Contextual Factors Affecting Capital Structure Financing of the Nigerian Listed Companies

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Abstract
The study examined the effect of contextual factors affecting Nigerian companies’ capital structure. These are companies’ features that influence a choice of financing mix and the level of leverage. Unlike, previous studies this study makes distinct between visible and subtle companies’ contextual features in order to understand the most influential among them. A regression analysis of data from Nigerian companies for five years show a significant negative effect of profitability on the leverage. Whereas, a significant positive effect of assets tangibility and size on leverage is found. This provides evidence that larger Nigerian companies with more fixed assets have more levered capital structure. This aligns with the argument of the trade-off theory of more in capital structure brings more returns. The subtle factors (apart from growth), risk and non-debt tax shield are less noticeable and influential. This is because they are elusive and can be shaken by other factors, not under direct control of the companies' management. Therefore, the trade-off theory is not sufficient to explain their effect on the Nigerian companies’ capital structure. Notwithstanding the relevance of the findings caution should be exercised in its use due to limited factors considered in this study. Suggest for further study that will consider more factors such as industry classification, competitiveness, share ownership and affiliation, among others.

Key Words: Capital structure; Contextual factors; Leverage; Nigerian companies

1.0 Background
It is not uncommon often to hear people particularly business managers, investors, and financial analysts discussing the capital structure of a company. This is because the structure informs about the financing alternatives and strategy employed by corporate companies in a surge to attain high performance. Companies normally finance their activities by either owners’ equity, debt, or a mixture of the two, depending on the risk-taking characteristics of the fund suppliers. It is viewed by Premkanth, Aziz, and Le (2015, p. 250) a “mixture of long-term debt and equity such as debenture, long-term debt, preference shares capital and reserves and surplus for uses to finance its operations”. This composition of the financing alternatives is referred to as capital structure and used as a measure of a company value.

A modern-day business practice provides companies with two basic capital structure financing options, owner’s equity and debt finance. Equity holders are primary suppliers of the fund, owners of the company with a residual claim over assets, and their return on their investment is not guaranteed. By its nature, this type of capital is less restrictive, that is, does not require fixed servicing cost obligation. Most of the times, management of a company do not appropriate all its profit to the shareholders as a dividend, they decide to hold back some amount as retained earnings. The retained earnings by its nature is an additional value to the equity holders. It is normally
utilized by a company management to finance further capital investments (Margaritis & Psillaki, 2010). Therefore, retained earnings are the delayed value of equity capital otherwise paid out but retained and invest in other profitable capital ventures. By implication, a company finances the capital expansion with retained earnings increases the value of equity investment holdings. With these, a company finances capital projects internally by issuing new equity stock and or retained earnings.

The capital structure underlies a company valuation, in particular, provides a composition of financing option, funding from equities and/or long-term debts. The presumption is that funds from both sources are used for acquiring income-producing assets. The management of the structure becomes an integral aspect of a company’s strategy having an important association with investment behaviour, and company’s relationship with financial and non-financial stakeholders (Cheng, Ioannou, & Serafeim, 2014; Mauer & Sarkar, 2005). Debt financing is in form of credits, loan stocks where a holder is promised regular fixed interests payment and. It is an obligation on the issuing company to pay the principal amount on the future maturity period. This type of credit holders do not have claim over the asset of the company but have a certain regular income on their investment, and do not participate in companies annual general meeting, therefore do not have the right to vote.

This financing option is accessed by the direct issuance of debt stock or borrowing from institutions serving as financing intermediaries. One key feature of this stock is its certainty in a stream of income to the holder. One advantage of this financing option is its tax shield ability because interest on the loan is deductible expense earnings before tax. Therefore, it allows a company to avoid certain tax on its income, ultimately increases company value, though have higher bankruptcy cost in case of defaults. Despite the appreciation of the capital structure financing in companies’ performance, much interest is not shown about contextual factors affecting the financing mix, particularly from developing countries (Bhardwaj, 2018). This is because prior studies such as Dalton, Daily, Ellstrand, and Johnson (1998); El-Sayed Ebaid (2009); Le and Phan (2017) were not able to provide conclusive evidence about the effect of contextual factors on the companies’ capital structure. Though Bhardwaj (2018) shows the impact is contextual related to a company’s characteristics. It is argued that companies’ capital structure is relative to contextual factors. Therefore, the objective of the study is to examine the effect of the contextual factors, such as profitability, Tangibility, Size, Growth opportunity, Risk, and NDTS on the companies’ capital structure. The study will add to the literature with empirical evidence from Nigerian companies and serve the need for the segregation of the factors into direct and subtle ones. This will help understand the most influential factors among the contextual features of the companies.

2.0 Contextual Features of a Company Capital Structure financing

As observed previously, capital structure financing decisions have an important implication on a company efficiency and performance. Companies’ managers most a time adopt a particular financing strategy that brings maximum return on investment and minimize the cost of capital. A balanced it needs to be stroked between more debt and more equity in the financing structure. The choice depends on the company; the optimal capital structure is one that provides the least cost of capital and the maximum value of returns on investment. Although efforts are being made in finance research to determine optimal structure for the company, this hurdle because of the differences in measurement of capital structure attributes. These attributes though frequently used in studies affects the validity of the findings. The capital structure financing decisions are more of management financing
strategy indigenous to a company. While there some subtle factors exogenous to the companies where management has ancillary control. It is the cumulative effect of these attributes that determined a capital structure financing choice of given entity. And the free float of these attributes is the factor that accommodates the existence of different capital structure theories.

2.1 Profitability
Profit from operations is a primary source of cash used to meet current and capital financing needs. Companies appreciate the importance of cash for day to day operational activities. A profitable company has more resources that are cash or near cash which can be easily converted into cash to service debt obligations. This provides the company with a shield against cash crunch as suggested by trade-off theory. A more profitable company has more income that shields it against tax by employing more debt. It suggests that a profitable company can use more debt in its capital projects to achieve greater return on investment.

In contrary, pecking order theory provided that company manager prefer financing by retained earnings due to the unlikely effect of bankruptcy cost that arises from over-dependent on debt financing. The advocates of this theory suggest that corporate companies give less recognition to benefits derived from tax shields, rather consider bankruptcy cost of debt finance in making capital structure decisions (Céspedes, González, & Molina, 2010; Gill, Biger, & Mathur, 2011). Therefore this makes them finance capital projects by the internal fund, that is, the financing is made first with retained earnings, debt, and equity issue. Alternatively, trade-off theory provides a link between company profitability performance and capital structure financing. This based on trade-off theory which explained that a company with high-profit performance finances its activities with more debt. This is because a profitable company has little or no risk of bankruptcy making investors developed confidence in the company to meet principal and interest obligations.

2.2 Tangibility
Notwithstanding the relevance of agency cost, managers are enticed to act sub-optimally in the stride to increase returns (Frank & Goyal, 2009). This makes them contemplate investing in a high-risk project to the detriment of debt holders. To guard against a scenario where bondholders suffer loss from a failed investment, therefore, asked for a security on the debt stock. That will limit the managers urge for more debt finances, and improve debtors’ confidence in the investment. Following trade-off theory, tangibility is an important determinant of a company capital structure, because the more fixed assets a company has as security against debt, the more access the company has to debt finance (Frank & Goyal, 2009; Sogorb-Mira, 2005).

The tangibility also reduces information asymmetric between debtors and the managers. As tangible fixed assets can be regularly inspected and valued, therefore, reduces agency problem that may arise from debt financing. Again depreciation charges on fixed assets serve as a shield on income taxes, therefore, increases the amount of retained earnings available for further expansion.

2.3 Size
The size of a company is considered as an important factor that determined company financing capability. Bigger companies have accumulated resources both tangible and intangible that provide them with easy access to fund. Works on capital structure tend to support the view that larger company has more debt in their financing mix than equity. They give an explanation of this by following the trade-off theory argument, where a company hinges on the cost of borrowing and the tax-shield advantage. In addition, while bigger
companies enjoy economic scale and have built a name for itself, smaller companies suffer the problem of information asymmetrically issue. Where this asymmetric exist getting funds from external source appears costly, lenders will be asking for a higher return on debt. Further, well established bigger companies enjoy high ratings which make them recognized by investors as less risk investment heaven.

For example, in a New Zealand study of unlisted SMS Hewa Wellalage, Locke, and Matlay (2015) report that company size is positively related to debt, supporting the relevance of rating. That is, larger companies have higher credit ratings than their smaller counterparts and therefore it is easier to access external financing due to lower information asymmetry between the lenders and the company. As competition abounds in accessing external finance, smaller companies are deprived of more debt in the capital structure due to their smallness, therefore resort to more of equity financing.

### 2.4 Growth opportunity

A company with the opportunity to expand its activities places much pressure to plough back profit to finance the investment opportunity. This is in line with pecking order theory unless the internal fund is exhausted; retained earnings are used to finance further expansion. The preference for financing by this source is also justifiable on the ground that most of the companies experiencing growth are new and small. Therefore getting equity finance may be restricted due to the problem of information asymmetric and too rife the opportunity they resort to debt financing (Degryse, de Goeij, & Kappert, 2012; Odit & Gobardhun, 2011).

Where the interest of the managers and the equity holders coincides, they tend to pursue more debt capital financing opportunity. Céspedes et al. (2010) were of the opinion that company growth opportunity determined its financing option. They report a positive relationship between growth opportunity and debt. Because the owners want to maintain their controlling right with the growth potentiality of the company, therefore, opts for more debt financing to equity issue.

Though, some justifications are provided establishing the negative relationship between leverage and growth opportunity. For example, Huang and Song (2006) in a study that compared the company capital determinants between companies operating developed and developing countries found a negative relationship between investments opportunity and leverage. Therefore, it suggests that a company with high investment opportunity use less of debt in its capital structure.

### 2.5 Risk Tendency

This relates to the nature of a business management in which perceived by investors as the degree of credit obligation default. As suggested by trade-off theory high-risk companies are low leveraged. This is on the ground that borrowing is expensive because of the high cost of debt demanded by debtors. This provides a negative relationship between debt financing in a company capital structure and risk tendency. That is the higher the company risk tendency the lower the debt finance (Eldomiaty, 2008). This volatility is interpreted as uncertainty in honouring debt obligations, with all likelihood of being bankrupt (Degryse et al., 2012). Therefore this suggests more debt in the capital structure.

### 2.6 Non-debt tax shields

Trade-off theory is used to support company optimal capital structure financing option, utilizing more debt to rife the benefits of interest deduction. There are instances where this assertion is not valid because some companies enjoy non-debt tax benefits which impact on
financing decisions. For example, depreciation on fixed assets is an allowable expense in income determination. Similarly, companies do benefit from investment tax credit on new equipment, research and development, etc. These are seen as substitutes for more leverage, therefore, a company with more non-debt tax shield have less debt capital structure financing (Huang & Song, 2006). As debt financing is associated with costs which are not directly related to a company's operational activity, managers go for internal financing to avoid bankruptcy and agency costs.

3.0 Empirical Studies of the Determinants Factors of Capital Structure

The literature has provided findings on capital structure determining factors, though the findings appear inconsistent particularly with regards to theoretical guides. This can be attributed to the adoption of leverage and other variables used as features of the companies’ capital structure.

Several capital financing theories are applied to explain the relationships between the variables and the financing options. The purpose is to establish a relationship with accounting measure of profit and returns.

Huang and Song (2006) examined the relationship between factors that determined capital structure financing decisions of listed China companies. The study used cross-sectional data of listed companies from China stock exchange and accounting research database, covering 1994-2003. A panel regression analysis on 1200 companies shows a negative relationship between Profitability, growth opportunity and leverage. While a positive relationship is shown with size, tangibility, and no relationship with ownership structure, shareholding, management and ownership.

Hewa Wellalage et al. (2015) study of 120 New Zealand companies over a period of five years reports a bi-directional relationship between insider ownership and company leverage. Size, growth opportunity, risk has a negative relationship with leverage. While profitability, tangibility have a positive relationship.

A Dutch study of the capital structure of small and medium scale enterprises (EMEs) by Degryse et al. (2012) used unbalanced panel data from eight different industries over three years. With a 93,033 firm/year, total observations report a negative relationship between debt and profitability, tax. A positive relationship between debt and tangibility, size, growth. Similarly, EMEs study of Portugal companies by Serrasqueiro and Caetano (2014), who tested capital structure theories in financing decisions of SMEs operating in the peripheral region of the country. A sample of 53 SMEs is drawn with a total of 371 observations over a period of five years. The study reports no relationship between leverage and effective tax, non-debt tax shield, growth opportunity, asset tangibility, risk. A negative relationship between leverage and profitability, age, consistent with pecking order theory. While a positive relationship between leverage and size as supported by trade-off theory.

Eldomiaty (2008) tests the competing theories of Trade-off and pecking-order on 99 Egyptian companies drawn from 14 industries. The objective is to examine the determinants of the capital structure with evidence from emerging economy. It documents the relevance of Trade-off theory, that is, leverage has a positive relationship with changes in debt, effective tax, bankruptcy cost, and negative with tangibility, industry characteristics. While based on the Pecking order theory, the leverage has a positive relationship with long-term debt, and negative with profitability (ROA) and capital expenditure.

Likewise, Köksal and Orman (2015) tested the competing theories with data from Turkish
companies for over fifteen years period. The study has an unbalanced panel of 11,726 companies with 74,155 company/year observations with data gathered from Sectoral Balance Sheets (SBS) dataset. A fixed and random effect panel analysis shows a positive relationship between leverage and size (short-term, long-term, total leverage), tangibility (long-term, total leverage). These are consistent with trade-off theory. While documents a negative relationship with profitability (short-term, long-term, total leverage), tangibility (long-term), risk (long-term, total leverage). These are consistent with pecking order theory. And no relationship growth, short-term risk. Tax-related variables have a positive relationship between leverage (short-term, long-term, total leverages) and potential debt tax shield, and tax exhaust. This indicates the relevance of trade-off theory in explaining the determinants. Likewise, industry-specific variables have a positive relationship with leverage (short-term, long-term, total leverages) as supported by trade-off theory.

Nunkoo and Boateng (2010) study Canadian companies’ capital structure financing mix with 7993 companies drawn from Toronto stock exchange over a period of three years. The result shows a significant positive relationship is between leverage and profitability, tangibility as suggested by trade-off theory. While a negative relationship is reported between the leverage and growth and size, as explained by pecking order theory. A Nigerian study by Bassey, Arene, and Okpukpara (2014) report a significant positive relationship between leverage and size, asset structure, growth, and tax. It also shows a negative relationship between age and profitability. The study covers a period of 5 years with a total of 28 sample companies drawn from agro-allied industries listed on Nigerian stock exchange. Similarly, Oino and Ukaegbu (2015) study of 30 companies listed on Nigerian stock exchange shows a negative relationship between leverage and profitability and asset structure as explained by pecking order theory. While a positive relationship is reported with size, growth, tangibility, and tax.

It can be discerned from the literature little effort is made by the previous research to consider contextual factors that affect a company’s capital structure. The studies do not segregate factors that a company has power to alter and control and those that are subtle. The factors are converged in the studies with little consideration of their peculiarity and importance. This can be the cause of the inconsistent findings, therefore, following trade-off theory it is hypothesised:

\[ H_1 \] There is a positive relationship between the companies’ capital structure and profitability, tangibility, and size.

\[ H_2 \] There is a negative relationship between the companies’ capital structure and growth opportunity, risk tendency and non-debt tax shield.

This allows for examination of the internal and external factors that have an effect on the companies’ capital structure.

4.0 Method and Models specification

The study population included all companies listed on the Nigerian stock exchange (NSE) market. In the selection of the companies included in the study, consideration is given to those that are active on the floor of the market from 2012 to 2016. A total of 86 companies are identified, though a sample of 56 companies is selected as a representative of the total population. This gives more than half of the population, therefore is adequate enough to make inferences therefrom. Financial statements of the companies for a period of 5 years provide the data source. Where a total of 280 firm/year observation is made. The data is pooled to allow for analysis of the observations across the sectional units over the study periods.
Two research models are developed specifically for the objectives of the study. They are developed to differentiate between internal and external contextual factors effect on the capital structure of the companies.

\[ LEV = a + a_1 ROA_{i,t} + a_2 TAN_{i,t} + a_3 SIZE_{i,t} + \varepsilon \]

\[ LEV = a + a_1 GROWTH_{i,t} + a_2 RISK_{i,t} + a_3 NDTS_{i,t} + \varepsilon \]

The models and their measure were developed from the review of Céspedes et al. (2010); Le and Phan (2017); Serrasqueiro and Caetano (2014); Vo (2017).

Where:

<table>
<thead>
<tr>
<th>Table 1 Variables Measures</th>
<th>Variables</th>
<th>Description</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leverage (LEV)</strong></td>
<td>Debt ratio</td>
<td>Total debt/Total assets</td>
<td></td>
</tr>
<tr>
<td><strong>Profitability (ROA)</strong></td>
<td>The ratio of earnings before interest and taxes (EBIT) to total assets</td>
<td>EBIT/ total assets</td>
<td></td>
</tr>
<tr>
<td><strong>Tangibility (TAN)</strong></td>
<td>The ratio of fixed assets to total assets</td>
<td>Fixed assets/total assets</td>
<td></td>
</tr>
<tr>
<td><strong>Size (SIZE)</strong></td>
<td>Natural logarithm of total assets</td>
<td>Log. of Total assets</td>
<td></td>
</tr>
<tr>
<td><strong>Growth (GROWTH)</strong></td>
<td>Percentage change in sales over the years</td>
<td>% in sales over the periods</td>
<td></td>
</tr>
<tr>
<td><strong>Risk (RISK)</strong></td>
<td>The standard deviation of EBIT and depreciation to total assets</td>
<td>Std dev. of EBIT &amp; depreciation/total assets</td>
<td></td>
</tr>
<tr>
<td><strong>Non-debt tax shield (NDTS)</strong></td>
<td>A ratio of depreciation to total assets</td>
<td>Depreciation/total assets</td>
<td></td>
</tr>
</tbody>
</table>

The measures provide the base for the collection of the data from the companies’ annual reports over the study periods. Each year annual report is analysed and all relevant indices for the companies are collected and put into STATA 13 for the analyses. No missing information is encountered as the annual report is a standardized legal document where the companies are requested to publish their financial performance at least once a year.

5.0 Results and Discussion

The data collected from the analysis of the companies’ annual reports over the study period is analysed. This is to facilitate the findings that will enable the study to achieve the stated objective. First summary statistics was made to comprehend the nature of the data, correlation and regression analyses help provide evidence to make a decision about the hypotheses.

5.1 Descriptive statistics

A summary statistics test is made on the data in order to get a descriptive result. This helps provide information about nature of the data. The entire variables are jointly analysed and the summary results are shown in Table 1 below.
Table 2 Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEV</td>
<td>280</td>
<td>0.4732</td>
<td>0.2495</td>
<td>0.1952</td>
<td>0.5104</td>
</tr>
<tr>
<td>ROA</td>
<td>280</td>
<td>0.1129</td>
<td>0.1056</td>
<td>-0.0573</td>
<td>0.4763</td>
</tr>
<tr>
<td>TAN</td>
<td>280</td>
<td>0.2427</td>
<td>0.4671</td>
<td>0.0065</td>
<td>0.7092</td>
</tr>
<tr>
<td>SIZE</td>
<td>280</td>
<td>5.4418</td>
<td>0.6489</td>
<td>3.1184</td>
<td>7.6740</td>
</tr>
<tr>
<td>GROWTH</td>
<td>280</td>
<td>0.6401</td>
<td>0.2623</td>
<td>0.1785</td>
<td>0.8573</td>
</tr>
<tr>
<td>RISK</td>
<td>280</td>
<td>0.3065</td>
<td>0.1458</td>
<td>0.2584</td>
<td>0.6549</td>
</tr>
<tr>
<td>NDTS</td>
<td>280</td>
<td>1.7934</td>
<td>0.4133</td>
<td>0.0472</td>
<td>3.0063</td>
</tr>
</tbody>
</table>

The summary statistics are shown in Table 2, it describes the nature of the data. There are 280 firm/year observations used in the analysis to get information about data. It can be seen that the companies leverage as a measure of capital structure has a mean score of 0.4732, ROA as a measure of profitability has a mean score of 0.1129. Tangibility, size, growth opportunity, risk tendency, and non-debt tax shield have 0.2427, 5.4418, 0.6401, 0.3065 and 1.7934 mean scores, respectively.

It is interesting to note, all the Nigerian companies used some level of debt financing in their capital structure. This shows the appreciation of the argument put forward by trade-off theory of maximum utilisation of debt finances to optimize returns. The likely explanation for this behaviour is the presence of growth opportunity in the country. Where companies prosper rapidly due to products demand resulted from population expansion, government incentives in form tax waivers. Also, Nigeria has a vibrant capital market supported with efficient banking sector providing finances to the companies.

5.2 Correlation analysis

Correlation analysis of the data provides information about direction and the strength of relationships between the study variables. As earlier proposed, the study decomposed the variables into direct and subtle contextual factors. Therefore, two sets of correlation analyses are made. Each of the direct contextual factors affecting the companies’ capital structure and for the subtle ones.

Table 3 below shows the results of the analysis with first part relates to the factors that are direct to the companies. The second part is of the subtle contextual factors which ancillary to the companies.

Table 3 Correlation Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>LEV</th>
<th>ROA</th>
<th>TAN</th>
<th>SIZE</th>
<th>LEV</th>
<th>GROWTH</th>
<th>RISK</th>
<th>NDTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.4127</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAN</td>
<td>0.3164</td>
<td>-0.0315</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.4119</td>
<td>0.5241</td>
<td>0.612</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.2171</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RISK</td>
<td>0.1637</td>
<td>0.1167</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDTS</td>
<td>0.3195</td>
<td>-0.2674</td>
<td>0.2114</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the first part of table 3, it can be seen the relationships between the variables are positive except between ROA and TAN with -0.0315. This shows the relationships are appropriate for the analysis as no absolute correlations among the variables. Likewise, the second part of the table relates to the subtle variables. A negative correlation exists between LEV and GROWTH of -0.2171, and GROWTH and NDTS of -0.2674. Whereas the other remaining variables have positive correlations between themselves.

5.3 Regression analysis

Further analysis is made to determine the effect of the variables on the companies’ capital structure. Analysis of the two models is made and the results shown below with each provides evidence for a decision about the research hypotheses.

Table 4 Regression results

<table>
<thead>
<tr>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var. LEV</td>
<td>Coef.</td>
<td>Std. error</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.128</td>
<td>0.027</td>
</tr>
<tr>
<td>TAN</td>
<td>0.381</td>
<td>0.163</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.625</td>
<td>0.181</td>
</tr>
<tr>
<td>Observ.</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.621</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.613</td>
<td></td>
</tr>
</tbody>
</table>

The regression results in Table 4 provide information about the effects of the contextual variables on the Nigerian companies’ capital structure. The table is divided into two with the first part shows the effect of the ROA, TAN and SIZE on the companies’ LEV. These are features that have a direct effect on the capital structure and visible in the companies’ financial statements. While model relates to a subtle feature which does not appear in the companies’ reports.

Model 1 regression results show an R² of 0.621 and adjusted R² of 0.613, indicating the model strength of more 60% to explain the effect of the variables on the leverage. The strength is adequate to observe the effect, as a recent study by Vo (2017) used a lower R² in her regression analysis.

The relationship between the companies’ ROA and LEV is negative with -0.128, standard error of 0.027 at 1% p-value. Therefore, the effect of the companies’ profitability on the capital structure is negative and significant. That is 1% change in the Nigerian companies profitability results in a negative change in the companies leverage by 0.128. This finding adds to trade-off theory argument of more debt in capital structure financing to maximise returns. Likewise, previous studies have reported the negative effect a company’s profitability on the leverage. For example, Degryse et al. (2012); Huang and Song (2006); Oino and Ukaegbu (2015); Serrasqueiro and Caetano (2014) show under different context

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1Zikmund (2003) provides for numerical ranges of the correlation strength between -0.10 to +1.00. Further broken into three: Small correlation -0.10 to -0.29 and +0.10 to +0.29; Medium correlation -0.30 to -0.49 and +0.30 to +0.49; Large correlation -0.50 to -1.00 and +0.5 to +1.00.
report a negative effect. Though, Hewa Wellalage et al. (2015) in a bidirectional study document positive effect of a company’s profitability on the capital structure.

Tangibility effect on the leverage is positive and significant with 0.381 coefficient and standard error of 0.163 at 5%. That is as the stock of Nigerian companies fixed assets increases leverage financing in the capital structure increases. Likewise, a positive effect of size on leverage is significant and positive at 1% p-value. This shows larger Nigerian companies with more fixed assets finances their capital projects with more debt, as supported by trade-off theory. Further, empirical evidence of the positive effect is provided by Degryse et al. (2012); Köksal and Orman (2015), among others.

The second part of the regression table relates to model 2 which is about the subtle features of the companies. It is assumption is that those companies with growth opportunity tend to have debt in their capital structure until when the return from further debt finance is decline. Therefore, as expected a significant positive effect of the growth on the companies’ leverage is found. It has a positive coefficient of 0.528 and standard error of 0.071 at 10% p-value. This is supported by the trade-off theory and empirical works of Bassey et al. (2014) through contradicted reports of Degryse et al. (2012); Hewa Wellalage et al. (2015). This finding reflects the developmental level of the Nigerian companies and expansion in the country’s capital market. The market is open to the companies for financing access through at relatively double-digit rates.

A company’s riskiness is reflective of the financing measures adopted. Company’s with more debt in the capital structure have more bankruptcy threat than low-levered one. However, it is not surprising in this study no significant effect of risk on leverage is detected. The companies risk level has no significant relationship with the companies’ capital structure financing. This will not be unconnected to the surplus finances accessible by companies in Nigerian capital market. Similarly, non-debt tax shield does not have a significant effect on the companies leverage. This can be attributed to laxity in strategic financial management on the part of the companies’ management.

6.0 Conclusion
The study examined the effect of contextual factors affecting Nigerian companies’ capital structure. These are companies' features that influence a choice of financing mix and the level of leverage. Unlike, previous studies this study makes distinct between visible and subtle companies’ contextual features in order to understand the most influential among them. The effort is to improve the inconsistent findings and provide evidence from Nigerian companies.

A regression analysis of data from Nigerian companies’ over the study period shows a significant negative effect of profitability on the level debt finances in the companies’ capital structure financing. Whereas, assets tangibility and size significantly influence the companies leverage. Thus, larger companies with a stock of fixed assets finance their businesses with more debt. This aligns with the argument of trade-off theory of more in capital structure brings more returns.

The subtle factors, apart from growth, risk and non-debt tax shield are less visible and less influential. This is because they are internal to the companies; they can shake by other factors not under direct control of the companies’ management. Therefore, the trade-off theory not sufficient to explain their effect on the Nigerian companies’ capital structure.

Future study can improve the limitation of this research by considering more factors such as
industry classification, competitiveness, share ownership and affiliation, among others. This enables understanding of effect the companies’ capital structure and the capital financing strategic play by the companies’ management. Likewise, comparative study of the factors between companies operating in different industries will be an interesting research.

References


