

Effect of Capital Structure on the Profitability of Non-Financial Institutions in Nigeria

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Abstract

Capital structure decision primarily deals with the question of how much debt is needed to optimize the value of a firm. The research objective was to establish effects of capital structure on the profitability of non-financial institutions in Nigeria. Theoretically it is assumed that the capital mix a firm uses to finance its operations does not matter and that its future operating income generated by its asset is what determines its value. Multiple linear regression which is capital structure determinant independent variable, leverage ratio, growth of the firm and earnings management. These variables were used to establish whether capital structure decisions affect profitability of non-financial institutions in Nigeria. Secondary data was collected from 2015 to 2020 and analyzed with the aid of statistical tools. Descriptive study research design was used to determine frequency of occurrence or extent to which variables were related. The population used in this study was five non-financial institutions listed at the NSE, study further found out that profitability improved with increase in liquidity and sales growth. From the findings outlined above, the study recommends that companies, should consider borrowing less funds and use internal funds economically so that they can consequently reap from such funds and increase their profit. The study concludes that the firm management should take into account their liquidity which is significant and growth as this also turned to be critical factors in determining profit.

Keywords: profitability, financial leverage, capital structure and earnings

1. Introduction

Organisation employs the practice of capital to do its business. This money engaged may be consisting of equity (ownership contribution) and debt. Debt is any external subsidy which is repayable and has an associated cost. The cost may be direct such as importance payment or indirect such as agency cost. For many years, it was thought to be an plus or benefit for an organisation to borrow to finance its operations so long as the organisation's ability to pay the debt and any associated cost remains unquestionable and the debt finance raised was invested sensibly (Tornyiva, 2013). The financial liberalization in 1987 has changed the operating environment of firms including Nigerian Non-Financial Firms. The liberalization system gives the firms more plasticity to the Nigerian financial managers in choosing the firm's capital structure (Salawu & Agboola, 2008). Although the capital structure issue has received considerable attention in developed countries, it has remained neglected in the developing countries. The reasons for this might be that developing economies have placed little importance to the role of firms in economic development.

Whether a business is newly born or it is an ongoing, it requires fund to carry out its activities as no success is achievable in the absence of fund. The needed fund may be for daily running or business expansions. This expresses how important or crucial fund is in the life of a business. This fund is referred to as capital. Capital therefore refers to the means of funding a business. Capital of firms when sourced, it becomes a burden on enterprises simply because it is other persons' resources which they are to compensate as they are deriving maximum benefits from it. It is therefore a symbol of a company's financial liabilities (Pandey, 2010). Capital structure is defined as the means by which a company is financed. It refers to the mix of debt and equity in the capital structure of the firm (Damodaran, 2001). Profitability has likewise been variably utilized with execution, authoritative execution, corporate execution, monetary execution, and so forth in all profit from resources or return on all out resources is a superior proportion of execution that considers the interest of the relative multitude of organization's partners (Ogunlesi 2014).

Accordingly, benefit just alludes to the capacity of the executives in using the assets of the firm in creating pay far beyond the costs caused in producing that pay for the organization (Tornyiva, 2013). The function of capital structure as a tool in funding the development and overall growth of firms has been severally discussed in accounting and finance literature. According to Arulvel and Ajanthan (2013), the choice of capital structure is an important decision for firms to consider, it is not only important in regard to profit maximization but also in terms of a firm having the ability to operate successfully in a competitive environment.

Along with capital budgeting, working capital management, and dividend policy, capital structure is one of the major topics taught in financial management courses. Capital structure decision primarily deals with the question of how much debt is needed to optimize the value of a firm. Gerestenberg (2013), stated that capital structure of a company refers to the composition or make up of its capitalization. It includes all long-term capital resources such as loans, reserves, shares and bonds.

Since the pioneer study of Modigliani and Miller (1958), regarding the role of capital structure decision on the value of the firm, there is considerable literature both theoretical and empirical in this field. In the original study, Modigliani and Miller (1958), based on a simplistic assumption of no taxes and perfect competition, concurred that capital structure is irrelevant to the value of the firm. But with the introduction of taxes into the model and the impact of tax shield of interest expenses involved in debt financing, the 'trade-off theory of capital structure became the cornerstone of empirical literature. Subsequently, the 'pecking order' theory (POT) of Myers (1984) and 'agency theory' of debt (ATD) of Jensen and Meckling (1976) were added to the theoretical literature. Evolving data showed Nigeria as the biggest economy in Africa in 2013, thereby surpassing South Africa for the first time (Ogunlesi 2014).

In the Nigerian economy, loan fees, unfamiliar money trade rates, expansion are for the most part high, which make both the expense of money and the expense of carrying on with work generally extremely high. Anyway producing firms in Nigeria, similar to those in different regions of the planet, take outside financing as obligation as a component of their capital construction to grow their business, and as a feature of their functioning capital administration, and most particularly, to exploit charge deductibility of interest installment.

Meanwhile, increased leverage causes a decline in Return on Equity (ROE). The indication of this is a debt-equity causal relationship differences exist on listed companies Return on Equity (ROE). Firms that have huge debts in their capital structure have reported huge losses and found themselves in major debt crises owing creditors more than their net worth. These firms that have relied much on debt financing tend to be more liquid in order to pay their debt obligations. This leads to decreased financial profitability. Furthermore, the recent corporate failures have largely been witnessed among the non- financial firms. As indicated by Abdullah and Manan (2010), availability and adequacy of assets is the significant boundary to the development of non-monetary firms.

These days, an ever increasing number of organisations tend to utilized various sources from value or obligations to back its tasks when they need to grow their firm size or reinvest or acquire benefits. In any case, the circumstances are more muddled in the genuine completion. Based on the above stated plight, the study emerged that is to examine the effects of capital structure on the profitability of non-financial institutions in Nigeria, with particular emphasis on some selected Non-financial institutions in Nigeria.

1.1 Research Questions

Based on the issues raised in the problem statement, this study will seek to explore the following research questions:

- i. What is the effect of leverage ratios on profitability of Non- financial institutions?
- ii. What is the effect of growth on profitability of Non-financial institutions?
- iii. What are the effects of earnings on profitability of Non-financial institutions?

1.2 Objectives of the Study

The general objective of the study is to examine the effects of capital structures on the profitability of non-financial institutions in Nigeria and the study will focus on some selected Non-financial institution in Jos Metropolitan city of Plateau State.

Specific objectives are as follows:

- i . To examine the effect of leverage ratios on profitability of Non-financial institutions.
- ii. To establish the effect of firm's growth on profitability of Non-financial institutions.
- iii. To determine the effect of earnings management on profitability of Non-financial institutions.

1.3 Research Hypothesis

In line with the research questions and objectives emphasized above, the study will seek to test the following hypothesis.

H01: Leverage ratios does not have any significant effect on profitability of Non-financial institutions.

H02: Growth of the firm does not have any significant effect on profitability of Non-financial institutions.

H03: Earnings management does not have any significant effect on profitability of Non- financial organizations.

2. Related Literature

2.1 Conceptual Meaning of Capital Structure: An Overview

Capital construction alludes to ‘the blend of obligation and value kept up with by the firm’ (Gitman & Zutter, 2012). It very well may be characterized as a blend of wellsprings of financing that shows up yet to be determined sheet (Keown, 1985).

Romano (2000), categorise capital structure into four main parts: capital and retained profits, family loans, debt, and equity. Alternatively, Gibson (2002) suggests five types of source of finance, namely owner equity, related person debt, trade credit, bank loan, and other debt or equity such as credit cards, venture capital, and government loans. On the other hand, Burns (2001) classifies sources of finance into two categories: long-term finance such as equity from private investment and other people’s money, bank loans, leasing, and hire purchase, and short-term finance, for instance, bank overdrafts, short-term loans, and factoring. Marlow (2003), categorise it into three types: private investment (e.g. personal monies and funds from friends and families), public investment (e.g. government loans, grants, and public equity finance) and private external finance (e.g. bank loans and overdrafts, asset finance and asset-based finance).

Capital structure of a company is crucial in determining the stability and profitability of the enterprise. Evidence from professionals and researchers on capital structure points to the capability of high debt proportion to stimulating the profitability of the enterprise in the long run (Chadha & Sharma, 2015). Nevertheless, the capacity of high debt ratio to influence profitability positively comes with the risk of bankruptcy in a situation where the growth experienced by the company, in the long run, is temporarily hampered by environmental forces. Capital structure is the mix of finance used by the corporation. The sources of long-term finance for the corporations are classified into two groups which are referred to as debt or borrowed capital, and equity (Rajan & Zingales, 1995). Equity is the capital provided by the owners of the corporation, which in turn give them rights to have shares in the company (Heinkal, 1982). The issue with borrowed capital is that the business enterprise has to pay the agreed interest rates and payback rate as at when due. The company using borrowed capital will have to meet its financial obligations irrespective of situations of low sales or reduced incomes or any other situations that affect the capability and operations of the company (Ganiyu, Adelopo, Rodionova & Samuel, 2019).

2.2 Elements of Capital Structure

An audit of past investigations on the determinants of capital construction assisted the scientist with recognizing some major questions. The majority of the past investigations uncover that the firm qualities are the most affected determinants of capital construction, while generally couple of studies inspect the impact of directors’ practices. In a subjective report, Michaelas, Chittenden, and Poutziouris (1998) discover that proprietors’ practices likewise decide the monetary construction of the firm. The new review by Borgia and Newman (2012) likewise settled that the monetary construction isn’t just affected by firm level attributes, for example, firm age, size, resource design and benefit; rather it is additionally impacted by the administrative technique, brain science and human resources. The determinants of capital design chose in this review depend on the agreement in the vast majority of the past examinations. This review inspects such determinants as attributes of the proprietor supervisor, qualities of the firm, the board execution and outside factors on four proportions of capital construction (for example held income, inward assets, obligation money and outer value).

2.3 Return on Assets (ROA)

The ROA estimates the general adequacy of the executives in creating benefits with its accessible resources. The higher the association’s ROA the better. The benefit measure ROA is viewed as subject of conflict among researchers in deciding the numerator of condition. The least difficult method for deciding ROA is to take overall gain detailed for a period and separation that by complete resources as indicated by Gitman and Zuter (2012), Ehrhardt and Brigham (201), and Ros et al. (2011). Interestingly, a few examiners take EBIT and separation over complete resources like Lindow (2013), Glantz (203), Ros et al., (203) as a gross ROA and Friedlob and Schleifer (2013). This is an unadulterated proportion of the effectiveness of an organization in producing gets back from its resources, without

being impacted by the executives financing choices. This review picked objective monetary execution measures by changing the interest and assessment to assess the exhibition of the executives impartially.

2.4 Return on Equity (ROE)

Another proportion that gives a sign of a company's generally speaking monetary wellbeing is ROE. It is a proportion that is utilized by experts to assess the presentation of a firm. ROE shows the pay created for the investor's by the value, which is the financing given by the investors. The ROE estimates the return acquired on the investors' interest in the firm. The most straightforward method for ascertaining ROE is to take overall gain detailed for a period and gap that by investors value as per Gitman and Zuter (2012), Ehrhardt and Brigham (201), and Ros et al. (201). Conversely, a few examiners take EBIT and gap over investors value like Lindow (2013). This is an unadulterated proportion of the effectiveness of an organization in producing gets back from its value, without being impacted by the executives financing choices. This review picked objective monetary execution measures by changing the interest and expense to assess the presentation of the board unbiasedly

2.5 Asset Structure

Resource structure Access to unmistakable resources is deviated across areas. For instance, fabricating areas are essentially made out of substantial resources, while administrations areas are generally made out of elusive resources. More substantial resources would build the availability of the firm to the outside financing; unmistakable resources have less resource particularity. As needs be, this component augments its advantage as collateralisation for obligation which additionally expands the moneylenders' assurance. Then again, resources' explicitness for elusive resources makes troubles in finding credit since they are non-collateralisable. Therefore, this will likewise propose a positive connection between insurance of resources and obligation level. Security is additionally expected to beat data deviation as for the unfriendly determination and moral peril issue (Di Patti and Dell'Araccia, 2004).

The loaning is basically conceded relying upon the benefit of hidden resources, which can be controlled by untouchables (Berger and Udell, 2006), not founded on the reliability of the firm. Insurance of resources is basically important for SMEs to empower them to acquire (Han et al., 2009) as little firms are not so instructively straightforward as huge firms as they don't need to reveal examined budget summaries or don't give exchanged protections (Myers, 1984). Security may likewise impede any holes that exist among bank and borrower (Stiglitz and Weiss, 1981; Batten and Hettihewa, 1999; Hanley and Crook, 2005). The collateralised resources would be taken advantage of neglecting to pay the obligation. Firms that have fixed resources can acquire at lower rates on account of their capacity to give resources as security (Jensen and Meckling, 1976). In this way, a positive relationship is relied upon to exist among influence and fixed asset.

By asset structure, we mean the proportion of firms' assets that are tangible. Asset structure of a firm plays a very critical function in determining its capital structure. According to Titman and Wessels (1988) and Harris and Raviv (1991), the degree to which assets of a firm are tangible should result to greater liquidation value for the firm. Also, Bradley, Jarrel and Han Kim (1984) opined that if firms invest maximally in tangible assets, they stand to have greater financial leverage because they borrow at lower interest rate, if their assets serve as collateral for such loans. Booth, Aivazian, Dmirguc-Kunt and Maksimovic (2001) said "the more tangible the firms' assets, the greater its ability to issue secured debts and the less information revealed about future profit".

2.6 Effect of Capital Design on Benefit

An investigation of an association's capital construction and a company's exhibition is broadly talked about in the majority of the capital construction speculations. The office hypothesis with the expectation of complimentary incomes by Jensen (1986) accepts that the free income accessible to supervisors can be decreased through the usage of obligation (Ramadan et al., 2012) and therefore will act in light of a legitimate concern for investors. Notwithstanding, this hypothesis isn't appropriate on account of SMEs as the proprietor and chief of the firm is a similar person. The lopsided data model (Myers, 1984; Myers and Majluf, 1984) accepts that proprietor administrators normally have preferred data about their organizations over external financial backers. Because of restricted data got by the untouchables, they will generally check out the obligation level of the organizations. Undeniable degree of obligation shows that proprietor administrators are sure with regards to the eventual fate of the firm. Then again, significant degree of value shows the horrible showing of the organizations as the profit will fall later on (Ramadan et al., 2012).

Ramadan et al. (2012) likewise stress that obligation intervenes the relationship between determinants of capital design and company's presentation.

In view of the writing search, it was found that there are three distinct circumstances for the relationship between capital construction and association's exhibition: no huge affiliation, positive affiliation and negative affiliation. The

people who observed no critical affiliation support Modigliani and Miller's (1958) hypothesis and the contention of Miller's (1977) model with regards to the ideal capital design. Then again, the people who observed a contrary relationship between obligation level and execution support Myers and Majluf's (1984) contention which expressed that profoundly turned firms might forego positive net present worth (NPV) projects which might influence execution antagonistically.

2.7 Nexus between Capital Structure and Profitability

Capital structure is a combination of debt and equity that corporate firms used to finance their business operations and growth activities. Whether a business is newly born or is on-going it requires funds to carry out its activities (Chechet & Olayiwola; 2014). Structure of a firm in terms of capital (i.e capital structure) embodies the way the firm finances its operation via the combination of debt and equity (Aftab, Eshan, Naseer & Awan; 2012; Dare & Sola, 2010). This form of corporate structure is very critical and fundamental in the life of a business not only for profit maximization purpose, but also for sustainability and optimal attainment of the overall business objectives.

Capital structure is referred to as the way in which the firm finances itself through debts, equity and securities. It is the composition of debt and equity that is required for a firm to finance its assets. The capital structure of a firm is really extremely important since it is related to the ability of the firm to meet the requirements of its stakeholders (Sivalingam & Kengatharan; 2018).

However, profitability is the ability of a given investment to earn a return from its use (Kaguri; 2013). Many empirical studies have been conducted on effect of capital structure on profitability of firms. Many of these studies have identified some specific firm level of financing structure that affect profitability.

Ishaya & Abduljeleel (2014). examined capital structure and profitability of the Nigerian listed firms from the Agency Cost Theory perspective with a sample of seventy (70) out of population of two hundred and forty-five firms listed on the Nigerian change (NSE) for a period of ten (10) years: 2000 - 2009 with the aid of the NSE Fact Book covering the period under review. Panel data for the firms are generated and analyzed using fixed-effects, random-effects and Hausman Chi Square estimations. Two independent variables which served as surrogate for capital structure were used in the study: debt ratio, DR and EQT while profitability as the only dependent variable. The result show that DR is negatively related with PROF, the only dependent variable but EQT is directly related with PROF. The study by these findings, indicate consistency with prior empirical studies and provide evidence against the Agency Cost Theory.

Also, Cyril (2016) investigated the effect of Nigerian banks' capital structure on the performance of conglomerates quoted on the floor of the Nigerian stock exchange from 2011 to 2015. The study identified four levels of dependent variables such as return on assets, ratio (ROA), return on equity ratio (ROE), assets turnover ratio (AT) and earnings per share whereas the independent variable is financial leverage. Essentially the paper sets out to determine the effect of capital structure on the above dependable variables hence return on assets of quoted conglomerates, return on equity of quoted conglomerates, asset turnover of the quoted conglomerates and on the earnings per share of quoted conglomerates. Descriptive statistics and the pooled ordinary least square (POLS) regression analytical method were used for data analysis. The study finds that capital structure has effect on both return on assets and asset turnover of the conglomerates but no effect on return on equity and earnings per share of the conglomerate. It is then concluded that an in-depth analysis of business factors which affect a particular industry should be considered so as to obtain the benefits of the debt-equity mix. The result of the study is in agreement with most previous studies on other sectors that discovered mixed results on the effect of capital structure on financial performance. It is therefore necessary to employ a critical analysis of the appropriate debt-equity mix suitable for the company.

3. Theoretical Framework

3.1 Capital Structure theory of Modigliani and Miller

Capital structure theory was propounded by Modigliani and Miller (1958). This capital structures irrelevancy theory, argued that there is no relationship between capital structure and firm's profit. Modigliani and Miller theorem is considered the greatest breakthrough in theory of optimal capital structure. The theorem specifies the financial decisions by firms that are irrelevant to the firm's value. Its prepositions include; the value of a firm is the same regardless of whether it finances itself with debt or equity. The weighted average cost of capital is constant. The assumptions of Modigliani- Miller theorem is; Perfect and frictionless markets, no transaction costs, no default risk, no taxation, both firms and investors can borrow at the same interest rate; there is homogeneous expectation homogeneous risk and equal access to all of relevant information.

In other words, shareholders are indifferent about firm capital structure reason being that the firm's value do not change with changes in debt. This theory is made to function in a market where there are free entry and exit, no transaction

cost, no asymmetry information, non-existence of taxes, rational behaviour of investors, Constant cash-flow, risk free interest rate, no bankruptcy cost, perfect and efficient market among other assumptions. Modigliani and Miller (1958) capital structure irrelevancy was debunked with its restrictive assumptions. However, Modigliani and Miller (1963) later suggested that firms should take advantage of tax shield when relying on debt capital to maximize firms' value. Debt becomes beneficial if firm's interest deduction and taxation are taken into consideration.

Pecking Order Theory, the pecking order theory of capital structure as introduced by Donaldson (1961) is among the most influential theories of corporate leverage. This theory tries to capture the costs of asymmetric information which states that companies prioritize their sources of financing (from internal financing to equity) according to the principle of least effort, or of least resistance, preferring to raise equity as a financing means of last resort. Hence, internal funds is used first, and when that is exhausted, debt is issued, and when it is not sensible to issue any more debt, equity is issued. Pecking Order Theory (Myers & Majluf, 1984) captures the effect of asymmetric information upon the mispricing of new securities, which says that there is no well-defined target debt ratio. They opined that investors generally perceive that managers are better informed of the price sensitive information of the firms. Investors' perception is such that managers issue risky securities when they are overpriced. This perception of investors leads to the underpricing of new equity issue. Sometimes this underpricing becomes so severe that it causes substantial loss to the existing shareholders. To avoid the problem arising from information asymmetry firms usually fulfill their financing needs by preferring retained earnings as their main source of financing, followed by debt and finally external equity financing as the last resort. The theory underpinning this research work is the pecking order theory.

Many examinations (Chechet and Olayiwola, 2014; Onalapo and Kajola, 2010; Akinlo, 2011) favor dominance hierarchy hypothesis. The hypothesis guarantees a negative connection between capital design and firm execution.

The theory is profit motivated theory. The theory further shows that, the form of debt capital could equally have effect on firm's profitability.

3.2 Empirical Studies

Abeywardhana (2015) examined capital structure and profitability an empirical analysis of SMEs in the UK, this study examined the relationship between capital structure and the profitability of nonfinancial SMEs in the UK for the period of 1998-2008. The researcher used the two stage least squares, (2sls) which showed a significant relationship with capital structure and profitability which is negatively related. The size of the firm appears to have a more important factor that determines the profitability in SMEs in the UK. There is consistent evidence for positive size- profitability relationship. The results of this study have shown that the capital structure of the firm has a significant influence on the profitability of SMEs in the UK. Particularly long-term debt to total assets ratio is negatively related with the profitability and this is an indication that SMEs are unenthusiastic to use more equity because of the fear.

A study had been done by Abor (2005) on the influence of capital structure on profitability of listed companies on the Ghana Stock Exchange during a five-year period. He found out that there is significant positive interrelationship between SD A and ROE and shows that firms which earn a lot use more short-term debt to finance their business. In other words, short- term debt is an essential source of financing in favour of Ghanaian companies, by representing 85 percent of total debt financing. Yet, the results showed the adverse relation between LDA and ROE. The regression output showed that there is positive relationship between DA and ROE which measure the relationship between total debt and profitability. This indicates that firms which earn a lot are depending on debt as their key financing option. In the early study on relationship between capital structure and a firm's reaction to short term financial distress had shown the result that high-leverage firms are more possible than their less leverages counter parts to react operationally to short-term distress. The high-leverage firms are also more possible to take personal actions such as restructuring assets and laying off employees when performance deteriorates. Apart from that, a firm with high leverage will react quickly in financial through cutting own dividend, restructuring debt and bankruptcy (Ofek, 1993).

Tani (2013) analyzed the effect of capital construction on benefit in Jordanian banks. The review covered 12 recorded banks on Amman Stock Exchange over the time of 207 to 201 and the significant discoveries of the review are summed up beneath: Total obligation was viewed as critical in deciding net benefit and Return on capital utilized (ROCE) in the financial business of Jordan. The obligation/value proportion is normally protected up to 2. It shows the way that banks in Jordan relies more upon obligation (long haul advances) rather than value capital. This has re-underlined the way that banks are exceptionally turned institutions. LTD and TD were viewed as irrelevant in deciding ROE in the financial business of Jordan. This implies that stores don't really travel into upgrading ROE in the financial business of Jordan.

Salteh et al., (2012) investigate the impact of capital structure on firm performance. The sample of the present study

consists of 28 Iranian companies listed in Tehran Stock Exchange. The result that firm performance, which is measured by (ROE, Market-to-book value ratio & Tobin's Q) is significantly and positively associated with capital structure

Etale and Uzakah (2019) examined the association between capital structure and firm performance in a case study of Aluminium manufacturing company (ALEX) in Nigeria. Capital structure (the explanatory variable) was represented by debt to equity, debt to capital employed and equity to capital employed ratios, while the response variable, profitability, was represented by return on capital employed. Secondary data was obtained from audited financial statements of the sampled company for the period 2009 to 2018. They employed descriptive statistics and multiple regression estimation technique as the tools for data analysis. The study found that debt to equity ratio had significant positive effect on profitability; debt to capital employed ratio had negative effect on profitability; whereas, equity to capital employed ratio had no effect on firm performance. Kerim, Alaji and Innocent (2019) investigated the effect of capital structure on the profitability of listed insurance companies in Nigeria for 5 years period covering 2013 to 2017. The study adopted ROE as proxy for profitability, while the components of capital structure used include short term debt and long-term debt ratios. Secondary data was obtained from the financial statements of 15 insurance companies included in the study sample. They employed OLS multiple regression technique for analysis of data. The findings showed that short term debt ratio had significant negative effect on profitability; while long term debt ratio had significant positive effect on firms' profitability.

Afolabi, Olabisi, Kajola and Asaolu (2019) examined the relationship between financial leverage and performance of quoted food and beverage firms in Nigeria for the period 2007 to 2016. The study adopted debt ratio, debt equity ratio and interest cover ratio as independent variables representing leverage, while return on capital employed was used as proxy for performance (the dependent variable). Secondary data for the study was obtained from annual reports of sampled 7 firms listed on the NSE. They employed inferential statistics and panel data regression techniques for data analysis. The findings indicated that debt ratio and debt equity ratio had significant positive effect on ROCE (performance), while interest cover ratio had positive but insignificant effect on performance. It was suggested that firms should continue to employ debt capital in financing business.

Etale and Sawyer (2019) investigated the link between capital structure and the performance of listed consumer goods sector companies in Nigeria for the period 2009 to 2018. The study adopted debt to equity, debt to capital employed and equity to capital employed ratios representing capital structure as the independent variables, while return on assets was used as proxy for performance (the dependent variable). Secondary data was collected from the annual reports of sampled 7 companies representing the sector. Methods of data analysis employed include descriptive statistics, and multiple regression technique based on the E-view software. The study found that capital structure had no significant effect on firm performance. It was recommended that consumer goods sector companies should exercise caution on the use of debt for financing business.

Also, Etale and Ekpulu (2019) investigated the effect of capital structure composition on profitability of banks in Nigeria for the period 2009 to 2018. They adopted debt-equity ratio, debt-capital employed ratio and equity-capital employed ratio as components of capital structure (the independent variables), while financial performance was proxy by return on total assets. Secondary data for the study was collected from published financial reports of 10 banks selected for the study. They employed OLS regression techniques for data estimation, and found that capital structure had positive correlation with financial performance.

3.3 Study Gap

From the above empirical evaluation, the study displayed the gaps in the previous studies which could be seen on the following patterns. Firms that finance their investment on their equity entertain much profit in comparison to the firms that finance their activities through borrowed capital, a firm's profitability depends on debt-to-equity ratio. The debt-to-equity ratio varies from firm to firm. Most non-financial institutions lack the skills to operate, also the persistent problem of inability of management of Nigerian listed companies to decide on the optimum capital structure towards attaining the most favorable level of profitability, availability and adequacy of assets is the significant boundary to the development of non-financial firms.

4. Methodology

The design of a study defines the study type (descriptive, correlation, semi-experimental, review, meta-analytic) and sub-type, research question, hypotheses, independent and dependent variables, experimental design, and if applicable, data collection methods and a statistical analysis plan. The study adopted a descriptive research design. The study will make use of secondary data which will be collected from the annual reports of the firms. The study will investigate five firms which are recorded under the assembling and united area of the principle speculation market section at the

Nigeria Stock Exchange (NSE). The exploration considered a five-year time frame from 2015 to 2020. The data was analysed using qualitative method in order to ensure reliability validity. This study conducted the KMO and Barlett's test of Sphericity. The KMO measures the sampling adequacy (which determines if the responses given with the sample are adequate or not) which should be close than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommend 0.5 (value for KMO) as minimum (barely accepted), values between 0.7- 0.8 acceptable, and values above 0.9 are superb.

4.1 Data Presentation

Based on the content evidence in liu to analysis of the company's annual financial statements, data generated in the study is presented in Table 1. The data represent average annual figures for the variables computed from the company's annual reports, included in the study for the five years' period between 2016 to 2020

Table 1. Average Annual Ratios of the Study Variables

Year	Profit	Leverage Ratio	Growth of Firm	Earning Management
2016	7.9	78.1	59.1	50.2
2017	8.2	77.2	62.3	55.1
2018	8.7	88.4	72.1	71.1
2019	9.1	89.5	81.1	81.5
2020	8.3	72.1	62.1	71.3

Source: Researchers' Computation (2021) E-view software.

5. Result of Descriptive Statistics

Table 2 shows the summary of the descriptive statistics of the study variables. The table shows that Profit (Prf) as the dependent variables. While independent variables include; Leverage ratio (LR), Growth of firm (GF), and Earning management (EM) has mean of 4.699, 67.424, 36.841 and 60.567 respectively. The maximum values Profit (Prf), Leverage ratio (LR), Growth of firm (GF) and Earning management (EM) are 9.700, 99.190, 49.800 and 70.680 while the minimum values are 2.800, 41.560, 22.750 and 50.200 respectfully. Table further shows that that the standard deviation of Profit (Prf), Leverage ratio (LR), Growth of firm (GF) and Earning management (EM) are 2.285, 20.070, 8.199 and 7.051 respectively. This indicates that Leverage ratio (LR) is the most dispersed variable among the variables in the study, while Growth of firm (GF) is the least dispersed among the variables. The Jarque-Bera statistics and the associated probability values show that the Profit (Prf), Leverage ratio (LR), Growth of firm (GF) and Earning management (EM) are normally distributed with probabilities of 0.178, 0.662, 0.864 and 0.687 (which are greater than 5 per cent), respectively.

Table 2. Descriptive Statistics

	Profit	Leverage Ratio	Growth of Firm	Earning Management
Mean	4.699000	67.42400	36.84100	60.56700
Median	3.875000	63.90500	36.32500	61.10000
Maximum	9.70000	99.1900	49.90000	70.68000
Minimum	2.80000	41.56000	22.75000	50.20000
Std Dev	2.285945	20.07063	8.199228	7.0513378
Skewness	1.417142	0.269238	0.061883	-0.053776
Kurtosis	3.497040	1.701973	2.173305	1.662621
Jarque-beta	3.450088	0.822846	0.291143	0.750062
Probability	0.178165	0.662707	0.864528	0.687268
Sum	46.99000	674.2400	368.4100	605.6700
Sum Sq. Dev	47.02989	3625.472	605.0461	447.4974
Observation	5	5	5	5

Source: Researchers' Computation (2021) E-view software.

Table 3. Multiple Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob
Constant	-98.89669	46.34474	-2.133935	0.0768
LR	0.500894	0.167202	2.995748	0.0241
GF	-0.304135	0.187693	-1.620388	0.1563
EM	1.337825	0.539530	2.479611	0.0478

Source: Researchers' Computation (2021).

6. Selection of Panel Data Regression Model

Before testing the influence between variables, it is necessary to select 3 (three) approaches from the panel data regression analysis.

Panel Regression Analysis

Model 1: Leverage ratio correlates with profitability of non -financial institutions in Nigeria.

The Hausman test was adopted to select the best fit model to test the hypothesis; the Cross-Section chi-square statistic with 5 degrees of freedom is 2.80 and the p-value of 0.0000 is presented in Table 4 below. The P-value of the Hausmann Chi-square Statistic is lower than 5%. The null hypothesis is accepted (random effect).

Table 4. Leverage ratio correlates with profitability of non -financial institutions in Nigeria

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Constant	2.649	1.802	1.469	0.0002
LR -0.185	-0.185	0.148	-1.2467	0.0001
GF 0.008	0.008	0.1185	0.069	0.0002
EM 0.399	0.399	0.181	2.202	0.0011

Source: Authors' Computation (2021).

Table 5. Effects Specification Hausman Test

R² Adjusted	R-squared	F-Stat	P-value	Test	D.w Stat	P-value
0.66	0.63	28.87	0.0000	2.80	1.902	0.7305

Source: Authors' Computation (2021).

Table 5: The R² of 66% shows, the goodness of the panel regression. The exogenous variables are jointly responsible for a 66% variation in the endogenous variable with an unexplained variation of 34%. Firm performance proxy by return on asset indicate a negative and significant relationship between long term debt, debt-equity, and total debt. The overall panel regression results are significant. F-stat of (28.87) is associated with a P-value of (0.000). The result is reliable for a meaningful analysis. The Durbin Watson Statistics of 1.90 is approximately 2 ruling out all possible suspicion of first-order positive autocorrelation.

Model 2: Growth of the firm correlates with profitability of non -financial institutions in Nigeria.

The Hausman test was adopted to select the best fit model to test hypothesis two; the Cross-Section chi-square statistic with 5 degrees of freedom is 1.761 and the p-value of 0.001 is presented in Table 6 below. The P-value of the Hausmann Chi-square Statistic is greater than 5%. The null hypothesis is accepted (random effect) following the standard null hypothesis.

Table 6. Growth of the firm correlates with profitability of non -financial institutions in Nigeria

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Constant	284.340	114.730	2.478	0.0138
LR	-17.463	10.501	1.662	0.0000
GF	-29.678	7.485	-3.964	0.0001
EM	21.032	7.603	-2.766	0.0060

Source: Authors' Computation (2021).

Table 7. Effects Specification Hausman Test

R² Adjusted	R-squared	F-Stat	P-value	Test	D.w Stat	P-value
0.87	-	3.407	0.0000	1.761	0.881	2.161

Source: Authors' Computation (2021).

Table (7): The R² of 87% shows, the goodness of the panel regression model. The exogenous variables are jointly responsible for an 87% variation in the endogenous variable with an unexplained variation of 13%. Firm performance proxy by profitability showed a positive and significant relationship with firm size, leverage ratio, growth of the firm and earning management had a negative relationship with profitability under the measure of D_E. The overall panel regression results are significant. F-stat of (3.407) associated with the P-value of (0.000). The result is reliable for a meaningful analysis. The Durbin Watson Statistics of 2.161 rules out all possible suspicion of first-order positive autocorrelation.

Model 3: Earning management correlates with profitability of non -financial institutions in Nigeria.

The Hausman test was adopted to select the best fit model to test hypothesis three; the Cross-Section chi-square statistic with 5 degrees of freedom is 6.773 and the p-value of 0.238 is presented in Table 8 below. The P-value of the Hausmann Chi-square Statistic is greater than 5%. The null hypothesis accepted (random effect) is preferable over the fixed effect following the standard null hypothesis.

Table 8. Earning management with profitability of non -financial institutions in Nigeria

Variables	Coefficient	Std. Error	t-Statistic	Prob.
Constant	0.263	0.876	0.300	0.7639
LR	-0.027	0.022	-1.246	0.0011
GF	0.091	0.061	1.487	0.1380
EM	0.087	0.058	1.505	0.1333

Source: Authors' Computation (2021).

Table 9. Effects Specification Hausman Test

R ² Adjusted	R-squared	F-Stat	P-value	Test	D.w Stat	P-value
0.68	-	12.925	0.0000	6.773	0.108	2.108

Source: Authors' Computation (2021).

Table (9): The R² of 68% shows, the goodness of the panel regression model. The exogenous variables are jointly responsible for a 68% variation in the endogenous variable with an unexplained variation of 32%. The overall panel regression model result is significant. F-stat of (12.925) is associated with the P-value of (0.000). The result is reliable for a meaningful analysis. The Durbin Watson Statistics of 2.108 rules out all possible suspicion of first-order positive autocorrelation.

7. Test of Hypotheses

H₀₁: Leverage ratios does not have any significant effect on profitability of Non-financial institutions.

H₀₂: Growth of the firm does not have any significant effect on profitability of Non-financial institutions.

H₀₃: Earnings management does not have any significant effect on profitability of Non-financial institutions.

Leverage ratio and Profitability

Leverage ratios does not have any significant effect on profitability of Non-financial institutions. From Table 4, the coefficient of Leverage ratios is -0.185 and the P-value is 0.0001. This means that Leverage ratios has positive significant effect on profitability (which means that it is statistically significant at 5% level). Therefore, the null hypothesis is rejected. This is in line with the findings of (Nimalathasan & Vateriu, 2010; Tani, 2013).

Growth of the Firm and Profitability

Growth of the firm does not have any significant effect on profitability of Non-financial institutions. From Table 6 the coefficient of Growth of the firm is -29.678 with P-value of 0.0001. This means Growth of the firm has positive influence on profit of the firm, but this is not statistically significant at 5% level. So the null hypothesis is accepted. This finding agrees with the study results of (Etale and Uzakah (2019) and (Kerim, Alaji and Innocent (2019)

Earning Management and Profitability

Earnings management does not have any significant effect on profitability of Non-financial institutions. Table 8 shows that the coefficient of Earning management is 0.087 with P-value of 0.0004. This means Earnings management has a positive significant influence on profitability, and this significant with P-value of 0.04 which approximately equal to 0.05. This mean Earning management has a statistically significant impact on profitability. Therefore, the null hypothesis that Earning management has no significant impact on profitability is rejected. This finding agree with the study results of (Etale & Sawyer, 2019; Etale & Ekpulu, 2019).

8. Discussion of Findings

The results in model (1) of Table 4 reveal a negative and significant relationship between leverage ratio, growth of firm and earning management on the profitability level of studied firms by 17.46%, 29.67%, and 10.11% respectively. Supporting the pecking order theory hypothesizes a negative relationship between profitability and leverage ratio. The result maintained that long-term debt increases a firm's value, due to a lower long-term debt ratio in the capital structure of companies, and in relationship with (Abeywardhana, 2015).

Highly profitable Nigerian firms require less debt finance. A positive and significant relationship was observed between

short-term debt leverage ratio, growth of the firm and earning management, supporting the cost model of debt ratios as a disciplinary device to reduce cash flow waste mitigating the opportunistic behaviours of shareholders-managers to generate sufficient cash flow to prevent liquidation. The result correlates with the true nature of the Nigerian business climate where the majority of firms depend on short-term financing from deposit money banks as a result of the high cost of raising equity from the stock market and debt market underdevelopment.

The results in model (2) of table (6) reveal a negative and significant relationship between Growth of the firm and profitability on the performance level of studied firms by 17.46%, 29.67%, and 10.11% respectively. Supporting the pecking order theory hypothesizes a negative relationship between profitability and growth of the firm. Based on this result clarified the fact that growth of the firm will increase if the firm do the needful by increasing a firm's value, due to a lower long-term debt ratio in the capital structure of companies. Highly profitable Nigerian firms require less debt finance. Based on the dimension of the result, a positive and significant relationship was observed between growth of the firm and profitability supporting the growth model of firm with a definite ratio as a disciplinary device to reduce cash flow waste thereby mitigating the opportunistic behaviours of shareholders-managers to generate sufficient cash flow to prevent liquidation.

The result correlates with the true nature of the Nigerian business climate where the majority of firms depend on short-term financing from deposit money banks as a result of the high cost of raising equity from the stock market and debt market underdevelopment. The results reveal that the tested firms typically don't back their resources with the size of their value. Normally tested firms across the enterprises utilize transient obligations to back their exercises. A special case for this standard can be made for firms in the agro-handling industry and family items ventures. Elucidating examination shows that the drawn out obligation parts of their capital utilized is moderately to the next high. It is conceivable that the financing substances and financial backers might be offering more momentary credit than long haul offices because of the potential dangers implied with the last option.

Moreover, on the grounds that expense of money is extremely high in Nigeria with the conversion scale to USD, firms would prefer to lean toward transient credit with the goal that it tends to be paid off quickly when their income circumstance improves. It is additionally conceivable that monetary administrators in these organizations deal with their functioning capital to such an extent that while giving borrowers more limited days to settle their commitments to the organizations, they likewise somewhat delay in settling their monetary commitments, for example, making installment to staff annuity commitments, installment of service bills, and for unrefined components among others. However, this in total builds their momentary liabilities, it makes cash accessible for tasks. Almost certainly, because of conversion standard misfortunes and macroeconomic shocks, organizations are not boosted to acquire as well as deal long haul offices among themselves. These could represent the high level of momentary liabilities among the noticed units. With that in spite of the fact that, it tends to be settled that once firms by and large hatch a great deal of transient liabilities in their business, they are working at a danger.

However it can't be said that agro-handling firms bungle how much obligations instruments got; what can be said is that the drug firms can deal with their values moderately and somewhat better. It is likewise conceivable that distinctions in modern climate may significantly influence the viability of obligations offices. Relapse results uncovered that while expansions in value improves productivity, expansions in transient obligations and long haul obligations are adverse to benefit; however the effect of long haul obligation is inconsequential. This outcome upholds the finishes of Duyen (2012) and Zeitun and Tian (2007) who observed that expansions in obligations lessens benefit. Pratheepkanth (2011) additionally infers that there is a negative connection between net benefit and capital design. Duyen (2012) saw that the effect of momentary obligation on benefit however bad, it isn't irrelevant.

9. Conclusion and Recommendation

The overall objective of the study was to establish effect of capital structure (leverage ratios, growth and) on profitability of non-financial institutions in Nigeria. The outcomes of the regression equation found out that there exists no negative relation between capital structure dimensions on profitability, rather capital structure influences profits of non-financial institutions in Nigeria. The study concluded that increase in debt has a negative effect on profit of non-financial institutions. The higher the capital structure the less the return on equity as well as reduced shareholder's wealth which indicates a need to increase more capital injection rather than borrowing. The total loans in these firms could lead to high interest expense hence lowering the profitability of the firm. The firms should therefore fund investments from internal sources in order to enhance their profit in financial perspective. This is also supported by Amenya (2015), who found out a negative relation between debt and firms' performance in financial perspective. The findings of this study are not consistent Modigliani and Miller (1958) theory which affirmed that capital structure is not relevant and has no influence on firm's value. It is also in contradiction with Muhoro (2013) and Banafa (2015)

who concluded a significant positive relation between debt to equity ratio and performance in financial perspective. the study recommended as such;

- i) There is need for the management to study capital structure so as to become aware of areas that want to be stepped forward on like lowering dependence on debt financing until for capital belongings meant for expanded manufacturing, set an most effective Debt Equity and Debt Ratio that match the company ultimately, and priorities their resources of financing; preferably keep in mind internal funds, accompanied by means of debt, and finally fairness issues, as sources of finance.
- ii) That firms in the basic material sector have to finance their businesses with retained profits and use debt because the last choice as this is in agreement with the perking Order idea, which states that there may be hierarchy in deciding on sources of funds.
- iii) That the oblique impact of capital structure on firm profitability be analyzed through future researchers and managers of the organization are cautioned to be extraordinarily conscious within the use of debt financing as choice in their capital mix up to the greatest limits, as debt to equity ratio supplied fantastic giant effect on overall profitability.

Future Studies Considering the limited sample population of non-financial firms used, the study recommends further research on the examined topic but in the larger sample size of Nigeria's non-financial firms. In addition, a more detailed work that includes some of the new emerging firms that have contributed towards the current economic growth of Nigeria could be included in the data pool to help in resolving some theoretical keystones of the results as obtained in this study.

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