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EQUITY FINANCING AND PROFITABILITY OF CONSUMER GOODS MANUFACTURING FIRM IN NIGERIA

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ABSTRACT

The study therefore investigated the relationship between equity financing practices and profitability of consumer goods manufacturing firms in Nigeria. The study proxied equity financing and profitability is measured using ROA, ROCE and gross profit margin. The study is anchored on two theories, pecking order theory and marketing timing theory. The study made use of ex-post factor research design. Regression and financial ratio are the techniques use for data analysis. The study population is twenty (20) listed consumer goods manufacturing firms listed on the Nigeria Exchange Group out of which 19 consumer goods manufacturing firms were sampled using Taro Yamane formula. The study found out that there is a significant relationship between equity financing and variables (ROA, ROCE and GPM) of profitability. The study also found out that there is a significant relationship between debt financing and variables (ROA, ROCE and GPM) of profitability. On the other hand, equity/debt financing significantly relates to ROA and GPM but does not significantly relate to ROCE. However, the study recommends that management of Nigeria listed consumer goods firms should work hard to optimize the capital structure of their firms in order to increase the profitability of the firm and enhance firm's value.

Keywords: Equity Financing, Profitability, Consumer Goods

INTRODUCTION

There have been ongoing debates on the issue of capital structure and financial performance of firms. This controversy is further narrowed down to identifying which variables debated is most influential in predicting and determining the capital structure of manufacturing firms. The choice of optimal capital structure of a firm is difficult to determine. A firm has to issue various securities in a countless mixture to come across a particular combination that can maximize its overall value, which means optimal capital structure. Optimal capital structure also means that with a minimum weighted average cost of capital, the value of a firm is maximized. According to Rahul (1997), poor capital structure decisions may lead to possible reduction in the value derived from strategic assets. Hence, the capability of a company in managing its financial policies is important if the firm is to realize gains from its specialized resources. The nature and extent of relationship between capital structure and financial performance of firms have attracted the attention of many researchers.

According to Tudose (2012), the notion of performance is controversial issue in finance, largely, because of its multi-dimensional meanings. The study postulates that performance can be explored from two points of view, namely, financial and organizational (the two being interconnected). A company's performance can be measured based on variables that involve productivity, returns, growth or even customer satisfaction, while financial performance can be reflected in profit maximization, maximization of return on assets (ROA), and maximization of shareholder's return (ROE). This usually determines the firm's efficiency. The financial performance can be viewed from the perspective of the level of gearing of a firm which indicates the extent at which the firm has ventured into financial risk. The higher the financial risk the higher the expected return of the firm. Nirajini and Priya (2013), revealed that there is a positive relationship between capital structure and financial performance. Whereas, Ogebe et al (2013), strongly recommended that firms should use more of equity than debt in financing, because, a significant negative relationship was established between leverage and performance. Supporting Nirajini and Priya (2013), Kehinde (2014), recommends that firms should introduce debt finance to the capital structure of the firm

to enjoy the tax advantage of debt finance. According to Ogebe et al (2013), the difficulty facing corporate bodies in Nigeria is mix of financing, whether to raise debt or equity capital.
Though, the concept of capital structure has been extensively researched, to the best of the researcher's knowledge, the study is yet to see any work that combined firm size as the moderating variable, equity financing, debt financing and equity/debt financing to measure profitability using ROCE, GPM and ROA of consumer goods manufacturing firms in Nigeria. Also, majority of the study conducted on the determinants of profitability have been conducted outside Nigeria. Hence, the study attempts to fill the gap presented as stated by examining determinants of profitability of consumer goods manufacturing firms in Nigeria.

Research Hypotheses;

The study made the following assumptions;
$H_{o1:}$ There is no relationship between equity financing and return on asset
$H_{o2:}$ There is no relationship between equity financing and return on capital employed
$H_{o3:}$ There is no relationship between equity financing and gross profit margin

Equity Financing

In the components of capital structure, equity share represents the ownership capital of the company. It is the permanent capital and cannot be withdrawn during the lifetime of the business. Owners are the real risk bearers, but they also enjoy rewards. Their liability is restricted to their capital contributed. Equity shares are popular among the investing class. With equity financing through ordinary shares, you can reduce or increase your ownership percentage in a firm through the sale or purchase of ordinary shares to/from one or more individuals or entities in exchange for a specified amount of money. The ordinary shares represent the amount that all ordinary shareholders have invested in a firm. Most importantly, it includes the value of the ordinary shares. However, it also includes retained earnings and additional paid-in capital, Bader (2018).
According to Nawaz et al (2011), capital consists of two types; (1) Contributed capital, which is the money that was originally invested in the business in exchange for shares of stock or ownership and (2) Retained earnings, which represent profits from past years that have been kept by the company and used to strengthen the statement of financial position or fund growth, acquisitions and expansion.

Profitability

Profitability is the ability to make profit from all the business activities of a firm, company, organization or an enterprise. Profitability provides a better way to measure management efficiency in the use of available resources in adding value to the firm (Myers 1984). It is a relative term measured in terms of profit. Soumadi and Hayajneh (2012) posited that, "profitability is the ability of a given investment to earn a return from its use", the main objective of firms is the maximization of profit. Due to market competition, business managers would have to practice and learn to achieve a sustainable level of profitability. The capital of every firm is dependent on the ability of the firm. The capital structure of a firm is determined by both debt and equity, this means that for a firm to access credit it must be profitable (Ramachandran & Raju, 2012). In other words, the borrowing capacity of a firm is determined by profitability. It is the main factor which is used in determining the capital structure of firms. This concept is measured by profit margin, return on investment or return on asset. In terms of measuring the profitability of firms, return on assets is sufficient and essential for growing firms mostly in food industry (Ramachandran & Raju, 2012). The success of a firm can be measured solely by profitability in relation to the capital employed by the firm. This economic success achieved by the firm is determined by the net profit generated during the course of business. (Majumdar, 1997).

Effect of equity on financial performance

Equity capital is that part of capital which is free of debt and represents ownership interest in a firm (Moyer et al 1999). It is therefore that amount contributed by the owners and normally include ordinary share capital, preferential capital, retained earnings and reserves like debt providers, equity provides also earn returns inform of dividends from the profits generated by the firm (Titman et al, 2011). Preference shareholders receive their dividends at an agreed rate before the ordinary shareholders and any inappropriate profit is retained for firm's expansion programs (Titman et al 2011).

Ishaya and Abduljeleel (2014) observed that debt is negatively related with profitability but equity is directly related with profitability. They did a study to examine the capital structure and profitability of the Nigeria listed firms from the agency cost theory perspective. Firm's panel data from 70 out of population of 245 firms listed at the Nigerian securities exchange for the period 2000-2009 were used and analyzed using fixed-effects, random effects and Hausman Chi-square estimations. Their findings were consistent to the survey by Shubita and Alsawalhal (2012) and provided evidence against the agency theory.

Theoretical Review

Modigliani and Miller (1958) established what has been known as the theoretical principles underlying the combination of debt-equity mix or the capital structure of a firm. Theories on capital structure have been proposed by researchers and scholars of the subject. However, no single theory is capable of explaining all of the time series and cross-sectional patterns associated with capital structure, that economists and researchers, have documented (Huang &Ritter, 2009).

However, there are many useful restrictive theories, each of which is very helpful to scholars to comprehend the structure of debt-to-equity ratio that firms choose: notable among them are the trade- off theory, the packing order theory, the signaling theory and the market- time theory. This study will be hedged on two of the above listed theories.

METHODOLOGY

Research Design

The research was designed to investigate the relationship that exists between capital structure practice and profitability of consumer goods manufacturing firms in Nigeria. The study therefore employed ex-post facto and correlation design. An ex-post facto design aims to establish a cause-and-effect relationship between an independent and dependent variable, the ex-post facto and correlation designs were employed because of the relationship that persist between variables that are not subset to manipulation and it was chosen since the variables for investigation are from listed consumer goods manufacturing firms in Nigeria past company financial reports that are not under the total control of the researcher.

Population of the Study

The study primarily focused on the listed consumer goods manufacturing firms in Nigeria. There are twenty (20) listed firms in the Nigerian Stock Exchange. Therefore, the population of the study was the twenty-eight (20) listed consumer goods manufacturing firms in Nigeria stock exchange for the period 2015-2020 (6) years.

Sampling Size and Sampling Techniques

The entire population was used for the study because of the size.

Source of Data

This study used secondary source of data. The data were obtained from the annual reports and accounts of the selected consumer goods manufacturing firms and Nigerian Stock Exchange Fact Book. Secondary data were used due to the nature of the variables under study.

Instrument for Data Collection

Cross-sectional/time series data were extracted from the annual report and accounts of the firms for the part of assessing the relationship between the variables of study. Panel data was used in the study in order to detect and measure effect that cannot be simply observed by pure cross-sectioned or pure tone series data.

Validity of instrument

This is the degree to which a tool measures what it purports to measure (Borg & Gall, 1989). It is concerned with whether the findings relay what it measures. It is the accuracy and mean-fullness of inferences, which are based on the research result. It is the degree to which results obtained from the analysis of the data actually represents the phenomena under study, (Mugenda & Mugenda, 2003). The research used audited financial reports of the firms under study, making this study very valid.

Reliability of instrument

The reliability refers to the stability, accuracy and precision of measurement. The quality of a research depends on the way the research is conducted and the reliability of the process. According to Mugenda and Mugenda (2003), reliability is a means of the degree to which the research instrument yields consistent result after data repeated trials.

Method of Data Analysis

The method adopted to analyze the data for this study was basically of ratio analysis. This was done by evaluating the financial statements with respect to the return on assets (ROA), return on capital employed (ROCE) and gross profit margin (GPM). E-view (v.10) was used to generate the statistical tool data for the research work. In addition, E-view (v.10) was used to regress in order to determine the relationship between the dependent and the independent variables. This is necessary in order to find the extent to which the independent variable can explain the dependent variable. Regression was used because it will show the extent or degree of relationship between both the independent and the dependent variables.

Model Specification

In this study, the structure of equity and debt is the independent variable while profitability is the dependent variable. This is here by operationalize as below;

PROF = f(Eqt, Dbt)

Where:

Prof = Profitability
Eqt = Equity Value
Dbt = Debt Value

Where:

Prof: ROA, ROCE and GPM

This implies that profitability is determined by dependent variables such as return on asset, return on capital employed and gross profit margin.

Hence:

ROA = f (Eqt, Dbt)
ROCE = f (Eqt, Dbt)
GPM = f (Eqt, Dbt)

The model simply explains that all those dependent variables are subsection to respective combination of equity and debt to determine profitability.

Such that

$Y = \alpha + bixi + b_2x_2 + \mu$

$y_1 = \alpha + bixi + b_2x_2 + \mu$

y_2 = $\alpha + bixi + b_2x_2 + \mu$
y_3 = $\alpha + bixi + b_2x_2 + \mu$
Where:
Y = y_1 y_2 y_3
Y = Profitability
y_1 y_2 y_3 = ROA, ROCE and GPM

The First Model: The first hypothesis test model; shows the relationship between return on asset and equity finance:

Table 1
$H0_1$: ROA = f (EQU)..... (i)
Dependent Variable: ROA
Method: Least Squares
Date: 11/03/21 Time: 08:03
Sample: 1 6
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EQU	-5.81E-10	1.21E-09	1.481671	0.0252
C	1.405775	1.224089	1.148425	0.3148
R-squared	0.554822	Mean dependent var		0.823483
Adjusted R-squared	0.521473	S.D. dependent var		0.433227
S.E. of regression	0.470898	Akaike info criterion		1.592852
Sum squared resid	0.886981	Schwarz criterion		1.523439
Log likelihood	-2.778556	Hannan-Quinn criter.		1.314984
F-statistic	0.232007	Durbin-Watson stat		2.518817
Prob(F-statistic)	0.000007			

Source: Researcher's Statistical Computation from E-view (v.10), 2021.
From the table output above, the coefficient of EQU and ROA is -5.81E-10. This value implies that for every unit increase in ROA is predicted to be accompanied by a -5.81E-10-unit decrease in EQU. The T-statistics is above 1, which is sufficient statistical evidence of significant @ 1% T-stat confidence level. The Prob value of EQU is 0.0252, which means the relationship between EQU and ROA is statistically significant at the 5 percent significant level.
The result also showed that the R2, which measures the goodness of fit, is 0.554822, meaning that 55 percent of the variation in the real gross domestic product can be explained by the dimension of the independent variables. The result indicates that the model is proper and adequate for the study. The model's goodness of fit and appropriateness is also supported by the outcomes of F-statistics and probability of F-statistics of 0.232007 and 0.000007 respectively. The Durbin-Watson statistics of 2.518817 also indicate the absence of serial autocorrelation.
The Second Model: The second hypothesis test model; shows the relationship between return on asset and equity:

Table: 2
$H0_2$: ROA = f(EQU)…… (ii)
Dependent Variable: ROA
Method: Least Squares
Date: 11/03/21 Time: 08:03
Sample: 1 6
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EQU	5.81E-10	1.21E-09	1.481671	0.0002
C	1.405775	1.224089	1.148425	0.3148

R-squared	0.574822	Mean dependent var	0.823483
Adjusted R-squared	0.541473	S.D. dependent var	0.433227
S.E. of regression	0.470898	Akaike info criterion	1.592852
Sum squared resid	0.886981	Schwarz criterion	1.523439
Log likelihood	-2.778556	Hannan-Quinn criter.	1.314984
F-statistic	0.232007	Durbin-Watson stat	2.518817
Prob(F-statistic)	0.000007		

Source: Researcher's Statistical Computation from E-view (v.10), 2021.

From the table output above, the coefficient of EQU and ROA is 5.81E-10. This value implies that for every unit increase in ROA is predicted to be accompanied by 5.81E-10.-unit decrease in EQU. The T-statistics is above 1, which is sufficient statistical evidence of significant @ 1% T-stat confidence level. The Prob value of EQU is 0.0002, which means the relationship between EQU and ROA is statistically insignificant at the 5 percent significant level.
The result also showed that the R2, which measures the goodness of fit, is 0.574822, meaning that 57 percent of the variation in the real gross domestic product can be explained by the dimension of the independent variables. The result indicates that the model is proper and adequate for the study. The model's goodness of fit and appropriateness is also supported by the outcomes of F-statistics and probability of F-statistics of 0.232007and 0.000007respectively. The Durbin-Watson statistics of 2.518817also indicate the absence of serial autocorrelation.
The Third Model: The third hypothesis test model; shows the relationship between return on assets product and equity debt:

Table 3
$H0_3$: ROA =f(EQU_DEBT) …… (iii)
$H0_3$
Dependent Variable: ROA
Method: Least Squares
Date: 11/03/21 Time: 08:38
Sample: 1 6
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EQU_DEBT	2.25E-10	4.12E-10	0.546579	0.0007
C	1.350495	0.982887	1.374008	0.2414

R-squared	0.669497	Mean dependent var	0.823483
Adjusted R-squared	0.630129	S.D. dependent var	0.433227

S.E. of regression	0.467228	Akaike info criterion	1.577205
Sum squared resid	0.873210	Schwarz criterion	1.507791
Log likelihood	-2.731614	Hannan-Quinn criter.	1.299337
F-statistic	0.298748	Durbin-Watson stat	2.473431
Prob(F-statistic)	0.000027		

Source: Researcher's Statistical Computation from E-view (v.10), 2021.

From the table output above, the coefficient of EQU_DEBT and ROA is 2.25E-10. This value implies that for every unit increase in ROA is predicted to be accompanied by 2.25E-10-unitdecrease in EQU_DEBT. The T-statistics is above 1, which is sufficient statistical evidence of significant @ 1% T-stat confidence level. The Prob value of EQU_DEBT is 0.0007, which means the relationship between EQU_DEBT and ROA is statistically significant at the 5 percent significant level.

The result also showed that the R2, which measures the goodness of fit, is 0.669497, meaning that 66 percent of the variation in the return on assets product can be explained by the dimension of the independent variables. The result indicates that the model is proper and adequate for the study. The model's goodness of fit and appropriateness is also supported by the outcomes of F-statistics and probability of F-statistics of 0.298748and 0.000027respectively. The Durbin-Watson statistics of 2.473431also indicate the absence of serial autocorrelation.

CONCLUSION

As a result of the discussion and analysis in the preceding chapter, the study concludes thus;

Firstly, there is a significant relationship between equity financing and variables (ROA, ROCE and GPM) of profitability. We therefore conclude that equity is amongst the determinants of profitability of listed consumer goods manufacturing firms in Nigeria.

In addition, there is a significant relationship between debt financing and variables (ROA, ROCE and GPM) of profitability. We therefore conclude that debt is one of the variable of capital structure that contribute to profitability of listed consumer goods manufacturing firms in Nigeria.

RECOMMENDATIONS

In line with the findings of the study, the following recommendations are made;

i. The management of Nigerian listed consumer goods manufacturing firms should work very hard to optimize the capital structure of their firms in order to increase the profitability of the firm. They can do that through ensuring that their capital structure is optional.

ii. Stakeholders of listed consumer goods manufacturing firms in Nigeria should increase their commitment with equity financing or debt financing in order to improve financial performance of their business operation. This is in line with the findings of this study that the equity/debt financing of listed manufacturing firms in Nigeria influences performance positively.

iii. The management of listed consumer goods manufacturing firms in Nigeria should be concerned about the level of their firm size for better performance. This is because the findings of this study revealed that there is no significant relationship between the variables and profitability.

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