THE EFFECT OF CAPITAL STRUCTURE ON THE FINANCIAL PERFORMANCE OF NIGERIAN QUOTED CONGLOMERATES

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ABSTRACT: *This study investigated the effect of Nigerian banks' capital structure on the performance of conglomerates quoted on the floor of the Nigerian stock exchange from 2011 to 2015. The paper identified four levels of dependent variables such as return on assets, ratio (ROA), return on equity ratio (ROE), assets turnover ratio (AT) and earnings per share whereas the independent variable is financial leverage. Essentially the paper sets out to determine the effect of capital structure on the above dependable variables hence return on assets of quoted conglomerates, return on equity of quoted conglomerates, asset turnover of the quoted conglomerates and on the earnings per share of quoted conglomerates. Descriptive statistics and the pooled ordinary least square (POLS) regression analytical method were used for data analysis. The study finds that capital structure has effect on both return on assets and asset turnover of the conglomerates but no effect on return on equity and earnings per share of the conglomerate. It is then concluded that an in-depth analysis of business factors which affect a particular industry should be considered so as to obtain the benefits of the debt-equity mix. The result of the study is in agreement with most previous studies on other sectors that discovered mixed results on the effect of capital structure on financial performance. It is therefore necessary to employ a critical analysis of the appropriate debt-equity mix suitable for the company.*

KEYWORDS: Capital Structure, Financial Leverage, Conglomerates, ROA, ROE, POLS.

INTRODUCTION

Capital structure is the way a company finances its assets through the mixture of equity, debt or hybrid securities. According to Chechet and Olayiwola (2014) whether a business is newly born or it is ongoing, it requires fund to carry out its activities. This fund is referred to as capital. Capital therefore refers to the means of funding a business. Two major sources are available for firms willing to raise funds for their activities. These sources are internal and external sources (Chechet & Olayiwola, 2014). Internal sources refer to funds generated from within an enterprise; external sources refer to funds generated from outside the entity. External funding may be by increasing the number of co-owners of a business or by outright borrowing in form of loan, or the, issuance of debentures, bonds or other forms of debt instruments. Financial managers are concerned with the determination of the best financing mix; i.e., the optimum combination of debts and equity available to the firm (Akeem, Terer, Kiyanjui, & Kayode, 2014). Capital structure decision represents the mix of debt and equity that a company uses to finance its business (Damodaran, 2001). According to Akeem et al. (2014) one of the importance of capital structure is that it is tightly related to the ability of firms to fulfill the needs of various stakeholders. Capital structure represents the major claims to a corporation's assets which includes the different types of both equities and liabilities (Riahi-Belkaonui, 1999). According to Alfred (2007) as cited in Akeem et al. (2014) a firm's capital structure

implies the proportion of debt and equity in the total capital structure of the firm. Therefore, a firm's capital structure simply refers to the combination of long-term debt and equity financing.

According to Dare and Sola (2010) as cited in Akeem et al. (2014) there are various alternatives of debt-equity ratio. These includes; 100% equity: 0% debt, 0% equity: 100% debt and X% equity: Y% debt. From these three alternatives, option one is that of the unlevered firm, that is, the firm that shuns the advantage of leverage (if any). Option two is that of a firm that has no equity capital. This option may not actually be realistic or possible in the real life economic situation, because no provider of funds will invest his money in a firm without equity capital. This is what is referred to as 'trading on equity'. That is, it is the equity element that is present in capital structure that motivates the debt providers to give their scarce resources to the business (Chechet & Olayiwola, 2014). Option three is the most realistic one in that, it combines both a certain percentage of debt and equity in the capital structure and thus, the advantages of leverage (if any) are exploited.

In reality, capital structure of a firm is difficult to determine (Ong & Teh, 2011). The extant literature is full of theories on capital structure, following the seminar work of Modigliani and Miller (1958). A firm has to issue various securities in a countless mixture to come across particular combinations that can maximize its overall value which means optimal capital structure (Ong & Teh, 2011). Therefore, the issue of how an organization is financed is of paramount importance to both managers and providers of funds. This is because if a wrong mix of finance is employed, the performance and survival of the business enterprise may be seriously affected (Osuji & Odita, 2012). Capital structure is closely linked with corporate performance (Tian & Zeitun, 2007, as cited in Ong & Teh, 2011). Corporate performance can be measured by variables which involve productivity, profitability, growth or, even, customers' satisfaction. Financial measurement is one of the tools which indicate the financial strengths, weaknesses, opportunities and threats. Those measurements are return on investment (ROI), residual income (RI), earning per share (EPS), dividend yield, price earnings ratio, growth in sales, market capitalization etc. (Barbosa & Louri, 2005).

In both developed and developing countries, there has been an argument on the effect of capital structure of a firm on firm performance (Nwankwo, 2014). According to Akeem et al. (2014) financial constraints have been a major factor affecting corporate firms' performance in developing countries especially Nigeria. The basis for the determination of optimal capital structure of corporate sectors in Nigeria is the widening and deepening of various financial markets. Mainly, the corporate sector is characterized by a large number of firms operating in a largely deregulated and increasingly competitive environment. Since 1987, financial liberalization resulting from the Structural Adjustment Program has changed the operating environment of firms, by giving more flexibility to the Nigerian financial managers in choosing their firms' capital structure. The macroeconomic environment has not been conducive for business while both monetary and fiscal policies of government have not been stable.

CONCEPTUAL ISSUES AND REVIEW OF RELATED LITERATURE

According to Akinsulire (2002) capital is "a stock of money, possessed by a person or a business firm, that could be invested, from time to time, in order to earn income, but for which it is intended not to diminish." Uremadu (2004) sees capital as "those pool of funds that the company commits to its fixed assets, to inventories, to account receivables, and to cash or

marketable securities" to lead to corporate growth. There are two forms of capital: equity capital and debt capital. Capital structure refers to the firm's financial framework which consists of the debt and equity used to finance the firm (Ong & Teh, 2011). According to Kennon (2010) as cited in Akeem et al. (2014) capital structure refers to the percentage of capital (money) at work in a business by type. Capital structure in financial term means the way a firm finances her assets through the combination of equity, debt, or hybrid securities (Saad, 2010, as cited in Ong & Teh, 2011). In short, capital structure is a mixture of a company's debts (long-term and short-term), common equity and preferred equity (Ong & Teh, 2011). The ability of companies to carry out their stakeholders' needs is tightly related to capital structure (Ong & Teh, 2011).

Alfred (2007) as cited in Akeem et al. (2014) stated that a firm's capital structure implies the proportion of debt and equity in the total capital structure of the firm. Pandey (1999) as cited in Akeem et al. (2014) differentiated between capital structure and financial structure of a firm by affirming that the various means used to raise funds represent the firm's financial structure, while the capital structure represents the proportionate relationship between long-term debt and equity. According to Inanga and Ajayi (1999) as cited in Akeem et al. (2014) the capital structure of a firm does not include short-term credit, but means the composite of a firm's long-term funds obtained from various sources.

Therefore, a firm's capital structure is described as the capital mix of both equity and debt capital in financing its assets. According to Akeem et al. (2014) capital structure is the combination of the debt and equity structure of a company. It can also be referred to as the way a corporation finances its assets through some combination of equity, debt or hybrid securities; that is the combination of both equity and debt. However, not all business firms use a standardized capital structure hence they differ in their financial decisions under various terms and conditions. It is therefore a difficult situation for these firms to determine the capital structure in which risk and costs are minimum and that can raise the value of shareholder wealth and or maximize profits (Raheman, Zulfiquar and Mustafa, 2007 as cited in Uremadu & Efobi, 2012).

The various components of a firm's capital structure according to Inanga and Ajayi (1999) as cited in Akeem et al. (2014) may be classified into equity capital, preference capital and long-term loan (debt) capital. Equity capital refers to the contributed capital; money originally invested in the business in exchange for shares of stock; and retained profits; profits from past years that have been kept by the company to strengthen the balance sheet, growth, acquisition and expansion of the business. Preference capital refers to a hybrid that combines the features of debentures and equity shares except the benefits while debt capital refers to the long term bonds used by the firm in financing its investment decisions while coming up with its principal and also paying back interest.

According to Uremadu and Efobi (2012) the capital structure of a firm comprises of both the long-term sources of finance which include debt and equity financing, and the short-term sources of finance, for example, cash, reserves etc. Myers (1984) as cited Uremadu and Efobi (2012) observed that the capital structure of firms range from internal financing to external financing.

He identified internal financing to include retained earnings while the external financing include debt financing and equity financing. Zoppa and McMahon (2002) as cited in Uremadu and Efobi (2012) observed that a company's capital structure should include the following: (a)

Reinvested profits (R.Es); (b) Short-term debt financing like trade credit; (c) Long-term debt financing like debentures and long-term debts etc. (d) New equity capital injections from existing owners and owner managers; (e) New equity capital from uninvolved parties like outside investors, venture capitalists etc.

Modigliani and Miller, (1958) illustrates that under certain key assumptions, firm's value is unaffected by its capital structure. Capital market is assumed to be perfect in Modigliani and Miller's world, where insiders and outsiders have free access to information; no transaction cost, bankruptcy cost and no taxation exist; equity and debt choice become irrelevant and internal and external funds can be perfectly substituted. The M-M theory (1958) argues that the value of a firm should not depend on its capital structure. The theory argued further that a firm should have the same market value and the same Weighted Average Cost of Capital (WACC) at all capital structure levels because the value of a company should depend on the return and risks of its operation and not on the way it finances those operations. Miller brought forward the next version of irrelevance theory of capital structure. He appealed that, capital structure decisions of firms with both corporate and personal taxes circumstances are irrelevant (Miller 1977). If these key assumptions are relaxed, capital structure may become relevant to the firm's value. So, research efforts have been contributed to relaxing the ideal assumptions and describing the consequences. This theory was criticized on the ground that perfect market does not exist in real life situation. Attempts to relax these assumptions particularly the no bankruptcy cost and no taxation led to the static trade off theory.

Theoretically, this study is underpinned on two theories namely the agency theory and pecking order theory. The agency theory is a theory concerning the relationship between the principal (shareholders) and the agent of the principal (company's managers) (Akeem et al., 2014). This suggests that the firm can be viewed as a nexus of contracts (loosely defined) between resource holders. An agency relationship arises whenever one or more individual, called principals, hire one or more other individuals, called agents, to perform some service and then delegate decision- making authority to the agents. The agency theory concept was initially developed by Berle and Means (1932), who argued that due to a continuous dilution of equity ownership of large corporations, ownership and control become more separated (Akeem et al., 2014). Jensen and Meckling (1976) define an agency relationship as a contract under which the principal(s) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. If both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal (Jensen & Meckling, 1976).

According to Eisenhardt (1989) the theory is concerned with resolving two problems that can occur in agency relationships. The first is the agency problem that arises when (a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing. The problem here is that the principal cannot verify that the agent has behaved appropriately. The second is the problem of risk sharing that arises when the principal and agent have different attitudes toward risk. The problem here is that the principal and the agent may prefer different actions because of the different risk preferences (Eisenhardt, 1989). The principal can limit divergences from his interest by establishing appropriate incentives for the agent and by incurring monitoring costs designed to limit the aberrant activities of the agent. The dollar equivalent of the reduction in welfare experienced by the principal as a result of this divergence is also a cost of the agency relationship, and we refer to this latter cost as the "residual loss". Jensen and Meckling (1976) define agency costs

as the sum of: (a) the monitoring expenditures by the principal (b) the bonding expenditures by the agent (c) the residual loss.

They further suggested that, for an optimal debt level in capital structure can be attained by minimizing the agency costs arising from the divergent interest of managers with shareholders and debt holders. They suggest that either ownership of the managers in the firm should be increased in order to align the interest of managers with that of the owners or use of debt should be motivated to control managers' tendency for excessive extra consumptions. Jensen (1986) presents agency problem associated with free-cash flow. He suggested that free cash flow problem can be somehow controlled by increasing the stake of managers in the business or by increasing debt in the capital structure, thereby reducing the amount of "free" cash available to managers. Therefore, firms which are mostly financed by debt given managers less decision power of those financed mostly by equity, and thus debt can be used as a control mechanism, in which lenders and shareholders becomes the principal parties in the corporate governance structure. According to Chechet and Olayiwola (2014) the only control mechanism to checkmate the managers' excesses to pursue the firm's overall goals is the introduction of more leverage in financing the firm. If more of debt is employed, the treat of liquidation, debt servicing, which may eventually result to loss of jobs to the managers will result to cost reduction thereby leading to efficiency and subsequently improved performance (Chechet & Olayiwola, 2014).

Secondly, the pecking order theory articulated by Myers and Majluf (1984) and Myers (1984), state that firms having high profits tend to attain low debt profile because when firms are more profitable their first priority is to generate financing through retained earnings because they maximize the value of the existing shareholders. If retained earnings are not sufficient, the firms can then go for debt and if further financing is required they issue new equity. The retained earnings is preferred because it almost has no cost, but if the external resources are used for financing like issuance of new shares it may take very high costs. The pecking order theory is as a result of information asymmetries existing between insiders of the firm and outsiders (Rahaman, Zulfiquar and Mustafa, 2007). The model leads to managers to adopt their financing policy to minimize these associated costs. It means that they will prefer internal financing to external financing and very risky debt to equity.

Numerous studies have examined the importance of this vital sector to economic growth. According to Chandrasekharan (2012), who conducted a study using 87 firms out of the population of 216 firms listed on the Nigeria stock exchange for a period of five years (2007-2011) from static trade-off, agency and pecking order theory point of view. He employed the panel multiple regression analysis and the study reveals that for the Nigerian listed firms; firms' size, growth and age are significant with the debt ratio of the firm, whereas, profitability and tangibility are not.

Babalola (2014), using 31 manufacturing firms with audited financial statements for a period of fourteen years (1999-2012) from static trade-off point of view. He employed the triangulation analysis and the study revealed that capital structure is a trade-off between the costs and benefits of debt, and it has been refuted that large firms are more inclined to retain higher performance than middle firms under the same level debt ratio.

Akinyomi (2013), using three manufacturing companies selected randomly from the food and beverage categories and a period of five years (2007-2011) using the static trade-off and the pecking order theory point of view. He adopted the use of correlation analysis method and

revealed that each of debt to capital, debt to common equity, short term debt to total debt and the age of the firms' is significantly and positively related to return on asset and return on equity but long term debt to capital is significantly and relatively related to return on asset and return on equity. His hypothesis also tested that there is significant relationship between capital structure and financial performance using both return on asset and return on equity.

Taiwo (2012), using ten firms listed on the Nigerian Stock Exchange for a period of five years (2006-2010) from the static trade-off, pecking order and agency theory point of view, revealed that the sampled firms were not able to utilize the fixed asset composition of their total assets judiciously to impact positively on their firms' performance.

Bassey, Aniekan, Ikpe and Udo (2013), used a sample of 60 unquoted agro-based firms in Nigeria within a period of six years (2005-2010) from the agency cost theory point of view. They employed the Ordinary Least Square regression and descriptive statistics and revealed that only growth and educational level of firms owners were significant determinants of both long and short term debt ratios, assets structure, age of the firms, gender of owners and export status impacted significantly on long term debt ratios, while business risk, size and profitability of firms were major determinants of short term debt ratio for the firms under investigation.

Simon-Oke and Afolabi (2011), used a study of five quoted firms within a period of nine years (1999-2007) from the static trade-off and agency cost theory point of view. They employed the panel data regression model and revealed in their study a positive relationship between firms' performance and equity financing as well as between firms' performance and debt-equity ratio. There is also a negative relationship that exists between firm's performance and debt financing due to high cost of borrowing in the country.

METHODOLOGY

Research design is the structure and strategy for investigating the relationship between the variables of the study. The research was adopted to examine the effect of capital structure on the financial performance of Nigerian quoted conglomerates. The study made use of ex-post facto research design. According to Kerlinger and Rint (1986) in the context of social science research an ex-post facto investigation seeks to reveal possible relationships by observing an existing condition or state of affairs and searching back in time for plausible contributing factors. The population of the study is made up of Conglomerates quoted on the floor of the Nigerian Stock Exchange (NSE). The Conglomerates are as follows: (a) A.G. Leventis Nigeria Plc. (b) Chellarams Plc. (c) John Holt Plc. (d) Scoa Plc. (e) Transnational Corporation Plc. and (f) UACN.

The study utilizes secondary data which were obtained from the annual financial statements of the banks and the Nigerian Stock Exchange Fact book. The study spans a period of five years, from 2011 to 2015. Panel data over this period will be used to determine the influence of capital structure variables on financial performance.

RESULTS AND DISCUSSIONS

The following measures of descriptive estimates, such as the mean, standard deviation and variance were employed so as to see the degree of variability of these estimates.

Table showing the mean and standard deviation of the dependent variables:

Table 1: Descriptive Statistics

	N	Mean	Std. Deviation	Variance
RETURN ON ASSETS	20	.0341	.02442	.001
RETURN ON EQUITY	21	1.2679	3.54585	12.573
ASSET TURNOVER	21	.6750	.53947	.291
EPS	21	.3502	1.29065	1.666
Valid N (listwise)	20			

Source: Author's Computation from Annual Financial Reports and Accounts.

Table showing the mean and standard deviation of the independent variables:

Table 2: Descriptive Statistics

	N	Mean	Std. Deviation	Variance
TD/TA	21	.5948	.14305	.020
LTD/TA	21	.1423	.08036	.006
STD/TA	21	.4523	.18469	.034
Tax/Rev	19	.0313	.04012	.002
Firm Size	21	6.8250	1.46609	2.149
Valid N (listwise)	19			

Source: Author's Computation from Annual Financial Reports and Accounts.

Table 3: Regression Result
Pooled OLS, using 18 observations
Included 7 cross-sectional units
Time-series length: minimum 1, maximum 3
Dependent variable: ROA

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
Const	0.212487	0.05378	3.9510	0.00192	***
Lev1	13.0103	7.40093	1.7579	0.10421	
Lev2	-13.2229	7.39024	-1.7892	0.09883	*
Lev3	-13.1832	7.40047	-1.7814	0.10015	
T	0.0101399	0.168402	0.0602	0.95298	
S	-0.0101444	0.00431431	-2.3513	0.03662	**
Mean dependent var	0.036324		S.D. dependent var	0.024798	
Sum squared resid	0.003741		S.E. of regression	0.017655	
R-squared	0.642178		Adjusted R-squared	0.493085	
F(5, 12)	4.307243		P-value(F)	0.017793	
Log-likelihood	50.76922		Akaike criterion	-89.53844	
Schwarz criterion	-84.19621		Hannan-Quinn	-88.80182	
Rho	-0.230597		Durbin-Watson	1.586540	

Source: Author's Computation from Annual Financial Reports and Accounts.

The table above is a regression output, it shows that capital structure has effect on the return on assets of the quoted conglomerates.

Table 4: Regression Result

Pooled OLS, using 19 observations
Included 7 cross-sectional units
Time-series length: minimum 1, maximum 3
Dependent variable: AT

	Coefficient	Std. Error	t-ratio	p-value	
const	-3.42455	1.14708	-2.9854	0.01053	**
Lev1	108.911	168.049	0.6481	0.52821	
Lev2	-105.098	167.805	-0.6263	0.54195	
Lev3	-105.649	168.038	-0.6287	0.54042	
T	-4.60384	3.82002	-1.2052	0.24961	
S	0.319342	0.088994	3.5884	0.00330	***

Mean dependent var	0.666681		S.D. dependent var	0.566546
Sum squared resid	2.089259		S.E. of regression	0.400889
R-squared	0.638382		Adjusted R-squared	0.499299
F(5, 13)	4.589915		P-value(F)	0.012417
Log-likelihood	-5.987350		Akaike criterion	23.97470
Schwarz criterion	29.64133		Hannan-Quinn	24.93372
rho	-0.019570		Durbin-Watson	1.236978

Source: Author's Computation from Annual Financial Reports and Accounts.

The table above is a regression output. The result indicates that capital structure has strong effect on the assets turnover of the quoted conglomerates.

CONCLUSIONS

It has been depicted from the analysis above that the capital structure of Conglomerate firms in Nigeria consists of more short term finance than long term debt. This reveals that Nigerian firms rely heavily on short term financing rather than long term finance. In determining the effect of capital structure on the financial performance of quoted conglomerates. The study concludes that the ROA and Assets Turnover ratio were significant, while ROE and EPS were insignificant in explaining corporate capital structure decisions. Hence the study recommends that the management of the quoted conglomerate should employ a critical analysis of the appropriate debt-equity mix suitable for the firm. An indepth analysis of business factors that affect a particular industry is necessary in other to obtain the benefits of debt-equity mix.

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