LIQUIDITY AND CAPITAL STRUCTURE: EVIDENCE FROM LISTED CONGLOMERATE FIRMS IN NIGERIA

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Abstract
This study investigates the effect of liquidity on the capital structure of listed conglomerate firms in Nigeria. This study employed a panel data collected for the period of seven (7) years (2009-2015) from a sample of ten (10) listed conglomerate firms in Nigerian Stock Exchange as at 31st December 2015. The data were analysed using multiple regression techniques. The findings of the study reveal that current ratio, cash conversion circle increases leverage and are significant in explaining the capital structure of listed conglomerate firms in Nigeria. Generally, this paper concludes that listed conglomerate firms in Nigeria which have more current asset tend to use more debt while those with higher quick ratio use less debt financing. In addition, listed conglomerate firms in Nigeria with a higher current ratio have the ability to meet their contractual obligation and hence, resort to financing via debt. To be specific, the proportion of inventory among Nigerian companies is high; as such it plays a significant role in debt decisions. The study, therefore, recommends that management should focus on inventory and sales management and monitor it closely to maintain an optimal capital structure which should be beneficial to the conglomerate industry.

Keywords: Liquidity, Capital structure, Listed conglomerate firms, Nigerian Stock Exchange

Introduction
The capital structure consists of the methods by which the companies finance their assets via a combination of debt and equity. Capital structure policies have the underlying purpose of maximising the worth of a company (Titman & Wessels, 1988). Any occurrence that could accumulate needless costs (such as liquidation) compels firms to deviate from achieving the aforementioned purpose. The optimum capital structure should be determined by keeping in mind the long-term and short-term requirement of finance, short-term solvency much depends upon the availability of liquid resources as short-term requirements. No business can aspire to keep surplus funds in the

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business because of liquidity - profitability trade-off but while developing these surplus funds, it has to estimate its short-term requirements (Kajanathan & Achchutan, 2013). One of the major reasons that may cause illiquidity is the inability to make an adequate profit. Liquidity appears to be one of the bases of measuring the going concern of an establishment, for these reasons companies are developing various strategies to improve their liquidity position. Strategies which can be adopted by the firm to improve liquidity and cash flows concern the management of working capital areas which are usually neglected in times of favourable business conditions. However, for the very survival of the business, the firm should have the requisite degree of liquidity; it should be neither excessive nor inadequate.

Excessive liquidity means the accumulation of ideal funds, which may lead to lower profitability, increase speculation, and unjustified extension of liberal credit terms and liberal dividend policy whereas inadequate liquidity result in interruption of business operations. Hence, a proper balance between these two extreme situations should be maintained for efficient operation of the business through skillful liquidity management (Eljelly, 2004). The form of financing and types of funding sources define a firm's capital structure. The process of financing takes a very important place in firm's management because it must ensure financial continuity necessary for growth and maintaining competitiveness within a market environment. However, it still remains an open question whether it is better to use internal sources of financing (cash, dividends, unpaid taxes etc.) or to use external sources and pay for compensation in the form of interest rates. Access to external funding is generally easier for liquid firms whose financial ratios correspond to the criteria of financial institutions (Brigham & Houston, 2009).

Debt can result in an increased return on investment. A liquid firm is one that promptly pays all its due obligations and as such is desirous of funding sources. Depending upon the firm's level of long-term debt, it may be optimal for the firm to borrow short-term in order to increase leverage. Liquid assets provide a cushion that would allow the firm to survive a period of low earnings during which the firm might be unable to access capital markets or could do so only at a very high cost. The firm's financial structure will affect this decision because the degree of leverage used by the firm will affect the likelihood that cash flows will be insufficient to cover debt service and other fixed charges. This creates a possible linkage from high debt to high liquidity to slow growth (Brigham & Houston, 2009). The conglomerate's industry is a complex, global collective of diversified businesses that are actually involved in the assembly, sales, servicing of power generation equipment and another high horsepower engine, including overhauls and the distribution of consumer goods. The fact that a firm makes a profit is not necessarily an indication of effective liquidity management because a company can be endowed with assets and profitability but short of liquidity. Such an organisation may run into debts that could affect its capital structure mix and performance in the
long run as it becomes likely unable to finance its obligations as to when due. For these reasons, companies are developing various strategies to improve their liquidity position. Strategies which can be adopted by the firm to improve liquidity and cash flows concern the management of working capital areas. These are usually neglected in times of favourable business conditions (Myers, 1984).

The conglomerate industry has been insufficiently considered in the prior studies on liquidity management and capital structure. As such, this present study will be carried out to fill this gap. In order to achieve the aim of this study is to examine the impact of liquidity on the capital structure of selected conglomerate companies in Nigeria. Based on the statement of the problem, the following hypotheses were formulated to guide the study; i. There is no significant relationship between cash conversion circle and debt to equity ratio of listed Nigerian conglomerate companies. ii. There is no significant relationship between current ratio and debt to equity ratio of listed Nigerian conglomerate companies. iii. There is no significant relationship between acid-test ratio and debt to equity ratio of listed Nigerian conglomerate companies. The outcome of this study is expected to benefit financial analysts, corporate managers and directors working in the conglomerate and other companies. The findings will assist the financial analyst in establishing other advanced analysis tools utilised by this study which is outside the commonly used stand-alone liquidity or leverage ratios. Most financial analysis models identify and analyse each class of ratio separately using conventional classification. The study will also assist corporate managers, especially at a strategic level to have a better understanding of the relevance of keeping sufficiently adequate liquidity to ensuring not only prompt settlement of due obligations but also ensuring that credit ratings and corporate reputation are maintained. The result of this paper is expected to stimulate further empirical studies in the area with respect to Nigeria and beyond.

**Literature Review**

This section reviews the literature on concepts relating to liquidity and capital structure. The review also covers empirical studies that were conducted on the relationship between liquidity and capital structure, focusing attention on the research problem, methodology, findings and limitations. Similarly, the literature on liquidity and capital structure were reviewed in order to serve as a basis for validation of the findings of this paper.

Liquidity describes the degree to which an asset or security can be quickly bought or sold in the market without affecting the asset's price or a measure of the extent to which a person or organisation has cash to meet immediate and short-term obligations or assets that can be quickly converted to do this (Anderson & Carverhill, 2010). A weak liquidity position poses a threat to the solvency as well as the profitability of a firm and makes it unsafe
and unsound (Anojan, 2014). The extent to which liquidity can be gained will naturally depend upon the magnitude of the sales. The efficiency of collection department, the lowest period of operating cycle, a successful collection programmer is in other words, necessary for maintaining liquidity by any business enterprises. Sales don't always convert into cash instantly; in some situations, credit sales do occur. Cash Planning involves ensuring that the company's financial resources are effectively utilised; that is ensuring that customers effect payments as at when due and banked company's cash as soon as possible instead of causing the company cash to be idle. In the realm of working capital management, empirical evidence has been documented both in Nigeria and abroad.

Anojan (2014) examined the effect of liquidity management, the capital structure on the profitability of selected listed beverage, food and tobacco firms on Colombo Stock Exchange (CSE) in Sri Lanka. The study covered a period between 2008 and 2012. Their findings reveal an insignificant association between capital structure and profitability. Khalaj, Farsian and Karbalae (2013) investigated the linkage between liquidity and capital structure among the top 100 Malaysian public listed companies from 2006 to 2010 financial years. Findings show a significant relationship between liquidity ratios and leverage. According to the results, Malaysian firms with more liquid stocks prefer equity to enjoy a lower cost of capital. Kajanathan and Achchuthan (2013) conducted a study on Liquidity and Capital Structure in Sri Lanka Telecom Plc. The study covered a period between 2004 and 2008. Their findings revealed that the decision on the capital structure highly depends on the liquidity management of the Sri Lanka Telecom Plc. Draniceanu (2013) investigated the impact of capital structure on firm value for Romanian companies at the same time considering the determinants of leverage. Using pooled regression model, the results show that capital structure impacts positively on firm value, for both firms facing low growth opportunities and firms facing high growth opportunities. Profitability, liquidity and tangibility have been found as negative determinants of capital structure, while growth opportunities, firm size and firm financial quality have been found as positive determinants of capital structure. Sarlija and Hare (2012) investigated the impact of liquidity on the capital structure of Croatian firms. The results revealed that there are statistically significant correlations between liquidity ratios and leverage ratios. Also, there are statistically significant correlations between leverage ratios and the structure of current assets. Furthermore, increasing the cash in current assets leads to a reduction in the short-term and the long-term leverage.

Osuji and Anthony (2012), examined the impact of capital structure on financial performance (in terms of liquidity and efficiency) of Nigerian firms using a sample of thirty non-financial firms listed on the Nigerian Stock Exchange during the seven-year period, 2004 - 2010. Their result showed that
a firm's capital structure surrogated by Debt ratio has a significantly negative impact on the firm's financial measures. Their study of these findings, indicate consistency with prior empirical studies and provide evidence in support of Agency cost theory. Uremadu (2012) investigated the effect of banks capital structure and liquidity on profitability using Nigerian data for the period 1980-2006. The study revealed a positive influence of cash reserve ratio, liquidity ratio and corporate income tax and a negative influence of bank credit risk on domestic economy and savings deposit rate. Owolabi and Obida, (2012) conducted a study on Liquidity Management and Corporate Profitability of Selected Manufacturing Companies Listed on the Nigerian Stock Exchange. The finding showed that liquidity management has a significant impact on corporate profitability. Their study concluded that managers can increase profitability by establishing an efficient credit policy, short cash conversion cycle and effective cash flow management procedures. Saleem and Rehman (2011) conducted a study on the relationship between liquidity and profitability of oil and gas companies listed on Karachi Stock Exchange (KSE) Pakistan using oil and gas companies traded per year. Linear regression through SPSS was applied. The financial reports of the 26 oil and gas companies were studied and relevant liquidity and profitability ratios were computed. It was revealed that for the period of 2004 - 2009, there was a significant impact of only liquidity ratio on ROA while insignificant on ROE and ROI. Olayinka (2011) examine the determinants of capital structure of 66 firms listed on the Nigerian Stock Exchange during the period 1999-2007 using panel data. The results show that there is a negative relationship between leverage and growth opportunities, leverage and tangibility, but positively related to liquidity as well as size. This negative coefficient shows that growing firms do not use debt financing. Negative relationship of profitability with leverage confirms the implication of pecking order hypothesis which argues that highly profitable firms prefer to finance new investment with internally available funds than through debt finance. It also shows that size and leverage are positively related.

In a similar vein, Udomsirikul, Jumreornvong and Jirapor (2010) conducted a study on liquidity and capital Structure in Thailand. The empirical evidence demonstrates an inverse relation between liquidity and leverage of firms in Thailand, where capital markets are less sophisticated than the U.S., bank loans more prevalent, and corporate ownership much more concentrated. In spite of these differences, the study document that Thailand firms with more liquid equity are significantly less leveraged. In the same spirit of research, Guimaraes and Nossa (2010) investigated the effect of key financial ratios including liquidity, working capital, profitability, and solvency using descriptive statistic on 621 non-financial firms for 2001, 2002 and 2004 using analysis of variance (ANOVA). They found that higher financial current assets and cyclical current assets are associated with high levels of profitability liquidity and solvency. In addition, the study emphasised the
importance of efficient management of working capital to the performance and survival of those non-financial firms. Sibilkov (2007) conducted a study on the effect of asset liquidity on capital structure. Using data from a larger sample of U.S. public companies and found that leverage is positively related to asset liquidity. Further analysis reveals that the relationship between asset liquidity and secured debt is positive, whereas the relation between asset liquidity and unsecured debt is curvilinear. The results are consistent with the view that the costs of financial distress and inefficient liquidation are economically important and that they affect capital structure decisions.

Haddad (2012) examined the relationship between stock liquidity and capital structure using a sample of 38 industrial companies listed on Amman Stock Exchange over the time period 2000 through 2009. The panel regression analysis results revealed the insignificant relationship between the three measures of liquidity. Similarly, Uremadu and Efobi (2012) studied the impact of liquidity, profitability and debt in Nigerian firms using microdata sourced from the financial statements of 10 selected firms covering 2002-2006 in the Nigerian building and construction sub-sector to pursue its investigations especially companies listed in the Nigerian stock exchange market. The study found the negative and significant influence of value of long-term debt, ratios of long-term debt to total liability, and ratios of short-term debt to total liability.

Nwidobie (2012) examined the impact of capital determinants on the liquidity and profitability in Nigerian firms, lessons from corporate financing decisions. The study used cross-sectional research design in investigating 30 listed firms across 4 different industries for the period 2008-2010. The study found firms used more of corporate debt derived from short-term sources than increasing their financing gearing. In the same spirit of research, Nwankwo (2014) studied the effect of capital structure on the firm liquidity in the Nigerian banking sector where 10 banks were selected for investigations. The study discovered that short-term liquidity issues are often caused by internal budgeting constraints whereas long-term gearing issues are often sourced from external sources hence no pressure on operational financing. Ghasemi1 & Ab Razak (2016) investigate the effect of liquidity on the capital structure among the 300 listed companies in the main market of Bursa Malaysia from 2005 to 2013 fiscal years. Pooled OLS was applied to investigate the impact of liquidity ratios on different Debt ratios. The study found that quick ratio has a positive effect on leverage; although, the current ratio is negatively related to leverage. Moreover, short-term debt is more influenced by liquidity compared to long-term debt.

There are some theoretical thoughts in the context of capital structure. According to the traditional opinion by Modigliani and Miller (1958) as cited in Ghasemi and Ab Razak, (2016), the instruments issued by the company do not influence value and productivity of the firm. Overall, there is no universal theory for choosing between debt and equity. However, the trade-off theory is
highly helpful in guiding this study. Trade-off theory helps to understand the capital structure that companies choose (Akinlo, 2011). The trade-off theory stated that firms are generally financed by both equities and debts and attempt to determine an optimal level of the capital structure in which firm value is maximised. The trade-off theory of capital structure suggests that firms trade off the net cost of equity against the net cost of debt. It thus logically follows that all things equal, any factor that lessens the net cost of equity, such as higher liquidity, should make equity more attractive relative to debt, leading to a lower proportion of debt in the capital structure. Two studies offer empirical evidence on this theoretical prediction; Frieder and Martell (2006) find that higher liquidity is associated with lower leverage, as predicted by the trade-off model. Likewise, Lipson and Mortal (2009) and Vatavua (2015) discover that firms with more liquid equity carry less debt. Further, when considering external financing, firms with more liquidity are more inclined to raise equity than debt. The economic magnitude of the effect of liquidity on capital structure seems to be significant as well. These studies provide insightful empirical evidence on the association between liquidity and leverage. The underpinning theory for this paper and as such is the theory that best explain the relationship between liquidity and capital structure and is therefore adapted to guide this study.

**Methodology**

This study adopted ex-post facto research design as it entails the use of annual report and accounts of listed conglomerate firms in Nigeria. This is in view of its relative importance to the actualisation of the research objective which is to determine the relationship between liquidity management and capital structure in the Nigerian Conglomerates industry. The population of this study will consist of seven (7) out of the eight (8) listed conglomerates on the Nigerian stock exchange as at 2015.

**Variable Measurement and Model Specification**

Capital structure will be viewed as the dependent variable, in which debt to equity ratio will be used as a proxy for capital structure. The proxy indicates the ratio of debt and equity used in financing the business and is consistent with the studies of Khalaj et al. (2013) and Kajananthan & Achchutan (2013).

**Independent variables**

Liquidity is considered as the independent variable and proxied by the three key ratios as a current ratio to be obtained by dividing current assets by current liabilities, quick ratio is obtained by subtracting inventory from current assets and divided by current liabilities and the Cash Conversion Cycle (CCC) is used as a comprehensive measure of liquidity. This is arrived at by adding Account Receivable Period CARP) to Inventory Conversion Period (ICP) and then subtracting the Account Payable Period (APP). This is consistent with the view that the time lag between expenditure for the purchase of raw materials and the collection of sales of finished goods can be
too long, and that decreasing the time lag increases profitability. This is consistent with the studies of Khalaj et al. (2013) and Kajanantha & Achchutan (2013). Firm size (SIZE) measured by the natural logarithm of its total sales and the return on assets (ROA) constitutes the control variables of the study.

Model Specification

The technique for data analysis that will be used in this study is the ordinary least squares regression (OLS). However, the researcher deemed it fit to use of multiple regressions to test the hypothesis in their null forms in order to arrive at a logical conclusion. Equally, the variables used in the model are those conforming to the information available in Nigeria's annual report. The model is stated thus:

\[ DTE = \beta_0 + \beta_1 CR_{it} + \beta_2 QR_{it} + \beta_3 CCC_{it} + \beta_4 SIZE_{it} + \beta_5 ROA_{it} + \epsilon_{it} \]

\[ DTE = \text{Debt to Equity Ratio} \]
\[ CR = \text{Current Ratio} \]
\[ QR = \text{Quick ratio} \]
\[ CCC = \text{Cash Conversion Circle} \]
\[ SIZE = \text{Firm size} \]
\[ ROA = \text{Return on assets} \]
\[ \beta_1, \beta_5 = \text{parameters} \]
\[ \epsilon_{it} = \text{error term} \]

Results and Discussion

This section starts with the preliminary discussion of the variables using descriptive statistics. This is followed by the presentation of the results of model estimations and the inferences drawn from the hypotheses tested. Pearson correlation coefficients and multiple regression techniques were used to analyse the relationship between the dependent and independent variables of the study.

Descriptive Statistics

The descriptive statistics are presented in Table 1 where minimum, maximum, mean and standard deviation of the data for the variables used in the study were described.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>OBSERVATION</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
<th>MINIMUM</th>
<th>MAXIMUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTE</td>
<td>70</td>
<td>0.2617</td>
<td>0.2749</td>
<td>0.0008</td>
<td>0.7837</td>
</tr>
<tr>
<td>CR</td>
<td>70</td>
<td>0.8997</td>
<td>3.4451</td>
<td>-22.4944</td>
<td>14.9113</td>
</tr>
<tr>
<td>QR</td>
<td>70</td>
<td>0.8345</td>
<td>6.6604</td>
<td>-40.4012</td>
<td>33.1349</td>
</tr>
<tr>
<td>CCC</td>
<td>70</td>
<td>4.6100</td>
<td>0.5432</td>
<td>3.6889</td>
<td>5.7236</td>
</tr>
<tr>
<td>SIZE</td>
<td>70</td>
<td>15.2236</td>
<td>1.0977</td>
<td>13.2447</td>
<td>16.8247</td>
</tr>
<tr>
<td>ROA</td>
<td>70</td>
<td>0.1162</td>
<td>0.1105</td>
<td>0.0043</td>
<td>0.5396</td>
</tr>
</tbody>
</table>

Source: Output from Stata, 2017
Table 1 presents the detailed account of descriptive statistics for the dependent and independent variables. From the table, Debt to Equity (DTE) has minimum and maximum values of 0.0008 and 0.7837 respectively and the mean and standard deviation of 0.2617 and 0.2749 respectively. This means that on the average, for every 1% increase in liquidity, Debt to Equity ratio of Conglomerate firms will increase by 26% approximately. The standard deviation of 0.2749 indicates that the data deviate from the mean value from both sides by 27.49% which implies that there is a wide dispersion of the data from the mean because the standard deviation is higher than the mean value. The minimum and maximum values of the Current ratio are -22.4944 and 14.9113 respectively. The mean value of 0.8297 indicates that on the average, the firms are financing their activities with current assets accounting to 82.97% while the standard deviation shows that the data deviate from the mean by 3.44%.

The minimum value of the Quick ratio (QR) is -40.40 and the maximum value is 33.13 while the mean and the standard deviation values are 0.8345 and 6.6604 respectively. The minimum value of -40.40 attributed to the losses suffered by the firms during the period of the study. The mean figure implies that on the average, the listed Conglomerate firms in Nigeria is having approximately 83% liquid assets while the figure for standard deviation 6.66 revealed the extent of dispersion of the data from its mean. Furthermore, the minimum and maximum values for cash conversion circle (CCC) are 3.6889 and 5.5835 respectively.

**Correlation between the Variables of the Study**

Correlation analysis is used to assess the nature of the relationship between the dependent and independent variables and to determine whether multicollinearity exits among the variables of the study. The Pearson correlation analysis is used in this study to assess the relationship between the variables of the study.

<table>
<thead>
<tr>
<th>VAR</th>
<th>DTE</th>
<th>CR</th>
<th>QR</th>
<th>CCC</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTE</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>0.1231</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QR</td>
<td>-0.0092</td>
<td>0.9106*</td>
<td>1.0000</td>
<td>0.9395</td>
<td>0.0000</td>
</tr>
<tr>
<td>CCC</td>
<td>0.0698</td>
<td>-0.1311</td>
<td>-0.1694</td>
<td>1.0000</td>
<td>0.5660</td>
</tr>
<tr>
<td>.01610</td>
<td>-0.3352*</td>
<td>-0.1403*</td>
<td>-0.1044</td>
<td>0.1819</td>
<td>1.0000</td>
</tr>
<tr>
<td>.0046</td>
<td>0.2467</td>
<td>0.3899</td>
<td>0.1318</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.2102*</td>
<td>0.0457</td>
<td>0.0521</td>
<td>-0.0615</td>
<td>0.2890*</td>
</tr>
<tr>
<td>1.0000</td>
<td>0.0001</td>
<td>0.7072</td>
<td>0.6686</td>
<td>0.6129</td>
<td>0.0152</td>
</tr>
</tbody>
</table>

* = significant at 1% (0.01), ** = significant at 5% (0.05), *** = significant at 10% (0.10)

Source: Correlation Matrix Result Using Stata, 2017
Table 2 shows the relationship between Liquidity (CR, QR, CCC) and debt to equity (DTE) of listed Conglomerate firms in Nigeria. The table shows a positive insignificant relationship between Debt to Equity (DTE) and CR from the coefficient of 0.1231 and a p-value of 0.3102 which is not significant at all level. The table also indicates an insignificant negative association between Debt to Equity and Quick ratio from the correlation coefficient of -0.0092 and a p-value of 0.9395. Cash conversion circle has an insignificant positive relationship with the DTE as shown by the coefficient of 0.0698 and a p-value of 0.5660. Also, the relationship between SIZE and DTE proved to be negative and significant at 1% level of significance as indicated by the correlation coefficient and a p-value -0.3352 and 0.0046 respectively. Finally, the association between DTE and ROA indicates a significant positive relationship between the correlation coefficient of 0.2102 and a p-value of 0.0808 which is 10% level of significance. This signifies that as the return on assets of Conglomerate firms continues to improve, DTE increases rapidly.

The relationship amongst the variables was found to be insignificant. However, there is the need to further justify the absence of multicollinearity amongst the independent variables. To prove the absence of multicollinearity, the variance inflation factor and tolerance values are comparatively beyond the established rule of thumb. Thus, the variance inflation factor (VIF) and tolerance value are advanced measures for assessing multicollinearity among the regressors. The variance inflation factor (VIF) and the tolerance values are determined with the use of STATA and were found to be concurrently smaller than ten and one respectively (see table 3) indicating the absence of multicollinearity. This, therefore, signifies the fitness of the model in this study.

### Regression Results and Discussion

This section presents the regression results of the dependent variables (Debt to Equity) and the independent variables of the study. This is followed by the analysis and interpretation of the association between the variables.

The summary of the regression result obtained from the model of the study $DTE = \beta_0 + \beta_1 CR_{it} + \beta_2 QR_{it} + \beta_3 CCC_{it} + \beta_4 SIZE_{it} + \beta_5 ROA_{it} + \varepsilon_i$ is presented in the table below.

**Table 3: Regression Results**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>COEFFICIENTS</th>
<th>T-STAT</th>
<th>VIF/TV</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>1.0406</td>
<td>2.10 (0.40)</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>0.0543</td>
<td>2.53 (0.014)</td>
<td>5.97/0.17</td>
</tr>
<tr>
<td>QR</td>
<td>-0.0267</td>
<td>-2.40 (0.019)</td>
<td>5.97/0.17</td>
</tr>
<tr>
<td>CCC</td>
<td>0.0557</td>
<td>0.97 (0.337)</td>
<td>1.07/0.94</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.0721</td>
<td>-2.44 (0.018)</td>
<td>1.15/0.77</td>
</tr>
<tr>
<td>ROA</td>
<td>0.3393</td>
<td>1.18 (0.241)</td>
<td>1.09/0.81</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>F-Stat</td>
<td></td>
<td>3.66</td>
<td></td>
</tr>
<tr>
<td>P-sig</td>
<td></td>
<td>0.005</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Stata output, 2017.
The regression result shows that the model is fit because the F-statistics value is 3.66, significant at 1%, thus leading to the credence of the result. The cumulative $R^2$ (0.42) which is the multiple coefficients of determination gives the proportion of the total variation in the dependent variable explained by the independent variables jointly. Hence, it signifies that 42% of the total variation in DTE of listed Conglomerate firms in Nigeria is caused by their current ratio, quick ratio, cash conversion circle, size and return on equity. This indicates that the model is fit and the regressors are properly selected and combined. Table 3 revealed that Current ratio (CR) has a coefficient value of 0.05428, T-Statistics value of 2.53 and T–Sig of 0.014 which is significant at 1% level of significance. From the coefficient value (0.05428) it can be deduced that Current ratio and DTE of listed Conglomerate firms are positively related. The economic implication of this result is that as CR increases, the leverage of conglomerate firms increases. Thus, for every 1% (percent) increases in current ratio, leverage of listed conglomerate firms increase by 5%. This implies that the positive influence of QR on leverage reveals that firms which have more current asset tend to use more debt. Conglomerate firms in Nigeria, which are characterised by higher current ratio, are bound to be highly leveraged. These findings also reveal that firms with a higher current ratio have the ability to meet their contractual obligation and hence, resort to financing via debt. In addition, these findings show that the relationships between quick ratio and debts are in the line with the static trade-off theory that postulates a positive relationship between debt and liquidity. Findings coincide with those of Sarliya and Harc, (2012). However, this finding stands at variance with those of Uremadu and Efobi, (2012), Ghasemi and Ab razak, (2016). This provides an evidence of rejecting null hypothesis one of the studies which states that Current ratio has no significant impact on DTE of listed conglomerate firms in Nigeria.

Quick ratio (QR) presents a coefficient of -0.0267, T-Statistics of -2.40 significant at 1%. The negative coefficient of the value of -0.0267 signifies that Quick ratio (QR) and DTE of listed conglomerate firms in Nigeria are inversely related. This implies that for every 1% increase in QR, DTE of conglomerate listed firms will decrease by 2.7% approximately. The implication is that higher quick ratio minimises the chances that conglomerates companies can face their short-term obligations. Overall, the negative influence of liquid assets (except inventory) on debt decisions shows that listed companies in Nigerian listed conglomerates do not consider liquidity as a guarantee; that when it is hard for a firm to get funded on the capital market, a situation of lower earnings, perhaps in the times that capital cost is very high, conglomerates opt for other sources to run their businesses. Therefore it can be understood that the effect of quick ratio has inverse effects on the capital structure. This finding coincides with those of Udomsirikul, et al. (2010), Nwidobie, (2012) and Nwankwo (2014). However, contradicting findings were documented by Khalaj et al. (2013) who documented a positive
effect of quick ratio on the leverage of Malaysian listed companies. Similarly, the results contradict our priori expectation as firms with a higher quick ratio have higher ability to meet their contractual obligation, hence they do not refrain debt financing. This provides an evidence of failing to reject null hypothesis two of the study which states that Quick ratio has no significant impact on the QR of listed Conglomerate firms in Nigeria. However, the negative effect of quick ratio on debt financing reveals that inventory has a significant role in the debt decision and cause a reverse impact on the leverage of conglomerate firms in Nigeria.

Conclusion and Recommendations

The study investigates the effect of liquidity on the capital structure of listed conglomerate firms in Nigeria. The three variables form the bases of hypotheses one to three of the study. The findings of this study are based on the panel data collected for the period of seven (7) years (2009-2015) from a sample of ten (10) listed conglomerate firms in Nigerian Stock Exchange as at 31st December 2015. The data were analysed using multiple regression techniques. The findings of the study reveal that current ratio, cash conversion circle play a significant role in explaining the capital structure of listed conglomerate firms in Nigeria. Emanating from the result obtained from the data collected and analysed, current ratio and cash conversion circle present positive effect on the capital structure mix of listed conglomerate firms in Nigeria.

Generally, this paper concludes that listed conglomerate firms in Nigeria which have more current asset tend to use more debt while those with higher quick ratio use less debt financing. In addition, listed conglomerate firms in Nigeria with a higher current ratio have the ability to meet their contractual obligation and hence, resort to financing via debt. In line with the findings of the study, inventory has been empirically identified as one of the important factors that influence the capital structure mix of listed conglomerates firms. Surprisingly, the findings reveal the different impacts of current ratio and quick ratio on debt decisions. To be specific, the proportion of inventory among Nigerian companies is high; as such it plays a significant role in debt decisions. Due to this, inventory management and sales management may need to progress in the Nigerian market.

The study, therefore, recommends that management should focus on inventory and sales management and monitor it closely to maintain an optimal capital structure which should be beneficial to the conglomerate industry.
References


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