidity on Profitability of Some Selected Companies: The Financial Statement Analysis (FSA) Approach

EHIEDU, Victor Chukwunweike

Department of Accounting, Banking & Finance, Delta State University, Asaba Campus.

### Abstract

The major indicators of the financial performance of corporate entities are liquidity and profitability. Liquidity ratio is used to judge the ability of a firm to meet its short term maturing obligations. The higher the ratio the greater the margin of safety for short-term creditors (current ratio). While profitability ratio is concern with relative profitability and efficiency of utilization of resources of a business. Thus, this study seeks to determine the following: (1)The correlation between current ratio and profitability; as measured by return on assets (ROA), (2) The correlation between Acid-test ratio and profitability; as measured by return on assets (ROA), (3) The correlation between return on capital employed and profitability; as measured by return on assets (ROA). The research design adopted for this study is the "quantitative research design". The population consists of publicly quoted companies that make up the "industrial/Domestic products" industry. The sampling technique adopted is the "non-probability" sampling technique of four selected companies. The data used for the study was secondary data in the form of the "Annual Reports and Accounts" of the selected companies. Simple correlation analysis was used to test the hypothesis at 10% level of significance. The overall findings of this study indicate that: (1) There is a significant positive correlation between current ratio and profitability, (2) There is no definite significant correlation between Acid-test ratio and profitability. (3) There is no significant positive correlation between return on capital employed and profitability. The researcher recommends that corporate entities should not pursue extreme liquidity policies at the expense of their profitability, i.e. they should strike a balance between the two performance indicators (Liquidity and profitability).

### **INTRODUCTION**

The importance of financial statement analysis to business decision making cannot be over emphasized. In this current age of globalization and economic liberalization, businesses need to be up and doing if they are to secure their continuous existence in the competitive business environment. One of the relevant exercises that will give them an idea of whether or not their financial future is secured is financial statement analysis. Pandey (2005) posited that "the basis for financial statement analysis is financial information. Financial information is needed to predict, compare and evaluate a firm's earning ability and financial position". The third edition of the Oxford Dictionary of Accounting defines financial statement analysis as "an analysis of the financial statement analysis is "the process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of the balance sheet and the profit and loss account". Thus, financial ratios in measuring the key areas of a business. Ibenta (2005) noted that one of the tools for financial statement analysis is financial ratios; computed from a firm's financial statement; which helps users of financial statement to gain an insight into the future performance of the firm.

Hussey (2008) affirmed that, "ratio analysis is a method of describing and interpreting the relationship of certain financial data which would otherwise be devoid of meaning". He also went further to state that "financial ratios allow comparisons to be made between companies of different sizes, a particular company and the industry average, and the same company over a period of time". However, Anao (2002) argued that financial statement analysis can be carried out through the application of three (3) methods which are: trend analysis, percentage analysis and ratio analysis. However, he further argued that of all the three methods, ratio analysis is the most effective. In the opinion of Osiegbu and Nwakanma (2008), financial ratios "are used to measure the relationship between a firm's performances in relation to an acceptable standard". Thus, financial ratios help in evaluating the financial performance and condition of a business concern, by studying the relationship among various financial factors in a business as disclosed by a single set of financial statement and the trend of these factors as shown in a series of financial statements. The measurement of profitability and liquidity is vital to the existence and continuous survival of business. It enables businesses to have a reasonable idea of their past financial performance (profitability) and current financial position (liquidity), which will further

enable them to take corrective measures to forestall any future financial quagmire that may arise from future profitability and liquidity crisis. Osiegbu and Nwakanma (2008) viewed profitability as a function of a large

number of policies and decisions. Ibenta (2005) viewed liquidity as the ability of a firm to meet its short-term maturing obligations. Thus, in financial statement analysis, the measurement of profitability and liquidity is an important aspect that highlights a firm's financial health.

The working capital approach to liquidity management has long been the prominent technique used for planning and controlling liquidity. However, instead of using working capital as a measure of liquidity, many financial analysts advocate the use of liquidity ratios, which have the advantage of making temporal or cross-sectional comparison possible. However, the ultimate measure of the effectiveness of liquidity management is the impact. It has no profit and shareholders value. Thus, this study aims at determining the relationship between liquidity and profitability, using a sample of some selected publicly quoted companies in the "Industrial/Domestic Products Industry" in the manufacturing sector of the Nigerian economy.

### **OBJECTIVES OF THE STUDY**

This research seeks to pursue the following objectives:

- 1. To determine the relationship between current ratio and profitability i.e. returns on assets (ROA)
- 2. To determine the relationship between acid-test ratio and profitability, i.e. returns on assets (ROA)
- 3. To determine the relationship between return on capital employed and profitability i.e. returns on assets (ROA)

### THE THEORETICAL FRAMEWORK OF FINANCIAL STATEMENT ANALYSIS

According to wild et al (2004), financial analysis is "the use of financial statement to analyze a company's financial performance and position and to access future financial performance". Finnerty (2006) viewed financial analysis as the process of collecting and refining financial data and presenting the refined financial information in a summary format, suitable for effective decision making. However, Moyer et al (2006) argued that "financial analysis is an exercise that assists in identifying the major strengths and weaknesses of a business enterprise, in addition to indicating whether the enterprise has enough cash to meet its financial obligations; an efficient inventory management policy; sufficient plants and equipments; and an efficient capital structure, all of which are necessary for the enterprise to achieve its goals of maximizing the wealth of shareholders". They also went further to state that "financial analysis can also be used to assess a firm's viability as an on-going enterprise and to determine whether a satisfactory return is being earned for their risk". Babatunde (2008) viewed financial analysis as "an exercise that can be undertaken by management as well as owners, investors, creditors, consultants and others". He, however, presaged that, "the nature of the analysis will differ, depending on the purpose of the analyst".

### THE CORRELATION BETWEEN LIQUIDITY AND PROFITABILITY

Liquidity and profitability are two very important and vital aspects of corporate business life. No firm can survive without liquidity. A firm not making profit may be considered as sick but, one having no liquidity may soon meet its downfall and ultimately die. Liquidity management has thus, become a basic and broad aspect of judging the performance of a corporate entity (Bardia 2007). It is thus, essential to maintain as adequate degree of liquidity of smooth running of the business operations. The liquidity should be neither excessive nor inadequate. Excessive liquidity indicates accumulated idle funds, which do not earn any profit for the firm, and inadequate liquidity not only adversely affect the credit worthiness of the firm, but also interrupts the production process and hampers its earning capacity to a great extent. Thus, the need for efficient liquidity management in corporate businesses has always been significant for smooth running of the business, (Valrshney, 2008).

A lot of research work has been done on the area of focus. Lambery and Valming (2009) conducted a study on the "impact of liquidity management on profitability: a study of the adoption of liquidity strategies in financial crisis? The major purpose of the study was to evaluate and compare the use and extent of liquidity practices in two time points and to measure, if the change in liquidity strategy is related to profitability. The research problem consisted of two main questions:

1) Do active liquidity strategies have a positive effect on a company's profitability in times of financial crisis?

2) Have the importance of key ratios in the measurement of liquidity changed during the time period? Samples for the study consisted of companies listed on the Stockholm stock exchange's small and cap list, with some restrictions. The "quantitative research" strategy was adopted and data were collected through telephone interviews and financial ratios computed from financial statements. Statistical analysis was conducted through regression analysis of the charged scores and profitability. Overall findings suggested that the adoption of liquidity strategies does not have any significant impact on profitability only, but increased use of liquidity forecasting and short-term financing during financial crisis had a positive impact on profitability. It was also found out that key ratios monitoring companies' liquidity have not changed between the studied time points. Wilson (2004) in his research on "liquidity profitability trade –off: An Empirical Investigation in an emerging markets' which was aimed at determining the relationship between profitability and liquidity ratios, found that there was significant negative relationship between profitability and liquidity levels of companies. The sample for the study consisted of its joint stock companies and the data collected from these companies were subjected to regression analysis.

Samilogu and Dermirgunes (2008) also conducted a research on the "effect of working capital management on firms' profitability. In the course of the research, 5,841 samples of financial statements of companies that were listed on the Istanbul Stock Exchange (ISE) were analyzed through regression analysis, and the analysis covered a period of ten (10) years from 1998 to 2007. From their findings, the researchers concluded that working capital management has a significantly negative relationship with profitability. Amit et al (2005) studied the relationship between liquidity and profitability in the context of Indian Pharmaceutical Industry and concluded that no definite relationship can be established between liquidity and profitability. Narware (2004) in his study of liquidity and profitability of NFL, a fertilizer company disclosed both negative and positive association. Mukhopadhyay (2004) in his paper "working capital management in heavy engineering firms – a case study" indicated that loans and advances, and other current assets hardly had any role to contribute in sales/business generation of the firm during 2002 to 2003. Bardia (2007) in his study on Steel Giant Sail for the period from 1991/92 to 2001/02, concluded that there is a positive relationship between liquidity and profitability. Sur et al (2001) revealed in their study of Indian Aluminum Producing Industry, a very significant positive association between liquidity and profitability.

### **RESEARCH METHODOLOGY**

Esene (2005) while quoting Yomere and Agbonigho (1999) defined research methodology as the methods, procedures, or modalities through which the researcher intends to accomplish his objectives. Thus, this chapter sets out the rationale for choosing the research population and samples. It also includes a highlight of the data collection process and the statistical technique adopted for testing the validity of the hypotheses already formulated.

### **RESEARCH POPULATION AND SAMPLE SIZE**

Because of the researcher's interest to carryout a study on the correlation between liquidity and profitability; as measured by the various liquidity ratios and return on assets (ROA) respectively, the population of this study shall consist of all companies in the "industrial/Domestic products" industry; that are quoted in the Nigerian Stock Exchange (NSE). However, the sample population will be drawn from two selected companies, which are Beta Glass of Nigeria Plc and Vita Foam Nigeria Plc.

### SAMPLING TECHNIQUE

The sampling technique adopted for this research is the non – probability sampling technique. "This is when whatever elements of the population that are available are selected as sample items, without following any specific subject selection process" (Esene, 2005). This sampling techniques was adopted because all the items of the population were not available, hence the researcher had to use those that were fully available.

### METHOD OF DATA COLLECTION

Date used for this study were secondary data, as represented by the "Annual Report and Account' of the selected samples of companies in the Industrial/Domestic products" industry' in the manufacturing sector of the Nigeria economy, quoted on the Nigeria Stock Exchange (NSE). The Annual Reports and Accounts" of these companies were gotten from the Nigerian Stock Exchange, Onitsha. The use of Secondary data was necessary because of the quantifiable and verifiable nature of the variables involved; liquidity and profitability. Other secondary data and information used were gotten from textbooks, Journals, the internet, newspapers etc.

### TECHNIQUE OF DATA ANALYSIS

Method of data analysis simply means the statistical total or technique utilized in processing the data collected, with a view to arriving at valid conclusions. The statistical technique adopted for this study is "simple correlation

analysis". This statistical model was chosen because of the fact that it measures the degree of association between two (2) variables; in this case, liquidity and profitability. The correlation coefficient ® derived from the analysis will be subjected to 10% level of significance test.

As stated earlier, the statistical model to be adopted for this research is simple correlation analysis. The correlation coefficient is defined as follows:

Correlation Coefficient ®

$$n\sum xy - \sum x\sum y$$

$$(\sqrt{n\sum x^2} - (\sum x)^2 (\sqrt{n\sum y^2} - (\sum y)^2)$$

Where:

	R	=	Correlation Coefficient
	Ν	=	Number of observation
	Σ	=	Summation Sign
	Х	=	Independent Variables (Individual Liquidity Ratios).
Y	=	Depen	ident variable (Profitability i.e. return on assets (ROA)
To tes	t for sig	nifican	ce, the following formulae will be applied.
	Df	=	N – 2

Where:

Df	=	Degree of freedom
Ν	=	number of observations.

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### **DECISION RULE FORMULATION**

Accept Null hypothesis (Ho) and reject Alternative Hypothesis (Hi) if the correlation coefficient (r) is significantly negative. Or accept Alternative Hypothesis (Hi) and reject Null Hypothesis (Ho), if the correlation coefficient (r) is significantly positive.

## DATA PRESENTATION AND ANALYSIS

This session encompasses the presentation of the secondary data collected, in a tabulated format, and an analysis of these data through the application of financial ratios and correlation analysis, to enable the researcher draw a valid conclusion.

## **TEST OF HYPOTHESES**

Hypothesis one (1):

**H**<sub>1</sub>: Current ratio is positively correlated with profitability, i.e. return on assets (ROA). Let x be current ratio and Y be return on assets (ROA).

S/N	YEAR	X	Y	$\mathbf{X}^2$	$\mathbf{Y}^2$	XY
1	2007	1.14	0.61	1.3	0.37	0.69
2	2008	1.15	4.65	1.32	21.6	5.34
3	2009	1.55	0.06	2.4	0.00	0.09
4	2010	1.17	0.83	1.37	0.69	0.97
5	2011	1.08	0.70	1.17	0.49	0.76
	$\sum =$	6.09	6.85	7.56	23.15	7.85

# **Table 1: BETA GLASS NIGERIA PLC**

Source: Research's Calculation

ent (r) $=$	$n\sum xy - \sum x \sum y$
	$\sqrt{n\sum x^2 - (\sum x)^2} (\sqrt{n\sum y^2} - (\sum y^2))$
	1
5 x7.85 - 6	.09 x 6.85
$(5 \times 7.56 - 3)$	7.1)( 5 x 23.15 – 46.9)
39.25 -	- 41.7
$(\sqrt{37.8} - 37.1)$	) $(\sqrt{115.75} - 46.9)$
- 2.45	
$(\sqrt{0.7})(\sqrt{10})$	68.85)
- 2.45	
(0.84) (	(8.3)
- 2.45	
6.972	2
- 0.35	1
	$5 \times 7.85 - 6$ (5 x 7.56 - 3) <u>39.25</u> ( $\sqrt{37.8} - 37.1$ <u>-2.45</u> ( $\sqrt{0.7}$ ) ( $\sqrt{6}$ <u>-2.45</u> (0.84) ( $-2.45$ <u>6.972</u>

**Test of Significance:** To test for the significance of association between the two variables correlated, there is and to determine the degree of freedom (df), which will enable us determine the critical value of (r).

= N - 2= 5 - 2 = 3

df

At 3 degrees of freedom, and at 10% level of significance, the critical value of (r) is  $\pm$  0.805 hence is not significant.

**Decision:** Since the computed value of (r) is less than the critical value of (r), accept the null hypothesis and reject the alternative hypothesis.

### Table 2: VITA FOAM NIGERIA PLC

S/N	YEAR	X	Y	X <sup>2</sup>	$\mathbf{Y}^2$	XY
1	2007	0.99	0.48	0.98	0.23	0.48
2	2008	0.94	0.36	0.9	0.13	0.34
3	2009	0.07	0.37	0.00	0.14	0.03
4	2010	0.05	0.50	0.00	0.25	0.03
5	2011	0.59	0.19	0.35	0.04	0.11
	$\sum =$	2.64	1.53	2.23	0.79	0.99

Source: Researcher's Calculation

Correlation Coefficient (r) = 
$$n\sum_{x} x y - \sum_{x} \sum_{y} \sqrt{n\sum_{x} 2 - (\sum_{x})^{2} (\sqrt{n\sum_{y} 2} - (\sum_{y})^{2}) - (\sum_{y})^{2})}$$
  
r =  $\frac{5 x 0.99 - 2.64 x 1.53}{(\sqrt{5 x 2.23} - 6.97) (\sqrt{5 x 0.79} - 2.34)}$   
r =  $\frac{4.95 - 4.04}{(\sqrt{5 x 2.23} - 6.97) (\sqrt{5 x 0.79} - 2.34)}$   
r =  $\frac{0.91}{(\sqrt{4.18}) (\sqrt{1.61})}$   
r =  $\frac{0.91}{(2.04) (1.27)}$ 



r	=	0.91
		2.59
r	=	0.351

**Test of Significant:** Since the computed value of (r) is lower than the critical value of (r) i.e 0.351 < 0.805, it means that the computed value of (r) is not significant.

**Decision:** Since the computed value of (r) is lower than the critical value of (r) accept the null hypothesis and reject the alternate hypothesis.

### Hypothesis Two (2):

**H**<sub>1</sub>: Acid test ratio is positively correlated with profitability, ie, return on Assets (ROA) Let x be Acid test ratio and Y be return as assets (ROA).

S/N	YEARS	X	Y	X <sup>2</sup>	$Y^2$	XY	
1	2007	0.61	56.7	0.37	56.7	34.6	
2	2008	4.65	7.8	21.6	60.8	36.3	
3	2009	0.06	12.2	0.00	148.8	0.73	
4	2010	0.83	8.2	0.69	67.2	6.8	
5	2011	0.70	9.3	0.49	86.5	6.51	
	$\Sigma =$	6.85	94.2	23.15	420	84.94	

**Table 3: BETA GLASS NIGERIA PLC** 

Source: Researcher's Calculation

Correlation Coefficient (r) =

$$\frac{n\sum x \ y - \sum x \ \sum y}{(\sqrt{n\sum x^2 - (\sum x)^2} \ (\sqrt{n\sum y^2 - \sum y})^2)}$$

$$r = \frac{5 \times 84.94 - 6.85 \times 94.2}{(\sqrt{5} \times 23.15 - 46.9) (\sqrt{5} \times 420 - 8873.6)}$$

$$r = \frac{424.7 - 645.27}{(\sqrt{115.75 - 46.9}) (\sqrt{2100 - 8872.6})}$$

$$r = \frac{-220.57}{(\sqrt{68.85}) (\sqrt{(-6772.6)})}$$

$$r = \frac{-220.57}{(8.29) (82.29)}$$

$$r = \frac{-220.57}{682.18}$$

$$r = -0.323$$

**Test of Significance:** Since the computed value of (r) is less than the critical value of (r) ie. 0.323 < 0.805, it means that the computed value of (r) is not significant.

**Decision:** Since the computed value of (r) is less than the critical value of (r) accept the null hypothesis and reject the alternative hypothesis.

S/N	YEARS	X	Y	<b>X</b> <sup>2</sup>	Y <sup>2</sup>	XY
1	2007	0.48	0.14	0.23	0.02	0.07
2	2008	0.36	0.7	0.13	0.49	0.25
3	2009	0.37	0.0	0.14	0.00	0
4	2010	0.50	0.3	0.25	0.09	0.15
5	2011	0.19	24.5	0.04	0.00	4.66
	$\Sigma =$	1.9	25.64	0.79	0.6	5.13

# Table 3: VITA FOAM NIGERIA PLC

Source: Researcher's Calculation

Correlation Coefficient (r)	=	$n\sum x y - \sum x \sum y$
		$(\sqrt{n\sum x^2 - (\sum x)^2} (\sqrt{n\sum y^2} - \sum y)^2)$
r =		<u>5 x 5.13 – 1.9 x 25.64</u>
		$(\sqrt{5} \ge 0.79 - 3.61) (\sqrt{5} \ge 0.6 - 657.41)$
r =		25.65 - 48.72
		$(\sqrt{3.95} - 3.61)(\sqrt{3} - 657.41)$
r =		- 23.07
		(0.58) (25.58)
r =		-23.07 = -1555
		14.84

**Test the Significance:** Since the computed value of (r) is greater than the critical value of (r) i.e -1.555 > -0.805, it means, that the computed value of (r) is significant.

**Decision:** Since the computed value of (r) is higher than the critical value of (r), accept the alternate hypothesis and reject the null hypothesis.

### Hypothesis Three (3):

**H**<sub>1</sub>: return on capital employed is positively correlated with profitability, ie return on assets (ROA). Let x be return on capital employed and y be return on assets (ROA).

S/N	YEARS	X	Y	X <sup>2</sup>	$Y^2$	XY
1	2007	0.11	56.7	0.01	3214.9	6.24
2	2008	0.08	7.8	0.01	60.8	0.62
3	2009	0.26	12.2	0.07	148.8	3.17
4	2010	1.29	8.2	1.66	67.24	10.58
5	2011	0.19	9.3	0.04	86.5	1.77
	$\Sigma =$	1.93	94.2	1.79	3578.24	22.38

## **Table 4: BETA GLASS NIGERIA PLC**

Source: Researcher's Calculation

Correlation Coefficient (r) = 
$$\frac{n\sum x \ y - \sum x \ \sum y}{(\sqrt{n\sum x^2 - (\sum x)^2} (\sqrt{n\sum y^2 - \sum y})^2)}$$
  
r = 
$$\frac{5 \ x \ 22.38 - 1.93 \ x \ 94.2}{(\sqrt{5} \ x \ 1.79 - 3.72) (\sqrt{5} \ x \ 3578.24 - 8873.64)}$$

$$\begin{array}{r} 111.9-181.81\\\hline (\sqrt{8.95}-3.72)\ (\sqrt{17},\ 891.2-8,873.64)\\ -69.91\\\hline (\sqrt{5.23})\ (\sqrt{9.017.56})\\ -69.91\\\hline (\sqrt{2.29})\ (\sqrt{94.96})\\\hline -69.91\\\hline 217.46\\-0.321\end{array}$$

**Test of Significance:** Since the computed value of (r) is less than the critical value, ie.-0.321 < -0.805, it means that is not significant.

**Decision:** Since the computed value of (r) is less than the critical of (r), accept the null hypothesis and reject the alternative hypothesis.

S/N	YEARS	X	Y	<b>X</b> <sup>2</sup>	Y <sup>2</sup>	XY
1	2007	0.35	0.14	0.12	0.02	0.05
2	2008	0.24	0.7	0.06	0.49	0.17
3	2009	0.07	0.0	0.00	0.0	0.0
4	2010	0.10	0.3	0.01	0.09	0.03
5	2011	0.07	24.5	0.00	600.3	1.72
	$\Sigma =$	0.83	25.64	0.19	600.9	1.97

### **Table: VITA FOAM NIGERIA PLC**

Source: Researcher's Calculation Correlation Coefficient (r)

$$\frac{n\sum x \ y - \sum x \ \sum y}{(\sqrt{n\sum x^2 - (\sum x)^2} \ (\sqrt{n\sum y^2 - \sum y})^2)}$$

=

r

$$\frac{5 \times 1.97 - 0.83 \times 25.64}{(\sqrt{5} \times 0.19 - 0.69) (\sqrt{5} \times 600.9 - 657.4)}$$

$$\frac{9.85 - 21.28}{(\sqrt{0.95} - 0.69) (\sqrt{3004.5 - 657.4})}$$

0.00

=

1 0 7

**Test of Significance:** Since the computed value of (r) is less than the critical value of (r), ie. -0.463 < -0.805, it means that, it is not significance.

**Decision:** Since the computed value of (r) is less than the critical value of (r), accept the null hypothesis and reject the alternate hypothesis.

### DISCUSSION AND FINDINGS

The analysis conducted in the previous session indicates that Beta Glass Nig Plc depicted a positive correlation coefficient between current ratio and profitability as represented by correlation coefficients (r) 0.351. However it was not significant at 10% level, when compared against a table of critical value of (r) of 0.805, hence the null hypothesis was accepted. Vita Foam Nigeria Plc depicted a negative correlation between current ratio and profitability, as represented by correlation coefficient (r) of -0.351. When compared against a table or critical value of (r) of -0.805, it was not significant at 10% level. Hence, the null hypothesis was accepted and rejects the alternate hypothesis.

In the same vein, from the above analysis out of the two (2) companies studied, 75% of them indicated that current ratio has a significant positive correlation with profitability. The researcher believes that the reason for this positive relationship between current ratio and profitability is simply because idle funds, especially when they are borrowed, generate profit and less costs in the business. The two (2) companies depicted a negative correlation between Acid test ratio and return on assets respectively. Thus, from the above results, 50% of the companies analyzed indicated a significant negative correlation between current ratio and acid test ratio. Hence there is no definite correlation between current ratio and profitability in this analysis.

On the other side, the correlation between return on capital employed and profitability, the analysis conducted indicate that out of two (2) companies studied, the two (2) companies (Beta Glass Nigeria Plc and Vita Foam Nigeria Plc) indicated a negative correlation between return on capital employed and profitability as represented by correlation coefficient (r) of -0.321 and -0.463 respectively. Nevertheless, when compared against the critical value of correlation coefficient (r) of 0.805, they were all not significant at 10% level; hence the null hypothesis was accepted.

### CONCLUSION

From the findings of this study, after the analyses in the previous chapters have been made, the following conclusions are drawn.

- (i) There is a significant positive correlation between current ratio and profitability as measured by return on assets (ROA).
- (ii) There is no definite significant correlation between Acid test ratio and profitability as measured by return on assets (ROA).
- (iii) There is no significant positive correlation between return on capital employed and profitability as measured by return on assets (ROA).

### RECOMMENDATIONS

Based on the conclusions drawn from the findings of this study, the researcher recommends that firms should maintain a moderate level of liquidity that does not threaten their going concern status, and yet allows them to make adequate profits on their investments. This is because the negative correlation between liquidity and profitability indicates that both of them hare an inverse relationship, such that gaining more of one means losing more of the other. Thus, firms should try to find an optimum balance between liquidity and profitability.

In addition to the above, the researcher also recommends that other researchers should carry out studies to determine the cause of the relationship between liquidity and profitability, in order to find out if there is a causal relationship between them or there is another factor causing the relationship between them. They could also carryout comparative studies on the subject matter.

### **RECOMMENDATION FOR FURTHER STUDY**

Based on the summary, conclusion and recommendation in this research work, other researchers should carryout further studies on the Vulnerability of earnings for ordinary shareholders, and the leverage ratio which show the degree of financial risk a company is exposed to. Research should also be done on the area of investment or stock market ratio and long term solvency and stability ratio to know the ability of the company in meeting its long term obligations.

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