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CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NIGERIA

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Abstract: This study examined the relationship between capital structure decision and performance of quoted small and medium scale enterprise in Nigeria. The objective was to investigate how various components of capital structure affects return on equity. Ten small and medium enterprises were selected from the population. Panel time series data were sourced from audited financial statement of the sampled small and medium enterprises. Return on equity was modeled as the function of debt capital equity capital and retained earnings. Fixed effect model was adopted after a cross examination of the validity of the models. It was found that 89.6 percent of the total variations in the return on equity is accounted for, by the explanatory variables. findings proved that short term debt ratio have positive but no significant effect, retained earnings have positive but no significant effect, debt to total assets ratio have positive but no significant effect while ordinary share capital and debt equity ratio have negative and no significant effect on return on equity of the quoted small and medium scale enterprise. The study recommends that Small and medium scale enterprises should finance projects with retained earnings, debt capital and equity capital; this is in agreement with the pecking order theory. The quoted small and medium enterprise firms have to pay attention to financing aspects represented by differentiation between different financing sources, and in particular investment debt funds in are turn exceeds capital cost, which affects profitability growth and sales volume. The quoted small and medium enterprise firms should be aware of the relationship between capital structure decisions and profitability taking into accounts the conditions of external environment as an important factor in the analysis of their strategies.

Keyword: Capital Structure, Retained Earnings, Debt to Total Assets, Small, Medium Enterprises

INTRODUCTION

The important role played by Small and Medium Scale Enterprises in the growth and development of developing countries has long been acknowledged by governments. Apart from providing opportunities for employment generation, it helps to offer effective means of curtailing rural–urban migration and help in strengthening of industrial inter-linkages and integration Dogurou et al (2012). In Nigeria, Small and Medium Scale Enterprises account for 95 per cent of formal manufacturing and 70 per cent of industrial jobs (Kauffmann, 2005). Small and Medium Scale Enterprises have been and are still a central hub in generating income for the majority of urban dwellers with no formal paid employment; however enabling growth of Small and Medium Scale Enterprises has posed a major challenge (Kipilyango, 2012). Small and Medium Scale Enterprises contribute about 10-15 per cent to the total manufacturing output.

One of the many objectives of a corporate financial manager is to ensure low cost of capital and thus maximize the wealth of shareholders. Hence, capital structure composition is one of the effective tools of the cost of the capital is minimal that maximize profit. But the questions that remain unanswered are *"*what is the optimal composition of capital structure and do Small and Medium Scale Enterprises choose their capital structures"?, empirical researches have not provided answers to these questions as achieving optimal composition of capital structure remain a matter of fact among scholars and managers most especially the

Small and Medium Scale Enterprises and the developing countries like Nigeria.

Achieving optimal capital structure composition is a critical success factor of every corporate organization. the decision is important not only because of the need to maximize shareholder's wealth, but also the impact such a decision has on corporate ability to deal with its competitive environment (Siro, 2013). How much debt and equity the firm used to finance its assets is important, since it will impact on corporate financing decisions (Yahyazadehfar et al., 2010). The role and importance of Small and Medium Scale Enterprises in Nigeria has been detrimental to the economy due to the ill performance. The real value of Small and Medium Scale Enterprises in Nigeria has not been unveiled entirely in reflecting the firm and owner-manager' s capital structure impact and key significance on Small and Medium Scale Enterprises growth (Kira, 2013). The initial capital and expansion capital fund for Small and Medium Scale Enterprises in Nigeria has been a perpetual problem in even though the government still intending to empower the sector through intervention financing. The establishment of second tier security market has not leveraged the equity financing challenges facing SMEs in Nigeria.

The relationship between capital structure composition and financial performance has well been documented in literature with limited studies of citable significant that have dealt with problem of capital structure composition and the financial performance of Small and Medium Scale Enterprises. Similar studies by (Kira, 2013, Kira & Zhongzhi He, 2012, Kipesha 2013) failed to establish the relationship between various components of equity and debt capital on the performance of quoted Small and Medium Scale Enterprises. Onalapo and Kojala (2010) proved that profitability is negatively affected by leverage. Soumadi and Hayajneh (2012) studied Jordanian firms, including high financial leveraged companies and low financial leveraged companies and found that firm performance and leverage are correlated negatively.

Onaolapo and Kajola (2010) investigated the effect of capital structure on financial performance of companies listed on Nigeria Stock Exchange. From these points of view, it was appropriate for the researcher to investigate further on the impact of capital structure on Small and Medium Scale Enterprises performance after by investigating the extent to which various components of debt and equity capital affects the performance of Small and Medium Scale Enterprises that are quoted on the floor of the Nigerian Stock exchange.

Capital Structure Composition

Capital structure composition is defined as a specific mix of debt and equity that a firm uses to finance its operations. Equity also includes the firm's retained earnings. The firm's debt is comprised of short-term debt and long-term debt. Short-term debt is defined as the proportion of the company's debt repayable within one year, while long-term debt is the firm's debt repayable beyond one year (Hall et al., 2004). The theory of capital structure choice focuses on several determining factors: life-cycle approach, differential taxation of income from different sources, bankruptcy cost/risks, the agency theory, pecking order hypothesis, and signaling theory. Firms in general and Small and Medium Scale Enterprises in particular have various sources of finance to support their activities that can be summed up as equity or shareholders' funds, trade credit, short term and long term bank debt (Moro and Fink, 2010).

Also Elaine et al, (2005) pointed out that financing decisions in Small and Medium Scale Enterprises have received comparatively little academic attention despite their economic importance. Cressy and Olofsson (1997) noted that smaller businesses are heavily reliant on retained earnings to finance their investments and obtain most of additional finance from banks, while other resources, especially equity are less important. Brighi and Torluccio (2007) used data from an Italian Small and Medium Scale Enterprises survey and found that on average, self-financing as a major form of finance is the preferred choice of the small firms. These findings seem to be consistent with the predictions of

the pecking order theory. It is also likely that Small and Medium Scale Enterprises are more vulnerable to credit crunches during economic downturns or financial crises than larger enterprises. The European Central Bank (ECB) and the European Commission surveys from 2009 provided evidence that the financial and economic crisis had an adverse effect on the availability of external financing for Small and Medium Scale Enterprises (ECB, 2009, 2010).

Also, the surveys revealed that access to finance was the second most serious problem, reported by 17% of Small and Medium Scale Enterprises in the first half of 2009 and by 19% in the second half of 2009 (ECB 2009, 2010). That consistent with Lindholm-Dahlstrand and Cetindamar (2000) who pointed out that the problem of bank financing to Small and Medium Scale Enterprises has been persistent for many years in the developing countries with both parties actively responsible for the lack of Small and Medium Scale Enterprises financing. Given the constraints on the supply side of debt financing, an option for Small and Medium Scale Enterprises would be to resort to external equity financing, for example, private investors and business angels (Mac and Bhaird and Lucey, 2010).

Equity Composition of Capital Structure

Traditionally, Small and Medium Scale Enterprises are financed by the owners and their relatives (Fletcher, 2000). They do not like to access external finance since it implies a reduction in the freedom in managing the firm (Delmar, 2000), limitation in the possibility of accessing non-pecuniary benefits (Jensen and Meckling, 1976) and the implementation of additional control and management tools (Delmar, 2000). Moreover, if Small and Medium Scale Enterprises have unconstrained choice between external debt and internal resources, they will choose not to use debt financing because of a desire to retain control and independence (Bell and Vos, 2009). Therefore, potential investors face big problems in valuing the venture and making investment decisions (Block and McMillan, 1985). Chepkemoi (2013) noted that equity and return on equity cannot be quantified or even clearly defined for the majority of Small and Medium Scale Enterprises and therefore, cost of equity cannot therefore be ascertained and employed in capital structure decisions. Also, profit is not necessarily a source of finance since it is the result of assets and it does not generate any financial benefit because there is a time lag between earning profit and generating cash (Moro and Fink, 2010).

Composition of Equity Financing

a. **Ordinary Share Capital**

Shares are the universal and typical forms of raising capital from the capital market. The capital of a company is divided into certain units of a fixed amount. Share' means a share in the share capital of a company. It includes stock except where a distinction between stock and share is expressed or implied. Stock is merely a name for the aggregate ownership of a company, which is divided into a number of units, each unit called a share1.The holders of common stock are called shareholders or stockholders. The capital represented by common shares is called equity capital. Authorized share capital represents the maximum amount of capital, which a company is permitted to raise from shareholders.

Retained Earnings

Retained earnings constitute the sum total of those profits which have been realized over the years since incorporation and which has been reinvested in the business rather than distributed in the form of dividends. These earnings stand to the credit of equity shareholders and the shareholders equity therefore includes them. The process of creating internal savings and their utilization in business is referred to as ploughing back of profits. The dividend decision in a firm is taken in the light of the firm's operating and financial conditions. Choosing a dividend policy which best suits the existing conditions are not only an important decision but also has significant consequences for a company. The disposal of net income is governed by many considerations.

Debt Composition of Capital Structure

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Small and Medium Scale Enterprises financing challenges the proposition that capital structure can be modelled by looking at agency theory, asymmetry of information, and taxes as long as short-term debt is not affected by the trade-off between tax benefits and bankruptcy costs. Long-term debt is affected by collateral sable assets but short-term debt is not (Pindalo *et al.,* 2006). From the entrepreneurs point of view, short-term debt is the best financing tool because it is perceived to be cheaper both entrepreneur and bank prefer short-term debt (Landier and Thesmar, 2009).

According to Moro and Fink (2010), repayment plan has a key role in building up the optimal debt structure of the firm since it is too short and from which the firm will end up again using short-term debt to finance long term assets, if it is too long, it can raise problems of underinvestment since the firm has additional, free cash temporarily available (Jensen, 1986).

Composition of Debt Capital

Total Debt Ratio

Total debt ratio measures the amount of a firm's total assets that is financed with external debt. This measure encompasses all short term liabilities and long-term liabilities. Nwude (2003) contend that this measures portion of the firm's assets that is financed by creditors. As the total debt ratio increase, so do a firm's fixed-interest charges, if the total debt ratio becomes too high, the cash flow the firm generates during economic recessions may not be sufficient to meet interest payments. In terms of its significance to a firm, theoretical literatures predict that debt is positively correlated with level of investment.

Long and Malitz (1985) found a significant positive relationship between the rate of investment in fixed plant and equipment and level of borrowing. The total debt ratio is measured by dividing total debt with the total assets of the firm. This proxy variable remained most notable measure of leverage ratio of a firm as adopted in many empirical studies (Zeitun and Tian, 2007; Onaolapo and Kajola, 2010; Tze-Sam and Heng, 2011; Kasozi and Ngwenya, 2010; Baker and Wurgler, 2002; Ju et al., 2004; and Booth et al., 1999; Khan, 2012; Azhagaiah and Gavoury, 2011).

$$\text{Total Debt ratio} = \frac{\textit{Total Assets}}{\textit{Total Debt}} \quad (1)$$

Debt Equity Ratio

Debt equity ratio is similar to the debt ratio and relates the amount of a firm's debt financing to the amount of equity financing. Actually, this measure of leverage ratio is not actually a new measure; it is simply the debt ratio in a different format. Debt equity ratio is the quantitative measures of the proportion of the total debt to residual owners' equity (Nwude, 2003). Thus, it is an indicator of company's financial structure and whether the company is more reliant on borrowing (debt) or shareholders capital (equity) to fund assets and activities. Many empirical studies in different jurisdictions have employed this measure of financial structure in their various studies (Zeitun and Tian, 2007; Agwor and Akani 2020, Majumdar and Chhibber, 1999; Azhagaiah and Gavoury, 2011) among others.

$$\text{Debt equity ratio} = \frac{\textit{Shareholders Funds}}{\textit{Total Debt}} \quad (2)$$

Long Term Debt Ratio

Although this measure is incorporated in the last two measures highlighted above, some analysts generally use this measure because most interest costs are incurred on long-term borrowed funds, and because long-term borrowing places multi-year, fixed financial obligations on a firm. Titman and Wessels (1988) contend that significant results are good reason for employment of different measures of leverage ratio because some of the theories of financial structure have different implications for not combining them as aggregate "debt ratio". Long term debt ratio is measured by dividing long term debt with the total assets of the firm, and has been adopted in several

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empirical studies (Titman and Wessels, 1988; Zeitun and Tian, 2007; Tze-Sam and Heng, 2011; Long and Malitz, 1985; Booth et al., 1999).

$$\text{Long term debt ratio} = \frac{\textit{Total Assets}}{\textit{Long Term Debt}} \quad (3)$$

Short Term Debt Ratio

Short term debts are debt obligations that mature within one accounting year. This measure is very appropriate to be included in the measures of leverage ratio due to the important of short term funding to a firm. This may be one of the reasons that led to adoption of different measures of leverage ratio rather than narrow measure of financial structure by some scholars. Titman and Wessels (1988) contend that theories have different empirical implications in regard to different types of debt instruments. Thus, mismatching funds is a situation when long term investments are financed by short term debt rather than long term debt. A good number of authors have employed this measure in their empirical studies (Timan and Wessels, 1988; Zeitun and Tian, 2007; Long and Malitz, 1995; Khan, 2012) among others. This is measured thus;

$$\text{Short term debt} = \frac{\textit{Total Assets}}{\textit{Short Term Debt}} \quad (4)$$

Financial Performance

A company's financial performance, in the view of the shareholder, is measured by how better off the shareholder is at the end of a period, than he was at the beginning and this can be determined using ratios derived from financial statements; mainly the balance sheet and income statement, or using data on stock market prices (Berger & Patti, 2002). These ratios give an indication of whether the company is achieving the owners' objectives of making them wealthier, and can be used to compare a company's ratios with other companies or to find trends of performance over time. Rosemary peavler (2008) observed that, measuring of return on investment involves use of ratios. The commonly utilized are ROA, which measures the efficiency with which the company is managing its investment in assets and using them to generate profit and ROE which measures the return on funds that investors have put into the company.

The Modigliani-Miller: Irrelevant and Relevant Theory

Modigliani and Miller (MM) 1958 illustrates that under certain key assumptions, firm's value is unaffected by its capital structure. Capital market is assumes to be perfect in Modigliani and Miller's world, where insiders and outsiders have free access to information; no transaction cost, bankruptcy cost and no taxation exist; equity and debt choice become irrelevant and internal and external funds can be perfectly substituted. The M-M theory (1958) argues that the value of a firm should not depend on its capital structure. The theory argued further that a firm should have the same market value and the same Weighted Average Cost of Capital (WACC) at all capital structure levels because the value of a company should depend on the return and risks of its operation and not on the way it finances those operations. Miller brought forward the next version of irrelevance theory of capital structure. He appealed that, capital structure decisions of firms with both corporate and personal taxes circumstances are irrelevant (Miller, 1977).

Static Trade-Off Theory

Kraus and Litzenberger (1973) opined that the static trade-off theory assumes that firm's trade-off the benefits and costs of debt and equity financing and find an optimal capital structure after accounting for market imperfections such as taxes, bankruptcy costs and agency costs. The theory states that there is a benefit to financing with debt, specifically the tax benefit. However there is also a cost of financing with debt, namely the indirect bankruptcy costs and the more direct financial distress costs of debt. This is thus the trade-off that all firms, whom are maximizing value, should focus on when choosing the amount of debt and

equity needed to finance their operations. Needless to say, there is a maximum point where the marginal benefit of further increases in debt declines as debt increases, whereas the marginal cost increases.

Hence, the static trade-off theory of capital structure states that optimal capital structure is obtained where the net tax advantage of debt financing balances leverage related costs such as financial distress and bankruptcy, holding firm's assets and investment decisions constant. Baxter (1967) & Altman (1984, 2002) in view of this theory, claim that issuing equity means moving away from the optimum and should therefore be considered bad news. According to Myers (1984), firms adopting this theory could be regarded as setting a target debt-to-value ratio with gradual attempt to achieve it.

Pecking Order Theory

The pecking order theory of capital structure as introduced by Donaldson (1961) is among the most influential theories of corporate leverage. It goes contrary to the idea of firms having a unique combination of debt and equity finance, which minimize their cost of capital. The theory suggests that when a firm is looking for ways to finance its long-term investments, it has a well-defined order of preference with respect to the sources of finance it uses. It states that a firm's first preference should be the utilization of internal funds (retain earnings), followed by debt and then external equity. He argues that the more profitable the firms become, the lesser they borrow because they would have sufficient internal finance to undertake their investment projects. He further argues that it is when the internal finance is inadequate that a firm should source for external finance and most preferably bank borrowings or corporate bonds. And after exhausting both internal and bank borrowing and corporate bonds, the final and least preferred source of finance is to issue new equity capital.

Application of Theory

This study is built on pecking order theory. The theory suggests that when a firm is looking for ways to finance its long-term investments, it has a well-defined order of preference with respect to the sources of finance it uses. It states that a firm's first preference should be the utilization of internal funds (retain earnings), followed by debt and then external equity. He argues that the more profitable the firms become, the lesser they borrow because they would have sufficient internal finance to undertake their investment projects. He further argued that it is when the internal finance is inadequate that a firm should source for external finance and most preferably bank borrowings or corporate bonds. And after exhausting both internal and bank borrowing and corporate bonds, the final and least preferred source of finance is to issue new equity capital

Empirical Review

Abbasali & Esfandir (2012) investigated the impact of capital structure on the financial performance of companies listed in the Tehran Stock Exchange. Variables of return on assets ratio (ROA) and return on equity ratio (ROE) used to measure the financial performance of companies. Results suggest that there is a significant negative relationship between debt ratio and financial performance of companies, and a significant positive relationship between asset turnover, firm size, asset tangibility ratio, and growth opportunities with financial performance measures. But the relationship between ROA and ROE measures with the firm age is not significant. Also, some of the studied industries have effect on firm performance. In addition, research results shows that by reducing debt ratio, management can increase the company's profitability and thus the amount of the company's financial performance measures and can also increase shareholder wealth.

Abdul (2010) used 36 engineering sector firms in Pakistani market listed on the Karachi Stock Exchange (KSE) during the period 2003-2009 applied Pooled Ordinary Least Square regression and revealed the results show that financial leverage measured by short term debt to total assets (STDTA) and total debt to total assets (TDTA) has a significantly negative relationship with the firm performance measured by Return on

Assets (ROA), Gross Profit Margin (GM) and Tobin's Q. The relationship between financial leverage and firm performance measured by the return on equity (ROE) is negative but insignificant. Asset size has an insignificant relationship with the firm performance measured by ROA and GM but negative and significant relationship exists with Tobin's Q. Firms in the engineering sector of Pakistan are largely dependent on short term debt but debts are attached with strong covenants which affect the performance of the firm.

Abdul (2012) conducted a similar study to determine the relationship between capital structure decisions and the performance of firms in Pakistan. The study concluded that financial leverage has a significant negative relationship with firm performance as measured by ROA, GM, and Tobin's Q. The relationship between financial leverage and firm performance as measured by the return on equity (ROE) was negative but not statistically significant.

Abdus (2013) ascertained the effects of lease finance on the financial performance of Small and Medium Scale Enterprises located on Munshigang and Kushtia in Bangladesh and whether lease finance has a relationship with the Return on Equity (ROE) /Return on Assets (ROA) of organizations. This study selected 23 medium enterprises and 30 small enterprises as samples. The results show a positive correlation between lease finance and ROE/ROA) through simple regression statistics.

Dagogo and Ollor (2012) studied the effect of venture capital on Small and Medium Scale Enterprises. They found out that small and Medium Scale Enterprises do not thrive well when they use venture capital financing. Reason being that such source of finance is usually for groups of wealthy investors and large conglomerates. Also, (Gbandi & Amissah, 2012) stressed that Small and Medium Scale Enterprises do not use venture capital as most operators are buoyant enough to embark on high risk businesses. This was opined after they studied the effect of venture capital and P2P on Small and Medium Scale Enterprises.

Aburub (2012) in his research investigated the impact of capital structure on the firm performance of companies listed in Palestine Stock Exchange during 2006 to 2010 which 28 companies were selected as samples. In this study, five measures of Return On Equity (ROE), return on assets (ROA), earnings per share (EPS), market value to book value of equity ratio (MVBR) and Tobin Q ratio as the measures of accounting and market of firm performance evaluation and also as dependent variables., and four measures of short-term debt to total assets ratio (SDTA), long-term debt to total assets ratio (LDTA), total debt to total assets ratio (TDTA) and total debt to total equity ratio (TDTQ) as the measures of capital structure and also as the independent variables were selected. Results indicate that the capital structure has a positive effect on firm performance evaluation measures.

Aghabeygzadeh & Akbarpour (2011) analyzed the ROA and ROE against the STD, LTD and Equity to Total Liability. Overall the results showed that all the capital structure variables have a positive and significant effect on performance is case of ROA. On the other hand the impact of capital structure on ROE was not confirmed, although Dwilaksono (2010) found that STD and TD has a negative impact on ROE. Moreover according to the author as the country is a developing country and that why debt market is underdeveloped and firms mostly relay on short term financing, STD was found to have a positive impact on ROA while LTD has a negative impact on ROA (Aghabeygzadeh & Akbarpour, 2011).

Ahmad et al. (2012) in their study on the impact of capital structure on firm performance by analysing the relationship between operating performance of Malaysian firms, measured by ROA and ROE with short-term debt (STD), long-term debt (LTD) and total debt (TD). This study covered two major sectors in Malaysian equity market which are the consumers and industrials sectors. 58 firms were identified as the sample firms and financial data from the year 2005 through 2010. The study revealed that only STD and TD have significant relationship with ROA while ROE

has significant on each of debt level. However, the analysis with lagged values shows that none of lagged values for STD, TD and LTD has significant relationship with performance. Also, Abor (2007) argued that quoted firms exhibit higher debt ratios than those of Small and Medium Scale Enterprises

Akinyomi (2013) used three manufacturing companies selected randomly from the food and beverage categories and a period of five years (2007-2011) used the static trade-off and the pecking order theory point of view. He adopted the use of correlation analysis method and revealed that each of debt to capital, debt to common equity, short term debt to total debt and the age of the firms' is significantly and positively related to return on asset and return on equity but long term debt to capital is significantly and relatively related to return on asset and return on return on equity. His hypothesis also tested that there is significant relationship between capital structure and financial performance using both return on asset and return on equity.

Al-Taani (2013) used short term debt to total assets (STDTA), long term debt to total assets (LTDTA) and total debt to equity (TDE) as indicators of capital structure and used return on assets (ROA) and profit margin (PM) as performance indicators to study 45 companies listed on the Amman Stock Exchange (ASE) and capital structure and firm performance were correlated negatively and insignificantly. Firms with moderate level of long term debt, as in the market, will face an increase in sales, but firms with higher levels of debt standard will not have significant growth in sales or in market.

Babalola (2014) used 31 manufacturing firms with audited financial statements for a period of fourteen years (1999-2012) from static trade-off point of view. He employed the triangulation analysis and the study revealed that capital structure is a trade-off between the costs and benefits of debt, and it has been refuted that large firms are more inclined to retain higher performance than middle firms under the same level debt ratio.

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Bassey, Aniekan, Ikpe and Udo (2013) used a sample of 60 unquoted agro-based firms in Nigeria within a period of six years (2005-2010) from the agency cost theory point of view. They employed the Ordinary Least Square regression and descriptive statistics and revealed that only growth and educational level of firms owners were significant determinants of both long and short term debt ratios, assets structure, age of the firms, gender of owners and export status impacted significantly on long term debt ratios, while business risk, size and profitability of firms were major determinants of short term debt ratio for the firms under investigation.

Binsbergen, Graham & Yang (2011) evaluated the optimal capital structure for large firms by calculating the corresponding benefits and cost of debt. As according to Miller and Modigliani (1968) trade off theory optimal capital structure is the point at which the marginal cost of debt is exactly equal to the marginal benefit attained from using debt. Variables like cash flows, book to market ratio, intangible assets and that whether firm give dividend or not were used because they also have an impact on the firm performance. The results supported the trade-off theory that as firm increase their leverage the performance of the firm decreases which is due to the increases in the marginal cost of debt i.e. with the increase in debt the risk (financial risk) of the firm increases and it leads to an increase in the required rate of returns and it ultimately leads to increase in the cost of debt for a firm. Azhagaiah & Gavoury (2011) also found that increasing debt reduces the performance because of the increase in required rate for the investment.

Céspedes et al. (2010) investigated the relationship between capital structure and ownership in seven Latin American countries during 1996 to 2005. In this study, the numbers of 6766 firm-years were selected as a sample. They concluded that there is a positive relationship between leverage and ownership concentration. Also, the research results indicate a positive relationship between leverage and growth variable, and a negative relationship between leverage and profitability and larger firms have more tangible assets.

Chandrasekharan (2012) conducted a study using 87 firms out of the population of 216 firms listed on the Nigeria stock exchange for a period of five years (2007-2011) from static trade-off, agency and pecking order theory point of view. He employed the panel multiple regression analysis and the study reveals that for the Nigerian listed firms; firms' size, growth and age are significant with the debt ratio of the firm, whereas, profitability and tangibility are not.

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Cheng et al. (2010) found evidence that if debt ratio is between 53.97% - 70.48%, then there is a positive relation between leverage and firm performance, but if the debt is more than 70.48% then that relation would be in reverse, these results were found after studying 650 Chinese firms. The relationship between leverage and firm performance is dual sided which means that performance is affected by capital structure positively and negatively also, Meng et al. (2010).

Chepkemoi (2013) investigated the effect of capital structure of Small and Medium Scale Enterprises on their financial performance, a case of Nakuru town in Kenya. The measurements as regard to this study were profitable, liquidity, sales growth, and debt ratio variables which were intervened by inflation, government policy and political environment variables. The study targeted 295 Small and Medium Scale Enterprises which are registered as companies in Nakuru town where a sample of 170 Small and Medium Scale Enterprises was selected. The findings revealed that capital structure have negative effect on firm profitability. However, capital structure has positive and significant effect on firm liquidity. Similarly, capital structure indicated a positive effect on sales growth. Based on study findings under increased capital structure, firm profitability decreases. On the other hand, under increased capital structure, liquidity and growth in sales increases.

Chowdhury and Chowdhury (2010) found that debt positively affect performance. Overall TD has a negative and strong effect on the performance because of the inefficient use of funds and the agency cost. Memon, Bhutto and Abbas (2012) also found that agency cost lead to the lower performance of the firms. In a study of Brazilian firms it was found that LTD has a negative impact on ROE and off course performance of a company, but for STD the impact was found to be positive and significant. For equity the relation with the performance in shape of ROE was positive but low performance was experienced with high level of debts (Mesquita & Lara, 2003).

Dube (2013*)* investigated the impact of debt financing on the operations of Small and Medium Scale Enterprises in Masvingo. This study used a sample of 80 Small and Medium Scale Enterprises The results from the study show that debts finance have a positive impact on productivity of Small and Medium Scale Enterprises. The study also established that firms which receive adequate funding from banks improve their productivity. Another finding of the study was that the cost of borrowing was too high to enable firms to borrow adequate amount of required finance investment.

Dwilaksono (2010) studied the impact of capital structure on the firm performance for mining industry

of Jordan using ROE against STD, LTD and both variables simultaneously. Results showed that STD has a positive impact on ROE while LTD has a negative impact on ROE.Mesquita & Lara (2003) found a negative impact of LTD on ROE. According to author the reason for STD positivity is its low required rate because STD has lessor duration and thus less risk is involved in it, on the other hand LTD has higher duration and risk than STD and that's why higher cost of capital than STD.

Fatoki (2011) investigated the Impact of Human, Social, and Financial Capital on the Performance of Small and Medium Scale Enterprises for evidence from King Williams‟ Town and Port Elizabeth in the Eastern Cape Province of South Africa study based in manufacturing, retail, wholesale and service Small and Medium Scale Enterprises sector. In this study, 248 Small and Medium Scale Enterprises were selected as samples. The results indicate that there is a significant positive relationship between human, social and financial capital and the performance of Small and Medium Scale Enterprises. Also, the findings by Saeedi and Mahmoodi (2011) indicate that financial leverage may affect different measures of performance in different ways.

Ferati and Ejupi (2012) examined the impact of capital structure on the firm performance and profitability of Macedonian firms for a sample size of 150 firms and 10 years and found that debt has a negative impact on the return on equity (ROE). The reasons mentioned was that with increase in debt ratio the required rate of return increases and hence decrease profitability. The results were consistent with Velnampy & Niresh (2012) as they also gave the same arguments about the decrease in the firm performance with the increase in the level of debt.

Ferati & Ejupi (2012) provided us with the empirical evidence for in the impact of STD, LTD and Total Equity on ROE or simply organizational performance. Results proved that LTD has an indirect impact on the ROE because of its high cost of capital and also leads to agency cost when exceeded from a certain level. According to the author most of the firms prefer STD on LTD because of its lower cost of capital as compared to LTD and as proved from the results that STD has a positive impact of profitability in shape of ROE.

Gbandi and Amissah (2012) they opined that Small and Medium Scale Enterprises in Nigeria account for over 90% of Nigerian business. In the same vein Policy insight No.7 of the African economic outlook 2004/2005 states that Nigerian Small and Medium Scale Enterprises account for some 95% of formal manufacturing activity and 70% of industrial jobs. In spite of this dominance of the Nigerian economy by the Small and Medium Scale Enterprises, their contribution to the GDP is only about 1%. However, access to finance by the Small and Medium Scale Enterprises is very critical to the success of the Small and Medium Scale Enterprises. (Luper, 2002) in his empirical evidence showed that finance contributes about 75% to the success of the Small and Medium Scale Enterprises. To alleviate the problem of funding, the Federal government and CBN have over the years established many credit institutions with the objectives of improving access to finance to Small and Medium Scale Enterprises. These initiatives appear not to have paid off as the Small and Medium Scale Enterprises still contribute well below 5% to the GDP (Soludo, 2010).

Gbandi (2012) studied the ease to which Small and Medium Scale Enterprises access credits from financial institutions using 30 banks across Nigeria. He found out that the greatest challenge facing small and Medium Scale Enterprises in Nigeria is finance. Other empirical evidences showed that epileptic finance is a great problem facing Small and Medium Scale Enterprises (Fatai, 2009). Also, Duflo and Banerjee (2011) in their studies have argued that production technologies follow a step-function and that credit must be needed for Small and Medium Scale Enterprises to make the jump to the next level that is move from manual to automatic production.

Gropp and Heider (2010) analyzed the factors determining the financial structure of U.S and European banks by collecting data for 14 years from 1991 to 2004 on 200 U.S and European banks. The main intention of this research was to identify the effect of variables such as collateral, profitability, market-to-book ratio, size, risk and dividend on banks. The empirical estimation of fixed effects regression model indicates that risk, profitability and dividend have negative impact on leverage of the bank while collateral and size have direct a relation with debt ratio and the separate analysis of US and European banks also reports the same results. Furthermore, they suggested that regulatory capital requirements are of second order importance.

Imad (2015) examined the impact of the leverage on the firms' value utilizing unbalanced pooled Ordinary Least Square (OLS) cross-sectional time series panel data regression approach to all listed companies in Amman Stock Exchange (ASE) during the period 2000-2013 after excluding the financial sector and services sector, due to their own characteristics. F-test was used to test the hypothesis that the changes in the firms' leverage level significantly explain the changes in the firms' value. The results shows that the firms' leverage level affect the firms' value for the Jordanian listed companies included in the sample test, this result inconsistent with the result of Rajan and Zingales (1995) who find inverse association between debt and performance.

Javed and Akhtar (2012) explored the relationship between capital structure and financial performance. They concluded that there is a positive relationship between financial leverage, financial performance, and growth and size of the companies. The study, which focused on the Karachi Stock Exchange in Pakistan, used correlation and regression tests on financial data. The findings of the study are consistent with the agency theory. This study however isolated the other financing decisions and focused only on financial leverage.

Karanja (2014) conducted a study on the effect of capital structure on financial performance of small and medium enterprises in dairy sector in Kiambu County in Kenya. Debt equity ratio; debt asset ratio and liquidity were used to measure variables of the study. 50 dairy Small and Medium Scale Enterprises in Kiambu County were selected as a sample. The results indicate that Debt equity ratio was significant at 5% level of significance (0.009). The estimate of coefficient value for Debt equity ratio was -0.179; Debt asset ratio was significant at 5% level of significance (0.006) with estimate of coefficient value of 0.195 whereas liquidity ratio was significant at 5% level of significance (0.01) with coefficient value of 0.012 which indicates that the three factors are predictors of financial performance of small and medium enterprises in dairy sector in Kiambu County.

Kaumbuthu (2011) carried out a study to determine the relationship between capital structure and return on equity for industrial and allied sectors in the Nairobi Securities Exchange during the period 2004 to 2008. Capital structure was proxy by debt equity ratio while performance focused on return on equity. The study applied regression analysis and found a negative relationship between debt equity ratio and ROE. The study focused on only one sector of the companies listed in Nairobi Securities Exchange and paid attention to only one aspect of financing decisions. The results of the study, therefore, may not be generalized to the other sectors.

Kebewar & Shah (2012) investigated the impact of capital structure on the firm performance by observing ROA (Return on Assets) against the total debt used by a firm. The focus was the impact of debt use on profitability by checking the validity of signaling theory, tax theory and agency cost theory. Firms with different sizes were included in the sample; results showed that there is a non-linear relationship between the capital structure decisions or the use of debt and firm's respective performance in all size firms.

Khalaf (2013) used a sample of 45 manufacturing companies listed on the Amman Stock Exchange were used for this study which covers a period of five (5) years from 2005-2009. Multiple regression analysis was

applied on performance indicators such as Return on Asset (ROA) and Profit Margin (PM) as well as Short-term debt to Total assets (STDTA), Long term debt to Total assets (LTDTA) and Total debt to Equity (TDE) as capital structure variables. The results show that there is a negative and insignificant relationship between STDTA and LTDTA, and ROA and PM; while TDE is positively related with ROA and negatively related with PM. STDTA is significant using ROA while LTDTA is significant using PM. The study concludes that statistically, capital structure is not a major determinant of firm performance. It recommends that managers of manufacturing companies should exercise caution while choosing the amount of debt to use in their capital structure as it affects their performance negatively.

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Khan (2012) examined the impact of different levels of debt on ROA, ROE, GPM and Tobin's Q. From the results it was concluded that most of the firms finance through short term bank loans (STD) rather than long term debt and even equity because short term loans are easily available and at a reasonable interest rate as compared to LTD, secondly bonds market and up to some extent equity market is underdeveloped leaving the firms to rely on STD. Author added that due to unequal information and market inefficiency external financing is very expensive and is kept as a last resort, which means that firms of Pakistani market follow the "Pecking Order Theory". For STDTA and TDTA the impact on ROA, GPM and Tobin's Q was negative and as well as significant.

Maina and Kondongo (2013) investigated the effect of debt-equity ratio performance of firms listed at the Nairobi Securities exchange. A census of all firms listed at the Nairobi Security Exchange from year 2002-2011 was the sample. The study found a significant negative relationship between capital structure (DE) and all measures of performance. This results collaborated MM theory that indeed capital structure is relevant in determining the performance of a firm, the study further found that that firms listed at NSE used more short-term debts than long term.

Mitani (2014) chosed 799 manufacturing firms listed on the Tokyo Stock Exchange (TSE) and presented the evidence of positive correlation between leverage and market share under both types of competition, Cournot competition and Bertrand competitions. Huang and Song (2006) conducted research on Chinese firms and found negative relation between capital structure and firm performance. Ghosh (2007) came to know that leverage is inversely correlated with profitability.

Nirajini and Priya (2013) used data of trading companies listed in Sri Lanka from year 2006 to 2010 and used correlation and multiple regression analysis and found that there is a significant relationship between capital structure and firm performance. There are mixed results about the influence of capital structure on firm performance.

Nosa & Ose (2010) also found that STD has a positive impact of the corporate performance. In addition simultaneously the impact of LTD is stronger than STD because most of the time taking more debt leaves firms unable to pay their short term obligations, as taking LTD beyond an average level increases the default risk

and increase the liquidity problems for a firm (Stiglitz, 1974).

Onalapo and Kojala (2010) proved that profitability is negatively affected by leverage. More profitable firms prefer lower leverage, Jang (2011). Soumadi and Hayajneh (2012) studied Jordanian firms, including high financial leveraged companies and low financial leveraged companies and found that firm performance and leverage are correlated negatively.

Onaolapo and Kajola (2010) investigated the effect of capital structure on financial performance of companies listed on Nigeria Stock Exchange. This study was performed on 30 nonfinancial companies in 15 industry sectors in a 7-year period from 2001 to 2007. The results showed that the capital structure (debt ratio) has a significant negative effect on financial measures (ROA and ROE) of these companies.

Ong and Teh (2011) investigated on the capital structure and firms performance of construction companies for a period of four years (2005-2008) in Malaysia. Long term debt to capital, debt to asset, debt to equity market value, debt to common equity, long term debt to common equity were used as proxies as the independent variables (capital structure) while returns on capital, return on equity, earnings per share, operating margin, net margin were used to proxy the corporate performance. The result shows that there is relationship between capital structure and corporate performance.

Park and Jang (2013) found a positive relation between capital structure and firm performance after examining the data from 1995 to 2008 of 308 restaurant firms. Debt can efficiently be used to reduce free cash flows and to increase firm profitability, Park and Jang (2013). Capital structure does impact firm performance in a positive way, Nirajini and Priya (2013) found after analyzing financial statements of companies in Sri Lanka.

Patel & Bhatt (2013) discussed the impact of the capital structure on the performance of the firm for the nonfinancial firms listed on the National Stock Exchange by studying any alteration in firm's Net Operating Profitability (NOP) due to change in capital structure variables. The author ended up with a conclusion that Total Debt has a negative impact on the firm's profitability. LTD was also found to have an indirect impact on the firm's net profitability, this was attributed by the author that as LTD increases the management started fearing about their jobs and thus lead to underinvestment, plus the high interest rates incurred on LTD increases the fixed cost and ultimately financial leverage and thus decreases free cash flows and eventually profitability (Mesquita & Lara, 2003). Equity was found to have a positive impact on the net profits and the author has suggested for the firms to go for equity financing. SIZE of the firm has also a direct impact of Net Profitability of the firms (Raheman, Zulfiqar, & Mustafa, 2007).

Pratheepkanth (2011) examined the impact of capital structure decisions on the firm performance for Sri Lankan firms. Several performance variables i.e. ROA, ROE, NP and GP were observed against debt to equity ratio. A negative and significant relationship was found between NP and capital structure but a capital affected GP positively but the impact was a weak one. For ROA and ROE the effect of capital structure was a negative and strong one.

Saeed & Badar (2013) examined the impact of capital structure on firm performance by analyzing the ROA and ATR against different levels of debt i.e. STD, LTD and TD. The results came were different from most of the previous studies. According to the results LTD has a significantly positive impact on the ROA. The results were compatible with

Aghabeygzadeh & Akbarpour (2011) as they found a positive impact as well. On the other hand TD and STD were found to have a negative but significant effect on the ROA. The reason mentioned by the author is that because the LTD is mostly given by banks and due to competition among the banks the LTDs are usually taken with lower required rate of returns and also efficiently use of the funds. STD has relatively higher required rate of return and because in Pakistan the

Money Market is not well developed and that's why affect negatively the ROA (Saeed & Badar, 2013).

Saeed (2013) assessed the impact of capital structure on the performance of banks in Pakistani for the period 2007 to 2011 found a positive relationship between determinants of capital structure and performance of banking industry. The performance was measured by Return on assets (ROA), Return on equity (ROE) and earnings per share (EPS). Determinants of capital structure included long term debt to capital ratio, short term debt to capital ratio and total debt to capital ratio. When come to Ethiopia, very few studies are conducted pertaining to capital structure according to the researcher knowledge.

Saeed, Gull, & Rasheed (2013) gave empirical results for the impact of capital structure on firm performance by observing firm performance against the capital structure decisions. Based on the results of the study STDTA has a positive and significant impact on ROA, ROE and EPS while LTDTA was found to be negatively related to all the performance variables. On the other hand TD was proved to have an optimistic impact of ROA, ROE and EPS. SIZE of the firm also affected the performance positively and significantly as well. AG (Assets Growth) affected ROA and ROE insignificantly negative but for EPS the relation was significantly negative. The reason for positive impact of STDTA was because of its lower required rate (Mesquita & Lara, 2003). An addition to that according to the author STDTA is easily accessible as compared to LTDTA because bonds market is not yet developed in the country. The same results were found by Amjed (2011) for the non-financial sector as STD to be positively related and LTD to be negatively related to the firm performance.

Saeedi and Mahmoodi (2011) examined the relationship between capital structure and performance of listed firms in the Tehran Stock Exchange. According to their study, market measures of performance are positively related to capital structure and whereas ROA is positively related to capital structure, no significant relationship exists between ROE and capital structure. The finding by this study indicates that financial leverage may affect different measures of performance in different ways.

Salteh, Ghanavati, Khanqah, & Khosroshahi (2012) concluded that ROA is negatively affected at all levels of debt. It proves that empirically the results negated the theories mentioned above. Later on in another study the same variables were used and results showed that using debt has a significantly negative impact on the firm performance as increasing debt reduced ROA (KEBEWAR, 2013). The impact became worse in case of small and medium firms as compared to large firms.

San & Heng (2011) conducted a study to examine the impact of financial or capital decisions on firm performance by studying the construction industry. Viewing the results it was concluded by the author that capital structure has a linear relationship with the firm performance and very integral to one's success but for some companies the impact was insignificant. For large construction companies ROC and EPS were significantly related to the capital structure while other performance variables showed no relationship. Debt to Equity Ratio, LTD and TDTA affected the performance variables while others failed to show any. For medium size firms only long term debts showed an impact on the performance while other capital structure variables failed to do so. For small size firm only EPS showed to be affected by the capital structure variable that is Total Debt. ROA, ROE and NPM were not affected by any of the capital structure variables.

Semiu and Collins (2011) used a sample size of 150 respondents and 90 firms were selected for both primary data and secondary data respectively for a period of five years (2005-2009) from the relevance, pecking order, the free cash flow, the agency cost and the trade-off theory point of view. They employed the descriptive statistics and Chi-square analysis and suggested that a positively significant relationship exists between a firm's choice of capital structure and its market value in Nigeria.

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Literature Gap

Khalaf (2013) used a sample of 45 manufacturing companies listed on the Amman Stock Exchange were used for this study which covers a period of five (5) years from 2005-2009. The study is foreign and cannot be used for Nigeria. The present study focuses on quoted small and medium scale enterprises in Nigeria. Abdul (2010) used 36 engineering sector firms in Pakistani market listed on the Karachi Stock Exchange (KSE) during the period 2003-2009 applied Pooled The study is foreign and cannot be used for Nigeria. The present study focuses on quoted small and medium scale enterprises in Nigeria. Raheman, Zulfiqar and Mustafa (2007) conducted research on 94 non final companies listed on the Islamabad Stock Exchange (ISE) and used data from 1999 to 2004. The study is foreign and cannot be used for Nigeria. The present study focuses on quoted small and medium scale enterprises in Nigeria.

METHODOLOGY

The study adopted ex-post facto research design to examine the effect of capital structure composition on the performance of quoted small and medium scale enterprises in Nigeria. The population comprises all the quoted small and medium scale enterprises on the floor of the Nigerian Stock Exchange. The study relied on cross sectional data collected from the publications of the quoted SMEs in the sample size.

Data Analysis

The method of data analysis used in this research work is the descriptive, correlation and regression technique. In order to test the hypotheses concerning the relationship between the dependent and independent variables, Eview 9.0 software was used the panel data method of analysis with simple percentages and ratio scale. This is important to access the extent to which capital structure affects the performance of SMEs quoted on the floor of Nigerian Stock Exchange. Regression analysis was used to determine the relationship between the dependent and independent variables while the magnitude of change in share prices for the companies was analyzed.

Hence, endogeneitv problems arise when the explanatory variables are correlated with the disturbance term ε_{it} (Mayston, 2002; Nakamura and Nakamura, 1981: Hausman and Taylor, 1981). In order to circumvent these problems, panel estimation techniques of fixed and random effects will be adopted in this study, in addition to the traditional pooled regression estimation. Decisions will be made between the fixed and random effect models using the Hausman specification test.

The panel model for the study is specified thus:

$$Y_{it} = \beta X'_{it} + \alpha Z_i^{'} + \varepsilon_{it} \qquad (5)$$

Where:

Y	=	dependent variable
D	=	independent variable
β_o	=	intercept
β_i	=	coefficient of the explanatory variable
e	=	error term
I	=	cross-sectional variable
T	=	time series variable

Model Specification

Deriving from the theoretical model, we specify the pooled, fixed and random impact of capital structure on performance of SMEs in twenty selected firms listed on Nigeria stock exchange.

Pooled regression specification

$$ROI_i = \alpha o + \alpha 1\, OSC_i + \alpha_2\, RE_i + \alpha_3 DAR_{it} + \alpha_2\, STDR_i + \alpha_3 DER_{it} + \varepsilon 1_i \qquad (6)$$

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Fixed Effect Model Specification

$$ROI_{it} = \alpha o + \alpha 1\, OSC_i + \alpha_2\, RE_i + \alpha_3 DAR_{it} + \alpha_2\, STDR_i + \alpha_3 DER_{it_{it}} + \sum_i^9 = 1\, \alpha_i\, idum + \varepsilon 1_{it} \quad (7)$$

Random effect model specification

$$ROI_{it} = \alpha o + \alpha 1\, OSC_i + \alpha_2\, RE_i + \alpha_3 DAR_{it} + \alpha_2\, STDR_i + \alpha_3 DER_{it} + \mu i + \varepsilon 1_{it} \quad (8)$$

Where
ROI = Return on investment
OSC =percentage of ordinary share capital to total capital
RE = Retained earnings as percentage total capital
DAR = Debt to total assets
STDR = Short term debt as percentage of total capital
DER = Debt Equity ratio
et = Stochastic or disturbance/error term.
t = Time dimension of the variables
α 0 = Constant or intercept.

ANALYSIS AND DISSCUSSION OF FINDINGS

Table 4.1: Correlated Random Effects - Hausman Test

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		17.274359	5	0.0040
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
STDR	32.821804	31.510667	10.600948	0.6872
RE	0.348406	1.025914	0.029106	0.0001
OSC	-0.028784	-0.005362	0.000042	0.0003
DER	-0.039076	1.708692	0.280731	0.0010
DAR	21.650371	37.884769	21.826035	0.0005

Source: Computed from E-view

Following the various methods of panel data analysis, the question of which is the most appropriate or suitable methods arises. Therefore, some means of selecting the most suitable method among the different approaches especially between the fixed effect model (FEM) and random effect model (REM) is needed. But when such a correlation exists, the Fixed Effects Model would be more suitable because the random effect model would be inconsistently estimated. From the table above the probability of the Hausman test is greater than 0.05, therefore, the study adopt the fixed effect model.

Table 2: Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
		Pooled Effect Model		
STDR	39.82370	46.28433	0.860414	0.3942
RE	1.266156	0.096378	13.13737	0.0000

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OSC	0.000774	0.021091	0.036718	0.9709
DER	3.517826	2.102706	1.673000	0.1014
DAR	51.84489	45.09511	1.149679	0.2565
C	-32.93788	30.47554	-1.080797	0.2857
R-squared	0.832963	Mean dependent var		4.835920
Adjusted R-squared	0.813982	S.D. dependent var		0.362482
S.E. of regression	0.156338	Akaike info criterion		-0.761429
Sum squared resid	1.075427	Schwarz criterion		-0.531986
Log likelihood	25.03571	Hannan-Quinn criter.		-0.674055
F-statistic	43.88308	Durbin-Watson stat		1.333717
Prob(F-statistic)	0.000000			

Fixed Effect Model

STDR	32.82180	34.98844	0.938076	0.3546
RE	0.348406	0.208937	1.667516	0.1043
OSC	-0.028784	0.017661	-1.629803	0.1121
DER	-0.039076	1.800070	-0.021708	0.9828
DAR	21.65037	34.42129	0.628982	0.5334
C	-14.30844	23.17487	-0.617412	0.5410

Effects Specification

Cross-section fixed (dummy variables)			
R-squared	0.926339	Mean dependent var	4.835920
Adjusted R-squared	0.896874	S.D. dependent var	0.362482
S.E. of regression	0.116405	Akaike info criterion	-1.220162
Sum squared resid	0.474252	Schwarz criterion	-0.646555
Log likelihood	45.50405	Hannan-Quinn criter.	-1.001729
F-statistic	31.43907	Durbin-Watson stat	2.326993
Prob(F-statistic)	0.000000		

Random Effect Model

STDR	31.51067	34.83662	0.904527	0.3706
RE	1.025914	0.120620	8.505350	0.0000
OSC	-0.005362	0.016435	-0.326278	0.7458
DER	1.708692	1.720326	0.993238	0.3260
DAR	37.88477	34.10277	1.110900	0.2726
C	-23.63367	23.00753	-1.027215	0.3099

Effects Specification

	S.D.	Rho
Cross-section random	0.094196	0.3957
Idiosyncratic random	0.116405	0.6043

Weighted Statistics

R-squared	0.647470	Mean dependent var	2.339143
Adjusted R-squared	0.607410	S.D. dependent var	0.210102
S.E. of regression	0.131644	Sum squared resid	0.762521

F-statistic	16.16242	Durbin-Watson stat	1.655803
Prob(F-statistic)	0.000000		
	Unweighted Statistics		
R-squared	0.808009	Mean dependent var	4.835920
Sum squared resid	1.236087	Durbin-Watson stat	1.061194

Source: Computed from E-view

Analysis of Results

F-Test: The F-calculated value is 31.43907 and probability of 0.000000 considering the P-value, the chosen level of significance α =0.05 [5%] is less than the P-value of F-statistic. It is concluded that the regression plane is statistically significant. This means that the joint influence of the explanatory variables on the dependent variable is statistically significant.

Coefficient of Multiple Determinations (R^2): The computed coefficient of multiple determination of 0.896874 from the fixed effect shows that 89.6 percent of the total variations in the dependent variable is accounted for, by the explanatory variables while the remainder is attributed to variable is attributable to the influence of other factors not included in the regression model.

Durbin Watson statistics (DW): The computed DW is 2.326993 from the fixed effect results shows that at 5% level of significance with two explanatory variables and 13 observations, the abulated DW for dL and du are 0.861 and 1.562 respectively. The value of computed DW is greater than the lower limit. Therefore, there is no evidence of positive first order serial correlation.

Discussion of Findings

The firm's debt capital is predicted not to have any significant effect on its return on equity of the small and medium scale enterprises in Nigeria. However, from the regression results in Table 3 the coefficients of the debt capital as expected are highly significant and positively related to the return on equity. These results show that higher level of debt capital lead to increase on return on equity. Furthermore, it may provide support for the proposition that due to agency conflicts, companies over-leverage themselves does not exist thus affecting their performance positively. This findings are consistent with the finding of previous studies such as Tian and Zeitun (2007), Salawu (2007),Akani and Lucky (2020), Chen (2004), Tzelepsis and Skuras (2004), Gleason et al (2000), Krishnan and Moyer (1997) and Rajan and Zingales (1995) among others. The positive and significant coefficient of debt capital is contrary to the findings of Brick and Ravid (1985) that long term debt increases a firm's value, which could however be due to the lower ratio of long term debt in the financial structure of Nigerian companies.

This finding does not support the pecking order theory of financial structure which suggests that profitable firms initially rely on less costly internally generated funds before looking out for external finances. It is therefore, expected that highly profitable Nigerian firms will require less debt finance. The positive relationship between debt capital and return on equity also suggests that there no agency issues which may lead Nigerian firms to use higher than appropriate levels of debt in their financial structure thereby producing lower performance. The significant positive relationship further reflects that the bond market in the Nigerian economy is underdeveloped and is consistent with signs of underdeveloped bond market in all markets. Intuitively, upon taking a closer look at the results, there may be other reasons for this positive relationship rather than the propositions of the pecking order hypothesis. It could be due to decisions by the firms to avoid underinvestment problems and mispricing of new projects. More so, listed firms in Nigeria are most times

attracted by equity finance due to the substantial capital gains in the secondary market. Hence, there could be a little deviation from the reasons proposed by the pecking order theory.

The study predicted no significant relationship between equity capital and return on equity quoted manufacturing firms. It is however interesting to note that there is empirical evidence of a highly positive relationship between the firms' equity capital and return on equity indicating that higher levels of equity capital in the financial structure of Nigerian firms are associated with a higher level of return on equity. The positive relationship further suggests that equity capital improves the return on equity of Nigerian firms which may not reflect on their profitability. It could also be that this positive impact is not reflected because of the underdeveloped nature of the market or due to market imperfections. This empirical evidence of a significant relationship between firms' equity capital and return on equity supports the static tradeoff theory of capital structure. These findings indicate that equity capital affects the return on equity positively.

This supports the arguments of Myers (1977) that firms with high short-term debt to total assets have a high growth rate and high performance. This finding is contrary to the findings of Pandey (2001),Akani and Akani (2019) and Stohs and Mauer (1996). Interestingly, the highly significant positive relationship between equity capital and return on equity indicates that higher level of equity capital in the financial structure of Nigerian firms is associated with a higher market performance. This result also supports the findings of Tian and Zeitun (2007). Therefore, the hypothesis that equity capital debt has no significant effect on firm return on equity is rejected and we conclude that equity capital increases the return on equity of Nigerian manufacturing firms.

The study also predicted that retained earnings have no significance effect on a return on equity of Nigerian manufacturing firms. Interestingly, as expected the coefficient of retained earnings is found to be positive and highly significant for return on equity of the quoted manufacturing firms. This result is consistent with previous findings such as Tian and Zeitun (2007), Gleason et al. (2000) and Krishnan and Moyer (1997). The significant positive relationship does not support the findings of Tzelepsis and Skuras (2004), Durand and Coeuderoy (2001), Lauterebach and Vaninsky (1999), Akani and Lucky 2014and Mudambi and Nicosis (1998).

Conclusion

This study examined the financial structure and return equity of in Nigerian manufacturing firms. The study employed descriptive econometric analytical tools in studying 10 Nigerian quoted companies period 2010 to 2019. The analyses were performed using panel data. This study tries to fill the gap left by other studies in this field, by investigating financial structure and return equity in Nigerian small and medium scale enterprises by using the following proxies for capital structure: equity capital, debt capital, retained earnings. Financial structure was used as the independent variable while shareholders wealth maximization was proxy as return on equity which also represents the dependent variable.

The results of this empirical study suggest that some of the insights from modern financial structure theories are compatibles to Nigeria in that certain firm-specific factors that are relevant for explaining financial structure and corporate performance in the Western countries are also relevant in Nigeria. This is true despite profound institutional differences that exist between Nigeria and the Western countries. Overall, the empirical results from this study offer some support for the Pecking Order Theory and Static Tradeoff Theory of capital structure.

Recommendations

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

1. The study recommends that internal and external policies should be made to deepen the operational efficiency of Nigerian capital market to enhance easy source of Equity capital for better profitability performance on Nigerian quoted manufacturing firms.

2. The study also recommends that small and medium scale enterprises should manage a proper mix of debt capital and equity capital so as to enhance shareholders wealth maximization.
3. Small and medium scale enterprises should finance projects with retained earnings, debt capital and equity capital; this is in agreement with the pecking order theory. Small and medium scale enterprises should source for low cost debt capital and taking advantage of tax shield will enhance shareholders wealth.
4. The quoted small and medium enterprise firms have to pay attention to financing aspects represented by differentiation between different financing sources, and in particular investment debt funds in are turn exceeds capital cost, which affects profitability growth and sales volume.
5. The quoted small and medium enterprise firms should be aware of the relationship between capital structure decisions and profitability taking into accounts the conditions of external environment as an important factor in the analysis of their strategies.

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