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The Effect of Capital Structure on the Performance of Selected Conglomerates in Nigeria

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Abstract

This study focused on the effect of capital structure performance in Nigeria conglomerates. It sought to assess the significance of capital structure, and to suggest measures that could enhance its effectiveness and firms' performance in Nigeria. To achieve the objective of the research, some financial and performance indicators, using an ex-post facto research design was applied. The population of the study comprised of six (6) firms. The data was collected, analyzed and tested using the descriptive statistics and the panel data analysis techniques. From the analysis, it was revealed that there was a significant relationship between debt ratio and conglomerates performance in Nigeria. Also, it was revealed that long term debt to capital employed had a significant influence on conglomerates performance in Nigeria. Furthermore, total debt ratio was found to have a significant effect on conglomerates performance in Nigeria. Based on the findings, the study recommended that the management of Nigerian conglomerates should work very hard to optimize their capital structure, in order to increase the financial performance. They can do that through ensuring that the debt proportion (debt ratio) in their capital structure is optimal. Also, the Management of Nigerian conglomerates should increase their commitments into long term debt to capital employed, in order to improve financial performance from their business operation.

Keywords: conglomerate, pecking order, hybrid securities, financial liabilities

1. Introduction

The overall objective of any firm in contemporary business environment is to maximize the wealth of owners, as measured by the current market value of the firm's common stock. In other words, it connotes the responsibility for obtaining and effectively utilizing the funds necessary for the efficient operations of an enterprise. The finance function centers on the management of funds, raising and using them effectively. It therefore covers all functions concerned in attempting to ensure that financial resources are obtained and used in the most effective way to secure the attainment of the objectives of the organization (Akinsulire, 2014).

The financing decision is one of the three core decisional areas in financial management, which involves the identification of the appropriate sources of funds that would be used to finance projects. To do this, considerations are usually given to the cost associated with each source, the characteristics of each source, as well as the availability of each source (Damodaran, 2001).

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 tells how important or essential 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 deriving maximum benefits

from it. It is therefore a symbol of a company's financial liabilities (Udoka, John & Orok, 2022).

Two major sources are available for firms willing to raise funds for their activities. These sources are internal and external sources. The internal source refers to the funds generated from within an enterprise which is mostly retained earnings. It results from success enterprises earn from their activities. Firms may in the same vein look outside to source for their needed funds to enhance their activities. Any funds sourced not from within the earnings of their activities are termed external financing. The external funding may be by increasing the number of co-owners of a business or outright borrowing in form of loan. Issuance of equity helps in sourcing for fund through external financing leading to increment in the number of owners where its holders are entitled to dividends when surplus is declared and after meeting the mandatories. In the same vein, the equity holders exercise a greater decision control over the firm because they bear the larger share of risk. On the other hand, outright borrowings by a company make her a creditor to the lenders. This may be through issuance of debentures, bonds or other forms of debt instruments. The holders of this are entitled to a fixed amount of interest to be paid before the equity or shareholders (Obim, John & Orok, 2018). They have lesser control over decision in the organization.

According to Dare and Sola (2010), capital structure is the debt-equity mix of business finance. It is used to represent the proportionate relationship between debt and equity in corporate firms' finances. Therefore, in this context, the composition of equity and debt in a firms' capital is what we mean by capital structure. This is in line with the definition Chou (2007) as a mixture of debt and equity financing of a firm. An optimal capital structure is the best debt/equity ratio of a firm, which minimizes the cost of financing and maximizes the value of the firm.

The capital structure of a firm as opined by Dare and Sola (2010) can take any of the following three alternatives: 100% equity: 0% debt, 0% equity: 100% debt or X% equity: Y% debt. From the above, option one is that of a purely equity financed firm. That is a firm that ignores leverage and its benefits in financing its activities.

Option two is that of a firm that finances its affairs solely on debt which may not be realistic in the real-world situation because hardly will any provider of fund invest in a business without owners. This is what is referred to as "trading on equity". That is, it is the equity element that presents in capital structure that motivates the debt providers to give their scarce resources to the business. Option three is that of a firm that combines certain proportion of both equity and debt in its capital structure. It will therefore reap the benefits of combined debt and equity.

For a purely equity financed firm, the whole of its after-tax cash flows (profit) is a benefit to the shareholders inform of dividends and retained earnings. However, firms with certain percentage of debts in their capital structure shall devote a portion of the profit after tax to servicing such debt. However, Pandey (2005) opined that capital structure decision should be examined from the point of its impact on the value of the firm. Thus, if capital structure decision can affect a firm's value, then it would be optimal to have a capital structure which maximizes the firm's market value. In order to efficiently carry out the firm's operational and production activities, the firm may use either of the components, a combination of the components, or all of these capital structure components; retained earnings, common stock, preference shares and debt.

From the foregoing, capital structure decision is therefore very critical and fundamental in the life of a business. This is not only to maximize profit to the shareholders but also due to the impact such a decision has both on sustainability and its ability to satisfy external objectives. The capital structure theory is seen as a sine qua non to the administration of a firm wishing to raise fund for finance. It addresses the means of finance available to an enterprise likewise the best mix of such sources that can reduce the overall cost of capital and maximizes returns on acquisition. The success of any business therefore lies in its management's efforts to identify this optimum capital for smoothness, sustainability and prosperity in line with her overall goals and objectives (John, Takon, Obim Emefiele, Ita & Nkamere, 2022).

An appropriate capital structure is a critical decision for any business organization. The decision is important not only because of the need to maximize returns to various organizational constituencies, but also because of the impact such a decision have on an organization's ability to deal with its competitive environment. However, so much research has been carried out in corporate finance to determine the influence of a firm's choice of capital structure on performance. The difficulty facing companies when structuring their finance is to determine its impact on performance, as the performance of the business is crucial to the value of the firm and consequently, its survival.

Managers have numerous opportunities to exercise their discretion with respect to capital structure decisions. The capital structure employed may not be meant for value maximization of the firm but for protection of the manager's interest especially in organizations where corporate decisions are dictated by managers and shares of the company closely held. Even where shares are not closely held, owners of equity are generally large in

number and an average shareholder controls a minute proportion of the shares of the firm. This gives rise to the tendency for such a shareholder to take less interest in the monitoring of managers who left to themselves pursue interest different from owners of equity (Udoka, James, John & Orok, 2022).

The difficulty facing firms in Nigeria has to do more with the financing—whether to raise debt or equity capital. The issue of finance is so important that it has been identified as an immediate reason for business failing to start in the first place or to progress. However, it is necessary for firms in Nigeria to be able to finance their activities and grow over time, if they are ever to play an increasing and predominant role in creating value added, as well as income in terms of profits, but they are always marred by the choice of what proportion of the firm's assets and operational activities should be financed by owners' funds, as well as the proportion that should be financed by borrowed funds (Takon, John, Ononiwu & Mgbado, 2020). This challenge often brings to bare, the question, which structure of capital is optimal, given the firm's goal of maximizing shareholders' wealth and the maintenance of adequate liquidity. Given this challenge, thus, it is in the light of this and more that the study seeks to carry out an empirical analysis of capital structure performance in Nigeria conglomerates.

Specifically, this study is designed to:

i) Examine the effect of debt ratio on firms' return on investment;

ii) Assess the effect of long-term debt to capital employed ratio on firms' return on investment;

iii) Investigate the effect of total debt ratio on firms' return on investment.

2. Literature Review and Theoretical Framework

2.1 Theoretical Framework

2.1.1 Modigliani and Miller Theory

The initial study on capital structure of firms began with Modigliani and Miller, (1958). The theory rests on the assumption that there is perfect capital market. According to the theory, market exists and operates without bankruptcy cost, transaction cost; and information is adequately available for everyone in the market. Modigliani and Miller (1958) further asserted that financing decision of firm do not affect the value and the performance of the firm. Decisions are taken without tax but with identical interest rate. As resultant effects, the cost of leverage is the same for both leverage and non-leverage firms and premium is included for the non-leverage firm. However, in 1963, Modigliani and Miller came up with another proposition that states that capital structure of firm will affect its firm performance because of tax advantage of debts (Modigliani & Miller, 1963). Other studies after Modigliani and Miller (1958) were conducted and premised on less limiting conditions. One main consideration was that taxation was included as one of the determinants of capital structure. These includes tax rate on corporate earnings and dividend income. Tax incentive is also vital for corporate borrowings as it is able to take advantage of interest tax shields (Myres, 2003).

2.1.2 Trade-off Theory

Kraus and Litzenberger (1973) propounded the trade-off theory which reflects a balance between the dead-weight costs of bankruptcy and the tax saving benefits of debt. This theory is often set up as a competitor theory to the pecking order theory of capital structure. The trade-off theory which clearly dominates the literature on capital structure claims that a firm's optimal financing mix is determined by balancing the losses and gains of debt (Myers, 1977). This stream of literature predicts a unique capital structure for every firm where the marginal benefit equals the marginal cost of debt and changes in debt "should be dictated by the difference between current level and optimal debt level" (De Angelo & Masulis, 1980).

Modigliani and Miller (1963) showed that the benefit of debt is primarily the tax-shield effect that arises due to the deductibility of interest payments. Basically, Myers (1977) combined this model with the bankruptcy cost framework of Kraus and Litzenberger (1973) and Scott (1976). Hence, in the classic, so-called static trade-off theory, the costs of debt are mainly associated with direct and indirect costs of bankruptcy. These include legal and administrative costs and more subtle costs resulting from the loss of reputation among customers and the loss of trust among staff and suppliers' due to uncertainties (Myers, 1984). However, the consensus view is that "bankruptcy costs alone are too small to offset the value of tax shields" and additional factors must be included in a more general cost-benefit analysis of debt (Ju, 2005).

According to Jensen & Meckling (1976), agency costs arise due to the "separation of ownership and control" in situations in which agents make decisions affecting the welfare of the principals. The finance providers (principals) try to incentivise the managers (agents) to act in their best interest. The agency costs are the direct and indirect costs resulting from this attempt as well as the failure to make the agents act this way (Arnold, 2008). However, Frank & Goyal (2008) argue that the impact of the various agency conflicts on capital structure has not been completely clarified. Bradley (1984) contends that these costs which could include "costs of renegotiating the firm's debt contracts and the opportunity costs of non-optimal production/investment

decisions" become economically significant especially when the firm is having difficulties to meet the obligations to creditors. Therefore, the broader term "costs of financial distress" is often used to refer to both bankruptcy and the various agency costs of debt (Myers, 2001).

This illustrates that the trade-off theory is based on the original theory of capital structure by Modigliani and Miller (1958) because the perfect market assumptions are loosened by including taxes, bankruptcy and agency costs (Ozkan, 2001). In contrast to the M&M framework, this stream of literature justifies moderate gearing levels. Furthermore, it plausibly substantiates the existence of an optimal or target capital structure that firms gradually try to achieve and maintain to be able to increase shareholder wealth (Brounen, 2005). According to this model, a value-maximizing firm facing a low probability of going bankrupt should use debt to full capacity. Thus, one key prediction of the trade-off model is the positive correlation between profitability and gearing. Hovakimian (2004) argues that high profitability suggests that the firm can yield higher tax savings coupled with a lower possibility of bankruptcy.

Different variations of trade-off models can be found in the literature taking even more factors into account. For example, Auerbach (1985) created and tested an adjusted trade-off model and arrived at the conclusion that risky and fast-growing firms should borrow less. But none of these theoretical and empirical further developments has managed to fully replace the traditional version. So, most researchers still refer to the original assumptions described above when testing the trade-off theory.

While some researchers' findings try to expand the literature, others reproduce tests with minor adjustments on different samples. Hence, there have been more developed and specific models of firm behaviour with more complex predictions and implications to be found in the body of literature. However, this theory is of significant importance to this study because the efficiency risk hypothesis has been adjudged to be an off shot of the trade-off theory (Ayiku, 2015).

2.1.3 Pecking Order Theory

The pecking order theory has become a widely used model to analyse and explain firms' financing behaviour. In contrast to the trade-off theory, the pecking order theory challenges the existence of a well-defined optimal gearing ratio (Myers, 1984). Instead, firms seem to follow a hierarchical order of financing practices which can be traced back to Donaldson (1961) who was the first to observe that "management strongly favoured internal generation as a source of new funds". Based on this finding, Myers & Majluf (1984) developed the theory suggesting that firms will not seek external finance at capital markets until the reserve of retained earnings is exhausted. Then, "the debt market is called on first, and only as a last resort will companies raise equity finance" (Arnold, 2008).

In contrast to the trade-off theory, research in this aspect considers interest tax shields and the potential threat of bankruptcy to be only of secondary importance. In fact, gearing ratios are adjusted when there is a need for external funds which results from the imbalance between internal cash flow, net of dividends, and real investment opportunities (Shyam-Sunder & Myers, 1999). In other words, only firms whose investment needs exceeded internally generated funds would borrow more debt. Myers (2001) concludes that "each firm's debt ratio, therefore, reflects its cumulative requirement for external financing" and that profitable companies with limited growth opportunities would always use their cash surplus to reduce debt rather than repurchasing shares.

There is an agreement in the literature about the key implications of the pecking order theory: due to the preference for internal funds, it predicts lower debt levels than the trade-off theory (Shyam-Sunder & Myers, 1999). Furthermore, Myers & Majluf (1984) state that the theory justifies why firms tend to create financial slack to finance future projects. Several motivations for pecking order behaviour can be found in the literature. Initially, the principal-agent problems associated with the separation of ownership and control served as an explanation why firms try to avoid capital markets (Myers, 2001). Baumol (1965) argued that firms with no or relatively infrequent use of stock can "proceed to make its decisions confident in its immunity from punishment from the impersonal mechanism of the stock exchange".

Other literature highlights the signalling effects of capital structure choices to outside investors (Ross, 1977). Some scholars go further by saying that debt issues can signal confidence to the capital market that the firm is, in fact, an excellent firm and that the management is not afraid to borrow money (Frydenberg, 2004). Myers and Majluf (1984) extended this approach by taking asymmetric information between managers and investors and its effects on investment and financing decisions into account. However, it is important to mention Akerlof's (1970) adverse selection argument that explains why prices of used cars drop significantly compared to new cars. The seller of a used car will usually have more information about the true performance of the car than the prospective buyer. The buyers require a discount to compensate for the possibility that they might purchase an "Akerlof lemon", i.e., a car that appears to be in good condition but has a major flaw that is not visible from the outside.

Analogically, Myers & Majluf (1984) claim that managers have access to inside information and are able to

make better statements regarding the true value, the riskiness and future prospects of the firm than less informed outside investors who are unable to accurately value the securities issued. Hence, it is likely that the market misprices a firm's shares since investors are unable to accurately value the securities issued (Myers, 2001). Therefore, equity investors demand an increased level of return for the informational disadvantage which represents an additional risk. That means that for firms who are unable to convince rational investors of their true quality and future performance, equity finance has an "adverse selection premium" making it more expensive (Myers & Majluf, 1984).

Stewart (1990) contends that any equity issue raises doubts because "investors suspect that management is attempting to shore up the firm's financial resources for rough times ahead by selling over-valued shares". This is in line with the adverse selection problem that states that firms will only issue new equity when the stock is overpriced. Allotting overpriced shares would transfer value from new investors to existing shareholders (Myers, 2001). This argument drives down share prices which can lead to an underinvestment problem so severe that potentially profitable projects have to be rejected (Myers & Majluf, 1984). This demonstrates how the signalling effects and the consequences of the informational disadvantage taken together influence equity investors to require a "risk premium". It makes equity finance more expensive and therefore less attractive for companies as a financing instrument.

Harris and Raviv (1991) argue that within the original pecking order framework, capital structure decisions are designed to avoid inefficiencies that are caused by the information asymmetry, particularly the mispricing of shares. The logical conclusion is that from a firm's point of view, internal finance is most preferred because sending a signal is avoided. Furthermore, debt dominates equity because it leads to less severe value impacts and minimizes chances of any misinterpretation (Neus & Walter, 2008). In other words, if external financing is inevitable, firms would rather issue securities that are less affected by asymmetric information, such as riskless debt. However, this explanation has been criticized because it does not take into account the mentioned principal-agent conflict. In the signaling model, managers are assumed to act in the shareholder's best interest and to not take advantage of their superior information to serve their own interests (Neus & Walter, 2008). Whereas the pecking order model by Myers & Majluf (1984) recommends that managers should have high discretionary power over free cash flows, while Jensen and Meckling (1976) advise the opposite.

The idea that managers tend to hold cash excessively to avoid the scrutiny of external investors is part of behavioural finance theory, in which agents behave irrationally (Elsas & Florysiak, 2008). To reduce the related agency costs, shareholders have an interest to reduce the managers' access to internal funds, thereby inducing them to raise external finance (Jensen, 1986). This argument is based on the model's assumption that the efficiency of the capital markets would inevitably lead to the best allocation of funds to profitable projects (Neus & Walter, 2008). Furthermore, Grossman and Hart (1982) imply that debt is a more effective mean to discipline managers and to reduce agency costs than equity because the implicit obligation to pay interests is more binding than a pledge to pay dividends.

The literature suggests additional factors, but Myers (1984) contends that they are not significant enough to serve as single explanations. According to Myers (1984) firms tend to take the "path of least resistance" when internal funds are available because the process of obtaining external financing is more complex and time-consuming. Communicating with outside investors and convincing them to invest with the help of prospectus and advertisement is expensive. If external financing is inevitable, debt is next in the pecking order because "the degree of questioning and publicity associated with a bank loan or bond issue is usually significantly less than that associated with a share issue" (Arnold, 2008). Hence, funds with low transaction costs, such as administrative costs, are preferred.

In summary, the theory predicts that more profitable firms that generate high cash flows are expected to use less debt capital than those who generate lower cash flows. The pecking order theory argues that businesses adhere to a hierarchy of financing sources and prefer internal financing when available. However, when external financing is required, firms prefer debt over equity. Equity entails the issuance of additional shares of a company, which generally brings a higher level of external ownership into the company. Hence, the form of debt that a firm chooses can act as a signal for its need of external finance.

Thus, firms that are profitable and therefore generate high cash flows are expected to use less debt compared to those who do not generate high cash flows. This theory, therefore, suggests that firms prefer debt to equity. (Muritala, 2012). All the previously mentioned mechanisms suggest that the pecking order theory claims a negative relationship between capital structure and firm performance since more profitable firms opt to use internal financing over debt. This theory is of relevance because it shows the preference of the internal sources of funding which is in relation to the aim of the franchise value hypothesis that needs to be related to Nigeria situation. Thus, this empirical work is anchored on the pecking order theory.

2.2 Determinants of Capital Structure

Based on the different theories on capital structure, a number of empirical studies have identified firm-level characteristics that affect the capital structure of firms. Among these characteristics are age of the firm, size of the firm, asset structure, profitability, growth, firm risk, tax and ownership structure. In the case of Small and Medium scale Enterprises (SMEs), other heterodox factors such as industry, location of the firm, entrepreneur's educational background and gender, form of business, and export status of the firm may explain their capital structure.

2.2.1 Age of the Firm

This serves as a standard measure of reputation in capital structure models. As a firm continues longer in business, it establishes itself as an ongoing business and therefore increases its capacity to take on more debt; hence age is positively related to debt. Before granting a loan, banks tend to evaluate the creditworthiness of entrepreneurs as these are generally believed to pin high hopes on very risky projects promising high profitability. Petersen and Rajan (1994) found that older firms should have higher debt ratios since they should be higher quality firms. Hall (2004) agreed that age is positively related to long-term debt but negatively related to short-term debt. Esperança (2003), however, found that age is negatively related to both long-term and short-term debt. Green, Murinde and Suppakitjarak (2002) also found that age has a negative influence on the probability of incurring debt in the initial capital equation, and no impact in the additional capital equation.

2.2.2 Firm Size

Larger firms are more diversified and hence have lower variance of earnings, making them able to tolerate high debt ratios (Wald, 1999). Smaller firms, on the other hand, may find it relatively more costly to resolve information asymmetries with lenders, thus, may present lower debt ratios (Castanias, 1983). Lenders to larger firms are more likely to get repaid than lenders to smaller firms, reducing the agency costs associated with debt. Therefore, larger firms will have higher debts. Empirical evidence on the relationship between size and capital structure supports a positive relationship. Several works have shown positive relationship between firm size and leverage, such of those works include Barclay and Smith (1996); Friend and Lang (1988); Barton (1989); MacKie-Mason (1990); Kim (1998); Al-Sakran (2001), and Hovakimian (2004). Their results suggest that smaller firms are more likely to use equity finance, while larger firms are more likely to issue debt rather than stock. Their results showed that the success rate for large firms applying for bank loans was higher than that of smaller firms. In a study of six African countries, Bigsten (2000) also showed that about 64% of micro firms, 42% of small firms and 21% of medium firms appear constrained, while this is only 10% for the large firms.

2.2.3 Asset Structure

The degree to which the firm's assets are tangible should result in the firm having greater liquidation value (Raviv, 1991). Bradley (1984) asserts that firms that invest heavily in tangible assets also have higher financial leverage since they borrow at lower interest rates if their debt is secured with such assets. It is believed that debt may be more readily used if there are durable assets to serve as collateral (Wedig, 1988). Booth (2001) suggests that the relationship between tangible fixed assets and debt financing is related to the maturity structure of the debt. In such a situation, the level of tangible fixed assets may help firms to obtain more long-term debt, but the agency problems may become more severe with the more tangible fixed assets, because the information revealed about future profit is less in these firms. If this is the case, then it is likely to find a negative relationship between tangible fixed assets and debt ratio (Takon, John, Mbaze-Ebock, Akpan, Asukwo, Awah & Nkamare, 2020).

2.2.4 Profitability

The relationship between firm profitability and capital structure can be explained by the pecking order theory discussed above, which holds that firms prefer internal sources of finance to external sources. The order of the preference is from the one that is least sensitive (and least risky) to the one that is most sensitive (and most risky) that arise because of asymmetric information between corporate insiders and less well-informed market participants (Myers, 1984). By this token, profitable firms with access to retained profits can rely on them as opposed to depending on outside sources (debt). Murinde (2004) observe that retentions are the principal source of finance. Barton (1989) agrees that firms with high profit rates, all things being equal, would maintain relatively lower debt ratios since they are able to generate such funds from internal sources.

2.2.5 Firm Growth

Growth is likely to place a greater demand on internally generated funds and push the firm into borrowing (Hall, 2004). According to Marsh (1982), firms with high growth will capture relatively higher debt ratios. In the case of small firms with more concentrated ownership, it is expected that high growth firms will require more external financing and should display higher leverage (Heshmati, 2001). Aryeetey (1994) maintain that growing SMEs appear more likely to use external finance—though it is difficult to determine whether finance induces growth or the opposite (or both). As enterprises grow through different stages, i.e., micro, small, medium and large scale, they are also expected to shift financing sources. They are first expected to move from internal

sources to external sources (Aryeetey, 1998).

2.2.6 Firm Risk

The level of risk is said to be one of the primary determinants of a firm's capital structure (Kale, 1991). The tax shelter-bankruptcy cost theory of capital structure determines a firm's optimal leverage as a function of business risk (Castanias, 1983). Given agency and bankruptcy costs, there are incentives for the firm not to fully utilize the tax benefits of 100% debt within the static framework model. The more likely a firm is exposed to such costs, the greater their incentive to reduce their level of debt within its capital structure. One firm variable that affects this exposure is the firm's operating risk; in that the more volatile the firm's earnings stream, the greater the chance of the firm defaulting and being exposed to such costs. According to Johnson (1997), firms with more volatile earnings growth may experience more situations in which cash flows are too low for debt service.

2.2.7 Taxation

Numerous empirical studies have explored the impact of taxation on corporate financing decisions in the major industrial countries. Some are concerned directly with tax policy, for example, MacKie-Mason (1990), Shum (1996) and Graham (1999). MacKie-Mason (1990) studied the tax effect on corporate financing decisions and provided evidence of substantial tax effect on the choice between debt and equity. He concluded that changes in the marginal tax rate for any firm should affect financing decisions. When already exhausted (with loss carry forwards) or with a high probability of facing a zero-tax rate, a firm with high tax shield is less likely to finance with debt. The reason is that tax shields lower the effective marginal tax rate on interest deduction. Graham (1999) concluded that in general, taxes do affect corporate financial decisions, but the magnitude of the effect is mostly "not large".

2.2.8 Managerial Ownership

Managerial insiders (officers and directors) have a somewhat different perspective since many of them have large portions of their personal wealth invested in the firm (Friend & Hasbrouck, 1988). The personal wealth managerial insiders have invested in their employer is composed largely of their employer's common stock and the firm-specific human capital they have accumulated while working for their employer. Since these items tend to represent a large proportion of an insider's total wealth, the bankruptcy of the employer would have a major impact on their personal wealth. As a result, Friend & Hasbrouck (1988) argue, managerial insiders should be more sensitive to the bankruptcy risk that debt financing induces and more inclined to minimize this risk by using less than the shareholder wealth maximizing amount of debt in the firm's capital structure. Further, the more wealth a managerial insider has invested in the employer, the greater the incentive they have to minimize the use of debt financing. Research has shown that factors that determines capital structure differs from firm to firm and even from country to country.

2.3 Advantages of Equity Financing

There are various reasons why firms will find the use of equity stock as an indispensable medium of financing. Some of these reasons include:

1) The use of equity stock does not create a fixed charge on the firm. The firm using equity stock as the sole medium of finance does not have to pay dividend except if the company makes profit and the directors wish to declare dividend. This however is not the case with debt instruments where a fixed charge is created and this must be serviced as the contract stipulates whether or not the firm makes profit. The use of equity stocks thus insulates the firm against shocks arising vagaries in trade cycle.

2) Equity stocks do not have maturity date, and so the firm is not obliged to pay out funds to redeem the stock. Where debt instruments are used, they have to be redeemed on maturity. At such times, the firm might be experiencing trade difficulties, these difficulties notwithstanding, the firm has to redeem its debt instruments or it will be subjected to legal embarrassment.

3) Equity stocks can be sold more easily than bonds because of its appeal to investors. Most investors during inflationary periods would prefer to buy equity stocks because of the possibilities of earning higher incomes than the fixed interest that bond holding would generate.

4) The psychology of ownership will make investors more willing to invest on equity stocks than bonds. Some investors want to be actively associated with a particular organization. To boost their ego, they will still wish to invest in such companies whether or not the economy is in a state of recession.

2.4 Advantages of Using Debt for Financing

i) Preservation of corporate control: Holders of debts do not have voting rights, and hence exercise no influence in the voting for directors. Firms may wish to raise additional funds for its operations without being willing to give up a portion of its control in that case, the use of debt instruments becomes the best alternative.

ii) Cost benefit of using debts: There are various cost benefits that will be derived from the use of debts as instrument of finance. These include: (a) The payment of interest on debts are often considered as a tax-deductible expense. Before the corporate profits are taxed, the amount paid out as interest is deducted, these savings increase the cash flows available to the organization. (b) The cost of issuing debts such as, investigation and underwriting debts are much less than that used for equity stock. The interest payments on debts are much less than the amount paid out as dividends. Thus, if there are two firms, one levered and the other not levered, the number of payments that will be made by the levered firm in the form of interest will be much less than what will be paid out as dividend by the unlevered firm.

iii) Flexibility of financial structure: The use of debts ensures flexibility in the financial structure. Debts have a maturity date and so can be redeemed at maturity. This is unlike the case in equity stock that does not have maturity date. If a levered firm were to be over-capitalized, it can rectify this when the debts mature by redeeming the debts, thus reducing the amount of funds that is ploughed into the venture. Thus, the availability of debts enables a firm to increase or decrease its capital structure without much difficulty. If the price of equity stock is depressed in the market, then the firm can issue debentures or bonds until thing improve. Also, even if interest rates are high, a firm can issue debentures or bonds with a call provision, so that it can redeem these when the interest rates improve.

iv) Consideration of expediency: This could arise from the tempo of the market, if the economy is in the state of recession, the sale of common stock might prove very difficult, and in that case, the firm wishing to raise more funds will have to use debentures. This is because the investors will want a reasonable margin of safety for the funds and a guaranteed source of income.

v) Alternative to short term debt: If the firm has incurred very many short-term debts that are very costly, the firm can replace all these debts by the issue of a single debenture. This single debenture or bond that replaces all short-term debts is called funded debts.

2.5 Empirical Review

The empirical review of the study begins with Abor (2005), who conducted a research on capital structure and performance of 22 firms listed in Ghana Stock Exchange from 1998 to 2002. The study measured firm performance by ROE and capital structure by short term debt, long term debt and total debt. The study revealed a significantly positive relationship between short term debt and ROE, and with long term debt, the results showed a significant negative relationship. Thus, this implies that short term debt is less expensive and induces high firm performance, but an increase in the long term debt will lead to a decrease in firm performance, thus long term debt is relatively more expensive and lead to lower performance. The result for total debt revealed a significant positive relationship. This means that, an increase in the level of debt will lead to an increase in firm performance. Thus, the higher the debt level, the higher the firm performance. Also, the result showed a positive relationship between firm size and sales growth.

Abor (2007) also carried out a study on relationship between capital structure and performance of small and medium-sized enterprises in Ghana and South Africa from 1998 to 2003. The study used a sample of 92 SMEs firms from Ghana and 68 firms from South Africa. The study measured financial performance by return on assets and capital structure by short term debt ratio, long term debt ratio and total debt ratio. The study used Generalized Least Square (GLS) panel model for the estimation. Using return on asset as the performance measure, on the sample on Ghana, the result revealed a significant negative relationship between all the measures of capital structure and firm performance. Abor concluded that for Ghanaian SMEs, using high debt level significantly, lead to lower performance; that is increasing the level of debt in the firm's capital structure results in high bankruptcy and this leads to negative impact on firm performance. Also, the study found firm size to be significant and negatively related with return on assets. On the South Africa sample, the result showed a significant positive relationship between short term debt and return on asset. Thus, it revealed that short term debt seemed to be relatively less costly, thus increasing the short term debt will induce high level of profit. For long term debt and total debt, the result revealed a significant negative relationship with firm performance. Thus, it showed that the cost of long term debt is high and this will lead to low level of firm performance. The study also confirmed that firm size has positive and significant effect on return on asset.

Samuel (2013) also conducted research on the relationship between capital structure and firm performance in South Africa. Using panel data consisting of 257 South African firms over the period 1998 to 2009, the study measured capital structure in terms of Leverage and firm performance in terms of ROA and Tobin's Q. Using panel data analysis, the results found financial leverage to be positively related to firm performance.

However, Ebaid (2009) in Egypt, researched on the impact of capital structure choice on firms' performance from 1997 to 2005. Using 64 firms, the study employed three accounting-based measures which includes ROA, ROE and gross profit margin, and found that capital structure generally, had a weak-to-no impact on firm

performance.

Also, in Nigeria various studies were also carried out on the relationship between capital structure and firm performance; and among such studies include Simon, Oke & Afolabi (2008), who investigated capital structure and industrial performance from 1999-2007. Using five quoted firms, the study used Debt financing, equity financing, debt-equity ratio as a proxy for capital structure and profitability index as measures of performance. The study also employed panel data analysis and reported a positive relationship between firm performance and equity financing and also a positive relationship between firm performance and debt/equity ratio; while a negative relationship between firm performance and debt financing was reported as well. This study shows a high cost of borrowing in the country and suggested an efficient management of borrowed funds.

Similarly, Salawu (2009) also conducted a study on the determinants of capital structure of large non-financial listed firm in Nigeria (1990-2004). The study measured capital structure by short term debt, long term debt, and total debt, and firm performance by ROA. Using a panel sample of 33 large firms, the study found capital structure measured by short term debt to be negatively related to profitability measured by ROA, while both long term debt and total debt were positively related to profitability measured by ROA using panel data analysis. The study concluded that the financing decisions of large firms in Nigeria can be explained by the determinants suggested by trade-off theory.

Onaolapo, Adekunle and Kajola (2010), while examining the impact of capital structure on firm's financial performance, using sample of thirty non-financial firms listed on the Nigerian Stock Exchange between 2001 and 2007, measured capital structure by debt ratio and firm performance by ROA and ROE respectively. The study employed ordinary least square method, and the results showed that a firm's capital structure surrogated by Debt Ratio has a significantly negative impact on the firm's financial measures (Return on Asset (ROA) and Return on Equity (ROE).

In contrast, Omorogie & Erah (2010) examined capital structure and corporate performance in Nigeria from 1995-2009, using the profitability and earnings as proxies for firm performance and debt ratio as a measure of capital structure. The study however, reported a positive relationship between firm performance and capital structure.

Also in the same vein, Ishola (2008), while considering the sensitivity of performance to capital structure from 2000 to 2004, using Degree of Operating Leverage (DOL), Degree of Financial Leverage (DFL), Degree of Combined Leverage (DCL), as a proxy for capital structure; and Dividends Per Share (DPS), Earnings Before Interest and Taxes (EBIT) as measures of firm performance. Based on the data from selected foods and Beverages Company, the study analyzed the degree(s) of leverage ratio and the percentage change in DPS relative to percentage change in EBIT, and reported a positive relationship between capital structure and firm performance. The study concluded that irrespective of the dividend policy adopted by a firm, the rate of change in capital structure is a major determinant of firm's performance.

Also, Adeyemi & Oboh, (2011) examined the empirical effects of corporate capital structure (financial leverage) on the market value of a selection of firms listed on the Nigerian Stock Exchange. Both primary and secondary data were obtained from a sample size of 150 respondents and 90 firms. Both descriptive and inferential statistics were employed as analytical method; while the study revealed a positively significant relationship between a firm's choice of capital structure and its market value in Nigeria.

3. Model Specification

To assess the effect of capital structure performance in Nigeria conglomerates, we formulate model of capital structure indices and firms' performance. Thus, the functional as well as the econometric form of this model is given as;

$$ROI = f(DER, LDCER, TDR)$$

Where

ROI = Return on investment

DER = Debt ratio

LDCER = Long term debt to capital employed ratio

TDR = Total debt ratio

The ordinary least square regression model based on the above function is;

$$ROA = a_0 + b_1DER + b_2LDCER + b_3TDR + u$$

Where

a_0 = Regression constant or estimate

b_1 - b_3 = Unknown parameters or regression coefficients

u = Stochastic error term

4. Data Presentation, Analyses and Discussion of Findings

The study employed variables such as return on equity (dependent variable) and debt ratio, long term debt to capital employed ratio and total debt ratio (independent variables). The data set for the study was 20 years period ranging from 2001 to 2020 with a total of six quoted conglomerates. The data set were analyzed and presented in ratios for further analysis. The dataset presentation in the Appendix 1 comprises of the 20 years cumulative value of both the dependent and independent variables for each sampled quoted firm. The trend behaviour of these variables is presented in the descriptive statistics analysis as shown in Table 1.

Table 1. Result of descriptive statistics

	ROE	DER	LDCER	TDR
Minimum	-4.2515	-3.09690	-2.299	-2.821
Maximum	1.5382	2.68171	2.846	2.442
Mean	-1.6644	0. 0000	0. 0000	0. 0000
Std. Dev.	1.12534	1.08152	1.000	0.985
Observations	102	102	102	102

4.1 Data Analysis

4.1.1 Descriptive Statistics

The result of the descriptive statistics is presented in Table 1 above. The analysis revealed that, the total value of return on equity (ROE) has a mean value of -1.6644 with a standard deviation of 1.12524 having its minimum value as -4.2515 and its maximum value as 1.5382. The total value of debt ratio (DER) shows its minimum value as -3.0969 and maximum of 2.68171; with standard deviation of 1.08152.

Further analysis of the descriptive statistics revealed that total value of long term debt to capital employed ratio (LDCER) shows its minimum value as -2.299 and maximum of 2.846; with standard deviation of 1.000. Finally, the total value of total debt ratio (TDR) revealed its standard deviation as 0.985, while having its minimum value as -2.821 and its maximum value as 2.442.

Table 2. Summarized t-test result from the OLS multiple regression result

The t-test as summarized: {t-cal.}	t-tab	Corresponding probability	Remark
DER {-5.852}	± 2.56	0.000	Significant
LDCER {-5.950}	± 2.56	0.000	Significant
TDR {6.652}	± 2.56	0.000	Significant

4.1.2 The OLS Multiple Regression Result

The OLS multiple regression result in Table 2 is the regression of the effect of capital structure performance in Nigeria conglomerates. From the result presented in Table 2, the value of the intercept (-0.916) revealed that the performance of the conglomerates will experience a 0.916 decrease when all other variables (debt ratio, long term debt to capital employed ratio and total debt ratio) are held constant. Further analysis of the result revealed that, the estimate coefficient which is debt ratio (DER) {0.590} shows that a percentage change in DER will cause a corresponding percent increase in the performance of conglomerates in Nigeria and was found to be statistically significant. Also, the analysis of the result revealed that, the estimate coefficient which is long term debt to capital employed ratio (LDCER) {0.452} shows that a percentage change in LDCER will cause a corresponding percent increase in the performance of conglomerates in Nigeria and was found to be statistically significant. Lastly, the relationship that existed between total debt ratio (TDR) and the performance of conglomerates in Nigeria is found to be negative and significant. The implication is that a percentage change in TDR will cause a corresponding percent decrease of 0.636 in the performance of conglomerates in Nigeria.

The R^2 {R-Squared} which measures the overall goodness of fit of the entire regression, shows its value as 0.520 = 52.0 per cent. This indicates that the independent variables (DER, LDCER and TDR) accounts for about 52

per cent of the variation in the dependent variable (ROE). Hence, the study does have a goodness of fit. From the result in Table 2, f-calculated {35.361} is greater that the f- tabulated {3.35}, that is, f-cal. > f-tab. Hence, we reject the null hypothesis {H0} that the overall estimate has a good fit and a joint-significance, which implies that our independent variables are simultaneously significant. The test for the existence of autocorrelation was performed using Durbin-Watson statistic and the D-W value of 2.016 revealed that the model is free from serial autocorrelation.

4.2 Test of Hypotheses

(1) Test of hypothesis one

The decision rule is as follows:

If t-calculated > t-tabulated, reject the null hypothesis $\{H_0\}$ and accept the alternative hypothesis $\{H_1\}$, and if otherwise, select the null hypothesis $\{H_0\}$ and reject the alternative hypothesis $\{H_1\}$. The t-statistics is used to test for individual significance of the estimated parameter $\{\beta 1\}$. From table 2, the study deduces that debt ratio (DER) {4.554} is greater than 2.56 which represents the t-tabulated t-statistics value; implying that DER is statistically significant. Hence, the study accepted the alternative hypothesis of the study and concluded that: there is a significant relationship between debt ratio and conglomerates return on equity.

(2) Test of hypothesis two

From table 2, the study deduces that long term debt to capital employed ratio (LDCER) {6.652} is greater than 2.56 which represents the t-tabulated t-statistics value; implying that LDCER is statistically significant. Hence, the study accepted the alternative hypothesis of the study and concluded that: there is a significant relationship between long term debt to capital employed ratio and conglomerates return on equity.

(3) Test of hypothesis three

From table 2, the study deduces that total debt ratio (TDR) {-5.852} is greater than 2.56 which represents the t-tabulated t-statistics value; implying that LDCER is statistically significant. Hence, the study accepted the alternative hypothesis of the study and concluded that: there is a significant relationship between total debt ratio and conglomerates return on equity.

4.3 Discussion of Findings

The study empirically examined the effect of capital structure performance in Nigeria conglomerates. Based on the analyses, the following findings were made: Firstly, there is a significant relationship between debt ratio and conglomerates return on equity. The finding is in line with the works of Dare and Sola (2010), who posited that an optimal capital structure is the best debt/equity ratio of a firm, which minimizes the cost of financing and maximizes the value of the firm.

Secondly, there is a significant relationship between long term debt to capital employed ratio and conglomerates return on equity. The finding is also in line with the work of Akinsulire (2014), who posited that long term debt to capital employed ratio addresses the means of finance available to an enterprise likewise the best mix of such sources that can reduce the overall cost of capital and maximizes returns on acquisition.

Thirdly, there is a significant relationship between total debt ratio and conglomerates return on equity. The finding is also in line with the work of Chou (2007), who posited that the success of any business therefore lies in its management's efforts to identify an optimum combination of total equity and total debt for smoothness, sustainability and prosperity in line with her overall goals and objectives.

5. Conclusion and Recommendations

5.1 Conclusion

Capital structure can have both positive and negative impact on firm performance. This depends on how debt is used to resolve conflict of interest between shareholders and managers on one hand and between debt holders and shareholders on the other hand. The study found evidence that show capital structure (debt ratio, long term debt to capital employed ratio and total debt ratio) are directly related to firm performance (return on equity). The use of debt may push majority shareholders to exert more control and monitoring to ensure those they have appointed to manage the firm on day to day strive to achieve better performance to meet up with debt repayment obligations and employ debt to finance positive net present value projects such that they can obtain better returns on their equity. The practical implication of this in reducing agency problems in a setting where the majority shareholders dominate the minority shareholders is that greater use of both short term and long term debt may mean better protection of financial interest of minority shareholders in Nigeria firms.

5.2 Recommendations

Based on the findings and conclusion, the following suggested recommendations were made:

i) The management of Nigerian conglomerates should work very hard to optimize their capital structure, in order to increase the financial performance. They can do that through ensuring that the debt proportion (debt ratio) in their capital structure is optimal.

ii) The Management of Nigerian conglomerates should increase their commitments into long term debt to capital employed, in order to improve financial performance from their business operation.

iii) The Management of Nigerian conglomerates should be concerned about the level of their total debt to total equity, for better financial performance. This is because the findings of this study revealed a negative relationship the variable and financial performance.

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