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Effects of Capital Structure on the Financial Performance of Listed Consumer Goods Firms in Nigeria (2011-2021)

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ABSTRACT

The study investigated the effect of capital structure on the financial performance of listed consumer goods firms in Nigeria between 2011 and 2021. A sample of ten firms was purposively selected from the study's population of twenty four consumer goods firms listed on the Nigerian Stock exchange. The study employed secondary source of data obtained from the financial statements of the selected firms and the data collected was analyzed using random effects model. Findings from the study showed that the coefficient of share capital is negative (-1.86262) and insignificant (p=0.7961>0.05) and the beta value of short-term debt is positive (5.08662) and insignificant (P=0.1596>0.05). The coefficient of long-term debt is also positive (6.78568) and statistically significant (p=0.0298<0.05) and the beta value of retained earnings is positive (3.55649) and insignificant (p=0.2617>0.05) for the same firms in Nigeria. The study concluded that share capital has a negative and significant effect on the financial performance, while retained earnings, short-term debt and long-term debt have positive effects on the firms' financial performance. The study recommended that the consumer goods firms in Nigeria should avoid financing their operations with share capital without taking remedial actions on it persistence negative effect on their performance and Nigerian governments should be formulating new industrial policies that will rebrand the local enterprises including consumer goods firms instead of insisting on their annual corporate tax increase.

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Introduction

Capital structure is the combination of the firms' capital composition. Determining the effects of capital on the firms' financial performance is imperative during the companies' financing decisions as consumer goods firms require appropriate capital to run their activities properly to avoid negative effects on their performance. The capital through which various business organizations could be run are the share capital, retained earnings, short-term debt and long-term loans. However, selecting suitable capital sources may positively impact companies' performance but if they were not properly utilized, this may result into financial backwardness [1,2]. Therefore, using different sources of capital during the financing of the enterprises' operations could help in reducing the cost of finance, bringing up their net returns and improving their performance [3]. Although employing only one capital sources can still increase the companies' profitability but in the long run may become unreliable as the application of loan capital alone may create a high financial risk to the firms, while placing too much reliance on only equity capital may as well increase the cost of finance [4]. The cheapest mode of capital the business activities is the retained earnings. Using it doesn't however impose any financial obligation like costs of equity mobilization, loan redemption, and interest payments among others on the enterprises. Firms with enough reserved profits will be well off and be able to invest its excess on profitable

projects for their expansions and performance improvement than those firms with inadequate of it [5]. Short-term debt is the next economic mode of financing to the business organizations after the retained profits. It constitutes a great percentage of the total debts of most of the small and medium firms in the world due to the restricted access to long-term one [6]. Long-term debt is an external financing mode for most of the medium enterprises around the world and serves as a mechanism of closing the gaps of finance deficiency in the business arena especially in the absence of the sufficient financial resources [7]. Share capital is a source of finance involves issuing of shares. Shares may be issued through the public subscription, offer for sale, right issues, bonus issue, private placement, debt conversion, and offer for sales by tender [2].

Financial performance is a measure of how well a business has utilized its assets to generate revenues. Financial performance is an outcome that needs to be accomplished in organization. Assessing financial performance will serve as a criterion for making an inter firms comparisons. Financial performance can be evaluated in terms of growth in turnover, assets growth and efficiency, profitability growth, higher liquidity position, and stock prices improvement while lack of performance is generally assessed in terms of too high expenditures poor profitability, poor liquidity position, persistence corporate loss, and absence of self-reported innovations [8]. Return on equity is one of the most widely fitted models that have been used by various researchers in the past to measure firms' financial performance across the globe

[9]. In South Africa, assessing performance and sourcing for the appropriate funds by the consumer goods based companies are the predicament as only little attention is being paid to the rightful composition of capital sources during their financial decisions. Firms engaging in consumer goods required effective economic resources management and ability to mobilize the right capital from the right sources at the appropriate costs and times as the moving upward and recording better financial performance of some of these firms in the past in some African countries like South Africa, Ghana and Nigeria among others was as a result of strong links between the judicious capital utilization and effective finance management [10].

However, the past failure and bad performance of many corporate organizations around the world including the consumer goods firms were due to financial mismanagement and unseemly choice of sources of finance [11]. A review of related studies such as Ravi et al., Musila et al., Anizawati et al., Ahmed, Ahmed and El-Mande et al., Bassey et al., Abeywardhana and Magoro et al., Robert and Jason et al., Ahmad and Ghazalat et al., Mutie, Willy and Agnes et al., Kornom-Gbaraba and Ugwuoke et al., Abubakar and Olowe et al., Ali et al., among others revealed that the existing studies have concentrated their investigations on other sectors like agriculture, oil and gas, financial services, Small and Medium Enterprises, education, health care services and industrial sectors apart from consumer goods sector which is the focus of this study [12,13,4, 14,15,11,10,7,16,17,9,2,3]. This study has filled lacuna as most of the reviewed related studies have only used debt capital, long-term debt, retained profits, as their independent variables, but this study used corporate financing that combined all of the variables as the independent explanatory variables. The review also uncovered that the studies that have examined the effect of short-term debt, share capital, long-term debt, and retained earnings on the return on equity of the listed Nigerian consumer goods firms are rare in literature. Above all, the studies that have investigated the effect of capital structure on the financial performance of listed consumer goods firms in Nigeria from 2010 to 2020 are rare. That is why this study is examining the effect of capital structure on the financial performance of the listed consumer goods firms in the country.

Objectives of the Study

The broad objective of this study is to investigate the effect of capital structure on the financial performance of listed consumer goods firms in Nigeria. Specifically, the study:

- i. assesses the effect of share capital on the return on equity of listed consumer goods firms in Nigeria;
- ii. determines the effect of short-term debt on the return on equity of listed consumer goods firms in Nigeria; examines the effect of long-term debt on the return on equity of listed consumer goods firms in Nigeria;
- iii. assesses the effect of retained earnings on the return on equity of listed consumer goods firms in Nigeria.

Literature Review

Financial Performance

Financial performance is an indication of how well a business has perfectly applied its assets from its ordinary course of doing business to generate revenue [1]. Financial performance is a way of evaluating firms' healthy financial condition over a given accounting period [5]. It is what to be accomplished in any human organization. Performance is a business achievement that requires adequate and appropriate evaluation using some valid criteria Fan, Titman, & Twite, [18]. Performance is the firm's assessment outcome of how it has succeeded in attaining its objectives [8]. Measuring financial performance is a financial evaluation method of knowing the well being of the corporate organizations [3]. Return on equity is therefore a measure of firms' performance. It is the earnings after corporate tax and loan interest divided by shareholder's equity [19].

Capital Structure

Capital structure is the total combination of the firms' capital [2]. Corporate financing is a collective use of equity capital and debt capital to fund the business' activities [17]. Capital structure is the total mixed-funds available for the running of the firms' activities [14]. Capital structure are some specific mix of capital such as retained earnings, share capital, short and long-term debts and retained earnings used to fund the operations of a business [16]. Capital structure is an important financing aspect of firms' financial decisions involving concerted companies' capital funding [13].

Share Capital

Share capital is the funds mobilized by selling of variety of shares to the existing or potential stockholders [18]. Share capital is the funds generated by the firms by issuing ordinary shares (common stock) or preferred stock (preference share) and other external equity [5]. Share capital is the mingle value of the funds a firm has acquired through the public or private issue of the common or other stock [20]. The study therefore hypothesized that:

a. There is no effect of share capital on the return on equity of listed Nigerian consumer goods firms.

Short-term Debt

Short-term debt is a capital that is repayable within a year to the lenders. Loans that have short terms maturities assist corporate organizations to meet their immediate financial needs without resulting into long-term debt commitment [12,13]. Short-term financial obligations attracts lowers interest charges to the entities as most of the lenders may decide not to charge the borrowers too much of interest if the repayments agreed periods are not breached [21]. The study also hypothesized that:

b. Short-term debt has no effect of on the return on equity of listed consumer goods firms in Nigeria.

Long-term Debt

Long-term debt is a long-term debt instrument that imposed an obligation on its user to pay regularly the interests and the principal as at when due. The interest on debenture is tax-free as the corporate tax is chargeable on the profit after loans interests [8]. Tax saving is the reduction of the amount of tax payable by corporate organizations Anizanati et al. 2016. In the other hand, preference shares carried a fixed dividend percentage which is payable to the holders before the ordinary shareholders get theirs [13]. The study therefore hypothesized that:

c. There is no effect of long-term debt on the return on equity of listed consumer goods firms in Nigeria.

Retained Earnings

Retained earnings are the firm's cumulative retained profits, reserves, share premium and other available internal financing sources [19]. It is the earnings after tax and dividends retained by a company Ahad & Ghazalat, 2019. It is an internal model of finance referring to the cumulated profits reserved available for business re-investment [8]. It is the profit plugged back to finance a enterprise. The most common internal equity source of fund is the retained earnings or reserved profits [17]. Retained profits are the internally generated long-term funding sources meant for running firms' activities. Retained earnings are the long-term

internal equity fund in forms of revenue and other reserves. The most common internal source of financing a firm is the retained earnings [21,20]. The study therefore hypothesized that:

d. Retained earnings have no effect on the return on equity of listed consumer goods firms in Nigeria.

Empirical Review

Denis investigated the "effect of debt financing on the financial performance of private secondary schools in Nairobi of Kajiado County" [8]. The study used multiple regression models for data estimation. The study discovered a positive insignificant impact of debt financing on financial performance and a positive insignificant impact of revenue growth on the financial performance of the schools. Abeywardhana and Magoro examined "the relationship between debt capital and financial performance: a comparative analysis of South African and Sri Lankan Listed Companies" between 2011 and 2015 [11]. The research work obtained a secondary source of data which was analyzed using a fixedeffects regression model. Findings from the work revealed that short-term debt harms the performance of wholesale and retail sector companies in South Africa while the long-term debt has a positive impact, but the short-term debt of similar companies in Sri Lanka hurts firm performance while long-term debt has a positive impact. The study recommended that in South Africa, the wholesale and retail sectors are advised to use equity capital and retained earnings efficiently to minimize conflicting interests between the managers and shareholders to remain independent of external financiers. While in the case of Sri Lanka, the owners and managers of the retail companies should consider reducing the use of short-term debt because of its negative impact, and increasing long-term debt which seems to have positively influenced the financial performance of their companies. Oyetade investigated "the determinants of the capital structure of selected sample population of non - financial firms of Nigeria' and was carried out in the financial services sector" and employed a 'fixed effect model with linear ordinary least square classical regression model'

for data analysis [5]. Findings from the study showed that 'there is a positive impact of liquidity on leverage of Nigerian non-financial firms'. Abubakar and Olowe "examined the impact of capital structure on the financial performance of selected quoted firms in Nigeria" using a cross-sectional time-series data comprising ten firms and covered seven years (2012-2018) [2]. A sample of ten (10) quoted firms on the Group of Stock Exchange Nigerian limited was purposively selected. The study used a panel multiple regression model for data analysis. The study discovered that there is a positive significant influence of short-term debt on the financial performance of the firms. The study recommended that the Security and Exchange Commission should motivate quoted firms in the country to go for more loan capital as it enhances the firms' financial performance.

Methodology

The study employed an ex-post facto research design and made use of secondary data sourced from the annual financial accounts and reports of listed consumer goods firms in Nigeria between 2011 and 2011. Using the secondary source of data is justifiable as it is uneasy to get the required data for analysis on the study's variables through the primary data sources. This study's population comprised twenty (20) consumer goods firms listed on the Johannesburg Stock of Exchange of South Africa. The study sampled ten (10) consumer goods firms purposively based on the availability of data. The study's dependent variable is performance measured in terms of return on equity (ROE), while the independent variables of the study are the share capital (SCP), short-term debt (STD), long-term debt (LTD) and retained earnings (REs). SCP, STD, LTD and REs are expressed as their ratios to total assets. The inferential statistics was which include pooled ordinary least square, fixed effect and random effect modes were used for data estimation together with some post data analysis tests like F-test, Lagrange Multiplier test and Husaman test among others.

Data and Results Table 1: Random Effect Result SERIES: ROE, SCP, STD, LTD, RE

Total panel (balanced) observations: 110 Included 10 cross-sectional units Time-series length = 11					
Variables	Co-efficient	Std. Error	t-Statistic	Probability	
С	-1.98077	3.55052	-0.2879	0.4707	
SCP	-1.76262	7.20948	-0.3584	0.6461	
STD	4.08662	3.61714	1.5060	0.1396	
LTD	4.78568	3.12380	2.720	0.0198	
RE	2.99209	3.55649	1.220	0.2417	
R-squared Adjusted R-squared F-Stat P (f-stat) Durbin-Watson = Post Data Analysis Tests: F-tests F-stat. P-value Lagrange multiplier test statistical value P-value Hausman test chi-square stat P-val	0.706104 0.675163 18.05307 0.000000 1.829278 0.000345 1.000 .500 0.019				

Source: Author's Analysis, 2022 @ 5% level of significant

Table 1 reveals the result of the random effect model which is considered the most fitted model for data analysis in this study. The R-square result shows that 81% (0.806104) changes in the value of return on equity (ROE) will be jointly accounted for by the study's explanatory variables, while other variables in the error term will account for the remaining 19% changes on ROE. The adjusted R-square value of 0.775163 implies that even if other variables accounted for in the stochastic parameter were included in the model, the retained earnings (REs), short term debt (STD), share capital (SCP) and long term debt (LTD) would still account for a 78% increase in the financial performance of the firms in the country. This indicates that the study's explanatory variables have joint and global significant effects on the financial performance of the firms. The F-statistics result is 26.05307 with a probability value of 0.000000 at a 5% level of significance implying that the study's model is statistically significant and suggests that the significant linear relationship between the explanatory variables and return on equity (ROE) does not exist. That is, there is the overall significance of the study's parameters, the appropriateness of the model used for data analysis, and the probability values employed are valid enough to explain the outcome of the ROE. The beta value of SCP is negative (-1.76262) and statistically insignificant (p=0.6461>0.05) implying that it has a negative and insignificant effect on ROE. The beta value of STD is positive (4.08662) and statistically insignificant (p=0.1596>0.05) implying that it has a positive and insignificant effect on ROE. The beta value of LTD is positive (4.78568) and statistically significant (p=0.0198<0.05) indicating that it has a positive and significant impact on the ROE. The coefficient of retained earnings is positive (2.99209) and statistically insignificant (p=0.2417>0.05) meaning that the variable show a positive and has an insignificant effect on the ROE.

Table 2: Pooled Ordinary Least Square Result
SERIES: ROE, SCP, STD, LTD, RE

Total panel (balanced) observations: 110 Included 10 cross-sectional units Time-series length = 11						
Variables	Co-efficient	Std. Error	t-Statistic	Probability		
С	-1.98077	4.45052	-0.3979	0.6915		
SCP	-1.86262	7.20948	-0.2584	0.7966		
STD	5.08662	3.61714	1.4060	0.1627		
LTD	6.78568	3.12380	2.1720	0.0321		
RE	3.99209	3.55649	1.1220	0.2643		
R-squared Adjusted R-squared	0.80610 0.79480					

Source: Author's Analysis, 2022 @ 5% level of significant

Table 2 discloses the result of the pooled ordinary least square (POLS). The R-square result shows that 81% (0.806104) of the total changes in return on equity (ROE) is jointly accounted for by short-term debt, share capital (SCP), long-term debt (LTD) and retained earnings (REs), while other variables in the error term accounted for the remaining 19% changes in the value of the ROE. The adjusted R-square value of 0.794809 measured in terms of the ROE implies that even if other variables accounted for in the stochastic parameter were included in the model, the explanatory variables would still account for an 80% increase in the financial performance of the firms. The result of the coefficient of SCP is negative (-1.86262) and statistically insignificant (p=0.7966>0.05) meaning that the variable shows a negative and insignificant impact on the ROE. The beta value of STD is positive (5.08662) and statistically insignificant (p=0.1627>0.05) implying that it shows a positive and insignificant impact on the ROE. The beta value of LTD is positive (6.78568) and statistically significant (p=0.0321<0.05) meaning that the variable reveals a positive and significant impact on the ROE. The coefficient of REs is positive (3.99209) and statistically insignificant (p=0.2643>0.05) meaning it shows a positive and insignificant impact on the ROE.

Table 3: Fixed Effect ResultSERIES: ROE, SCP, STD, LTD, RE

Total panel (balanced) observations: 110 Included 10 cross-sectional units Time-series length = 11						
Variables	Co-efficient	Std. Error	t-Statistic	Probability		
С	-1.98077	4.65871	-0.3801	0.7047		
SCP	-1.86262	7.54673	-0.2468	0.8056		
STD	5.08662	3.78634	1.3430	0.1824		
LTD	6.78568	3.26992	2.0750	0.0407		
RE	3.99209	3.72285	1.0720	0.2863		
R-squared	0.806104					

Source: Author's Analysis, 2022 @ 5% level of significant

Table 3 shows the fixed effect model result. The R-square result reveals that 81% (0.806104) of the total changes in the value of return on equity (ROE) is jointly accounted for by the explanatory variables, while other variables in the error term accounted for the remaining 19% changes in the ROE. The coefficient of share capital is negative (-1.86262) and statistically insignificant (p=0.8056>0.05) showing that it negatively and insignificantly impact the ROE. The beta value of short-term debt is positive (5.08662) and statistically insignificant (p=0.1824>0.05) implying that it positively and insignificantly affect ROE. The beta value of long-term debt is positive (6.78568) and statistically significant (p=0.0407<0.05) meaning that it has a positive and significant impact on the ROE. The coefficient of retained earnings is positive (3.99209) and statistically insignificant (p=0.2863>0.05) showing that its impact is positive and insignificant (p=0.2863>0.05) showing that its impact is positive and insignificant (p=0.2863>0.05) showing that its impact on the ROE.

Discussion

Finding from the study discovered that hypothesis one result shows that the beta value of share capital is negative and has an insignificant effect on the financial performance. Thus, the null hypothesis is rejected. The result implies that a unit increase in the value of share capital will reduce their financial performance by 186%. From these results, there is a signal that the listed consumer goods establishments in Nigeria should not dare to continually use share capital to finance their activities to avoid future poor financial performance. The result of hypothesis two shows that the coefficient of short-term debt is positive and insignificantly affects the financial performance. Thus the null hypothesis cannot be rejected. This implies that a unit increase in the value of shortterm debt will improve their financial performance by 508%. The result agreed with the results of the studies conducted by Ahmed et al. and Ahmad and Ghazalat; Edori et al. confirming a positive effect of short term debt on the profitability and financial performance of the firms [14,16,]. The result of hypothesis three reveals that the coefficient of long-term debt is statistically positive and has a significant effect on the financial performance of the firms. Thus, the null hypothesis 3 is rejected implying that an increase in the value of long-term debt will consequently improve the performance of the firms by 679% in South Africa. These results are in line the results of the studies conducted by Ahmed et al. and Ahmad and Ghazalat revealing a positive effect of long-term liabilities on the financial performance of the studied companies [14,16]. The hypothesis four shows that the coefficient of retained earnings is positive and has insignificant effect on the financial performance of the firms. Thus, the null hypothesis cannot be rejected. The results indicate that a unit increase in the value of retained earnings will aftermath improve their financial performance by 356%, That is, the more the profits of the firms are retained the greater and better their financial performances will become. The result supports the study' outcome of Bassey et al., that retained earnings positively and significantly impact the firms' performance and they are a reliable and available capital source for boosting future earnings of any company [15].

Conclusions and Recommendation

The research concluded that the retained earnings, short-term debts and share capital have no significant effect, while only longterm debt has a significant effect on the financial performance of Nigerian consumer goods firms. The study also discovered that the appropriate modes of finance that could be considered for the effective performance of the firms are the retained earnings, shortterm and long-term debts. The study also discovered a negative effect of share capital on the performance of the firms in Nigeria. This finding is implicative as the failure on the part of the firms to raise additional equity will switch up their gearing position which is financially risky. This result implied that any attempt to raise additional shares to finance the activities of the companies will negatively affect their financial performance. Based on the study's findings, it is recommended that Nigerian governments should formulate new industrial policies that will rebrand the local enterprises including consumer goods firms instead of insisting on their annual corporate tax increase and should avoid financing their operations with share capital without taking remedial actions on it persistence negative effect on their performance.

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