DOES LEVERAGE AND LIQUIDITY AFFECT SHAREHOLDERS' INVESTMENT DECISIONS?

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Abstract

This work empirically investigates and examines the effect of leverage and liquidity on shareholders' investment decisions. Some of the key contents of published financial statements were used to derive the proxy variables used in the study, namely leverage and liquidity; while shareholders' investment decisions are represented by the change in owners' equity. The research design used is Ex Post Facto design and data for the study was obtained from the published annual financial reports of the selected firms spanning from 2009-2018. The statistical test of parameter estimates was conducted using multiple regression in order to establish the relationship between the variables. The findings generally indicate that liquidity positively related to shareholders investment decisions while a weak negative relation was found with leverage. On the basis of this finding, the study concluded that liquidity of firms' are of interest to the shareholders and has significantly influenced and stimulated shareholders' investment decisions over the years while the extent to which a firm is been funded by debt (leverage) is of interest to the creditors so as to ensure that they are not left out on the event of liquidation. The study, therefore, recommends proper awareness creation by the appropriate agencies to enhance shareholders' understanding of the relevance of published accounts to enable them to know the financial states of the companies of their interest before making investment decisions. Besides, shareholders should seek the advice of financial analysts so as to be properly guided in their investment decisions.

Keywords; Leverage, Liquidity, Investment Decisions, shareholders

Introduction

Recent research has shown that financial reporting is the most basic input into any informed economic decision making and a value relevance in public equity markets (Basu & Markov, 2012; Kothari, 2012). The amount of information disclosed by organizations in corporate reports has considerably expanded in recent times, although reliability on same has proven little to be desired with the recent increase in the collapse of world-class financial institutions among others which necessitated the increased pressure for optimal disclosures in the corporate report.

Financial statements contain information that can provide valuable insights into a company's financial performance and position when properly analyzed and interpreted. These statements not only report a firm's position at a point in time but also provide insights regarding its operations over past periods which stimulate investment decisions.

However, the real value of financial statements lies in the fact that they can be used to predict the firm's future earnings, dividends and financial position and help potential investors make an informed judgment on whether to invest or otherwise. Similar information is also needed to help current investors monitor adequately what has happened or is happening to their investments especially in terms of the extent to which their aspirations on the investment has been or are being realized (Ariyo, 2007).

Statement of Problem

Recent research has shown that one of the main causes of indigenous business failure in this country is failing to maintain proper and reliable

financial records been a core 'product of corporate accounting and external reporting systems that measure and publicly disclose audited, quantitative data concerning the financial position and performance of publicly held firms' (Basu & Markov, 2012).

Previous studies noted conflicting and mixed results on the effect of leverage and liquidity on shareholders' investment decision. For instance in the studies of (Aivazian, Ying, & Jiaping, 2005; Ajanthan, 2013; Bhole, 2004; Osuala, Ugwumba, & Osuji, 2012; Victoria, 2012; Waliullah & Mohammed, 2008; Yuan, 2012) and many other studies, mixed results were observed and thus brought about too many arguments on those financial ratios used in analyzing financial statements which have effect on shareholders fund. Thus, as a result, makes the study a necessity so as to clarify on the inconsistency on the results.

Objectives of the Study

This paper seeks to;

1. Ascertain if corporate firms' leverage has any effect on shareholders' investment decisions.
2. Examine the impact of corporate firms' liquidity on shareholders' investment decisions.

Hypothesis

H_{01}: Corporate firms' leverage has no significant effect on shareholders' investment decisions.

H_{02}: Corporate firms' liquidity has no significant effect on shareholders' investment decisions.

Literature Review

The Concept of Leverage

Leverage shows the debt obligations a firm holds along with the shareholder's equity. Higher leverage ratio for a company means high debt hence a very risky investment. This ratio group is used to demonstrate the company's ability to meet its financial obligations. (Egungwu, 2004)defines leverage analysis as an analysis that establishes a relationship between the amount of financial commitment made by the owners of the business (stockholders) and the firm's creditors. The analysis is very important in financial decisions because of the following:

- Owners of a business are the primary risk bearers and are therefore required to commit their funds which are considered large enough to encourage others (creditors) to risk their funds through lending to the business
- The owners of business gain through leveraged financing if the income generated from such financing is enough to offset the cost of borrowing and leave a margin as net income and if the cost of leveraged fund is higher than the income generated from such fund, the loss will be borne by the owners of equity.

Chordia & Subrahmanyam, (2005) defines leverage as a ratio that shows the degree of financial risks a company is exposed to. It is, thus used by loan creditors deciding whether or not to extend further loans to a company. A highly levered company has a higher risk and vice versa and a gearing greater than 0.61 is said to be relatively high and below 0.61 to be relatively low. It is a ratio that measures the degree of vulnerability of the company to the financial risk attaching to fixed interest securities. The higher the risk of the company being unable to pay the fixed financial charges and consequently, the higher the risk of its being forced into liquidation (Igben, 2009).

Leverage (LEV) generally means "the increased ability to accomplishing some purpose. It is the employment of an asset/ source of finance for which firms pay fixed cost/ fixed return". Hence, it is the firm's ability to use fixed cost assets or funds in lieu of variable costs assets or funds to increase the returns to its owners.

Total Debt to Equity Ratio

Charles and Patricia, (2013) reveal the use of total debt to equity ratio to determine the entity´s ability to pay long term debts. Total debt to equity ratio is a percentage of creditors funding for a dollar investment of the shareholder. The extent of firms financing controlled by the external parties is shown in the ratio. Calculation of the ratio is done

by including long term debts as the numerator whereas the shareholders' equity as the denominator. Mathematically, D/ER is expressed as *Total debts/ Capital employed.*

Liquidity

Chordia and Subrahmanyam, (2005) define liquidity ratio as the ability of a company to sell a large quantity of assets at a reasonable price to meet its short term financial obligations. Liquidity ratio determines if a particular company has enough resources to pay its current liabilities, which are due within a year.

(Egungwu, 2004) defines it as a ratio that measures the extent to which a firm is able to meet its maturing obligation. In other words, the ratio establishes the relationship between cash and near cash items with current liability. A firm that is favorably disposed to settling her debt obligations to current creditors sustains credibility and therefore creditworthy. If on the other hand, a firm fails to meet current obligations due to lack of enough liquid assets, it stands to damage not only her credibility but chances of raising current funds from her creditors.

(Ariyo, 2007) views the liquidity ratio as a ratio that judges the ability of a firm to meet its short term maturing obligations. It is a ratio that indicates the extent to which an enterprise is capable of settling its obligations due within a year. Liquidity ratio is a ratio that tries to assess the liquidity position of a company (Ifurueze, 2010). 40% liquidity level is considered standard while 20% is considered problematic.

Current Ratio

Current liabilities like accounts payable, dividends, taxes due within one year, and short term bank loans are divided from current assets like cash, short term marketable securities, account receivable, inventories and prepaid expenses to obtain a current ratio. Ideally, a ratio of 1 means short term assets equals the short term liabilities, companies prefer to have a current ratio of 1.5 to 2 (Ifurueze, 2010). Mathematically, C/R is expressed as *Current Assets / Current Liabilities.*

Theoretical Framework:

The theoretical framework gives the meaning of a word in terms of the theories on a financial statement such as proprietary and residual equity theory and entity and enterprise theory or social theory. It assumes both knowledge and acceptance of the theories that this research work depends upon.

Proprietary and Residual Equity Theory

Proprietary equity theorists such as Husband (1938) insisted that the accounting process of companies must be conducted from the shareholders' perspective. (G. Staubus, 1952; G. Staubus, 1959) developed the residual equity theory which considered that the accounting must be done from the perspective of the residual equity holders, which for a going concern coincides with that of the common shareholders. Residual equity theory is often regarded as a more restrictive form of proprietary theory.

Under the proprietary view, transactions and events are analyzed, recorded and accounted for as to their immediate effect on the proprietors. Financial statements are prepared from the viewpoint of the proprietors and are meant to measure and analyses their net worth expressed by the accounting equation:

(1) *∑assets - ∑liabilities = ∑equity, proprietorship or net worth*

Entity Theory and Enterprise or Social Theory

Under the entity view, transactions are analyzed as to their effect on the accounting entity. Financial statements are prepared from the viewpoint of the entity. The income statement is meant to calculate income for distribution and analyze the company's performance over a period, whereas the balance sheet serves to indicate the security or riskiness of the company's financial position. Under the different varieties of entity theory, the accounting equation may take the following forms.

(1) ∑assets = ∑liabilities (Paton, 1922) or

(2) ∑assets = ∑equities (Paton, 1922) or

(3) ∑assets = ∑equities + ∑liabilities (Hendriksen & Van Breda, 1992)

In the entity view as expressed in equation 3, the assets are considered the company's assets, and the liabilities are the company's liabilities. Alternatively, as expressed in equation 1 and 2, the assets are considered the company's assets and the equities are all the financial stakeholders' equities. Entity theory views the entity as "having a separate existence – an arm's length relationship with its owners. The relation to the owners is regarded as not particularly different from that of the long-term creditors (Lorig, 1964). Suojanen, 1954)'s enterprise or social theory sees the large listed corporation as an institution with social responsibilities. Companies' actions affect many different stakeholders such as stockholders, creditors, customers, employees, the government as a taxing and regulatory authority and the public at large (Hendriksen & Van Breda, 1992; Kam, 1990; Suojanen, 1954). Suojanen, 1954) traces this institutionalization of the large enterprise to the separation of management and ownership leading to increasingly large proportions of income being retained within the company to reduce the corporation's dependence on external financing. Large corporations may decide to pay only 'conventionally adequate dividends' because this ties in with their survival and growth objectives (Suojanen, 1958).

Empirical Studies

Leverage

Victoria, (2012) in her research concentrated on the United States with emphasis on the effect of financial ratios of financial statements on shareholders decisions observes with correlational coefficient as a statistical test tool that shareholders tend to be sensitive about the stock leverage of the company of their interest, so as to ensure that they are not left with anything in case of liquidation. She consequently concluded that leverage has a significant effect on shareholders' investment decisions and considered leverage as a determinable factor in making investment decisions.

Stulz, (2000)in their hypothesis which was put forward in form of behavioral justification of Net operating income opine that the way a company finances its operations is irrelevant in the determination of the company's market value and that the value of a firm does not depend on the extent to which is been funded by debt because the value of a company depends on the return and risk of its operations and not the way in which it finances its operations. However, it was noted that leverage has no significant effect on firms and shareholders' investment behaviors. Myers, (1984); Stulz, (2000) are of opinion in their research that debt has a negative impact on the investment activities of companies with promising investment opportunities. Mc Connell and Servaes, (1995) use cross-sectional data to analyze the effect of leverage on investment decisions of listed companies in the US and indicate that the market value (MV) was negatively correlated with debt ratio of companies with high growth opportunities and positively correlated with debt ratio of companies with few growth opportunities. They conclude that shareholders are nonchalant towards leverage ratio in making investment decisions since a negative relation was found.

Looking at more recent studies of Yuan, (2012), he is of opinion that leverage impacts on low growth firms are stronger than for average firms. Thus considered leverage ratio insignificant to shareholders. Firth, Chen, & Sonia, (2008) examine the effects of bank leverage on investments in China listed firms by shareholders and find that the effect of bank leverage is weaker in firms with higher state share and good performance. A negative relation was found between leverage ratio and shareholders net worth. Thus they conclude that leverage ratio is not a ratio of interest to the shareholders but to lenders who need to know the extent of debt of the company and if their investments shall be guaranteed after assets sacrificial.

Aivazian et al., (2005) analyze the impact of leverage on shareholders' investment decisions

using Canadian firm-level data, with a statistical test tool of multiple regression, they demonstrate that companies with fewer investment opportunities are more vulnerable to the impact of leverage than companies with many investment opportunities and conclude at leverage ratio is a ratio of fund providers and insignificant to shareholders. They recommended the need for determination of the extent of gearing of firms.

Osuala et al., (2012) are of opinion in their study limited to 5 quoted companies on NSE with emphasis on the effect of the information content of published accounts on investment decision making, using a statistical test tool of multiple regressions that leverage has a significant impact on shareholders' investment decisions and recommended for leverage consideration by the shareholders prior to investment making.

Liquidity

Bhole, (2004); Waliullah and Mohammed, (2008) carried out empirical survey on capital structure choice in emerging market of listed firms in Pakistan and argue that shareholders are not only after what should be their own returns on their investment in the company but also interested in the liquidity of the company and how management of the company settles their obligation to creditors and lenders. This implies that corporate firms' liquidity has a significant impact on shareholders' investment decisions.

Ajanthan, (2013) in his recent research on the nexus between liquidity and profitability is of opinion using statistical test tool of correlation with 5 years annual data of listed trading companies in Sri Lanka that there is a significant positive nexus between liquidity and profitability and concludes that the ratios are ratio of interest to the shareholders and have significantly influenced owners' equity over the years.

Osuala et al., (2012) recently in their research found a negative relation between liquidity and shareholders' investment decision arguing that the shareholders are not after how management of the company settles their obligation to creditors and lenders, rather, they are after what should be their own returns on their investment in the company.

Methodology

The population of the study covers the entire 172 quoted companies on the(Exchange, 2014) as at 2018 business list. However, the researcher used only secondary source of data and employed stratified sampling to cluster the population into eleven (11) sectors of listed firms and simple random sampling technique to select 11 quoted companies sector ally as a sample size which include, **(***7up Bottling company plc, AD Switch plc, ABC transport plc, Arbico plc, Chams plc, Abbey Building Society plc, Forte oil plc, AG Leventis plc, Aluminum Extrusion Industries plc, Evans Medical plc and Ellah lakes plc*).The above-mentioned firms were selected randomly from each of the sectors of listed firms. The study considered only ten accounting period of the individual company's Annual Report from 2009-2018 Accounting year.

Operationalization of Variables

The dependent variable in this study is the Shareholders' Investment Decisions and Change in owners' equity was adopted as a proxy and logarithm of it. This is in harmony with the works of (Bhole, 2004; Osuala et al., 2012). The independent variables of Leverage and Liquidity, as variables for analysing financial statements, were commonly used in previous studies of (Kothari, 2012; Steve, 2005). These are the key variables used in analysing financial statements. The independent variables have been computed as follows:

- LEV = Leverage (measured using **Debt/Equity ratio *i.e. Total Debt/Capital Employed***.
- LIQ = Liquidity (captured using **Current ratio** i.e. ***Current Assets / Current Liabilities)***

Model Specification

In line with the previous researches, the researcher adopts the model of (Osuala et al., 2012) in determining the effect of financial statements analysis on Shareholders' Investment Decisions.

$SID = \beta_0 + \beta_1 LEV + \beta_2 LIQ\ \mu$

Where: SID = Shareholders' Investment Decisions, LEV = Leverage, LIQ = Liquidity and μ = Stochastic term.

Result of the Study

The regression model was explored to test the linear relationship between the dependent and independent variable. To test the quality of the linear fit to the model, the researcher calculated the coefficient of the regression using SPSS version 20 as shown in the tables 1 below:

Table 1: Regression Computational Results.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.847[a]	.769	.599	0.8425	.499	1.493	2	7	.028	1.023

a. Predictors: (Constant), Leverage, Liquidity

b. Dependent Variable: SID

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.796	.425		.396	.044		
	Liquidity	.145	.818	.058	.178	.024	.934	1.071
	Leverage	.088	.770	.529	1.615	.150	.934	1.071

a. Dependent Variable: SID

Source: SPSS computational Results using the Published Annual Reports of the Selected listed Firms from 2009-2018.

Discussion of Findings

The coefficient of determinations R^2 shows 0.769 indicating that the overall model explained 76.9 percent of the total variations in the dependent variable. This shows that these variables (Leverage and Liquidity) can only explain 76.9 percent of change in Owners' Equity leaving 23.1 percent unexplained. This is to say that there are other factors that shareholders consider in making investment decisions order than the contents of the financial statement.

The sig. (or p-value) is .028 which is below the .05 level; hence, we conclude that the overall model is statistically significant, or that the variables have a significant combined or joint effect on the dependent variable. With this, the researcher affirms the validity of the regression model adopted in this study.

The results of the regression are therefore slated below as follows:

Hypothesis One:

This hypothesis was tested with the data exposited on table 1 and the result of this regression indicates that the relationship between SID and LEV is negative and not significant; this can be justified with the P-value (significance) of 0.150 which is greater than the 5% level of significance adopted. It has also been validated by the negative coefficient of -0.088 implying that

LEV has an inverse relationship with SID and an increase in LEV while other remaining variables remain constant decreases owners' equity. We consequently rejected the alternate hypothesis and accepted null hypotheses which contend that corporate firms' leverage does not significantly influence shareholders' investment decisions.

This observation is in tandem with a priori expectation. For instance (Aivazian et al., 2005; Firth et al., 2008; Mc Connell & Servaes, 1995; Myers, 1984; Stulz, 2000), it was demonstrated that companies with fewer investment opportunities are more vulnerable to the impact of leverage than companies with many investment opportunities. However, it was noted that leverage has a negative effect on firms and shareholders' investment behaviors and conclude that the leverage ratio is a ratio of interest to fund providers and insignificant to shareholders. Leverage enables fund providers not to be left out at the event of liquidation and also to know the extent of debt of the company and if their investments shall be guaranteed after assets sacrificial.

Consequently, a contradictory observation was made by (Victoria, 2012) and (Osuala et al., 2012) who argue that shareholders tend to be sensitive about the stock leverage of the company of their interest, so as to ensure that they are not left with anything in case of liquidation. They consequently conclude that leverage has a significant effect on shareholders' investment decisions and also considered leverage as a determinable factor in making investment decisions.

The disagreement in the finding with (Victoria, 2012) and (Osuala et al., 2012) is presumably on their 5 selected listed firms quoted on NSE while this study explored a multiple regression as a statistical test tool with 10 years Annual financial data of 11 quoted companies on NSE.

Hypothesis Two:

This hypothesis was tested with the data exposited on table 1 and the result of this regression indicates that the relationship between SID and LIQ is positive and significant; this can be justified with the P-value (significance) of 0.024 which is less than the 5% level of significance adopted. Likewise, the result of the positive coefficient of 0.145 is proving an increase in LIQ while other remaining variables remain constant increases owners' equity. This implies that in making investment decisions, shareholders make consideration on the liquidity level of the firms of their interest which reveals the tendency of such firms redeeming its obligations due within a year. Conventionally, a ratio of 2:1 is optimally accepted. We, therefore, rejected the null hypothesis and accepted alternate hypotheses which contend that corporate firms' liquidity has a significant impact on shareholders' investment decisions.

This tends to agree with (Bhole, 2004; Waliullah & Mohammed, 2008) and (Ajanthan, 2013) who noted a significant positive nexus between liquidity and profitability and argue that shareholders are not only after what should be their own returns on their investment in the company but also interested in the liquidity of the company and how management of the company settles their obligation to creditors and lenders. This implies that corporate firms' liquidity has a significant impact on shareholders' investment decisions.

This observation seems disagreeable with the findings of (Osuala et al., 2012) who argue that the shareholders are not after how management of the company settles their obligation to creditors and lenders, rather, they are after what should be their own returns on their investment in the company.

Conclusion

This study empirically investigated the effect of leverage and liquidity on shareholders' investment decisions. The study is vital as it portrays the extent to which shareholders of firms listed on the Nigerian Stock Exchange (NSE) are influenced by the leverage and liquidity in their investment decisions. We, therefore, conclude that:

1. Shareholders tend to be insensitive about the stock leverage of the company of their interest since their interest is on profitability, solvency and liquidity and regularity of dividend payment.
2. Shareholders are not only after their own return on their investments in the company but also on how the management of the company settles its obligation to creditors and lenders.

Recommendations

In view of the findings of the study, it is recommended that:

1. Shareholders also need not be sensitive about the leverage of a firm since what determines the value and real worth of a firm is the risk-return of its operations. The mode of financing of a firm shall be considered insignificant.
2. Shareholders shall always place and make an emphasis on the firms' liquidity and not only their own return on their investment in the company. How the management of the company settles its obligation to creditors and lenders should be a matter of concern to them.

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