Effect of Capital Structure on The Profitability of Selected Firms in Nigeria (2007-2015)

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ABSTRACT

This paper is aimed at determining the effect of capital structure on the profitability of selected Firms quoted in the Nigerian Stock Exchange. Capital structure which is proxied by equity capital, debt capital and retained earnings constitutes the independent variables while profitability, the dependent variable, is proxied by profit after tax. The research was conducted in Nigeria and investigated four manufacturing firms listed in and traded on the floor of the Nigerian Stock Exchange. The companies studied are PZ Cussons Nig. Plc., Unilever Nig. Plc., Guinness Nig. Plc. and Dangote Flour Mills Nig. Plc. and the study covered a period of ten years (2007-2015).The objectives of the study comprises the determination of the effects of Equity Capital, Debt Capital and Earning per Share on the profitability of the selected firms. Ex-post facto research design was adopted for the study while data were obtained from the Annual Reports and Accounts of the selected companies sourced from the Nigerian Stock Exchange. In order to determine the combined effect of components of the capital structure on the profitability of the selected firms' multi- regression analysis statistical model was applied. It was found that Equity Capital positively and significantly affect profit after tax of the selected Nigerian firms; that long term debts positively and significantly affect profit after tax in the selected Nigerian firms and that retained earnings positively and significantly affect profit after tax of the selected Nigerian firms.it was also found that 78% of changes in profit after tax could be explained by the variables under study. It is consequently recommended that firms should employ more shareholders' funds in financing their business activities because its low cost of capital.

Keywords: Capital Structure, firms, company, equity and earnings.

INTRODUCTION

Financing is one of the crucial areas in a firm. A financing manager is concerned with the determination of the best financing mix and combination of debts and equity for his firm. Capital structure decision is the mix of debt and equity that a company uses to finance its business [1]. One of the importance of capital structure is that it is tightly related to the ability of firms to fulfil 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 [2]. [3] posits that capital structure is actually a combination of equity shares, preference shares, long-term debts and retained earnings. Attention has to be paid as far as the optimum capital structure is concerned. He further stated that with unplanned capital structure, companies may fail to economize the use of their funds, consequently, it is being increasingly realized that a company should plan its capital structure to maximize the use of funds and to be able to adapt more easily to the changing conditions.

[4], posits that Modigliani-Miller (MM) theorem is the broadly accepted capital structure theory because it is the first theory on capital structure which has been used by many researchers. [5], stated that capital structure is one of the most important and effective parameters on the valuation and direction of economic enterprises in the capital markets. They went further to submit that current changing and evolving environment causes rating companies in terms of credit to depend partly on their capital structure and strategic planning, requiring them to select effective resources to achieve the wealth maximization goal of shareholders.

After the Modigliani-Miller [6] paradigms on firms' capital structure and their market values, there have been considerable debates, both in theoretical and empirical researches on the nature of relationship that exists between a firm's choice of capital structure and its market value. Debates have centred on whether there is an optimal capital structure for an individual firm or whether the proportion of debt usage is relevant to the individual firm's value [7]. Although, there have been substantial research efforts devoted by different scholars in determining what seems to be an optimal capital structure for firms, yet there is no universally accepted theory throughout the literature explaining the debt-equity choice of firms. But in the last decades, several theories have emerged explaining firms' capital structure and the resultant effects on their market values. These theories include the pecking order theory by [8], the capital structure relevance theory by [9], the agency costs theory and the trade-off theory [10].

Statement of the Problem

Determination of optimal capital structure is an important task in financial management [11]. Since the seminal work of [12], a number of theoretical literatures which led to the formulation of alternative theories were developed, such as the Static Trade off Theory, Pecking Order Theory and Agency Cost Theory. These theories identified a number of specific factors that may affect the capital structure and profitability of firms such as size, tangibility, growth, risk, liquidity, age, and dividend pay-out, as well as how the capital structure or financing decision affect the value of firms.

However, the empirical evidence regarding the alternative theories is still debatable [13]. For instance, Static Trade off-Theory states that a firm's optimal debt ratio is determined by a trade-off between the tax advantage and bankruptcy cost of borrowing, holding the firm's assets and investment plans constant. This theory assumes that higher profitability lower the expected cost of distress; hence, firms increase their leverage to take advantage from tax benefits. That is, profitability is positively related to leverage due to the free cash flow theory of [14]. Agency theory also support this positive relationship. However, the pecking order theory of [15], suggests that firms use debt only when the internal financing is not available and argues against the existence of target capital structure. According to this theory profitability is expected to have negative relation with leverage.

The determinants of capital structure and firm value have been contested for many years and still represent one of the most unresolved issues in corporate finance literature. Only a few of the developed theories have been tested by empirical studies and the theories themselves lead to different, not mutually exclusive and sometimes opposed result and conclusion [16]. [17] explained that numerous theoretical studies and much empirical research have addressed those issues, but there is no a fully supported and generally accepted theory; and the debate on the significance of determinant factors of capital structure and profitability/ firm value is still open.

Capital structure decisions are important to maximize the earnings of companies. Capital structure decisions are taken by considering factors like profitability, solvency and control. The relationship between debts, equity, retained earnings and profitability is examined and an attempt is made to understand this relationship among them [18]. This study focuses on the effect of corporate financing mix or rather capital structure on profitability of selected firms in Nigeria Stock Exchange.

[19], in his study on capital structure during the 1997 crisis in Kenya stated that the key factor which accelerated economic distress was the increased dependency on debt financing. The dependency had led to excess investment before the crisis and also instability in the Kenyan economy. [20] in his study on the impact of economic crisis on the capital structure, found that by having a low leverage, Turkish firms immunized themselves against the economic crisis. The results further indicated that profits of high leverage firms can be significantly increased by issue of equity or decrease of debt.

Most studies found a negative relationship between profitability and leverage [21] [6]; [17]. Some authors observed a positive relationship between profitability and debt levels in their studies [3]; [4]. [5] studied on the relationship between working capital investment policy and profitability of manufacturing firms in Kenya and concluded that no relationship exists between the working capital investment policy and profitability. [9] in his study of the relationship between capital structure and financial performance of microfinance institutions in Kenya found that outreach and portfolio size had a positive effect on financial performance of MFIs in Kenya.

From the foregoing discussions based on the available empirical literature [3]; [22]; [23], [4], [24]; [7], it is crystal clear that results from investigations into the effect of corporate financing mix or capital structure and profitability are inconclusive and requires more empirical work. No study known to the researcher has been done per se to determine the effect of corporate financing mix on profitability of listed manufacturing firms in Nigeria. This study was therefore motivated by this gap in finance knowledge and sought to answer the question: What is the extent of effect corporate financing mix has on profitability of selected firms in Nigeria?

Objectives of the Study

The general objective of this study will be to examine the effect of capital structure on profitability of selected firms listed in the Nigeria stock exchange. The following are the specific objectives of the study:

1. To determine the effect of debt capital on profit after tax of selected firms in Nigeria.
2. To evaluate the effect of equity capital on profit after tax of selected firms in Nigeria.
3. To examine the effect of retained earnings on profit after tax of selected firms in Nigeria.

Research Questions

1. To what extent does debt capital affect profit after tax of selected firmsin Nigeria?
2. To what extent does equity capital affect profit after tax of selected firms in Nigeria?
3. What extent of effect does retained earnings exerts on profit after tax of selected firms in Nigeria?

Statement of Research Hypotheses

In order to achieve the stated objectives and answer the research questions, and also in line with effects and variables in the research questions, the following hypotheses have been formulated for this research. They are deliberately stated only in their normal (H0) or negative form and will serve as the fulcrum of the study:

1. Debt capital does not significantly affect profit after tax of selected firms in Nigeria.
2. Equity capital does not significantly affect profit after tax of selected firms in Nigeria.
3. Retained earnings does not significantly exerts on profit after tax of selected firms in Nigeria.

Scope of the Study

The study covers a period of ten years (2007 to 2015) and the researcher made use of four firms in Nigeria manufacturing industry which are listed on the Nigeria Stock Exchange as at 1st January, 2007 and as at 31st December, 2015. They include PZ Cussons Nigeria Plc., Unilever Nigeria Plc., Guinness Nigeria Plc. and Dangote Flour Mills Nigeria Plc. Availability of complete time series data guided the choice of the period, year 2007 to 2015 and is also a factor under consideration in selecting the four firms.

Conceptual Review

Concept of Debt Capital (DC)

Debt is one of the two main ways companies can raise capital in the capital markets. It is a method of financing in which a company receives a loan and gives its promise to repay the loan. Debt capital can be difficult to obtain, but for many companies, it provides funding at lower rates than equity financing, especially in periods of historically low interest rates. Another perk to debt financing is the interest on debt is tax deductible (www.investopedia.com).

According to Champion [16], companies can use more debt to enhance their financial performance because of debt's capability to cause managers to improve productivity to avoid bankruptcy. The point here is that, debt must be repaid while dividend payment is not obligatory and can even be postponed if the firm is financially hard up. David. Hutchison and [18] examined the causal relationship between the return on equity and financial leverage in the U. S. banking industry. For the periods 1983 – 1989 and 1996 – 2002 they found a negative connection between bank capital and equity profitability except for the best performing banks. The amount of debt a firm uses for finance depend on the interest on debt, corporate income taxes, withholding taxes, personal income taxes, costs of financial distress, and covenant restrictions in other financing agreements, and other market imperfections [12]. They went further to stress that the lower the rate of interest on long term debts, the higher will be the desire of a firm to opt for it; but higher leverage increases the risk of financial distress. In the extreme, a firm may find itself unable to meet its service obligations, and forced into bankruptcy by disappointed creditors. This normally leads to substantial legal and administrative expenses and in addition, costs implicit in selling assets at distress prices. [16] supported the above claims by stating that if a firm is not forced into bankruptcy, high leverage can make the firm's stock less attractive to investors as the probability of financial distress increases.

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By implication, the firm will be in difficulty of raising further funds quickly on favourable terms; lenders will require higher interest rate; trade creditors will transact business with the firm on more stringent terms in addition to competitors' aggressiveness to exploit the firm's perceived financial weaknesses. [25], posited that in respect to any company, there is an optimal capital structure that is determined by the trade-off between the net tax advantage of additional corporate leverage and the costs associated with increased likelihood of financial distress, which he said is also influenced by reduced marketability of corporate debt that is a function of its corporate tax shields, investment tax shields, bankruptcy costs, cost of finance and agency cost. He further submitted that increasing the proportion of debt in a firm's capital structure, increases the firm value up to a point. Beyond that point, further increases in leverage increases the average company cost of capital and decrease the total market value of the firm. Firms lie at different points on this trade–off line.

Concept of Equity Capital (EC)

According to businessjargons.com, Equity Capital refers to that portion of the organization's capital, which is raised in exchange for the share of ownership in the company. These shares are called the equity shares. Cambridge dictionary defined equity capital as that portion of a firms capital that a company get from selling shares rather than borrowing money.
Several previous studies examine the impact of high equity capital on bank performance.
Barth, [26], argue that more stringent capital regulation reduces the amount of non-performing loans, and thus affects positively on firms. [27], argued that one percent increase in equity-to-assets ratio causes one percent decrease in total outstanding loans for banks. Common equity capital is the most effective loss-absorption financial instrument. However, higher equity capital requirements can also have social costs if, for example, banks meet the new ratios by granting less credit and/or charging higher interest rates. The social costs of higher equity capital during transition come from the possibility that banks contract the volume of credit to reduce the absolute requirements of additional equity, instead of increasing the volume of equity [28]. Using bank as an instance, [29], if banks adjust their equity capital ratios towards a target, the regulatory action should take into account the speed of the adjustment towards this target. On the other, if equity capital only depends on earnings retentions, regulation can alleviate the flow costs by setting a transition period according to the banks' potential to generate yearly earnings. Under the [30] world of perfect capital markets, the economic value of banks should be independent of their financial structure so that higher equity capital ratios do not have an effect on the cost of capital to the banks and consequently to their interest rates. However, in a more realistic world with taxes, bankruptcy, and agency costs, the capital structure does affect the economic value of the banks and, consequently, their interest rates.

Concept of Retained Earnings (RE)

Retained earnings refer to the percentage of net earnings not paid out as dividends, but retained by the company to be reinvested in its core business, or to pay debt. It is recorded under shareholders' equity on the balance sheet [8], stated that a company's dividend policy is its long term financial strategy with regards to deciding how much earnings to pay out as against retaining them for investment in the company. This according to him, leads to division of profits between dividend payment to shareholders and reinvestment in the company. There are no transaction and bankruptcy costs associated with retained profits [3]. Thus, retained earnings constitute a major source of

finance for companies. Payment of earnings as dividend is associated with agency cost and an opportunity for existing shareholders is lost to reinvest their earnings for growth of the company. [14] says that investors benefit more from reinvested earnings than dividends in the long-run. As ensured by [31], Plough back of corporate profits gives rise to appreciation in the value of corporate securities. Earnings retained are the most important sources of financing growth of a firm. The level of internal funds conveys information about growth prospects of companies [32]. [4] posits that during the years where the firms were with growth rates more than the average, the retained earnings played a significant role in their financing pattern. James Bates and Henderson [33] identify that internal finance has always been one of the most important sources of funds for small business enterprises. However, public companies are able to replace this source by a greater degree of external financing, whilst small firms do not have such opportunities. For many small concerns, growth is possible only if it could be financed largely from earnings retained in the business. What proportion of earnings to put by, depends very much on individual circumstances like desire to expand, speed of growth desired, ownership considerations and market prospects etc. Small firms save more out of their income than do large companies in the long-run. Rate of savings is determined mainly by level of profits and dividends paid in the preceding year.

Theoretical Framework

The main purpose of this study is to evaluate empirically the effect of corporate financing mix on profitability of selected firms in Nigeria. In doing so, the study combines an enlarged theoretical underpinning such as Capital Structure Theory by [8], Static Trade-off theory by [6], Pecking Order Theory by [32], Agency Cost theory by [34]

Capital Structure Theory

In corporate finance theories, the seminar work by [9] in capital structure provided a basis for the development of the theoretical framework within which various theories were about to emerge in the future. [9] propounded the theory broadly known as theory of "capital structure irrelevance" where financial leverage does not affect the firm's value. However, their theory was based on very restrictive assumptions that do not hold in the real world. These assumptions include no taxes, no transaction costs, homogenous expectations, and perfect capital markets. The existence of bankruptcy costs and tax advantages of interest payments lead to the concept of an "optimal" capital structure which maximizes the value of the firm, and hence minimizes its total cost of capital.

[9] ,reviewed their earlier position by incorporating tax benefits as determinants of the capital structure of firms. The key feature of taxation is that interest is a tax-deductible expense. A firm that pays taxes receives a partially offsetting interest "tax-shield" in the form of lower taxes paid. Hence,[9] proposed to use as much debt capital as possible in order to increase profitability and hence maximize the value of firms.

Static Trade-off Theory

Capital structure theories have diverse views on the relationship between leverage and profitability. The trade-off theory argues that firms generally prefer debt for tax considerations. Profitable firms would, therefore, employ more debt because increased leverage would increase the value of their debt tax shield [12]. It states also that firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress. Apart from the tax advantage of debt, agency and bankruptcy costs may encourage highly profitable firms to have more debt in their

capital structure. This is because highly profitable firms are less likely to be subject to bankruptcy risk because of their increased ability to meet debt repayment obligations. Thus, they will demand more debt to maximize their tax shield at more attractive costs of debt. For these considerations, the trade-off theory predicts a positive relationship between leverage and profitability.

Pecking Order Theory

The pecking order theory of [7] argues against the Static Trade-off Theory. It advocates that the firm will borrow, rather than issuing equity, when internal cash flow is not sufficient to fund capital expenditures. Thus the amount of debt will reflect the firm's cumulative need for external funds. It holds that there is a negative association between leverage and profitability because high profitable firms will be able to generate more capitals through retained earnings and then have less leverage.

Empirical Review

Equity Capital and Profitability

[35], 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.

[36], 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.

[3], conducted a study on determinant of capital structure in the Nigerian listed firms. 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.

[8], examined the effect of capital structure on firms' performance: evidence from Nigerian manufacturing company. 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

examined the relationship between corporate capital structure and firm value in Nigeria. Using a sample size of 150 respondents and 90 firms were selected for both primary data and secondary data respectively for a period of five years (2005-2009)

from the relevance, pecking order, the free cash flow, the agency cost and the trade-off theory points of view. They employed the descriptive statistics and Chi-square analysis and suggested that a positively significant relationship exists between a firm's choice of capital structure and its market value in Nigeria.

Debt Capital and Profitability

[7], examined the effect of capital structure on the financial performance of Nigerian quoted conglomerates. Using multiple regression techniques as an underlying analytical tool, it was revealed that return on asset and Assets Turnover ratio were significant, while return on equity and earnings per share were insignificant in explaining corporate capital structure decisions.

[6], examined did a study of 5 quoted firms within a period of five 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 firm's performance and equity financing as well as between firm's 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.

[18] scrutinize the leverage and their association with profitability of firms. Regression and correlation coefficient method was used on the data of 25 companies in the oil and gas sector of India. The outcome of this investigation is striking as it reveals that financial leverage has a positive effect on both ROE and ROA. The finding also claims that on accounting and market based measure, firms with high leverage have less risk.

[31] examine the financing behaviour of textile firms in Pakistan. Regression model analysis was employed to analyse the data for 75 listed textile firms in the duration of 2002-2007. The outcome disclose that amount of debt in capital structure negatively affect the profitability. Increase in the amount of debt in the capital structure of firms decrease the profitability as a repercussion [35].

[10] seeks to extend [6] findings regarding the effect of capital structure on profitability by examining the effect of capital structure on profitability of the American service and manufacturing firms. A sample of 272 American firms listed on New York Stock Exchange for a period of 3 years from 2005 – 2007 was selected. The correlations and regression analyses were used to estimate the functions relating to profitability (measured by return on equity) with measures of capital structure. Empirical results show a positive relationship between short-term debt to total assets and profitability and between total debt to total assets and profitability in the service industry.

[6], evaluate the Determinants of Capital Structure in the Chemical sector of Pakistan. Data of 26 firms was used over the term of 12 years (1993-2004). The outcome, after applying the panel regression analysis communicate that profitability has a negative linkage with the leverage, whereas positive association was unveiled between leverage and size, tangibility, growth and income variation. The link between growth, profitability and leverage was negative while link between size, tangibility and leverage was uncovered positive in the listed firms of Pakistan [16].

[12], inspect the factors that affect the leverage of firms. The data used were retrieved from the 166 firms listed at the Toronto stock exchange in the span of 2008 to 2012. The end result made known that leverage has positive impact on firm in the service sector while negatively associated with the firms in the manufacturing sector. The outcome of an investigation in India by [6], disclose the positive association between

short term debt and profitability while negative link was discovered between profitability and long term debt. A critical examination in the engineering sector of Pakistan made known that ROA and ROE negatively affected by debts of all levels whereas the performance of firms evaluated in term of Tobin's Q has positive link with LTDTA [20].

Retained Earnings and Profitability

[25] put forward that firms with high debt –equity ratio display a smaller payout ratio indicating that firms operating with high debt capital would try to reduce the debt and their investment requirements will be financed largely by reinvested profits. Smaller firms retain a higher proportion of their profits than larger firms because smaller firms could not afford to incur heavy cost in going into capital markets to raise their finance.

[33], support that retained earnings are determined as remainder of profits, after dividends are paid out; it is changes in profits than current level which determine how much should be retained by a firm; funds for investment are not very strong in determining the amount of profit retentions by firms. He concludes that retained earnings are determined residually and investment decisions are to play a minor role in allocation of profits.

[3], study the relationship between capital structure and performance of Malaysian construction industry in the financial crises of 2007-2008 that study badly affected the economies of Malaysia. They demonstrate a weak relationship exists between leverage and performance measured by return on assets and return in equity of Malaysian construction industry.

[26], examine the impact that capital structure have on financial performance on the data of 100 top firms in Pakistan for 4 years (2006-2009). The outcome displayed that capital structure (CLTA, LTLTA, & TLTA) inversely affect the profitability (EBIT, EPS & ROA). Whereas positive links were revealed between ROE and LTDTA. In the empirical study of [13] the negative association between profitability and debts was unveiled while the linkage was positive in between equity and profitability. Measures of financial performance such as ROE and ROA had negatively affected by their capital structure to a large extent [6].

[8], scrutinize the link between capital structure and profitability. The data from the 94 non-financial firms for a phase of 6 years (1999-2004) was put in use. They employ the regression and correlation analysis and made known that equity and firm's size has positive, while leverage (Debt) has negative effect on the profitability of organizations.

[15], studied the Capital structure and financial performance during 2006 to 2010 (05 years) financial year of listed trading companies in Sri Lanka. For the purpose of this study, the data was extracted from the annual reports of sample companies. Correlation and multiple regression analysis were used for analysis. The results revealed a positive relationship between capital structure and financial performance. And also capital structure is significantly impact on financial performance of the firm showed that debt asset ratio, debt equity ratio and long term debt correlated with gross profit margin (GPM), net profit margin (NPM), Return on Capital Employed (ROCE), Return on Asset (ROA) & Return on Equity (ROE) at significant level of 0.05 and 0.1.

[12], carried out a study in capital structure and corporate performance of Nigeria quoted firms. A panel data approach using a total of 101 quoted firms from 2003 to 2007. It was found out that a firm's leverage has a significant negative impact in firms

accounting performance measure (ROA). An interesting finding is that any leverage measures have a positive and highly significant relationship with the market performance measure (Tobin's Q). It was established that the maturity structure of debt affect the performance of firms significantly and size of the firm has a significant positive effect on the performance of firms in Nigeria.

[9], investigated the effect of capital structure on corporate performance of companies' in Jordan using a panel data sample representing 68 companies during the period 1989 to 2003. The study used panel data models to estimate different measures of corporate performance such as the return in asset (ROA) return on equity (ROE) earnings before interest and tax plus depreciation to total asset (PROF) as account performance's measurement and Tobin's Q. market value of equity to book value of equity (MBVR), price earnings (PIE) ratio and market value of equity plus book value of liabilities divided by book value of equity (MBVE) as market performance's measurements. The study also analysed the variable using descriptive statistics and correlation matrix. The result shows that a firm's capital structure has a significant negative impact on the firm's performance using both the accounting and market measurement.

[7], also assessed the factors that affect bank profitability in Ethiopia covering the period of 2000-2011. Mixed research approach (data obtained through the structured document reviews and in-depth interviews) were applied. The analysis also managed through the multiple linear regressions model, OLS. The dependent variable was ROA as a single measure of profitability and it was measured as net profit before tax divided by total assets. The independent variables includes; equity-to-total asset ratio (the inverse of the leverage ratio), Operational efficiency, Income diversification, Liquidity risk, Asset Quality, Real GDP growth and Inflation.

METHODOLOGY

Research Design

The research adopted the ex-post facto (after the facts) research design in order to establish the effect these capital structure indices have on organizational profitability.

Area of Study

The research was conducted in Nigeria and within the manufacturing Sector. It concentrated on selected firms quoted and traded on the floor of Nigeria Stock Exchange.

Sources of Data

The research will make use of secondary data. Time series data (2007–2015) is extracted from the annual reports and accounts of the selected firms in Nigeria. Data on corporate financing mix such as equity capital, debt capital, retained earnings and profit after tax were extracted from annual report and accounts of the four selected listed firms; PZ Cussons Nigeria Plc., Unilever Nigeria Plc., Guinness Nigeria Plc. and Dangote Flour Mills Nigeria Plc.

Population of the Study

The population of the study is the forty one (41) active manufacturing firms quoted in Nigeria Stock Exchange.

Sample Size and Selection Technique

Four (4) manufacturing firms were selected based on their performanceand volume of their stock turnover in the Exchange as well as the availability of required data for the last ten years. The firms selected werePZ Cussons Nigeria Plc., Unilever Nigeria Plc., Guinness Nigeria Plc. and Dangote Flour Mills Nigeria Plc.The period covered by the study was years 2007 to 2016.

Analytical Technique

For the purpose of empirical analysis, this study will adopt the multiple regression model as the underlying statistical tools to test the hypotheses as adopted in previous similar researches [19]; [15] [10]. The four functional forms of multiple regression analysis will be employed in the test of the effect of each of the independent variables (i.e. the indices of capital structure) on the dependent variables (i.e. financial performance indices).

The objectives of the study will be accomplished in the following manner

1. Graphical representation of the dependent and independent variables to show the trend of movement within the study period. This can be used for predictions.

2. A regression equation is estimated to evaluate the effect of capital structure on profitability of selected firms in Nigeria.

3. A correlation analysis is conducted to examine the relationship between selected capital structure variables and profit aftertaxwhich is the proxy for profitability. The result is useful for predictions.

Model specification

For the purpose of this work, composite multiple regression (prediction) model is statistically formulated as;

$$\text{Log}(PAT_{ti}) = \beta_o + \beta_1 \log(EC_t) + \beta_2 \log(DC_t) + \beta_3 \log(RE_t) - \quad - \quad - \text{[Equation (5)]}$$

Where,

PAT	Profit after Tax
EC	Debtors' Collection Period
DC	Creditors' Payment Period
RE	Stock Turnover
Ɛ	Error Term

β_o =   Coefficient (constant) to be estimated

$\beta_i - \beta_6$ =   Parameters of the independent variables to be estimated

t   =   Current period

Description of Model Variables

The research variables are structured into dependent and independent variables for the purpose of the analysis. The dependent variable of the study is profit after tax while the independent variables are Equity Capital, Debt Capital and retained earnings.

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Table 1: Model Variables Description

Short Form(Acronym)	Details	Source of Data
PAT	Profit After Tax	Annual Report and Accounts
EC	Equity Capital	Annual Report and Accounts
DC	Debt Capital	Annual Report and Accounts
RE	Retained Earnings	Annual Report and Accounts

Source: Author's Arrangement.

Table 2: Data Variable For Pz Cussons Nig. Plc

YEARS	PAT ₦'000	EC ₦'000	DE ₦'000	RE ₦'000
2007	5,441,899	6,236,521	3,942,883	5,687,495
2008	8,331,599	9,031,240	5,980,438	8,482,214
2009	9,738,578	10,543,935	11,921,190	9,994,909
2010	12,602,109	14,865,353	22,327,896	14,316,327
2011	16,808,764	23,492,887	25,870,684	22,885,689
2012	21,137,275	34,185,562	23,556,616	33,707,429
2013	22,258,279	40,594,801	26,471,275	40,139,626
2014	22,235,640	35,939,643	18,385,876	35,466,416
2015	23,736,777	38,007,074	12,530,361	37,428,018

Source: Company's Annual Reports and Accounts

Table 3: Data Variable For Unilever Nigeria Plc

YEARS	PAT₦'000	EC₦'000	DE₦'000	RE₦'000
2007	18,942,856	43,183,042	17,946,249	6,918,382
2008	25,700,593	32,229,181	25,862,961	10,953,596
2009	27,910,091	46,570,094	24,290,015	14,297,479
2010	30,382,118	50,172,162	25,494,832	3,560,647
2011	38,434,033	78,304,741	30,000,000	28,980,830
2012	38,042,714	93,447,892	45,000,000	15,746,346
2013	43,080,349	112,359,185	9,000,000	20,392,236
2014	42,520,253	171,882,830	24,670,000	14,951,798
2015	38,049,518	172,233,465	34,614,518	9,511,360

Source: Company's Annual Reports and Accounts

Table 4: Data Variable For Dangote Flour Mills Nigeria Plc

YEARS	PAT₦'000	EC₦'000	DE₦'000	RE₦'000
2007	10,691,060	31,638,842	3,500,000	5,971,298
2008	11,860,880	36,862,557	3,705,076	5,223,715
2009	13,541,189	31,524,701	6,897,234	0
2010	13,736,359	34,199,119	1,298,655	2,674,418
2011	17,927,934	40,283,492	1,332,933	5,759,798
2012	14,214,620	38,611,514	8,513,058	2,415,216
2013	11,863,720	46,039,111	8,796,183	64,322
2014	9,573,480	45,061,717	27,429,985	4,754,638
2015	7,794,899	48,341,376	12,250,754	2,976,057

Source: Company's Annual Reports and Accounts

Table 5: Data Variable For Guinness Nigeria Plc

YEARS	PAT₦'000	EC₦'000	DE₦'000	RE₦'000
2007	1,219,402	6,280,352	4,485,746	5,719,983
2008	1,608,910	7,223,047	5,871,415	6,662,678
2009	1,529,674	7,984,017	7,356,784	7,423,648
2010	1,566,873	8,564,912	6,096,032	7,989,776
2011	1,604,073	9,145,806	4,835,280	8,555,904
2012	1,678,471	10,307,595	2,313,776	9,688,160
2013	2,856,504	12,577,980	4,997,584	11,958,545
2014	6,434,601	17,328,695	11,032,831	16,709,260
2015	7,125,788	23,933,633	4,433,469	23,314,198

Source: Company's Annual Reports and Accounts

Table 6 - Regression Result For Pz Cussons Nig. Plc

Dependent Variable: PAT

Method: Least Squares

Date: 10/04/15   Time: 12:40

Sample: 2007-2015

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EC	-2.481680	30.96356	-0.080148	0.9387
DE	0.255312	0.196393	1.300002	0.2413
RE	2.836805	30.91782	0.091753	0.9299
C	3760507.	18260426	0.205938	0.8436
R-squared	0.780378	Mean dependent var		15021589
Adjusted R-squared	0.670567	S.D. dependent var		7004878.
S.E. of regression	4020540.	Akaike info criterion		33.54090
Sum squared resid	9.70E+13	Schwarz criterion		33.66194
Log likelihood	-163.7045	Hannan-Quinn criter.		33.40813
F-statistic	7.106547	Durbin-Watson stat		1.991117
Prob(F-statistic)	0.021172			

Source: Eviews 9.0 Software

Interpretation of Regression Coefficient Result

Table 6, indicates that a module change in DE and RE will increase PAT by 0.255312and 2.836805respectively. While a module change in EC will result in a decrease of 2.481680in PAT. In summary, DE and RE influence PAT positively while PAT is affected negatively by EC. The extent of effect EC, DE and RE have on PAT is insignificant. This is the situation in PZ Cussons Nigeria Plc.

Interpretation of Durbin Watson- Statistic

The Durbin-Watson statistic is 1.991117which closer to 2 than 0. The Durbin Watson statistic result indicates the absence of positive autocorrelation in the series. The result indicates the absence of positive serial correlation in the time series data extracted from the annual report and accounts of PZ Cussons Nigeria Plc.

Coefficient of Determination (R²)

The Adjusted R-squared is 0.670567. The adjusted R^2 reveals that only about 67% of the variations in PAT (dependent variable) of PZ Cussons Nigeria Plc could be accounted for by the explanatory (independent) variables considered in the analysis. The remaining 33% could be explained by other factors capable of influencing PAT; such as government regulation, the error term and the non-experimented variables.

Table 7: Regression Result For Unilever Nigeria Plc

Dependent Variable: PAT

Method: Least Squares

Date: 10/04/15   Time: 13:02

Sample: 2007-2015

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EC	0.103155	0.025792	3.999537	0.0071
DE	0.022193	0.153087	0.144967	0.8895
RE	0.501649	0.201779	2.486136	0.0474
C	16812188	5208938.	3.227565	0.0180

R-squared	0.813033	Mean dependent var	34334741
Adjusted R-squared	0.719550	S.D. dependent var	8107632.
S.E. of regression	4293605.	Akaike info criterion	33.67233
Sum squared resid	1.11E+14	Schwarz criterion	33.79336
Log likelihood	-164.3616	Hannan-Quinn criter.	33.53955
F-statistic	8.697076	Durbin-Watson stat	1.746340
Prob(F-statistic)	0.013254		

Source: Eviews 9.0 Software

Interpretation of Regression Coefficient Result

Table 7, indicates that a module change in EC, DE and RE will increase PAT by 0.103155, 0.022193 and 0.501649 respectively.The extent of effect EC and RE have on PAT is positive and significant, whereas a positive and insignificant association subsist between PAT and DE. This is the situation in Unilever Nigeria Plc when considered in isolation.

Interpretation of Durbin Watson- Statistic

The Durbin-Watson statistic is 1.746340which closer to 2 than 0. The Durbin Watson statistic result indicates the absence of positive autocorrelation in the series. The result indicates the absence of positive serial correlation in the time series data extracted from the annual report and accounts of Unilever Nigeria Plc.

Coefficient of Determination (R²)

The Adjusted R-squared is 0.719550. The adjusted R^2 reveals that only about 72% of the variations in PAT (dependent variable) of Unilever Nigeria Plc. could be accounted for by the explanatory (independent) variables considered in the analysis. The remaining28% could be explained by other factors capable of influencing PAT; such as government regulation, the error term and the non-experimented variables.

Table 8 - Regression Result For Guinness Nigeria Plc

Dependent Variable: PAT

Method: Least Squares

Date: 10/04/15   Time: 13:31

Sample: 2007-2015

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EC	-0.015056	0.328366	-0.045851	0.9649
DE	-0.285230	0.248417	-1.148193	0.2946
RE	0.603835	0.662540	0.911394	0.3972
C	12415270	12223098	1.015722	0.3490

R-squared	0.358901	Mean dependent var	11120414
Adjusted R-squared	0.038351	S.D. dependent var	4796070.
S.E. of regression	4703204.	Akaike info criterion	33.85456
Sum squared resid	1.33E+14	Schwarz criterion	33.97559
Log likelihood	-165.2728	Hannan-Quinn criter.	33.72179
F-statistic	1.119641	Durbin-Watson stat	0.804109
Prob(F-statistic)	0.412527		

Source: Eviews 9.0 Software

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Interpretation of Regression Coefficient Result

Table 16, indicates that a one unit change in EC and DE will decrease PAT by 0.015056 and 0.285230 respectively, while a unit change in RE will result in an increase of 0.603835in PAT. In summary, EC and DE have influenced PAT negatively while PAT is affected positively by RE. The extent of effect all the variables have on PAT is insignificant. This is the situation in Guinness Nigeria Plc. when considered in isolation.

Interpretation of Durbin Watson- Statistic

The Durbin-Watson statistic is 0.804109which closer to 0 than 2. The Durbin Watson statistic result indicates the presence of positive autocorrelation in the series. The result indicates the presence of positive serial correlation in the time series data extracted from the annual report and accounts of Guinness Nigeria Plc.

Coefficient of Determination (R^2)

The Adjusted R-squared is 0.038351. The adjusted R^2 reveals that only about 4% of the variations in PAT (dependent variable) of Guinness Nigeria Plc could be accounted for by the explanatory (independent) variables considered in the analysis. The remaining96% could be explained by other factors capable of influencing PAT; such as government regulation, the error term and the non-experimented variables.

Table 9 - Regression Result For Dangote Flour Mills Nigeria Plc

Dependent Variable: PAT

Method: Least Squares

Date: 10/04/15   Time: 14:13

Sample: 2007-2015

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EC	13.35940	16.92318	0.789414	0.4599
DE	0.398363	0.119559	3.331934	0.0158
RE	-13.11812	16.97455	-0.772811	0.4690
C	-10099836	9532635.	-1.059501	0.3301
R-squared	0.876465	Mean dependent var		2897176.
Adjusted R-squared	0.814698	S.D. dependent var		2156917.
S.E. of regression	928482.3	Akaike info criterion		30.60966

Sum squared resid	5.17E+12	Schwarz criterion	30.73070
Log likelihood	-149.0483	Hannan-Quinn criter.	30.47689
F-statistic	14.18978	Durbin-Watson stat	2.372778
Prob(F-statistic)	0.003928		

Source: Eviews 9.0 Software

Interpretation of Regression Coefficient Result

Table 18, indicates that a one unit change in EC and DE will increase PAT by 13.35940and 0.398363respectively, while a unit change in RE will result in a decrease of 13.11812in PAT. In summary, EC and DE have influenced PAT positively while PAT is affected negatively by RE. The extent of effect DE has on PAT is positive and significant. This is the situation in Dangote Flour Mills Nigeria Plc. when considered in isolation.

Interpretation of Durbin Watson- Statistic

The Durbin-Watson statistic is 2.372778, which is approximately 2. The Durbin Watson statistic result indicates the absence of positive autocorrelation in the series. The result indicates the absence of positive serial correlation in the time series data extracted from the annual report and accounts of Dangote Flour Mills Nigeria Plc.

Coefficient of Determination (R^2)

The Adjusted R-squared is 0.814698. The adjusted R^2 reveals that only about 81% of the variations in PAT (dependent variable) of Dangote Flour Mills Nigeria Plc could be accounted for by the explanatory (independent) variables considered in the analysis. The remaining19% could be explained by other factors capable of influencing PAT; such as government regulation, the error term and the non-experimented variables.

Industry Level Analysis Using Pooled Data
Figure 1: Line Graph – Industry Level Analysis
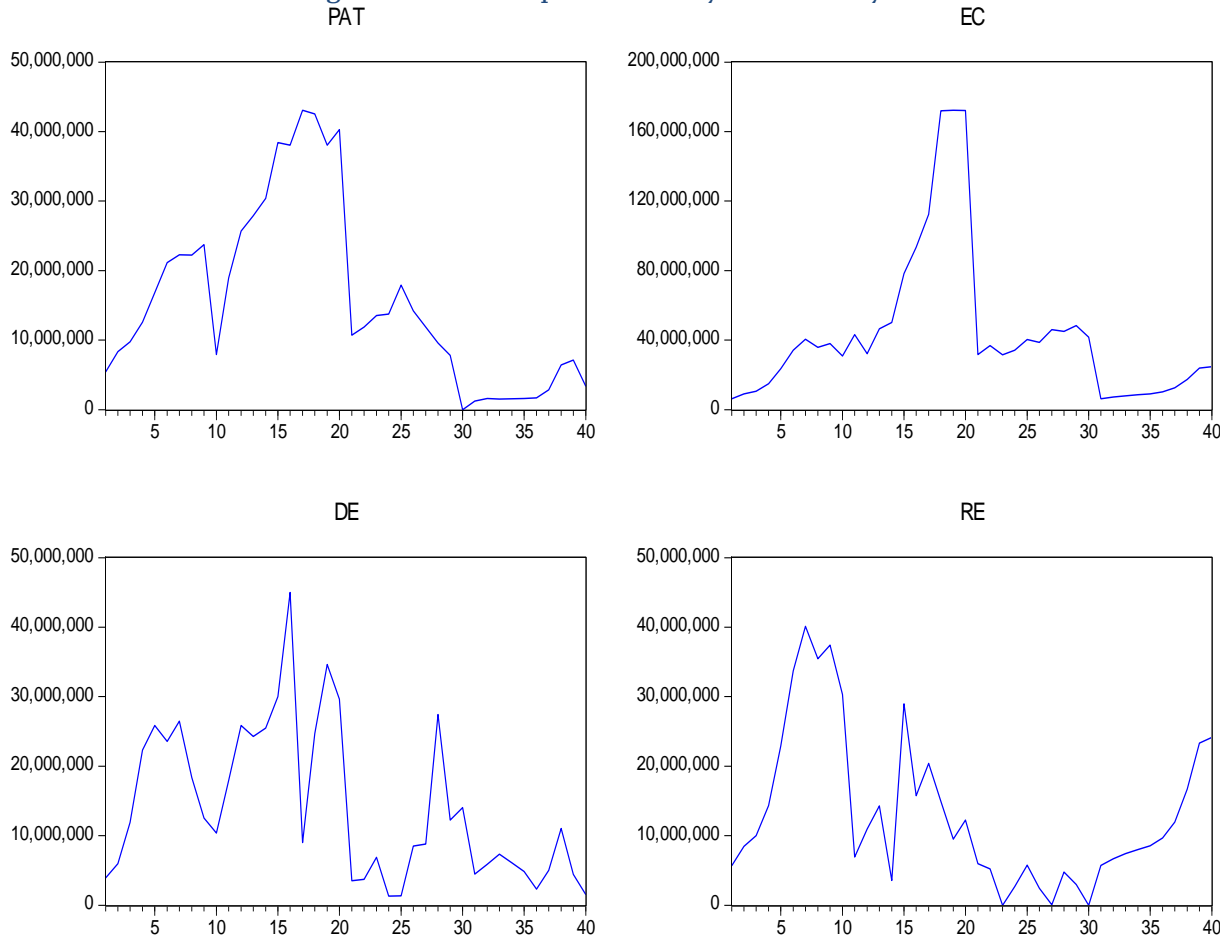
Source: Eviews 9.0 Software

Figure 1 reveals that there is a little resemblance in the pattern of movement between PAT and DE except during the later stages where DE was moving uphill as against PAT that is moving downhill. The industry utilized the highest equity capital in the middle of the graph. There is dissimilarity in the pattern of movement of retained earnings and equity capital.

Table 10 – Descriptive Statistic – Industry Level Analysis

	PAT	EC	DE	RE
Mean	15843480	43464112	14214849	13199929
Median	12232915	34192341	10708586	9599760.
Maximum	43080349	1.72E+08	45000000	40139626
Minimum	0.000000	6236521.	1298655.	0.000000
Std. Dev.	13016039	43488692	11011979	10971277
Skewness	0.749427	2.014596	0.772138	1.000634
Kurtosis	2.429926	6.374400	2.725180	2.980923
Jarque-Bera	4.285916	46.03495	4.100523	6.675730
Probability	0.117307	0.000000	0.128701	0.035513
Sum	6.34E+08	1.74E+09	5.69E+08	5.28E+08
Sum Sq. Dev.	6.61E+15	7.38E+16	4.73E+15	4.69E+15
Observations	40	40	40	40

Source: Eviews 9.0 Software

Table 10 reveals that all variables except EC and RE have skewness value that is less than one. This implies that the data for all the variables are fairly distributed. The kurtosis coefficient of all the variables is less than three except that of EC which is significantly lighter than the kurtosis of a normal distribution. This confirms that data series are fairly distributed. The P-value for all the variables is insignificant for the Jarque-Bera statistics except data for EC and RE. Generally, data series are fairly distributed for the variables under study.

Table 11 – Correlation Analysis – Industry Level Analysis

	PAT	EC	DE	RE
PAT	1.000000	0.827392	0.717368	0.314841
EC	0.827392	1.000000	0.589587	0.076369
DE	0.717368	0.589587	1.000000	0.300177
RE	0.314841	0.076369	0.300177	1.000000

Source: Eviews 9.0 Software

Table 11 reveals that a strong and positive relationship exists between EC, DE and PAT. Moreover, RE association with PAT is weak and positive. The strength of the relationship between EC and PAT is the strongest among all other variables under study. This implies

that EC amongst variables under study has a higher predictive capacity over movements of PAT in selected firms in Nigeria.

Table 12 - Regression Result – Industry Level Analysis

Dependent Variable: PAT

Method: Least Squares

Date: 10/04/15   Time: 15:07

Sample: 1 40

Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EC	0.193901	0.028228	6.868974	0.0000
DE	0.332223	0.116529	2.850997	0.0072
RE	0.214726	0.094747	2.266320	0.0295
C	-141109.9	1849833.	-0.076283	0.9396

R-squared	0.794644	Mean dependent var		15843480
Adjusted R-squared	0.777531	S.D. dependent var		13016039
S.E. of regression	6139225.	Akaike info criterion		34.19293
Sum squared resid	1.36E+15	Schwarz criterion		34.36182
Log likelihood	-679.8587	Hannan-Quinn criter.		34.25400
F-statistic	46.43511	Durbin-Watson stat		0.910345
Prob(F-statistic)	0.000000			

Source: Eviews 9.0 Software

Interpretation of Regression Coefficient Result

Table 12 indicates that a one unit/module change in EC, DE and RE will increase PAT by 0.193901, 0.332223 and 0.214726respectively. In summary, all the variables under study have a positive and significant effect on PAT. Such is the case of the data from selected firms in Nigeria.

Interpretation of Durbin Watson- Statistic
The Durbin-Watson statistic is 0.910345which is closer to 0 than 2. In this case, the Durbin Watson statistic indicates the presence of positive autocorrelation in the series. The result indicates the presence positive serial correlation in the time series data extracted from the annual report and accounts of selected firms in Nigeria.

Coefficient of Determination (R^2)

The Adjusted R-squared is 0.777531. The adjusted R^2 reveals that only about 78% of the variations in PAT (dependent variable) of selected firms in Nigeria could be accounted for by the explanatory (independent) variables considered in the analysis. The remaining 22% could be explained by other factors capable of influencing PAT; such as government regulation, the error term and the non-experimented variable.

TEST OF HYPOTHESES

Table 13 - Regression Result – Hypotheses One

Dependent Variable: PAT				
Method: Least Squares				
Date: 10/04/15 Time: 15:10				
Sample: 1 40				
Included observations: 40				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
EC	0.247636	0.027268	9.081472	0.0000
C	5080205.	1666069.	3.049216	0.0042
R-squared	0.684577	Mean dependent var		15843480
Adjusted R-squared	0.676276	S.D. dependent var		13016039
S.E. of regression	7405698.	Akaike info criterion		34.52210
Sum squared resid	2.08E+15	Schwarz criterion		34.60655
Log likelihood	-688.4421	Hannan-Quinn criter.		34.55264
F-statistic	82.47314	Durbin-Watson stat		0.429486
Prob(F-statistic)	0.000000			

Source: Eviews 9.0 Software

1. Hypotheses one state that equity capital does not positively and significantly affect profit after tax of selected firms in Nigeria.

Decision Rule: Reject H_0 if P-Value is less than a-value of 0.05

Decision: Table 13 reveals a P-Value of 0.0000which is less than a-value of 0.05; H_0 is therefore rejected in respect to equity capital of selected firms in Nigeria. This implies that equity capital significantly affect profit after tax of selected firms in Nigeria.

Table 14 - Regression Result – Hypotheses Two

Dependent Variable: PAT

Method: Least Squares

Date: 10/04/15   Time: 15:12

Sample: 1 40

Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DE	0.847921	0.133587	6.347329	0.0000
C	3790416.	2390775.	1.585434	0.1212
R-squared	0.514616	Mean dependent var		15843480
Adjusted R-squared	0.501843	S.D. dependent var		13016039
S.E. of regression	9186751.	Akaike info criterion		34.95313
Sum squared resid	3.21E+15	Schwarz criterion		35.03757
Log likelihood	-697.0626	Hannan-Quinn criter.		34.98366
F-statistic	40.28858	Durbin-Watson stat		0.981402
Prob(F-statistic)	0.000000			

Source: Eviews 9.0 Software

2. Hypotheses two state that debt does not positively and significantly affect profit after tax of selected firms in Nigeria.

Decision Rule: Reject H_0 if P-Value is less than a-value of 0.05.

Decision: Table 14 reveals a P-Value of 0.0000which is less than a-value of 0.05; H_0 is therefore rejected in respect to debt of selected firms in Nigeria. This implies that debt significantly affect profit after tax of selected firms in Nigeria.

Table 15 - Regression Result – Hypotheses Three

Dependent Variable: PAT

Method: Least Squares

Date: 10/04/15   Time: 15:15

Sample: 1 40

Included observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RE	0.373519	0.182668	2.044797	0.0478
C	10913059	3119280.	3.498583	0.0012
R-squared	0.099125	Mean dependent var		15843480
Adjusted R-squared	0.075417	S.D. dependent var		13016039
S.E. of regression	12515601	Akaike info criterion		35.57156
Sum squared resid	5.95E+15	Schwarz criterion		35.65600
Log likelihood	-709.4311	Hannan-Quinn criter.		35.60209
F-statistic	4.181194	Durbin-Watson stat		0.260795
Prob(F-statistic)	0.047847			

Source: Eviews 9.0 Software

3. Hypotheses three state that retained earnings does not positively and significantly affect profit after tax of selected firms in Nigeria.

Decision Rule: Reject H_0 if P-Value is less than a-value of 0.05.

Decision: Table 15 discloses a P-Value of 0.0478which is less than a-value of 0.05; H_0 is therefore rejected in respect to retained earnings of selected firms in Nigeria. This implies that retained earnings significantly affect profit after tax of selected firms in Nigeria.

DISCUSSION OF FINDINGS

Hypotheses one: A finding from test of hypothesis 1 implies that as the equity increases in these firms, the impact profit after tax (profitability) also increases. This is consistent with the study of [19], on factors that affect bank profitability in Ethiopia. The study argued that equity was positively and significantly associated with return of asset. Furthermore, from the result of the regression analysis in Table 21, equity capital affects profit after tax positively and significantly in the proportion of 0.0000. It also

reveals that about 68% of changes in profit after tax could be explained by equity capital.

Hypotheses two: A finding from test of hypothesis 2 means that the null hypothesis was rejected. It found debt to be positive and significant with profit after tax. This disagrees with the study of [28], where debt was negatively related and significant in his study on profitability of Pakistan engineering sector.Additionally, the result of the regression analysis in Table 22 shows thatdebt affects profit after tax positively and significantly in the proportion of 0.0000. It also reveals that about 50% of changes in profit after tax could be explained by debt as shown by 0.501843adjusted R-squared figure.

Hypotheses three: The interpretation of the result of test of hypothesis 3 means that retained earnings has a positive and significant effect on profit after tax of selected firms in Nigeria, hence the hypothesis rejected. Furthermore, the result of the regression analysis in Table 23 shows that retained earnings positively and significantly affects profit after tax in the tune of 0.0478. It also reveals that about 8% of changes in profit after tax could be accounted for by retained earnings as shown by 0.075417adjusted R-squared figure.

Summary of Findings

1. Equity Capital positively and significantly affects profit after tax of selected firms in Nigeria.

2. Long term debt positively and significantly affects profit after tax of selected firms in Nigeria.

3. Retained Earnings positively and significantly affects profit after tax of selected firms in Nigeria.

CONCLUSION

The capital structure decision is important for any business organization. The decision is important because of the need to maximize returns to various organizational stakeholders, and also because of the impact such a decision has on an organization's ability to deal with its competitive and dynamic business environment. Thus, organizations must strive for the optimal capital mix that enhances the firm value.

The main objective of this study was to establish the impact of Capital Structure on profitability of selected firms in Nigeria. To achieve the objective the researcher gathered data from the annual reports and statement of accounts of the selected companies and the Nigerian stock Exchange fact-book 2007 to 2016. From the findings of the study, it reveals that all the variables had significant effect on profit after tax of selected firms in Nigeria. The extent of effects these variables: equity capital, debt and retained earnings have on profit after tax is positive and significant. The study also reveals that 78% of changes in profit after tax of selected firms in Nigeria can be explained by the variables under study.

RECOMMENDATIONS

In line with the findings and conclusion, the study makes the following recommendations:

1. The management of these selected firms should employ more shareholders fund in financing their business activities as it has a direct relationship with

profitability. Additionally, highly geared firms are more prone to lower firms' performance as a result of an additional leverage incurred.

2. Long term debt finance is mostly used by highly tangible firms, hence, policies that would encourage growing manufacturing firms accumulate huge tangible assets should be pursued. Hence, tax rebates and exemptions can be granted.

3. These selected firms should plough back more profit into the core business activity and not pay out all profit as dividend. This is because, retained earnings is significant in relation to determining profitability of selected firms in Nigeria.

4. According to pecking order theory, companies should use their retained earnings to finance their business first.

AREAS FOR FURTHER RESEARCH

1. The study found out that the variables studied explain only about 78% of the variations in profitability. Subsequently, efforts should be made to test other variables in order to examine the extent they affect capital structure as regards profitability.

2. There are other internal factors that need special examination to ascertain their extent of influence on capital structure decisions. They include: internal policies, firm size, board composition etc.

3. Further Research should also attempt to investigate the Non-listed firms in Nigeria.

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