Effect Of Firms' Capital Structure On Financial Performance: Evidence From Nigerian Listed Consumer Goods Industries.

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Abstract
This paper assessed the effect of firms' capital structure on financial performance of Nigerian listed consumer goods industries. The study utilised secondary data gathered from the published annual report and accounts of fourteen (14) sampled consumer goods industries for the period of 6 years from 2011 to 2016, selected according to their data availability and time constrain from seventeen (17) industries that are operating on the floor of Nigerian Stock Exchange as at December, 2016. The study make used of panel data regression analysis using STATA 14.0. Based on the results from the analysis, it was found out that there is a positive and significant relationship between the dependent and the independent variables. This mean that a reasonable combination of debt and equity share capital enables Nigerian consumer goods industries to increase their financial performance. It was therefore recommends that, debt should be use by the companies only to the point where its benefit should not exceeds to total cost. The debt should be long-term in nature. Moreover, government should try as much as possible to reduce the cost of borrowing to enable firm's achieve a reasonable combination of debt into their capital structure and enjoy the relative tax savings advantage of the debt.

Key Words: Capital Structure, Financial performance, Consumers goods and Nigeria Stock exchange.

Introduction

One of the most important aspects of financial management is the choice of methods of financing company's assets. Companies use a variety of sources of finance with the aim of achieving an efficient capital structure that provides a good mixture of long-term source of financing it capital investment (Rouf, 2015). Available long-term sources of finance to a company include share equity, loan notes, debentures and preference shares (Watson and Head, 2013). Salawu (2007) stated that financial liberalization of 1987 in Nigeria has given managers of firms various options of utilizing retained earnings, issue new shares or borrow through debt instruments in the capital market with the view to maximising firms' value. These necessitate a rational choice by firm's managers of possible combination which will help in maximising firm's value and its shareholders' wealth (Salim and Yadav, 2012).

Capital structure (financial leverage) has been defined by different authors at different times. Kurfi (2003) viewed it as a proportional relationship between debt and equity. To Akinsulire (2006), it refered to how a company finances its operations and this is usually made up of ordinary share capital, preference share capital and debt capital. However, Mireku, Mensah and Ogoe (2014) sees capital structure as an organization's financing structure which continue to engaged the attention of researchers in the field of accounting and finance; with strongly emphasises of fulfilling the expectations of company stakeholders.

Capital structure hypothesis of 1958 propounded by Modigliani and Miller (MM) encouraged researchers and practitioners to determine what really influences financing decisions of firms (Varun,2014; Arnold, 2013). They argued that, perfect market is characterised with free and perfect information to all participant, free taxes andtransaction cost which altogether do not influence firm's value determination.Management should not be concerned about the proportion of debt and equity that will form part of their capital (Hossain and Nguyen, 2016; Varun,2014; Arnold, 2013), although, MM assumptions do not hold true in the real world (Watson and Head, 2013; Salim and Yadav, 2012).

Whereas for over 50 years various capital structure theories have been formulatedemphasising the relevance of optimal capital structure which affect firms' value, despite the peculiar differences. For example, Static trade-off theory states optimal capital structure is higher for companies with higher profits than companies with lower profits due to the tax savings effect and bankruptcy cost. Whilst, Myers in 1984, opposed to the optimal capital structure in the sense, companies with higher profits can rely on retained earnings as a source of finance more than those with lower profits, that is profitability and gearing are negatively correlated.

Moreover, there is an intense argument in relation to the choice of whether to use a market value or financial position value in assessing the financial leverage. Supporters of financial position value presented two explanations. Firstly, firms' managers perceived problems from the position of historical cost as against market value. Secondly, they argue that cost of debt is estimated given the circumstance or vulnerability to insolvency (Mireku, Mensah and Ogoe, 2014). Accordingly, followers of market value position opined that the net worth of a firm is determined considering the prevailing market forces. Although both arguments can be used as a measure of firm's capital structure (Salehi and Biglar, 2009).

Overview of capital structure

Firms' performance can be attributed to a variety of factors of which capital structure form part of the available factors (Salim and Yadav, 2012). Mix results were revealed by various researches in respect of the relationship between capital structure and firm performance, both indicating positive and negative association.

Soumadi and Hayajneh (2012); Rouf (2015); Salim and Yadav (2012) in their study found out that capital structure is negatively associated (statistically) with firm performance on the study sample generally, that is 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. one possible reason for their result could be attributed to higher borrowing cost peculiar to developing economies like Jordan, Malaysia and the like (Salim and Yadav, 2012). Moreover, this finding supports the MM position of dividend irrelevant theory.

Chang et. al (2014), study reveals that short-term capital structures decisions are negatively associated with accounting-based firm performance but long-term capital structures decisions are positively related to market-based firm performance. Meanwhile, they opined that taxation does not have any effect on firm performance, despite government deregulation policy. This clearly opposed to the MM second proposition, which they introduced tax savings into their model.

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Therefore the tax advantage enjoyed by debt finance over equity finance suggests that optimal capital structure exist (Watson and Head, 2013). Hossain and Nguyen (2016) study found that leverage has a strong negative relationship with performance, between 2004 and 2013. These results hold both in univariate and cross-sectional set up even after controlling for firm specific variables.

However, Fosu (2013) documents a contrary result to that of Soumadi and Hayajneh (2012) and Salim and Yadav, (2012). His findings indicates a positive and significant relationship between leverage and firm performance. It was also found that product market competition enhances the performance effect of leverage. The results are robust to alternative measures of competition and leverage.Mireku, Mensah and Ogoe (2014) established that the market value of capital structure has a stronger relation with financial performance as compared to the book value. They however emphases the use of market value of the underlying capital structure as opposed to it book value.

THEORIES OF CAPITAL STRUCTURE

In an effort to choose a particular project financing option prior to MM proposition of using financial leverage to enhance firm's value. A lot of theories documented the relative benefits of leverage amidst the cost of insolvency (Mireku, Mensah and Ogoe, 2014). These include:

Static trade-off theory

Static trade-off theory argues that for each company there is an optimal capital structure, with an optimal level of gearing. That is firms need to trade-off between the benefits of taking on more debt and the costs of higher indebtedness.The benefits of taking on debt (rather than equity) are mainly in the taxrelief that is obtained on debt interest. Modigliani and Miller have arguedthat although the cost of equity rises as gearing increases, the tax relief ondebt means that the company's weighted average cost of capital falls asgearing rises (Watson and Head, 2013). It is therefore beneficial to take in more debt and increasegearing up to the point where the marginal costs of extra debt start toexceed the marginal benefits of extra debt.

The optimal gearing level for a company is reached at a point wherethe marginal benefits of taking on additional debt capitalequals the marginal costs of taking on the extra debt.The optimal gearing level varies between companies, depending on theirprofitability. A very profitable company can take on higher gearing because the marginal costs of insolvency will not become significant until the gearing level reaches the highest possible level.

Pecking order theory

Pecking order theory was put forward by Myers in 1984 as a challenge to static order. He argued that companies should prioritise their source of finance which they use. That is, they are to choose among alternatives financing option based on preferences. Firstly, firms prefer retained earnings, followed by debt capital as the second in the order of priority. The third option should be by new equity capital (an issue of new shares) as the least preferred source of finance for investment.

This means that if a company has an opportunity to invest in a capital project witha positive net present value (NPV), it will prefer to fund the project from retained profits. If it is unableto do this, it will look for debt capital to finance the investment. Only if retainedprofits and debt capital

are unavailable (because cash flows are weak andprofitability is low) will the company consider a new issue of shares.
Companies are likely to choose a long-term dividend policy that will allow them tofinance future investments largely through retained earnings.

Market timing theory
This is a market timing driven theory, it is however based on the available market opportunities within the capital markets. These opportunities occur largely because of information asymmetries. That is company managers have more and better information about the company than shareholders and other investors.
Management should know when the future prospects for the company are better than investors are expecting, and vice versa. Company management might therefore recognise occasions when the company's shares are currently under-valued or over-valued. Taking advantage of opportunities in the market to issue new shares or buy back existing shares affects the gearing level. A company therefore does not have a targeted optimal gearing level. Its financing decisions are determined more by available market opportunity and market timing.

Agency effects on capital structure
Agency theory, which was developed by Jensen and Meckling (1976) can be used to explain the capital structure of a company and its choices of financing for new investment. The theory states that the governance of a company is based on conflicts of interest between the company's owners (shareholders), its managers and major providers of debt finance. Each of these groups has different interests and objectives.
The shareholders want to increase their income and wealth. Their interestis with the returns that the company will provide in the form of dividends,and also in the share appreciation. Thus, the value of their shares depends largely onthe long-term financial prospects for the company. They aretherefore concerned about dividends, but they are even more concernedabout long-term profitability and financial prospects, because these affectthe value of their shares.

The directors and managers are employed to run the company on behalfof the shareholders. However, if the managers do not own shares in thecompany, they have no direct interest in future returns in the value of the shares. Unless they own shares, or unless theirremuneration is linked to profits or share values, their main interests arelikely to be the size of their remuneration package, and other benefits fromtheir job and position such as their status as company managers.

Thus, major debt providers have an interest in sound financialmanagement by the company's managers, so that the company will be ableto pay its debts in full and on time. They will often be concernedthat a company will borrow more because the cost of borrowing is fairly low,and invest the money in high-risk ventures.
In view of these divergent stakeholders preference, their interest can have implications for capital gearing andpreferences for financing method.

Shareholders might prefer debt finance as a new source of funding. Whenmanagers own shares in the company, a new issue of shares might dilutetheir interest in the company's equity, and other shareholders might prevent this from happening. Borrowing to finance growth rather thanrelying on equity also reduces the amount of free cash for managers tospend on personal

interests and benefits. Providers of debt capital might be worried by the fact that debt capital givesshareholders an incentive to invest in high-risk projects. They mighttherefore oppose new borrowing by a company when they think that thiswill put their interest at risk.

Jensen and Meckling argued that the 'optimal' capital structure for a company isobtained by trading off not just the marginal benefits and marginal costs of extradebt (as suggested by static trade-off theory) but also by trading off the 'agencycosts' of additional debt and the 'agency costs' of additional equity.

HYPOTHESES

From the review of existing and relevant research on this topic, the following hypotheses were formulated:

1. There is significant relationship between capital structure and return on common equity.
2. There is significant relationship between capital structure and return on capital.
3. There is significant relationship between capital structure and operating margin.
4. There is significant relationship between capital structure and price to book value.
5. There is significant relationship between capital structure and enterprise value.
6. There is significant relationship between capital structure and net debt to EBITDA.

METHODOLOGY

The aim of this study as mentioned earlier is to examine the effects of capital structure on financial performance of listed consumer goods industry in Nigeria. The study utilises secondary data extracted from the annual reports and accounts of the fourteen (14) sampled consumer goods industry. The sampled companies were selected based on data availability. This study covers the period of six (6) years, from 2011 to 2016. Panel data regression analysis was employed to determine the link between the study variables. Panel regression model is considered to be more appropriate because the data of this study are cross sectional over several time periods (Sani and Chabbal, 2017). The sampled firms are:

Table1: Sampled Consumer Goods Industries

S/N	COMPANY NAME	YEAR OF INCORPORATION	YEAR OF LISTING
1	7 UP	1959	1986
2	CADBURY	1965	NA
3	CHAMPION BREW	1974	1983
4	DANSUGAR	2005	2007
5	DUNLOP	1961	NA
6	FLOUR MILLS	1960	1979
7	GIUNESS	1950	1965
8	INTER BREW	1971	NA
9	NASCON	1973	1992
10	NESTLE	1969	1979
11	NORTHERN NIG FLOUR	1971	NA
12	PZ	1948	NA
13	UNILEVER	1923	1973
14	VITA FORM	1962	NA

Source: www.nse.ng.gov
*NA = Not Available

The panel regression function below is employed to determine relationship between the dependent and independent variables as used by Abor (2007) with some modifications.

$FFP_{i,t}= \beta_0 + \beta_1 ROCEi_{,t} + \beta_2 ROC_{i,t} + \beta_3 OM_{i,t} + \beta_4 EPS_{i,t} + \beta_5 PBV_{it} + \beta_6 CETASSETS_{it} \beta_7 DY + \beta_8 EVEBITDA_{it} + \beta_9 LOGEV_{,it} + \beta_{10} NDEBT_{it} + \beta_{11} TDTA_{it} + \beta_{12} LTASSSETS_{it} + e_{it}$……..(1)

Where: FFP means financial performance, ROCE, ROC, OM, EPS, PBV, CETASSETS, DY, EVEBITDA, LOGEV, NDEBT, TDTA andLTASSETSrepresent return on common equity, return on capital, operating margin, earnings pr share, price to book value, common equity to total assets, dividend yield, enterprise value to EBITDA, logarithm of enterprise value, net debt, total debt to total assets and log of total assets (control variables) respectively.

While the symbol “e” denotes error term which is the white noise process and the subscripts ‘it” indicates entity over time.

RESULTS AND DISCUSSION

Table 2: Descriptive statistics

		obs	mean	std. dev.	min	max
roce		90	25.51322	25.4292	-37.91	99.96
roc		90	18.53089	19.7902	-37.91	72.1
om		90	9.072111	18.8826	-82.79	35.22
eps		90	18.14289	21.0107	-77.07	68.12
pbv		90	8.233111	32.1881	-15.65	304.2
cetassets		90	28.654	34.6342	-124.1	68.95
dy		90	6.490667	11.123	0	55.88
evebitda		90	35.415	177.413	2.11	1651
logev		90	4.683778	0.78103	3.19	6.14
ndebt		90	386.835	3475.44	-98.27	32984
tdta		90	20.22589	26.1254	0	124.8
ltassets			4.469444	0.58336	3.37	5.54

Source: Generated by the researcher using Stata 14.0

The descriptive statistics from table 2 above shows that performance ratios measured by Return on capital employed (ROCE)Return on Equity (ROC), Operating margin (OM), Earnings per share (EPS), total debt to total assets , Price to book value and Dividend yield 26%, 18%, 9%, 18%, 20%, 8 times and 6.5 % respectively.

Averagely, CETASSETS OF 29%, EVEBITDA of 35% and NDEBT of 387% are on the high side looking at the total debt to total assets of 20.23 times. This suggests that Nigerian consumer goods industries are able to utilize their capital effectively by increasing financial performance and shareholders' value. However, the financial performance and the values creation they make might possibly not translated into high profits due to operational lapses resulting in high operational cost. Looking at the figures closely, it can be deduced that either the market performance of the share prices has been good leading to increase in value of the equity of the sampled companies or some of the companies have experience losses leading to a reduction in the book value of equity capital.

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Table 3: Regression results

		1		2		3	
VARIABLES		OLS	t	RANDOM EFFECT	t	ROBUST	z
roc		0.84736	6.88	0.7260435	6.79	0.52335	2.6
om		0.26785	1.63	0.3055703	1.93	0.11066	0.45
eps		-0.011	-0.10	-0.0414712	-0.44	-0.0712	-0.86
pbv		-0.0365	-0.61	-0.0406528	-0.86	-0.0241	-0.89
cetassets		-0.0814	-1.21	-0.0735924	-1.09	0.06882	0.94
dy		-0.2288	-1.45	-0.1777484	-0.75	-0.0891	-0.19
evebitda		0.00067	0.08	0.0016379	0.24	0.00214	1.03
logev		14.5725	2.58	2.746495	0.49	-8.4423	-0.92
ndebt		-0.0001	-0.21	8.58E-06	0.02	-0.0002	-1.18
tdta		0.08401	1.19	0.0040327	0.06	-0.0482	-0.87
ltassets		-15.213	-2.30	-1.353115	-0.20	-7.0718	-1
_cons		9.7561	0.70	6.677161	0.34	87.049	1.38
sigma_u				8.4768017		22.199	
sigma_e				9.5384958		9.5385	
rho				0.44127105		0.84415	
R^2		0.7281		0.7987		0.1366	

Source: Generated by the researcher using Stata 14.0

In table above, panel regression result taken from the sampled consumer goods industries was provided. The regression was carry out based on ordinary least square (OLS), random effect regression (RE) and robust regression (RR).

Building on the findings of Chang et al (2014), it was decided to that OLS and RE models are the preferred models to report on, given both have 73%, 80% and 8 and 9 times R^2 and sigma u, e, rho compared with RR model which have only 14%. This indicates the level of significance of the two models, although the RR sigma's shows promising outcomes.

The research findings reveal positive correlatedcoefficient of return on capital and operating margin with increase financial performance of consumer goods industries in Nigeria. This is because the t-scores for total debt to total assets, net debt, enterprise value and enterprise value to EBITDA all shows positive. Thus, except for the borrowing cost which might be higher for some companies due to the size, using long-term debt as a source of financing capital project will increase companies' financial performance. Hence, there is a need to strike a balance between the amounts of debt which the companies should incorporate into their capital structure. This will helps them not to distract the tax benefit on borrowing cost with extra charges from the debt providers as a result of exposing them to additional risk of insolvent.

In view the results of the study Nigerian consumer goods industries should try as much as possible to not to substitute long-term debt financing with short-term debt financing. This is because the short-term debt financing carries higher costs and are not positively linked to increasing financial performance and shareholders' value (Mireku, Mensah and Ogoe, 2014). To help the industries achieve this strategy, there is need for the Central Bank to reduce borrowing cost on long-term debt to an acceptable level, thereby making the industries finance their

expansion with reasonable cost. Government should ensure a sound capital market to industries access log-term debt on timely basis.

Conclusion and Recommendation

This paper examined the empirical relationship between capital structure and financial performance of listed consumer goods industries in Nigeria using panel data regression analysis. It covers the period of six (6) years from 2011 to 2016. The paper was a follow up of MM, Myers and Jensen and Meckling capital structure theories. The study was considered important given the tax savings benefit that accrues to firms from using debt financing into their capital structure (Watson and Head, 2013). The findings of this study suggest that using debt finance increase firm's financial performance, looking at the performance measures considered by the study. Therefore, it was recommends that debt should be use by the companies only to the point where its benefit should not exceeds to total cost. The debt should be long-term in nature. Moreover, government should try as much as possible to reduce the cost of borrowing to enable firm's achieve a reasonable combination of debt into their capital structure and enjoy the relative tax savings advantage of the debt.

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