Effect of Financial Leverage on the Value of Firms in Nigeria

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Abstract: The study investigated the effect of financial leverage on value of firms in Nigeria in order to determine whether debt as a component of capital structure has positive or negative impact on value of firms in Nigeria. The independent variables for the study are long-term debts, medium term debts and short term debts while the dependent variable is the value of the firm. To guide the study three (3) hypotheses were formulated. The first hypothesis sought to find out whether significant relationships exist between long term debts of firms and the overall value of the organization. The second is to test whether there is significant effect of medium term borrowing on the value of the selected firms and lastly, whether short term debts has effect on the value of Nigeria firms. The Pearson correlation coefficient and Ordinary Least Squares (OLS) regression analysis were used to test the hypotheses. The study made use of secondary sources of information in carrying out the analysis. From the findings of the study, the results obtained showed that long term debt has a significant positive effect on the value of our sampled companies’ performance. Medium term debt and short term debts have significant positive influence on our sampled quoted companies’ value and were statistically significant. This was confirmed by the results of the findings in this research. Positive impact implies that increases in the value of one variable tend to be associated with increases in the value of the selected firms. The researcher also found out that the use of leverage enhances the value of the firm. Therefore, it was recommended that firms should go ahead and finance their operations with long term debt, medium term debts and short term debts when the need arises in order to ensure that value is enhanced.

Keywords: Financial Leverage, Firm, Value, Corporate, Performance, Capital, Structure

1.0 INTRODUCTION
Financial leverage can positively influence firm performance because leverage can be treated as a tool for disciplining management. However, it is not always applicable to the firms with two portion of debt. It is because high level of indebtedness may lead to significant financial limitations and that influence firm performance negatively. The importance of leverage can be seen from its presence in the capital structure of the organization; it is important for the organization to take decision of leverage position in the capital structure (Adeyemi & Oboh, 2011). According to Meyers (1984), leverage defines capital structure of the firms. It is one of the most difficult decision for the management of the organization to opt the mixture of debt and equity. Debt portion represents the other claim and it reduces the risk of owners (Adeyemi & Oboh, 2011).
In this global world, management is not an easy job because it has to take difficult decisions; management of the companies remains conscious about the debt portion of the organization because it affect the financial performance of the firms and the performance of the management is measured through the performance of the organization. Financial leverage affects not only the performance of the organization but it also affects the market value of the organization as well. Management of the debt financing is very crucial in the organization because, companies are using the funds of creditors which have to be returned with interest (Rushld as cited by Black, 2015).

Financial leverage is cost saving and it also reduces the risk of the owners but it becomes costly when organizations are unable to use it efficiently. Companies have to pay financial charges on the leverage. If companies fail to use leverage effectively, they have to suffer from many problems because the amount of leverage is to be repaid with interest expense. Profitable companies prefer to use leverage because it reduces the risk of owner and more cost saving for the shareholders of the organization. Financial leverage affect firm performance in aspect of profitability which has direct impact on the management performance, capital structure, stock price, wealth of shareholders and all the stakeholders (Adeyemi & Oboh, 2011). The most dangerous effect of using financial leverage is that it multiples the losses. If time is sufficiently hard, a company that has borrowed heavily may not be able to repay its debt. The company then becomes bankrupt and shareholders lose their entire investment, because debt position affects returns to shareholders in good times and adversely affects them in bad times. In early days, the existence of financial leverage in the capital structure of a firm was considered a great weakness. The firm’s leverage decision centers on the allocation between debt and equity in financing the company. However, how the leverage of a firm is determined in a world in which capital can be obtained by different media ranging from pure debt instrument to pure equity instrument and in which cash flow are uncertain in an unsettled issue (Sajid, 2016).

A firm’s financial leverage refers to the mix of its financial liabilities. It has long been an important issue from the strategic management standpoint since it is linked with a firm’s ability to meet the demands of various stakeholders (Roy and Minfang, 2000). Debt and equity are the two major component of firms’ capital, with debt holders and equity holders representing the two types of investors in the firm. Each of these is associated with different levels of risk, benefits, and control. While debt holders (Debenture holders, banks and other financiers) exert lower control, they earn a fixed rate of return and are protected by contractual obligations with respect to their investment. Equity holders are the residual claimants, bearing most of the risk and have greater control over decisions. An appropriate capital structure is a critical decision for any business organization.
The decision is important not only because of the need to maximize returns to various organizational constituencies, but also because of the effect such a decision have on an organization’s ability to deal with its competitive environment- Following the work of Modigliani and Miller (1958 and 1963), much research has been carried out in corporate finance to determine the influence of a firm’s choice of capital structure on performance. M-M theory argues that firms value should not depend on its capital rather on the level of risk associated with the capital whereas the Pecking Order theory advocates for prioritizing the sources of financing (from internal financing to equity) according to law of least effort. Hence internal funds are used first, and when that is depleted, debt is issued.

Many researchers had analyzed the effect of financial leverage firm’s value. However, most of these studies were done in an environment outside that of Nigeria. Most of the ones done in Nigeria do not include the core variables such as short term debt, medium term debt and long term debt while most of the study did not use Panel Least Square (PLS). Again the time frames considered in these studies were short and results from the studies were conflicting. From the forgoing it shows a knowledge gap on the effect of Leverage on firm’s value in Nigeria. This study seek to improve on the past studies by making use of a broad data set spanning 2000 to 2017. Such data set is far more than those used in the previous studies. This work attempts to distinguish between long, medium and short term effects of the variables in the model and determine the causalities among the variables used in the study. This is the direction of the study.

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

2.1.1 Debt

Debt is when something, usually money, is owed by one party, the borrower or debtor, to a second party, the lender or creditor. Debt is a deferred payment, or series of payments, that is owed in the future, which is what differentiates it from an immediate purchase. In a corporate setting we have three type of debt which is long-term debt, short-term debt and medium – term debt.

2.1.2 Long Term Debt

Long-term debt consists of debts and financial obligations lasting over one year. Long-term debt for a company would include any financing or leasing obligations that are to come due after a 12-month period. Long-term debt also applies to governments as nations can also have long-term debt. Financial and leasing obligations, also called long-term liabilities, or fixed liabilities, would include company bond issues or long-term leases that have been capitalized on a firm's balance sheet kinlo, & Egbetunde, (2010). Often, a portion of these long-term liabilities must be
paid within the year; these are categorized as current liabilities, and are also documented on the balance sheet. The balance sheet can be used to track a company's debt and profitability Ishaya & Abduljeel (2014). On a balance sheet, companies' debts are categorized as either financial liabilities or operating liabilities. Financial liabilities refer to debts owed to investors or stockholders; these include bonds and notes payable. Operating liabilities refer to the leases or unsettled payments incurred in order to maintain facilities and services for the company. These include everything from rented building spaces and equipment to employee pension plans. Bonds are one of the most common types of long-term debt. Companies may issue bonds to raise funds for a variety of reasons, such as to raise capital for new capital projects. Bond sales bring in immediate income, but the company ends up paying for the use of investors' capital due to interest payments (Shubita, & Alsawalhah, 2012).

A high debt-to-equity ratio means the company is funding most of its ventures with debt. If this ratio is too high, the company is at risk of bankruptcy if it becomes unable to finance its debt due to decreased income or cash flow problems Kanwal, & Nadeem, (2013). A high debt-to-equity ratio also tends to put a company at a disadvantage against its competitors who may have more cash. Many industries discourage companies from taking on too much long-term debt in order to reduce the risks and costs closely associated with unstable forms of income. Also, regulations are in place that restricts the amount of long-term debt a company can acquire. For example, since the Great Recession, banks have begun to scrutinize companies' balance sheets more closely, and a high level of debt can prevent a company from getting further debt financing. Consequently, many companies are adapting to this rule to avoid being penalized, such as taking steps to reduce their long-term debt and rely more heavily on stable sources of income (Ishola, 2008).

A low debt to equity ratio is a sign that the company is growing or thriving, as it is no longer relying on its debt and is making payments to lower it. It consequently has more leverage with other companies and a better position in the current financial environment. However, the company must also compare its ratio to those of its competitors, as this context helps determines economic leverage (Margaritis and Psillaki, 2008).

2.1.3 Short-Term Debt
Short-term debt is used to finance current assets that can be quickly turned back into cash; examples of this type of debt are accounts receivable and inventories. Non-current liabilities in the form of long-term debt, or debts, are used to finance long-term assets, such as the purchase of land and the construction of a building or ship. simplest version of the matching principle of finance, short-term assets should be financed with short-term liabilities and long-term assets should be financed with long-term liabilities (Guin 2011)). Short-term assets and liabilities are generally defined to be those items that will be used, liquidated, mature or paid off within
oneyear. A firm’s current assets (including cash, inventories, accounts receivable, etc.) are generally considered short-term assets while plant and equipment are generally considered long-term assets. On the other side of the balance sheet, current liabilities (accounts payable, short-term debt, etc.) are usually considered short-term liabilities while long-term debt (debt with a maturity of more than one year) and equity capital are considered long-term sources of financing (Abdeljawad, Mat-Nor, Ibrahim & Abdul-Rahim, 2013).

Defining other current liabilities (OCL) to be all current liabilities (CL) except short-term debt (STD), then according to the matching principle, the amount of a firm’s short-term debt financing should be equal to the amount of its current assets (CA) less other current liabilities (STD = CA – OCL). This implies that there are at least two ways that a firm’s short-term debt financing can change. One is if firm size changes. For example, if a firm grows the amount of its current assets will likely increase as well. To maintain the CA = CL equality, if current assets increase then so must short-term debt and/or other current liabilities (Abdul, 2012).

A second source of change in a firm’s short-term debt financing may exist if short-term debt and other current liabilities are substitute forms of short-term financing. Holding current assets constant, if the amount of a firm’s other current liabilities increases the firm will have less need for short-term debt financing to finance its short-term assets (Abor, 2007). Conversely, if other current liabilities decrease the firm will need to increase the amount of its short-term debt financing. As a result, the financial crisis could impact the amount of a firm’s short-term debt financing by either changing the amount of its current assets and/or the amount of its other current liabilities. It’s also possible that a firm’s short-term debt financing could be affected by the same factors that have been shown to affect the amount of long-term debt financing that a firm employs (Afza & Nazir, 2007).

2.1.4 Medium Term Debt

Bhaumik (2011) is of the opinion that present and potential investors with their investment decisions need single information, which the value is creating potential of a firm and what endeavors currently are taken and proposed by management for enhancing such value creating potential along with their financial impacts. According to him, this information helps them to estimate the value of the firm which in turn enablses them to take investment decisions. The above view of Bhaumik succinctly captures the importance of value to both investors and potential investors as well as management. In finance, we have to provide explanations to various interactions between financial structure and value of a firm. The first theoretical tendency is in line with classical theories of the firm which assumes a total independence between means of financing and the value of the firm.

To them, the selected analytical framework is that of pure and perfect competition and as such the theoretical choice is motivated by efficiency and transparency needed or required
by operational financial markets, while, the second theoretical tendency is in line with modern managerial theories. Recently as noted by, various approaches as well as agency conflict between different operators in the area of financing. In such case, conclusion has confirmed effects of financial structure on the value of firm. However, no matter the theoretical and empirical theories, value creation should be a continuous process and the value of the firm should be a mathematical function of the amount, training and risk involved in generating the firm’s cash flows while for investor who buy stock from the stock exchange should often look at the shares of a publicly traded company to determine the value of such firms through the computation of market capitalization.

2.2 Theoretical Framework
This research work is anchored on the Agency-Cost Theory. One of the defining characteristics of business in the 1990s was the adoption of the Agency cost theory to address the managerial excesses of the 1970s and 1980s. The classical Agency concept was propounded by Berle and Means (1932). They observed that ownership and control which have been separated in larger corporations as a result of dilution in equity positions provided an opportunity for professional managers to act in their best interest. Thus, the Agency cost theory attempted to provide explanation to firm behaviors in area of choice financing. Despite the earlier works of Berle and Means, research). Their analyses permitted the building up of interlink between the organization and the agency theory of corporate finance.

Since the vast literatures on the Agency theory explanations of financial structure lave been developed much of the activities of management are associated with increasing the size of the organizations and management were motivated not by a desire for maximizing shareholders wealth but by opportunities for the self-aggrandizement, therefore, contractual device suggested by Agency theory to the shareholders. Thus, debt provides a means of bonding managers promises to pay out future cash flows and as well as providing the means for controlling opportunistic behavior by reducing the cash flows available for discretionary spending thus ensuring that top managers attention is then clearly focused on those activities necessary to ensure that debt payments are made. A performing firm is one that borrows and is capable of honoring its commitment without any serious problem; by contrast, a bad firm is one that acts.

Agency cost theory also has important implication for the relationship between equity holders and debt holders. Thus, while equity holders are interested in the return over and above the amount which is required to repay debt. Debt holders are only interested in debt payment specified in the contract. Also, it is seen that most equity holders - are sometimes being interested in pursuing riskier business activities that debt holders would prefer, when this occurs, debt holders may charge higher prices for the capital and this constitutes greater
control measures to prevent up managers, from investing in capital in riskier undertaking.

Some scholars have provided further development to the agency model. While Sultz’s work is on hypothesis that the firm is in possession of important cash flows generating abundant liquidity, thus supporting the idea of an optimal financial structure of financing that would result from a compromise between benefits related to the reduction of cash flows and the inconveniences that this cash flows related to the reduction of cash flows and the inconveniences that this cash flows may be so weak when investment opportunities are good, The estimated conflicts between shareholders and managers can result from disagreement in optimal resources allocation. Thus, firms with stronger liquidity value with less cost of information are more likely to contract new debts. This would lead them to rapidly experience failure thus favouring their control by investors. A new approach to testing the agency cost theory was studied by Allen and Wharton, (2002). According to them, agency costs represent important problems in corporate governance for both financial and non-financial industries, they assumed that the agency theory suggest that the choice of financing structure may help mitigate these agency cost. To them, under the agency cost hypothesis, high leverage or a low equity asset ratio reduces the agency cost of outside equity and increases firm value by constraining or encouraging manages to act more in the interest of shareholders. They were of the view that greater financial leverage may affect managers and thus reduce agency costs through the threat of liquidation which causes personal losses to managers, loss salaries, Low reputations, pressure to generate cash flows to pay interest expenses etc.

For Elliot and Elliot (2002) in supporting the agency cost theory says shareholders of a company are the true owners and the duty of top management should be solely to ensure that shareholders interest are met. In other words, the duty of top managers should be to manage the company in such a way that returns to shareholders are maximized thereby increasing the profit figures and cash flows. In trying to outline problems that exists between management and shareholders, managers uses the excess free cash flows available to fulfill their own personal interest instead of increasing returns to the shareholders.

2.3 Theoretical Exposition
2.3.1 Long-term Debt and Firm Value
Long term debt is amount owed for a period exceeding 12 months from the date of the balance sheet. A company lists its long term debt on its balance sheet under liabilities usually under a sub heading for long term liabilities. Long term debt could be in the form of a bank loan, mortgage bonds, debenture, long term leases, trade and business financing, Loan Company’s bond issue or other obligations not due for one year. Such debt consists mostly of bonds or similar obligations, including a great variety of notes, capital lease obligation and mortgage issues. Generally, debt is money that has been borrowed from another party and must be
repaid at an agreed date. The cost of using this money, which also must be paid is interest. The person or firm making the loan is called the creditor or lender and the person or firm borrowing the money is called the debtor or borrower. A firm must disclose its long-term debt in its balance sheet with its interest rate and date of maturity.

2.3.2 Short-term Debt and Firm Value
Medium-term debt decisions are very important for a firm to operate successfully. The primary objective of a firm is to maximize the wealth of its shareholders. To put it another way it means that to maximize its net income (Jensen & Meckling, 1976). A way to achieve that is to reduce its cost of financing or to finance with a source having less cost and large benefits. Firms nowadays maintain a mix of debt and equity, but the problem is that which proportionate of debt and equity has greater benefits against lessor costs. This is a problem to answer because different sources of finances have different cost structures and benefits allowing the firms to make it as a competitive advantage. One solution can be that to choose the mix which maximizes the shareholder’s wealth but different firms have different impacts of the sources of finance.

2.3.3 Short-term Debt and Firm Value
This is an account shown in the current liabilities portion of a company’s balance sheet. This account is made up of any debt incurred by a company that is due within one year. The debt in this liabilities account is usually made up of short term bank loans taken out by a company among other types. It is a debt payable within twelve months. It includes the current portion of the long term debt. The value of short term debt is crucial when determining a company’s performance. If the account is larger than the company’s cash and cash equivalents, this suggest that the company may be in poor financial health and does not have enough cash to pay off its short term debts. In addition to any short term debt due within a year, there may be a portion of long term debt that is also included in this account. This portion pertains to payments that must be made on any long term debt throughout the year.

2.4 Empirical Review
2.4.1 Long-Term Debt and Firm Performance
Abor (2005) conducted a research on Long-term debt and performance of 22 firms listed in Ghana Stock Exchange from 1998 to 2002. The study measured firm performance by ROE and Long-term debt by short term debt, long term debt and total debt. The study revealed a significantly positive relationship between short term debt and ROE, and with long term debt, the results showed a significant negative relationship. Thus, this implies that short term debt is less expensive and induces high firm performance, but an increase in the long term debt will lead to a decrease in firm performance, thus long term debt is relatively more expensive and
lead to lower performance. The result for total debt revealed a significant positive relationship. This means that, an increase in the level of debt will lead to an increase in firm performance. Thus, the higher the debt level, the higher the firm performance.

Abor (2007) also carried out a study on relationship between Long-term debt and performance of small and medium-sized enterprises in Ghana and South Africa from 1998 to 2003. The study used a sample of 92 SMEs firms from Ghana and 68 firms from South Africa. The study measured financial performance by return on assets and Long-term debt by short term debt ratio, long term debt ratio and total debt ratio. The study used Generalized Least Square (GLS) panel model for the estimation. Using return on asset as the performance measure, on the sample on Ghana, the result revealed a significant negative relationship between all the measures of capital structure and firm performance. Abor concluded that for Ghanaian SMEs, using high debt level significantly, lead to lower performance; that is increasing the level of debt in the firm’s capital structure results in high bankruptcy and this leads to negative impact on firm performance. Also, the study found firm size to be significant and negatively related with return on assets. On the South Africa sample, the result showed a significant positive relationship between short term debt and return on asset. Thus, it revealed that short term debt seemed to be relatively less costly, thus increasing the short term debt will induce high level of profit. For long term debt and total debt, the result revealed a significant negative relationship with firm performance. Thus, it showed that the cost of long term debt is high and this will lead to low level of firm performance. The study also confirmed that firm size has positive and significant effect on return on asset.

Simon-Oke and Afolabi (2008), investigated Long-term debt and industrial performance from 1999-2007. Using five quoted firms, the study used Debt financing, equity financing, debt-equity ratio as a proxy for capital structure and profitability index as measures of performance. The study also employed panel data analysis and reported a positive relationship between firm performance and equity financing and also a positive relationship between firm performance and debt/equity ratio; while a negative relationship between firm performance and debt financing was reported as well. This study shows a high cost of borrowing in the country and suggested an efficient management of borrowed funds.

Salawu (2009) investigated the effect of financial risk and Long-term debt on the performance of Nigerian listed companies from 1990 to 2006. Using seventy companies, the study measured capital structure by long term debt and firm performance by return on asset (ROA). Using ordinary least square and Generalized Method of Moment, the study found a positive and significant relationship between capital structure measured by long term debt and firm performance measured by return on asset (ROA).

Ishola (2008), while considering the sensitivity of performance to Long-term debt Long-
term debt from 2000-2004, using Degree of Operating Leverage (DOL), Degree of Financial Leverage (DFL), Degree of Combined Leverage (DCL), as a proxy for capital structure; and Dividends Per Share (DPS), Earnings Before Interest and Taxes (EBIT) as measures of firm performance. Based on the data from selected foods and Beverages Company, the study analyzed the degree(s) of leverage ratio and the percentage change in DPS relative to percentage change in EBIT, and reported a positive relationship between capital structure and firm performance. The study concluded that irrespective of the dividend policy adopted by a firm, the rate of change in Long-term debt is a major determinant of firm’s performance.

Also, Adeyemi and Oboh, (2011) examined the empirical effects of debt structure on the market value of selected firms listed on the Nigerian Stock Exchange. Both primary and secondary data were obtained from a sample size of 150 respondents and 90 firms. Both descriptive and inferential statistics were employed as analytical method; while the study revealed a positively significant relationship between a firm’s choice of capital structure and its market value in Nigeria. The empirical review of most studies on capital structure and firm performance from Sub-Saharan African countries such as Ghana, South Africa, Egypt and Nigeria revealed that a relationship exists between capital structure and firm performance without consensus on the nature of the relationship across these countries.

2.4.2 Short-Term Debt and Firm Performance

Utile, Ikya and Akwuobu (2016) studied effect of short-term debt on the performance of cement manufacturing firms in Nigeria from 1997-2014. The researcher used secondary information gathered from books, journals and internet materials. Findings revealed that managers of firms are under pressure to determine the right proportion of debt and equity that would be used to achieve optimal financial performance. it was concluded that researchers are yet to reach a compromise on the optimal debt structure of a firm that would maximize firm’s performance. it has been recommended that managers continue to vary the debt to equity proportions more research should be conducted to find out an optimal capital structure that would optimize firm’s performance.

Echekoba and Ananwude (2016) examines the impact of short-term debt on performance of agricultural and healthcare firms listed in Nigerian Stock Exchange for a period of twenty one (21) years 1993 to 2013. This study selected fifteen (15) out of the sixteen (16) firms listed on agricultural and healthcare sectors. Data were collected from the Nigerian Stock Exchange fact book of various issues as relevant and were analyzed using the pooled OLS, fixed random effect models and the granger causality test. Financial structure was surrogated by total debt to total equity ratio, short term debt to total equity and total debt to total assets ratio while firm performance was measured by return on assets, return on equity, earnings per share and profit before tax. The analysis for the agricultural firms revealed that financial
structure significantly impacts on earnings per share but does not impact on return on equity, return on asset and profit before tax. For healthcare firms, financial structure significantly impacts on earnings per share and profit before tax but does not impact on return on equity and return on assets. To this effect, we suggest that it is very crucial for firm’s management to carefully look at the debt-equity mix, which according to the result of the study, significantly impacts on performance of firms in agricultural and healthcare sectors.

Muchiri (2016) investigated the relationship between short-term debt and financial performance of listed firms at the East Africa Securities Exchanges. The study employed explanatory research design with secondary data from the financial statements of 61 firms retrieved from the securities exchanges hand books for the period December 2006-2014. Feasible Generalized Least Squares method, random effect for models without moderator and fixed effect for models with moderator, based on Hausman specification test were used. The study found out that in isolation, short term debt, long term debt, retained earnings and external equity had insignificant negative relationship with return on assets but insignificant positive relationship with return on equity. While combined, financial structure had a significant positive and negative relationship with return on equity and return on assets respectively. On moderation of the relationship between financial structure and financial performance, it was found out that gross domestic product growth rate had a significant moderating effect. It is therefore recommended that firms combine both debt and equity in their financial structure and East Africa governments grow and maintain their GDPs trends since GDP was found to have a contingent effect on the financial structure.

Chechet, Garba&Odudu, (2013) assessed the determinants of short-term debt in Nigerian Chemical and Paints companies listed in Nigeria, for a period of five years from 2005 to 2009. The study employed secondary data from the annual reports and the Nigerian Stock Exchange (NSE) fact books covering the study period. Ordinary least square (OLS) was employed to determine whether relationship exists between leverage ratio and various independent variables in the model. The study reveals that for the Nigerian Chemical and Paints sector, tangibility and profitability have significant impact on leverage at 1% level, while size, growth and age have insignificant impact on the dependent variable. It also shows that the coefficient of the two significant explanatory variables, which are tangibility and profitability are negative. The effect of tangibility on capital structure suggests a negative relationship between tangibility and leverage contrary to both trade off theory and pecking order theory. Also the relationship between growth rate and level of leverage contradict both the pecking order and the trade off theory. All in all, three out of five of the explanatory variables have significant on the dependent variable whereas the remaining two, which include profitability and tangibility, are not significant. The study recommends that in carrying out their debt financing decision,
Chemical and Paints should deploy and properly measure variables like size, age, growth, profitability and tangibility of the firms.

Puwanenthiren (2011) examined the impact between short-term debt and Companies Performance, taking into consideration the level of Companies Financial Performance capacity during 2005 to 2009 (05 years) financial year of Business companies in Sri Lanka. The results shown the relationship between the short-term debt and financial performance is negative association at -0.114. Co-efficient of determination is 0.013. F and t values are 0.366, -0.605 respectively. It reflect the insignificant level of the Business Companies in Sri Lanka. Hence Business companies mostly depend on the debt capital. Therefore, they have to pay interest expenses much.

Mathanika, Vinothini and Paviththira (2015) in Sri Lanka investigate the impact of short-term debt on a firm’s value of listed manufacturing companies on Colombo Stock Exchange (CSE) in Sri Lanka 1997-2013. We used secondary data from 15 manufacturing companies on using Random sampling method. Correlation and multiple regression analysis techniques were used to analyses the impact of capital structure on firm value. Debts to equity ratio have significant influence on firm value but debts to total assets have not significantly associated with firm value. The study finding leads to the conclusion that the equity ratio, and debt ratio have significant impact on Firm Value of the Companies. The researcher proved that these findings are supported the prior empirical findings.

Anga, Ebenezer and Xicang (2012) in Ghana seeks to provide evidence on the impact of short-term debt on a firm’s value. The analysis was implemented on all the 34 companies quoted on the Ghana Stock Exchange (GSE) for the year ended 31st December 2010. The ordinary least squares method of regression was employed in carrying out this analysis. The result of the study reveals that in an emerging economy like Ghana, equity capital as a component of capital structure is relevant to the value of a firm, and Long-term-debt was also found to be the major determinant of a firm’s value. Following from the findings of this study, corporate financial decision makers are advised to employ more of long-term-debt than equity capital in financing their operations since it impacts more on a firm’s value.

Chowdhury and Chowdhury (2010) in Bangladesh examined Impact of short-term debt on firm’s value: Evidence from Bangladesh 1995-2008. The paper tests the influence of debt-equity structure on the value of shares given different sizes, industries and growth opportunities with the companies incorporated in Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) of Bangladesh. For the robustness of the analysis samples are drawn from the four most dominant sectors of industry i.e. engineering, food & allied, fuel & power, and chemical & pharmaceutical to provide a comparative analysis. A strong positively correlated association is evident from the empirical findings when stratified by industry.

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2.4.3 Medium-Term Debt and Firm Performance

Mustafa and Osa (2011) in Jordan investigates the effect of medium-term debt on the performance of the public Jordanian firms listed in Amman stock market. The study used multiple regression model represented by ordinary least squares (OLS) as a technique to examine what is the effect of medium-term debt on the performance by applying on 76 firms (53 industrial firms and 23 service corporation) for the period (2001-2006). The results of the study concluded that medium-term debt associated negatively and statistically with firm performance on the study sample generally. In addition, the study found out that there was no significant difference to the impact of the financial leverage between high financial leverage firms and low financial leverage firms on their performance. Finally, the study also showed that the effect of medium-term debt on the basis of the growth that there is no difference between the medium-term debt of high growth firms and low growth firms on the performance, which it was negatively and statistically.

Masulis (2012) develops a model based on current corporate finance theories which explains stock returns associated with the announcement of issuer exchange offers. The major independent variables are changes in leverage multiplied by senior security claims outstanding changes in debt tax shields. Parameter estimates are statistically significant and consistent in sign and relative magnitude with model predictions. Overall, 55 percent of the variance in stock announcement period returns is explained. The evidence is consistent with tax-based theories of optimal capital structure, a positive debt level information effect, and leverage-induced wealth transfers across security classes.

Oboh, Isa and Adekoya (2012) in Nigeria empirically examined the effect of a firm’s medium-term debt on its market value. Dataset from 39 non-financial listed companies for the period of 2005-2009 were used for analysis. Results from the regression analysis show a significant and positive relationship between non-financial firms’ market values and their debt-equity ratios. Whereas, a negative relationship exists between a firm’s total-debt/total-capital ratio and its market value, its size positively affects its market value. Hence, we conclude that firms’ leverage positively influence their market values. Suggesting that, a firm can actually attain an optimal capital structure.

Murital (2012) in Nigeria examined the optimum level of medium-term debt through which a firm can increase its financial performance using annual data of ten firms for a five-year period. The results from Im, Pesaran & Shine unit root test show that all the variables were non-stationary at level. The study hypothesized negative relationship between capital structure and operational firm performance. The results from Panel Least Square (PLS) confirm that asset turnover, size, firm’s age and firm’s asset tangibility are positively related to firm’s performance. Findings provide evidence of a negative and significant relationship between
asset tangibility and ROA as a measure of performance in the model. The study recommends that asset tangibility should be a driven factor to capital structure because firms with more tangible assets are less likely to be financially constrained.

Draniceanu and Ciobanu (2013) in Romania investigates the impact of medium-term debt on firm value for Romanian companies at the same time considering the determinants of leverage. The sample included 48 companies listed on Bucharest Stock Exchange for the period 2003-2012. Five regression models were used: Pooled regression model, fixed effects model, Time effects model, The two way fixed effects model and Simultaneous regressions model. The results show that capital structure has a positive impact of firm value, for both firms facing low growth opportunities and firms facing high growth opportunities. Profitability, liquidity and tangibility have been found as negative determinants of capital structure, while growth opportunities, firm size and firm financial quality have been found as positive determinants of capital structure.

Ahmad, Abdullah, and Roslan, (2012) This study seeks to investigate the impact of medium-term debt on firm performance by analyzing the relationship between operating performance of Malaysian firms, measured by return on asset (ROA) and return on equity (ROE) with short-term debt (STD), long-term debt (LTD) and total debt (TD). Four variables found by most literatures to have influence on firm operating performance, namely, size, asset grow, sales grow and efficiency, are used as control variables. This study covers two major sectors in Malaysian equity market which are the consumers and industrials sectors. 58 firms were identified as the sample firms and financial data from the year 2005 through 2010 are used as observations for this study, resulting in a total numbers of observations of 358. A series of regression analysis were executed for each model. Lag values for the proxies were also used to replace the non lag values in order to ensure that any extended effect of capital structure on firm performance is also examined. The study finds that only STD and TD have significant relationship with ROA while ROE has significant on each of debt level. However, the analysis with lagged values shows that non of lagged values for STD, TD and LTD has significant relationship with performance.

Ramazan and Doruk (2016) investigate the determinants of medium-term debt of non-financial public firms quoted in Istanbul using panel data 2010-2015. The results indicate that firm-specific factors have similar effects on both book and market leverage ratios except the effect of growth opportunity. The size of a firm is positively associated with its leverage ratio, particularly with long-term leverage ratio. Tangibility is negatively related to the short-term leverage ratio whereas it is positively related to the long-term leverage ratio. Profitability and liquidity have negative effects on leverage, particularly on short-term leverage ratio. It is also observed that the firms tend to follow their peers in their capital structure decisions. There
seems to be positive association between inflation and leverage. On the other hand, firm leverage and economic growth are negatively related. Lastly, recursive panel regression methods show that the evolution of the parameter estimates is stable over time.

Lawal, Kiyanjui & Adisa (2014) This research examines the effect of medium-term debt on firm’s performance with a case study of manufacturing companies in Nigeria from 2003 to 2012. Descriptive and regression research technique was employed to consider the impact of some key variables such as Returns on asset (ROA), Returns on equity (ROE), Total debt to total asset (TD), Total debt to equity ratio (DE) on firm performance. Secondary data was employed using data derived from ten (10) manufacturing companies. From our findings, we observe that capital structure measures (total debt and debt to equity ratio) are negatively related to firm performance. It is hereby recommended that firms should use more of equity than debt in financing their business activities, in as much as the value of a business can be enhanced using debt capital. Hence firms should establish the point at which the weighted average cost of capital is minimal and maintain that gearing ratio so that the company’s value will not be eroded, as the firm’s capital structure is optimal at this point ceteris paribus.

3.0 METHODOLOGY
3.1 Research Design
An ex-post facto research design was adopted for this study. This implies that the data were already collected and the researcher has no control over it. This study focused on five (5) selected public companies listed on the Nigerian stock exchange (NSE) between 2000 and 2017. These five are Portland paints & products Nig. Plc, Flour Mills of Nigeria Plc, National Salt Company of Nigeria Plc (NASCON), Dangote Sugar Plc and Julius Berger Nig. Plc.

3.2 Method of Data Analysis
The researcher used a secondary data collection method from the internet which is available. Some of these data are extracted from the Individual Companies Annual Reports. This was as a result of data availability, accessibility and reliability. This study used descriptive statistics where we measured Mean, Maximum value, Minimum value, Standard deviation and Jarque-Bera test; the hypothesis formulated were analyzed using Pearson Moment Correlation and Panel Least Square (PLS) regression analysis. The independent variables for this study are Long term debt, Medium term debt and short term debt while the dependent variable for the study is the value of firms in Nigeria.

3.3 Model Specification
The regression model utilized to test or investigate the effect of financial leverage on the value of Nigerian firm. This study modified the work of Ahmad, Abdullah, and Roslan, (2012) which investigates the impact of financial leverage on firm performance by analyzing the relationship...
between operating performance of Malaysian using ER=F(STD, LTD, MTD.) hence the above model is modified as follows
Y = (X1, X2, X3).

VONF = F(LTD, MTD,STD)

VONF= a₀ +B₁LTD +B₂MTD+B₃STD + Er ................................................................. (1)

Where:

VONF = Dependent variable which is value of firms in Nigeria measured as Price/Earnings ratio proxy for corporate performance.

LTD = Long term debt derived from the annual report of the sampled companies

MTD = Medium term debt derived from the annual report of the sampled companies

STD = Short term debt derived from the annual report of the sampled companies

e = Error term.

a₀ = Intercept Coefficient

3.4 Nature and Sources of Data
The study employed a panel data set from the annual report and financial statement of firms listed on the Nigerian Stock Exchange. The panel will cover a period of eighteen (18) years from 2000 to 2017 and a cross section of five firms. Thus, it is a secondary data set. The data ranges from earning per share as the dependent variables, while long term debt, short term debt, and medium term debt are the independent variables.

4.0 RESULTS PRESENTATION AND ANALYSIS OF DATA

4.1 Data Presentation
The data utilized in this study are presented below. This include the values of the value parameters (Long term debt, Medium term debt and Short term debt) of the selected 5 firms under study as well as their aggregate values in line with the model for the multiple Discriminate Analysis Model used to measure value of the selected firms on a firm by firm basis as well as aggregate values. Below each table are explanations of the various behavior of the test statistic utilized as mentioned in earlier.
Table 4.1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>PSE</th>
<th>LTD</th>
<th>MTD</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>19.94583</td>
<td>74.34802</td>
<td>14.63491</td>
<td>18744087</td>
</tr>
<tr>
<td>Median</td>
<td>180.2500</td>
<td>124546.0</td>
<td>3845.950</td>
<td>49379.96</td>
</tr>
<tr>
<td>Maximum</td>
<td>31.22000</td>
<td>2880257</td>
<td>8957000</td>
<td>59700957</td>
</tr>
<tr>
<td>Minimum</td>
<td>8.920000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>823367.0</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>7.180361</td>
<td>10310370</td>
<td>24970764</td>
<td>19993938</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.099556</td>
<td>-0.197793</td>
<td>1.025819</td>
<td>1.148654</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.924643</td>
<td>1.655278</td>
<td>2.430935</td>
<td>2.924857</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>0.464538</td>
<td>2.453574</td>
<td>2.518790</td>
<td>1.702453</td>
</tr>
<tr>
<td>Probability</td>
<td>0.792730</td>
<td>0.298649</td>
<td>0.002703</td>
<td>0.427900</td>
</tr>
<tr>
<td>Sum</td>
<td>12342.09</td>
<td>213864.0</td>
<td>173861.0</td>
<td>2397364.</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>13962717</td>
<td>1.05E+10</td>
<td>2.14E+09</td>
<td>4.01E+11</td>
</tr>
<tr>
<td>Observations</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

Table 4.1 shows the mean (average) for each of the variables, their maximum values, minimum values, standard deviation and Jarque-Bera (JB) Statistics (normality test). The results in table 4.1 provided some insight into the nature of the relationship among the included variables.

Firstly, it was observed that on the average over the eighteen (18) years period (2000-2017), the sampled quoted companies in Nigeria were characterized by positive Value of firm measured as the ratio of Price earnings per shares (P/E = 19.94583). The table also shows large standard deviation values of 10310370, 24970764 and 19993938 for LTD, MTD and STD variables respectively. This large standard deviation of values shows that our sampled companies are well selected and are not dominated by companies with either large or small LTD, MTD and STD activities. Also, the table with the mean values of 7434802, 14634913 and 18744087 respectively for LTD, MTD and STD reveals that most sampled companies in Nigeria are involved in different debt financing capital structure. This therefore justifies the need for this study as we expect that companies that are involved with any of this debt financing structure or combination of these debt financing structure will have a higher firm value in Nigeria. Lastly, in table 4.1, the Jarque-Bera (JB) which test for normality or the existence of outliers or extreme values among the variables, shows that just few of our variables are normally distributed at 1% level of significance. This means that any variables with outlier are not likely to distort our conclusion and are therefore reliable for drawing generalization. This also implies that the least square estimation can be used to estimate the pooled regression model.
4.2 Correlation Analysis

In examining the association among the variables, we employed the Pearson Correlation Coefficient (correlation matrix) and the results are presented in Table below.

Table 4.2: Pearson Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>PSE</th>
<th>LTD</th>
<th>MTD</th>
<th>STD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSE</td>
<td>1.000000</td>
<td>0.065361</td>
<td>0.134826</td>
<td>0.349767</td>
</tr>
<tr>
<td>LTD</td>
<td>0.065361</td>
<td>1.000000</td>
<td>0.532518</td>
<td>0.560265</td>
</tr>
<tr>
<td>MTD</td>
<td>0.134826</td>
<td>0.532518</td>
<td>1.000000</td>
<td>0.821825</td>
</tr>
<tr>
<td>STD</td>
<td>0.959767</td>
<td>0.560265</td>
<td>0.821825</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Source: Researcher’s Computation

The use of correlation matrix in most regression analysis is to check for multi-collinearity and to explore the association between each explanatory variable (LTD, MTD, and STD) and the dependent variable (PSE). Table 4.2 focused on the correlation between the ratio of Price Share Earnings and the independent variables (LTD, MTD, and STD).

The finding from the correlation matrix table shows that all our independent variables, (LTD = 0.06; MTD = 0.13; STD = 0.34) were observed to be positively and weakly associated with the ratio of Price Share Earnings (PSE). In checking for multi-collinearity, we notice that no two explanatory variables were perfectly correlated. This means that there is no problem of multi-collinearity between the explanatory variables. Multi-collinearity may result to wrong signs or implausible magnitudes in the estimated model coefficients, and the bias of the standard errors of the coefficients.

4.3 Pooled Multiple Regression Analysis

In order to examine the impact relationships between the dependent variable (PSE) and the independent variables (LTD, MTD, and STD), we used a pooled multiple regression analysis since the data had both time series (2000-2017) and cross sectional properties (5 quoted companies). The pooled interaction based multiple regression results are presented and discussed in Table below.

Table 4.3: Regression Result for the Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.256055</td>
<td>1.022558</td>
<td>4.020250</td>
<td>0.0000</td>
</tr>
<tr>
<td>LLTD</td>
<td>0.002909</td>
<td>0.124632</td>
<td>2.067584</td>
<td>0.0197</td>
</tr>
<tr>
<td>MTD</td>
<td>0.393387</td>
<td>0.048867</td>
<td>2.537370</td>
<td>0.0003</td>
</tr>
<tr>
<td>STD</td>
<td>0.212989</td>
<td>0.083122</td>
<td>1.599920</td>
<td>0.4071</td>
</tr>
</tbody>
</table>
The $R^2$ which is the coefficient of determination or the measure of goodness of fit shows the degree of variation in the dependent variables, as explained by the independent variables all taken together. The closer our $R^2$ is to 1, the better the goodness of fit of the model. From the result report in table 4.3, we find out that our $R^2=0.87\%$. This is closer to 1 and thus indicates that our model displayed a good fit. The adjusted $R^2=0.87\%$. This implies that despite the adjustment in the degree of freedom our variables can still explain about 81\% of the changes or variation in the model. Thus, it is in line with the result of the goodness of fit of the model.

The $F$-statistics is used to test the overall statistical significance of our parameter in the model. If the probability of $F$ in the computed model is greater than the desired level of significance (0.5) we accept the null hypothesis and reject the alternative. From the result report in table 4.3 above the computed value of $F$ is 33.65418 while its probability is 0.00000. Since its probability is less than 0.05 we accept the alternative hypothesis which states that independent variable are jointly statistically significant in explaining the dependent variable.

The Durbin Watson Statistic is used to test for the presence or otherwise of autocorrelation in our regression model. When the value of our d-w statistics is closer and a little above 2.00, it means the absence of autocorrelation among the explanatory variables in the model. From our model in table 4.3 we discovered that our Durbin Watson statistics is (1.9). This result shows the absence of autocorrelation amongst the explanatory parameter.
Long Term Debt (LTD): Based on the t-value of 2.067584 and P-value of 0.01, was found to have a positive influence on our sampled quoted companies PSE and this influence is statistically significant since its P-value was less than 10%. This result, therefore suggests that we should accept our alternative hypothesis one (Hi) which states that there is significant effect of long term debt on the market value of firms in Nigeria. This means that Long term debt financing impact significantly on market value of firms. However, this influence is statistically significant and so, should not be ignored as a determinant. However, on the basis of efficient use of LTD to generate market value of firms, those firms with high LTD structure perform higher than those with less LTD structure.

Medium Term Debt (MTD): Based on the t-value of 2.537370 and p-value of 0.00 was found to have a positive influence on our sampled quoted companies PSE and this influence was statistically not significant as its p-value was less than 0.05% values. This result therefore, suggests that we should reject our null hypothesis two and accept the alternative (Ho2) which states that there is significant effect of medium term debt on the market value of firms in Nigeria. This means that on the basis of effective use of MTD to generate market value of firms, firms with more MTD structure perform better.

Short Term Debt (STD): based on t-statistic of 1.599920 and p-value of 0.40 was found to have a positive influence on our sampled company’s PSE and this influence was also not statistically significant since its p-value was more than 0.5% level of significance. This result therefore, suggests that we should also accept our null hypothesis three (H03) which states that there is no significant effect of short term debt on the market value of firms in Nigeria. This means that firms with large short term debt structure perform better than those with low short term structure in terms of generating market values of shares of such firms. Although, this finding is not statistically significant.

4.5 Discussion of Findings
Based on the result generated in respect to effect of Long term debt on firms’ value, this study observes that there is a positive effect of Long term Debt on the value of firms in Nigeria. The results obtained confirmed the alternative hypothesis that states there is significant effect of Long term debt on the value of firms in Nigerian. The results are inconsistent with the capital structure theory by Modigliani and Miller ((1963) which formed the basis for this study. The theory argues that the firm’s value is unaffected by the firms financing decision.

Based on our findings of medium term debt it was found to impact negatively on our dependent variable, proxy as Price Share Earnings (PSE) and this impact was also not statistically significant. Thus our finding therefore supports the findings of Modigliani and Miller and negates the view of Pecking Order Model.

Based on the result short term debt was found to have a positive influence on the value of firms in Nigeria though the influence was not statistically significant. This means that companies with huge short term debt do not lose value when compared with companies with little or no short term debt. However, this result therefore, suggests that we should also accept our null hypothesis three (H03) which states that there is no significant effect of short term debt on the market value of firms in Nigeria. Hence this study is in consonance with Modigliani and Miller ((1963) theory that state that firm’s value is unaffected by the firms financing decision.
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

From the hypothesis findings tested in chapter four the following findings were made

i. Long term debt has significant and positive impact on firm value
ii. Medium term debt has significant positive impact on firm value
iii. Short-term debt has positive insignificant impact on firm value in Nigeria

Conclusion

The main objective of this study is to investigate the effect of debt financing on the value of firms in Nigeria using long term debt, Medium term and Short term debt as a mechanism. This study from its findings therefore concludes that Long term, Medium term and Short term debt have a negative relationship on firms value. Management needs to pay serious attention to the composition of the firm’s financial structure as failure to achieve an optimal financial structure may lead to insolvency and financial distress which can ultimately lead to bankruptcy.

Recommendations

The following recommendations were made for this study;

Firm’s financing decision should be dependent on the magnitude of risk before the decision is made.

Generally on debt financing, it is prudent to conclude that firms should borrow to finance their growth without fear of adverse effect on profitability since it is insignificant. Management must match the financing mix to the assets financed as closely as possible in terms of both timing and cash flows as to achieve the overall objective of the firm.

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