CAPITAL STRUCTURE MANAGEMENT AND PROFITABILITY OF NIGERIAN CONSUMER GOODS SECTOR

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Abstract

This study employed the use of longitudinal approach to assess the relationship of capital structure management and profitability. Fifteen (15) firms in the consumer goods sector were selected and their data sourced from the Nigerian Stock Exchange Fact book (2009-2018) and one hundred and fifty (150) observations were obtained. Correlation test was carried out to check co-linearity of variables and generalized least square regression model was best fit and in correcting heteroskadasticity and a constant coefficient regression model was specified and estimated from the proposed model. Specifically, the variables of capital structure management namely: long-term debt (LTD), short-term debt (STD and equity finance (EF) on the listed firm's profitability Tobin's Q were examined. The result of the study revealed a positive significant impact on firm's profitability. This existed between the variables of capital structure management (LTD, STD and EF) and profitability (Tobin's Q). The regression analysis showed that LTD revealed a positive and significant impact on firm's profitability while STD and EF were not significantly impacted on firm's profitability when tested at 0.05 level of significant. It is recommended therefore, that listed consumer firms should adopt the management of long-term debt as related to pecking order theory as it proves positively and significantly on firms capital structure thereby increases firm's profitability (market value).

Introduction

The sustainability of any firm depends on the ability to generate profits which contributes to the reputation of a firm. A firm's capital structure is determined by debt and equity in other words, for a firm to made use of debt it must be profitable (Ramachandran & Raju, 2012). The main objective of a firm in this present business environment is to maximize wealth. This implies that firm managers must effectively and efficiently made use of available funds for smooth running of a firm business (Akinsulire, 2014). The decision of financing a firm business involves the recognition of the various means of funds that would be used to finance a business idea or project in order to attain profitability (Aransiola & Aransiola, 2015).

Akintoye (2016) described capital structure management as an important means for any firm in maximizing wealth of stakeholder and such factor impact positively on firm's ability to compete in competitive markets. Thus, the capital structure management of a firm is the main source or process of funds used by firms in financing its daily operations and it is considered as the most vital elements of financing a firm's business due to its major role it plays in firm's profitability (Gambo, Ahmad & Musa, 2016; Offiong & Ajaude, 2017).

Relating capital structure management and profitability, it is believed that the profitability of a firm is directly influenced by the decision of a firm's capital structure (Velnampy & Niresh, 2012). As a result of the impact of capital structure on firm's profitability, it assists in dealings with competitive market environment (Ogebe, Ogebe & Alewi, 2013). The relationship between firm's capital structure management and profitability cannot be over looked because, firm's profitability needs to increase for a firm long-term survival and proper attention is needed when deciding the

management of a firm capital structure. In the area of finance, the use of debt can be effective as it is less costly to manage than equity but affects the firm's leverage after some certain time frame as a result of this, managers needs to maintain balance of both (Khalid, Khursheed & Mouh-i-Din, 2013). To maximize profits and market value of a firm, it is proper to combine debt and equity as it minimises the costs of capital but improper combination of both can create negative impact on firm's profitability thus, managers should ensure to achieve result from the combination of both (Vijayalakshmi, Babu & Goud, 2018).

According to Ogebe *et al*., (2013) most decisions are made by managers of a firm in Nigeria. Despite debt being a cheaper source of financing a firm, equity is much regarded which is as a result of managers protecting its human capital and to avoid issues that accompanying debt (Aransiola & Aransiola, 2015). The reviews of various literatures like Awuah-Agyeman (2015), Aransiola and Aransiola (2015), Kakanda, Bello and Abba (2016), Yusha'u and Audu (2018) as well as Uremadu and Onuegbu (2019) all stated likely components or variables of capital structure management when measured against profitability. It was observed that, most research work made use return on assets (ROA) and return on equity (ROE) as measurement of profitability thereby not looking at the market value of the firm. Thus, this study intends to find out how capital structure management affects firm's market value using Tobin's Q as measurement of profitability. This study therefore presents useful insights on capital structure management and profitability of Nigerian consumer goods sector using panel data analysis to assess the relationships among the research variables.

Research Questions

The underlisted research questions for this study have been formulated below:

1. What is the relationship between long-term debt and firm's profitability?
2. How does short-term debt influence firm's profitability?
3. How does equity finance impact on firm's profitability?

Objectives of the Study

The main aim of this study is to assess the relationship of capital structure management and profitability of Nigerian consumer goods sector. The underlisted aims are to:

1. investigate the relationship of long-term debt and firm's profitability;
2. examine the influence of short-term debt on firm's profitability; and
3. evaluate the impact of equity finance on firm's profitability.

Literature Review

Definition of Profitability

Definition of profitability is described similarly by researchers and it is understood in most cases as a financial result of a certain period divided by a firm's total assets. According to Shinta and Nila (2014) it is a way of tracking the progress of a firm by giving important facts about the firm's present situation and which enables the firm to achieve its goals. Firms are generally measured by how profitable it performed relating to previous performances or that of competitors (Awuah-Agyeman, 2015). Profitability is refers to as the operating competence of a firm. It is the ability of a firm to generate or makes profits and the capability of the firm to achieve sufficient returns on the capital and human capital used during the operations of the firm's business (Angahar & Ivarave, 2016). Profitability is defined by Hussain, Shahid and Akmal (2016) as the connection among business earnings from business capital assets which is measured by earnings before tax to its total assets. For this study, Tobin's Q is used as measurement of profitability.

Tobin's Q

Tobin (1968) proposed a model which represents ratio for market value of a firm shares in addition to the book value of the firm debts and to the book value of its assets. In 1969, he developed a neoclassical investment model which suggested

that the rate of investment and swiftness which investors wish to improve the capital stock should be related to Q. Lindenberg and Ross (1981) described Tobin's q as the market value ratio of a firm asset to the replacement of cost of the firm assets. Salehi (2002) stated that the Tobin's Q is a method that assist investment analysis and to measure how to make real investments. Most times the ratio is usually more than one and the larger the ratio the better for financial position. Also, the higher the profitability of the firm, the higher the firm produces cash. While the less the ratio, the worse the financial position and the weaker the profitability, the more complicated in cash production from the operating and investing of the firm's activities. It is helpful in decision making and if Q is equal to 1, then the firm makes use of their investment opportunity and if greater than 1 it means the firm is well supported for investment (Salehi, 2009).

Tobin's Q has been described as the most accurate measure regarding stock market value which can be employed in financial situation analysis of a firm. Meaning that investors who collected the stock of the firm would calculate the Tobin's Q and it is appropriate for firms to have high Q (Jahani, Zalghadr-Nasab & Soofi, 2013). Also when a Q is between 0 and 1 it is regarded as low and it indicates that the value of the firm is lower than its assets. This will make the firm to be undervalued and if above 1 it shows a firm's high value and better performance. It employs a basic opinion that firm value cannot swerve extremely from such as replacement value of the assets required in generating the future cash flow of a business (Geldenhuys, 2014). Thus, it is regarded as key predictor of market amendment and explains inconsistency of investments and it represents a firm's growth which indicates its positive relationship of the firm's present and future operating performance. Thus it can be calculated as Market Value of Firm divided by Replacement Value of Assets (Singhal, Fu, & Parkash, 2016; Sucuahi & Cambarihan, 2016).

Definition and Concept of Capital Structure Management

Research on capital structure management was initially done by Modigliani & Miller (MM) in (1958). This lead to different research work which identify its effect on financial performance of firms whose results were contradictory. Amarjit, Nahum and Neil (2011) opined that capital structure deals with what happen to the total assessment of a firm and its cost of capital when the ratio of debt to equity varied. This means that capital structure is a mix of debt and equity. Where debt refers to all fixed interest bearing stock while equity is the ordinary shares plus retained earnings. It is believed that the capital structure management is important and crucial to business organizations because it maximizes the firm's returns and its impacts in dealing with competitive markets (Mohammad & Jaafer, 2012). Capital structure management is the utilization of a third party's funds in financing a firm which might lead to growth in profit. It is the balanced correlation between debt and equity elements of a firm's capital outlay (Lawal, 2014). Hussain (2015) stated that capital structure plays a critical role in maximizing the firm's performance and its value and it involves various sources of funds used in financing the capital investment and operations of a firm. Such sources are: debt financing (short-term debt and long-term debt) and equity financing (common stock and preferred stock) and when employed by a firm it affects positively or negatively (Yusuf, Al-Attar & Al-Shattarat, 2015).

The capital structure management of a firm could be referred to as the financial leverage of a firm or ratios between the firm's debt and equity and it comprises of short-term debt, long-term debt, preferred equity and common equity (Angahar & Ivarave, 2016; Kakanda *et al*., 2016). Also according to Kirmi (2017) it describes how a firm finances its assets which consist of both equity and debt or equity only. Such source of funds includes bonds and loans, shareholder's funds like retained earnings, borrowed funds amongst others. Therefore, mismanagement of capital structure management lead to increased cost of

capital thereby reducing the net present value of the firm's investment while proper management of a firm capital structure will reduce the firm's cost of capital and increase the net present value of the firm's investment thereby increases the firm's overall value (Vijayalakshmi *et al*., 2018).

Long-term debt

Long-term debt comprises of all liabilities except short-term debt and shareholder's equity. The choice of using long-term debt is due to the plain and implied costs form of finance. This requires a cautious fact of interest rate, payment dates, borrower risk, loan size, terms and conditions, purpose of loan and collateral (McInnes, 2000). Bonds or debentures of long-term debt securities are agreed repayment of main amount by borrower. These bonds are requires the borrower to pay interest annually or intermittently. Also these securities are also refers to as straight bonds (Jiricek & Dostalova, 2010). This type of financing are usually done when firms acquires assets like machinery the repayment time frame for such funds lengthen over a long time usually more than a year (De-vries, 2010).

According to Ajugwe (2016) in making decision regarding long-term it determines the type and amount of assets the firm intends holding. This decision includes using or allocation of funds. And such involves the capital structure of a firm. Long-term debt refers to as issue of a firm year observations in which such proceeds with maturity of a year or greater exceeds five percent of the beginning of a year assets and the main reason a firm will involve in long-term debt is for financing of needs. Also without firm's involvement of long-term debt, firms will not be able to gain the requisite investment level which is necessary (Maja, Ivica & Marijana, 2017).

Short-term debt

According to De-vries (2010) Short term debt refers to as funds used in financing a firm's daily operations like short-term loans, inventory financing and trade receivables which is expected to pay off in less than a year. And as all liabilities that require to be payoff within a year. In other words, it covers debts whose insolvency is like to receive from current assets and normally incurred in any running business whose payment is required during a definite time. According to Guin (2011) short-term assets should be financed with short-term liabilities and short-term decisions are easier to change when implemented also and are items that will be used and paid off within a year. By holding on current assets, it is another source of change in short-term debt financing. And short-term debt are used as a permanent source of financing if debt is continuously refinanced when matures. Another thought of using short-term debt is to reduce the firm's interest expense (Fosberg, 2013).

Equity finance

Equity finance most times is more expensive to manage than debt (Carpenter & Pedersen, 2002). Equity is also refers to as owner's capital, net worth or equity. It involves mostly with large firms who depend less on equity financing than small firms (Terfasa, 2014). Equity financing enables firms to have funds without acquiring debt. This means that such funds to not have to be paid off in a certain time frame. It is from the firm's future profit that investors reclaim their shares from. The investors or shareholders have the right to share in the firm's profit either as capital gains or dividends and if such a firm losses, they losses only the amount which they invested (De-vries, 2010). Equity financing is the issuing of shares to shareholders or investors to support a firm's business activities. The method of financing is considered important during a firm's starting up stage. Also in this process of financing shareholders makes profit when the share price is high and through the sharing of dividends by firms which the shareholders or investors purchased. Also it is regard as ordinary plus other reserves (Kakanda *et al*., 2016).

Relationship between selected variables and profitability (Tobin's Q)

Long-term Debt and Profitability (Tobin's Q)

In evaluating firm performance it was observed that long-term debt was significantly negative on

profitability (Zeitun & Tian, 2007). Dwilaksono (2010) stated that long-term debt negatively affected Tobin's Q as a result from the research analysis. Long-term debt was not statistically significant in relating with profitability from the research work as stated by (Hasan, Ahsan, Rahaman & Alan, 2014). Also confirming this result, is the study of Chadha and Sharma (2015) where it was observed that leverage used was significantly and negatively linked with Tobin's Q. In order to reduce production cost and enhance profitability and productivity, it is necessary to reduce cost of borrowing. Firms should seek long-term debt as it affects debt more on profitability (Odusanya, Yinusa & Ilo, 2018).

Short-term Debt and Profitability (Tobin's Q)

Empirical study from Zeitun and Tian (2007) revealed that short-term debt has a positive impact on Tobin's Q which explained that firms are highly leveraged and debt was used to compel investors in increasing their rate as a result of the high leverage sometimes may lead to liquidity issues. Binsbergen, Graham and Yang (2011) agreed with the same findings that marginal costs of debt increases when firm increase the level of debt above average level. According to Khan (2012) firms finance through short-term rather than long-term debt as they are easily accessible at a reasonable interest rate. Salim and Yadav (2012) stated that short-term debt needs to be encouraged as it tested positively to profitability (Tobin's Q). Olokoyo (2013) opined that since short-term debt is highly significant in relationship with Tobin's Q, it therefore means that firms in Nigeria may not be exposed to risk in financing unlike firms in developed countries. Chen, Jiang and Lin (2014) stated that firms that practice higher percentage of short-term debt experience increase in firm value and prevent such firms from under investment (Chaleeda, Tunku & Anas, 2019).

Equity Finance and Profitability (Tobin's Q)

Khan (2012) stated that equity market is undeveloped as a result of firms relying on short-term debt due to irregular information and inefficiency in managing external financing which seems very expensive and being considered as the last result. Olokoyo (2013) measured performance with Tobin's Q which showed a high growth rate market performance as a result of increase in firm's equity and share prices. This means that sampled companies will prefer the use of equity than debts. For capital structure to reach its optimal level, firm market value should be maximize thereby reducing firm's risk (Chadha & Sharma, 2015). The use of equity is considered less risky since there is no pay off or debt plan of regular fixed payment which increases profitability and it reduces the risk of bankruptcy (Lyulyu, 2018).

Theoretical Review and Framework

Trade-off Theory

The trade-off theory was proposed by Kraus and Litzenberger (1973) when, an interest tax shield was introduced alongside debt and financial problems to a state preference model. Trade-off theory is very vital because it describes how firms with high leverage do attracts high cost of solving debt which affects the firm's profitability (Owolabi & Obida, 2012). This theory determines how a firm chooses in depth of equity and debt financing used by balancing benefits and costs. The theory involves offsetting debt cost as against debt benefit and firms are commonly financed with both debts and equity. The trade-off theory deals with two concepts under capital structure such as agency costs and cost of financial distress. There is financial distress when a firm was not able to meet with debt holders duties (Hossain & Yakub, 2014). According to Kung'u (2015) this theory supports investors and financial managers minimizing risk and maximizing the firm's returns from their investments. Though, also related to tax-based theory where it stated that firms should raise their debt level as possible when searching for best level (Qian, 2016). Also, this theory claims that in using debts a firm profitability will increase and by increasing debts, profitability will increase too (Hussain *et al*., 2016). Furthermore, Ironkwe and Wokoma (2017) stated that trade-off theory is an idea that a firm use in matching costs and

paybacks through equity funding and debt investment. This means that business firms are normally funded with debt and equity.

Resource Based Theory

Resource based theory was later developed and expatiated by Wernerfelt (1984) as a follow up on the theory of the growth of a firm introduced by Penrose (1959). The theory deals with the firm characteristics internally and its effects on firm performance. It was based on the assumptions like other theories where some of these assumptions directly affect the firm superior performance theories. It focuses on the measurement of superior performance for evaluating competitiveness of a firm. It adopts the assumption that firms are profit oriented entities and firm's managers are mainly logical. The resource based theory interprets and analyzes resources of a firm in order to understand how firm achieve an advantageous competitive market (Barney, 1986). According to Pearce and Robinson (2011) resource based theory is a method of identifying and analyzing a firm's devices as a result of evaluating its key combination such as skills, assets and the competence of a firm.

The theory also focuses on performance disparity between firms, relating the evaluation of the relationship between resources, competitive advantage and profitability, and the role of imperfect information in achieving profitability between competitive firms (Kaguri, 2013). These resources are usually measured by leverage ratios which makes the firm improve in its ideas of financing by debt. And for the firm to gain a competitive advantage over its competitors, physical resources have to be measured by its assets in terms of size. Therefore, being able to earn or gain increases firm's performance (Dioha, Mohammed & Okpanachi, 2018).

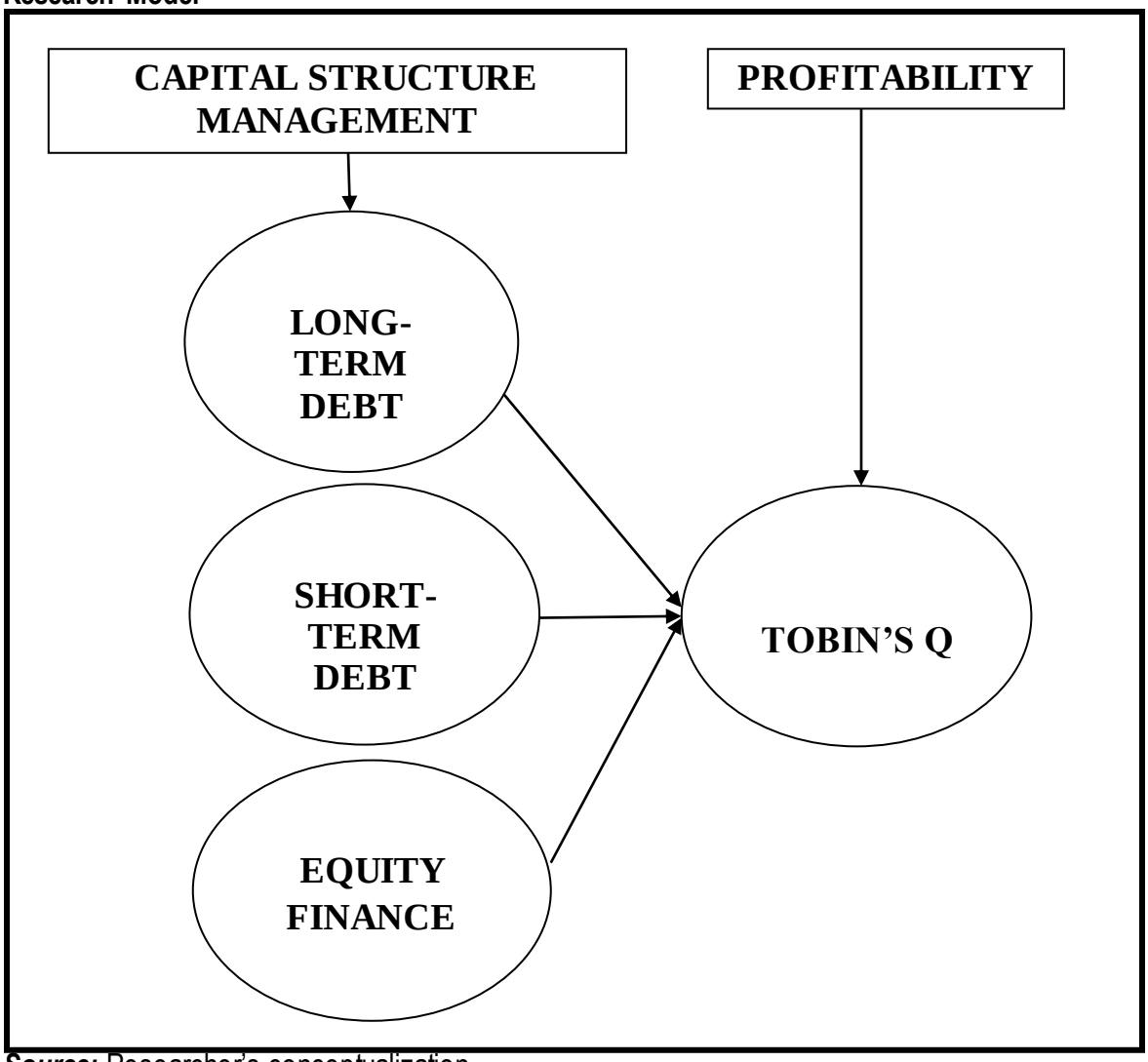
Pecking Order Theory

The pecking order theory was first introduced by Donaldson (1961) and it was observed that management prefers internal source of new funds then external except an unavailable circumstances arises. The theory is also known as information asymmetry theory as proposed by Myers (1984) where he suggested that management has a preference order they execute as regards financing either by sourcing for funds internally or if need be external source of funding will be considered. The theory was later developed by Myers and Majluf (1984) as an alternative to trade-off theory and that the order of financing according to preference should be internal, debt and equity which is known as pecking order of financing. The pecking order theory mainly goes well with large firms and high profitability which has more funds internally in the form of retained earnings. Owolabi and Obida (2012) suggested that the theory is as a result of asymmetric information that exists in the financial market and that firm managers should have good information about the progress of their firms. According to this theory, a firm profitability can increase using internal funds as a result of the manager's full knowledge of the firm's environment present and future operations and the interest of the shareholders are protected (Hussain *et al*., 2016). Negasa (2016) viewed it as a support for firms to have right hierarchy of financing by using retained earnings, debt and if necessary then application of equity which result as the last choice of funds financing.

In relating this theory with the capital structure management and profitability, since the theory initially suggested that firms should use internal source of generating funds and then turns to equity if it needs additional funds, then any highly profitable firms whose earnings are highly generated are expected to made use of less debt capital (Kaguri, 2013). And it emphasized the information asymmetry problem in the capital market. Also this theory claims that most managers at times finances through public offer and other sources of financing internally then equity as last resort (Onyeka, Nnado & Iroegbu, 2018). Therefore, in order to achieve firm's profitability, adequate cash must be maintained to prevent costs issues when sourcing externally and managing of finances. Thus, this theory (Pecking

Order Theory) is the framework in which this study is based.

Research Model



Source: Researcher's conceptualization

Empirical Review

Aransiola and Aransiola (2015) examined the effect of capital structure on performance of quoted manufacturing companies in Nigeria. Secondary data was collected from annual reports of selected companies and Nigerian Stock Exchange fact-book. Panel data analysis was employed. Inferential and descriptive methods were used in analysing the data. In order to determine the relationship between the variables, correlation analysis was carried out. While to determine how the independent variable affects the dependent variable, regression analysis was employed. From the study it revealed that there was a negative relationship between capital structure and profitability of the selected companies in Nigeria. Therefore, it was recommended that performance standards should be set up and converse to investors. Financial institutions, banks and government bodies should try to encourage these services to increase performance.

Awuah-Agyeman (2015) assessed the impact of capital structure and profitability of manufacturing industry in Ghana using fifteen (15) firms for eight

(8) years (2005-2012). Profitability was represented by return on equity while, capital structure was measured with long-term debt, short-term debt and equity. Panel data regression method was employed using both random effects and fixed effects for analysing the data. Also correlation and descriptive statistics were employed. The findings indicated that long-term debt and short-term debt were negatively related to profitability. Therefore, it was recommended that such firms should made use of equity to expand their business. When considering debt, long-term debt is recommended.

Kakanda *et al*., (2016) assessed the effect of capital structure on the financial performance of listed consumer goods companies in Nigeria. Secondary data was used covering the periods of 2008-2013. Ex-post facto was used as the research the design in order to examine the relationship between the independent variable and dependent variable. Hierarchical multiple regression, descriptive statistics and correlation analysis were employed to test the hypothesis in the study. From the result, there was a positive significant relationship between capital structure and corporate financial performance. Recommendation was that authorities of these companies should create a balance business environment in order to improve in their performance.

Mahmoud (2017) empirically analyzed capital structure determinants in Nigerian manufacturing industry from 2012-2016. Data was sourced from the Nigerian Stock Exchange fact-book. Eight (8) variables of capital structure were measured to ascertain their effects on firm value (Tobin's Q). One of the variables was not significantly related to firm value while, the other seven variables were significantly related. From the outcome results, it showed that the result confirm the prediction of pecking order theory as regards profitability and trade-off theory as regards tangibility. Earnings volatility did not agree with trade-off theory and firm value. Suggestions were made that, management, regulators and board members of these companies should always regard these variables used in measuring capital structure are the roots for decision of debt financing so as to gain best capital structure.

Oyedokun, Job-Olatuji and Sanyaolu (2018) examined the effect of capital structure on the financial performance of Nigerian manufacturing sector. Ten (10) companies were selected listed in the Nigerian Stock Exchange. Ex-post facto research design was adopted using four (4) models in analysing the impact of capital structure on performance of companies. The study made use of balanced panel data of 100 observations from the 10 selected companies within the periods of 2007-2016. Regression and descriptive statistics were carried out for analysis. From their findings, it revealed that there are non-significant and statistically significant effects of capital structure on the company's performance. It was recommended that, these manufacturing companies should adjust to balanced capital structure strategy that will enhance their performance and corporate values.

Uremadu and Onuegbu (2019) investigated the impact of capital structure on corporate performance in Nigeria focusing on consumer goods sector. Technique used in analysing the data was multiple regression of Ordinary Least Square (OLS) analytical technique. The result revealed that there was a negative and insignificant impact. Long-term debt ratio to total assets showed a negative and insignificant impact on ROA likewise total debt to equity. The study suggested that managers should be cautious using debt as source of funds. They should finance their operations with retained earnings and debt should be the least option.

Yusha'u and Audu (2018) examined the impact of leverage on the dividend policy of listed consumer goods firms in Nigeria covering the periods of 2007-2016. Secondary data was used. Panel multiple regression techniques were employed. From their findings, it revealed that long-term debt ratio and total debt ratio were negatively and significantly impacted on dividend policy of the listed consumer goods firms in Nigeria. In

conclusion, from the findings it shows that leverage has a significant negative impact on dividend policy. Thus, it recommends that managers should use leverage in such a way it increases value for the owners.

Shuaibu, Ali and Moh'd (2019) examined the impact of company attributes on firm value of listed consumer goods sector in Nigeria using the periods of 2005-2014. Secondary source of data collection was carried out. Cluster sampling technique was employed in determining the samples of the study. Data was tested using Hausman test and Shapiro Wilk test. Random effect model was used for regression analysis. The outcome of the result revealed that firm growth and firm size were positive and significantly impacted on firm value of selected consumer goods companies. While, firm leverage though was positively related with firm value but not significantly related. It was recommended that these companies should made use of proper debt management and suitable capital structure in order to avoid bankruptcy. Also, they should obtain reasonable assets for effective and efficient management for increase in sales and firm's value.

Methodology

This chapter describes the research design and methodology used in the study. It describes the appropriate tests required to choose and the ideal model that perfectly suits this study.

Research Design and Sample Size

Longitudinal research design was used for this study. Reasons for choosing this design are it is effective in determining variable patterns over time, it helps to identify unique developmental trends, the use of consistent observational methods and allows for unique specific data points to be collected. The study has a sample size of fifteen (15) firms listed in the consumer goods sector in the Nigerian stock exchange namely: Cadbury Nigeria, Dangote flour mill, Dangote sugar, Flour mills of Nigeria, Guinness Nigeria, Honeywell flour mill, International breweries, Nascon Allied, Nestle Nigeria, Nigerian breweries, Nigeria Enamelware, Nigerian Northern flour mill, PZ cussons, Unilever Nigeria and Vitafoam Nigeria covering the period of ten (10) years 2009-2018.

Source of Data

The study made use of secondary data. This was sourced from individual's firm annual reports, Central Bank of Nigerian Statistical Bulletins and Nigerian Stock Exchange Factbook. Data collected consists of long-term debt, short-term debt, equity finance and Tobin's Q.

Model Specification

Generalized least square model is used for this study to attain the co-efficient of the various variables used for this study.

The model for the study is functionally stated below:

$TobQ' = (LTD, STD, EF)'$ ..... (3.1)

The model is econometrically stated as:

$TobQ_{it} = \beta_0 + \beta_1 LTD_{it} + \beta_2 STD_{it} + \beta_3 EF_{it} + \varepsilon_{it}$ ..... (3.2)

Where:

TobQ	= Tobin's Q
LTD	= Long-term debt
STD	= Short-term debt
EF	= Equity finance
β_0	= intercept
$\beta_1 - \beta_4 > 0$	= Coefficient of LTD, STD and EF
ε_{it}	= Error term
i	= Samples of Nigerian consumer firms
t	= Time or period of the study

Statistical Techniques

The data collected was analyzed using descriptive statistics to check the average value, variance and standard deviations. The model proposed was estimated using generalized least square regression technique in testing the significance of the various independent variables. Generalized least square regression technique assists in reducing autocorrelation, tackling of outliers issues and heteroskedasticity. Analysis was conducted at

a significance level of 0.05 using STATA version 14.0 statistical software packages.

Data Analysis and Results

Descriptive Statistics of Selected Consumer Goods Firms

Table 4.1 shows the descriptive statistics of the measured variables. It represents the variables of fifteen (15) firms operating in Nigerian consumer goods sector for the period of 2009-2018. Thus, the mean, median, maximum, minimum, standard deviation and variance are described in the table below.

Table 1: Descriptive Statistics of Dependent and Independent Variables

```
. *(7 variables, 150 observations pasted into data editor)

. tabstat tobinq ltd std ef, statistics( mean median max min sd var sum count )
```

stats	tobinq	ltd	std	ef
mean	2.3094	.1528	.4652	32.81473
p50	1.6	.125	.44	18.33
max	9.29	.83	1.01	178.3
min	.17	-.24	.1	-2.44
sd	1.753357	.128126	.1463778	38.28955
variance	3.074262	.0164163	.0214265	1466.09
sum	346.41	22.92	69.78	4922.21
N	150	150	150	150

Source: 2008-2018 NSE data analyzed using STATA 14.0

From the table above, it reveals that Tobin's Q mean value is 2.31, the standard deviation is 1.75 within the minimum value of 0.17 and maximum value of 9.29. This shows that sampled firms are well supported for investment thereby making use of the investment opportunities effectively well. Long-term debt (LTD) records an average value of 0.15 within the minimum value of -0.24, maximum value of 0.83 and standard deviation of 0.13. This reveals that there is reduction of outstanding debts of the sampled firms. Short-term debt (STD) mean value is 0.47, standard deviation of 0.15 between the minimum value of 0.1 and maximum value of 1.01. This reveals that the firms were able to finance their daily activities, pay off in less than a year and reduce their firm interest expenses. Equity finance (EF) shows an average value of 32.81, standard deviation of 38.29 between the minimum value of -2.44 and maximum value of 178.3. This result indicates that sampled firms did not depend more on long-term debt or short-term debt but rather focus more on equity financing. Thus, it revealed that firms were fully supported for investment as there was increase in firm's profitability.

Correlation Test

Below result shows the correlation matrix unit of association between capital structure management variables (long-term debt, short-term debt and equity finance) and profitability (Tobin's Q) of Nigerian consumer goods sector. It was found that long-term debt (0.23) and equity finance (0.10) which indicates a positive and weakly unit of association with Tobinq. While, short-term debt (-0.07) was negatively and weakly associated with Tobinq. Further analysis revealed that variables were tested to be statistically significant at the level of 0.05. This implies that capital structure management have direct significant effect on profitability of firms.

Table 2: Correlation Matrix of Measured Variables

```
. pwcorr tobinq ltd std ef, star(0.05) sig

             |   tobinq      ltd      std       ef
-------------+------------------------------------
      tobinq |   1.0000
             |
             |
         ltd |   0.2251*  1.0000
             |   0.0056
             |
         std |  -0.0669  -0.2847*  1.0000
             |   0.4157   0.0004
             |
          ef |   0.1007  -0.0084  -0.2925*  1.0000
             |   0.2200   0.9188   0.0003
```

Source: Researcher's Computation (2019)

Regression Analysis and Model Estimation

Below is the regression analysis that illustrates both ordinary least square and generalized least square. Linearity test was carried out to confirm the linearity of the OLS result carried out which leads to tests for heteroskadasticity and multicolinearity of the conducted analysis. The result proves that P value was significant and the H0 was rejected. Generalized least square model was therefore used for the regression analysis in correcting the issues of heteroskadasticity.

Table 3: Summary of OLS and GLS Regression Results

```
. estimates table OLS GLS, stats(chi2 df N aic bic rank r2) star(.05 .01 .001)

-------------------------------------------------
    Variable |       OLS              GLS
-------------+-----------------------------------
_
         ltd |   3.2216322**
         std |   .39470917
          ef |   .00514421
       _cons |   1.4647101*
-------------+-----------------------------------
tobinq
         ltd |                   3.2216322**
         std |                   .39470917
          ef |                   .00514421
       _cons |                   1.4647101*
-------------+-----------------------------------
Statistics
        chi2 |                   9.6671097
          df |                         146
           N |         150             150
         aic |   591.52096       591.52096
         bic |    603.5635        603.5635
        rank |           4               4
          r2 |   .06210117
-------------------------------------------------
          legend: * p<.05; ** p<.01; *** p<.001
```

Source: Researcher's Computation (2019)

Model: $TobQ_{it} = \beta_0 + \beta_1 LTD_{it} + \beta_2 STD_{it} + \beta_3 EF_{it} + \varepsilon_{it}$

Estimation Equation:

TobQ = C(1)*LTD + C(2)*STD + C(3)*EF

Substituted Coefficients:

TobQ = 1.4647101+3.2216322*LTD+0.39470917*STD+0.00514421EF

From the table above, long-term debt (LTD) is significant and positively related to Tobin's Q while short-term debt and equity finance were positively but significantly related to Tobin's Q. This implies

that the mode of financing of these firms is based on long-term financing and this affect the market base of the firms positively. And investors may likely invest with these firms due to interest rate, time and liquidity risk. Short-term debt may not be appropriate if the interest of these firms is to improve their market value. The long-term debt is a good substitute for short-term and equity financing because firms that wants to see a better market value may not necessary relies on short-term financing, since short-term financing did not improve firm value. Equity financing is believed to be expensive and firms of consumer sector see the type of financing difficult to operate with.

Discussion of findings

The practice of capital structure management is believed to be the mixture of debts (long-term and short-term) and equity. The result of long-term debt was significantly related to Tobin's Q this is related to the studies of Zeitun and Tian (2007); Chadha and Sharma (2015) which indicates that significant impact on profitability which is against the result of Hasan, Ahsan, Rahaman and Alan (2014) whose study stated significant in connecting with profitability. The result of short-term debt did not tally with other related studies such as Zeitun and Tian (2007) had a positive short-term debt impact on profitability (Tobin's Q), Binsbergen, Graham and Yang (2011); Khan (2012) and Olokoyo (2013) whose results represents significant impact of short-term debt on profitability. Equity financing recorded non-significant on profitability which did not tally with the result of Olokoyo (2013) whose results stated positive and significant to profitability. This study which is related to pecking order theory suggested that management of firms should finance through debt which is part of asymmetry information. Also firm's profitability can increase either by financing through the right hierarchy of using debt and if necessary employ equity. Thus, firms should seek long-term debt as it affects more on profitability as a result from this study.

Conclusion and Recommendations

The practice of capital structure management is crucial and important to firm's business because of its maximization of firm's returns and its effect in dealing with competitive markets. The study found a positive and significant impact of capital structure management on profitability with long-term debt which serves as one of proxies for capital structure and recorded a significant connecting on firm's profitability using fifteen firms of the consumer goods sector listed in the Nigerian stock exchange for the period of 2009-2018. The study recommends that firm's manager of this sector interest is to improve Tobin's Q in terms of market value, they should make use of long-term debt in their capital structure. Due to overtime, it reduces the interest rate into smaller payments. Therefore, in order to achieve firm's profitability, adequate cash must be maintained to prevent costs issues when sourcing for funds and managing of finances. It is also recommended that further studies should be carried out using other non-financial sectors such as agriculture, health, information technology and services.

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Appendix

```
. *(7 variables, 150 observations pasted into data editor)

. tabstat tobinq ltd std ef, statistics( mean median max min sd var sum count )
```

stats	tobinq	ltd	std	ef
mean	2.3094	.1528	.4652	32.81473
p50	1.6	.125	.44	18.33
max	9.29	.83	1.01	178.3
min	.17	-.24	.1	-2.44
sd	1.753357	.128126	.1463778	38.28955
variance	3.074262	.0164163	.0214265	1466.09
sum	346.41	22.92	69.78	4922.21
N	150	150	150	150

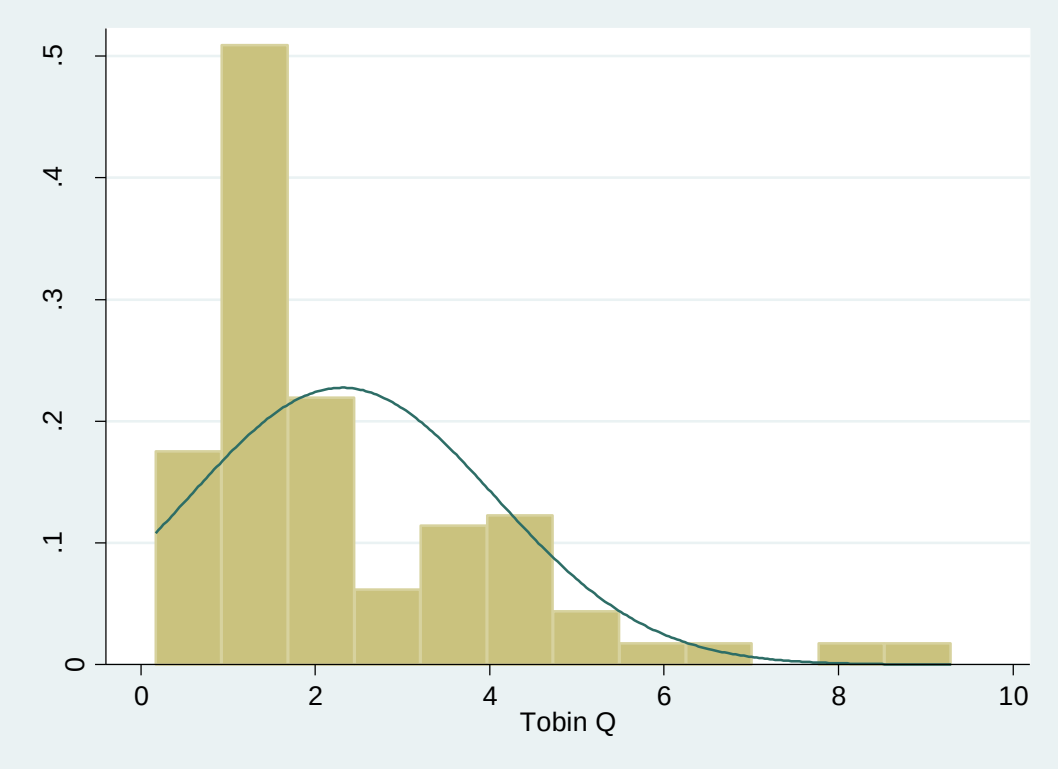
```
. pwcorr tobinq ltd std ef, star(0.05) sig
```

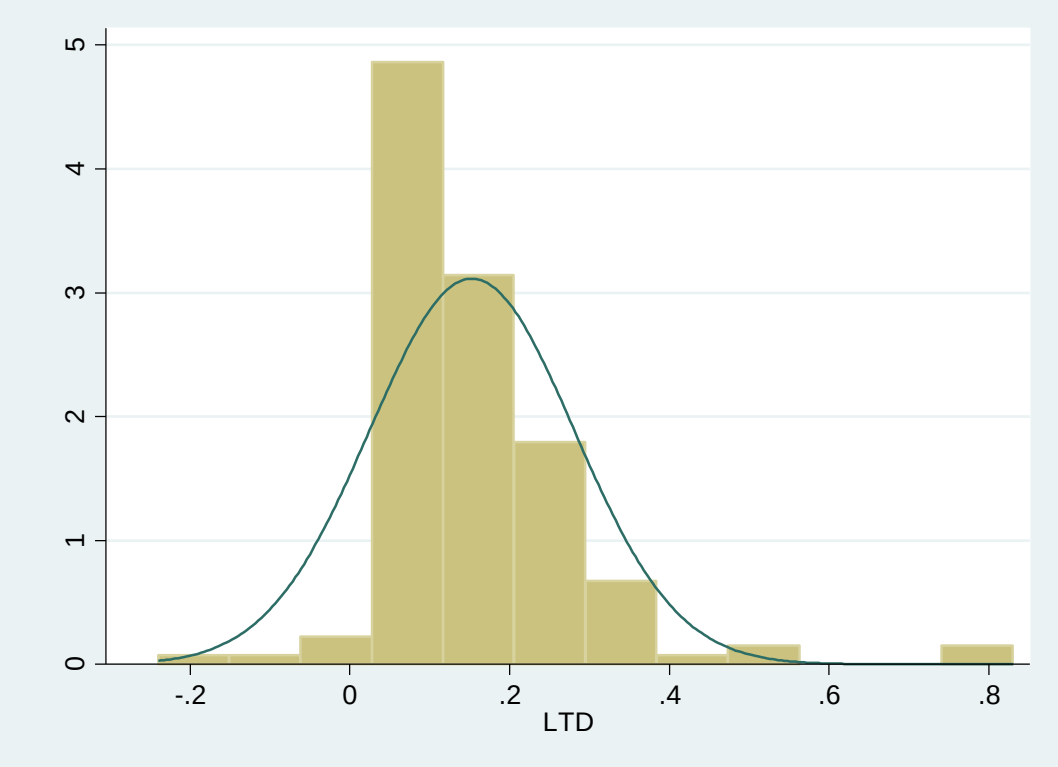
	tobinq	ltd	std	ef
tobinq	1.0000			
ltd	0.2251*	1.0000		
	0.0056			
std	-0.0669	-0.2847*	1.0000	
	0.4157	0.0004		
ef	0.1007	-0.0084	-0.2925*	1.0000
	0.2200	0.9188	0.0003	

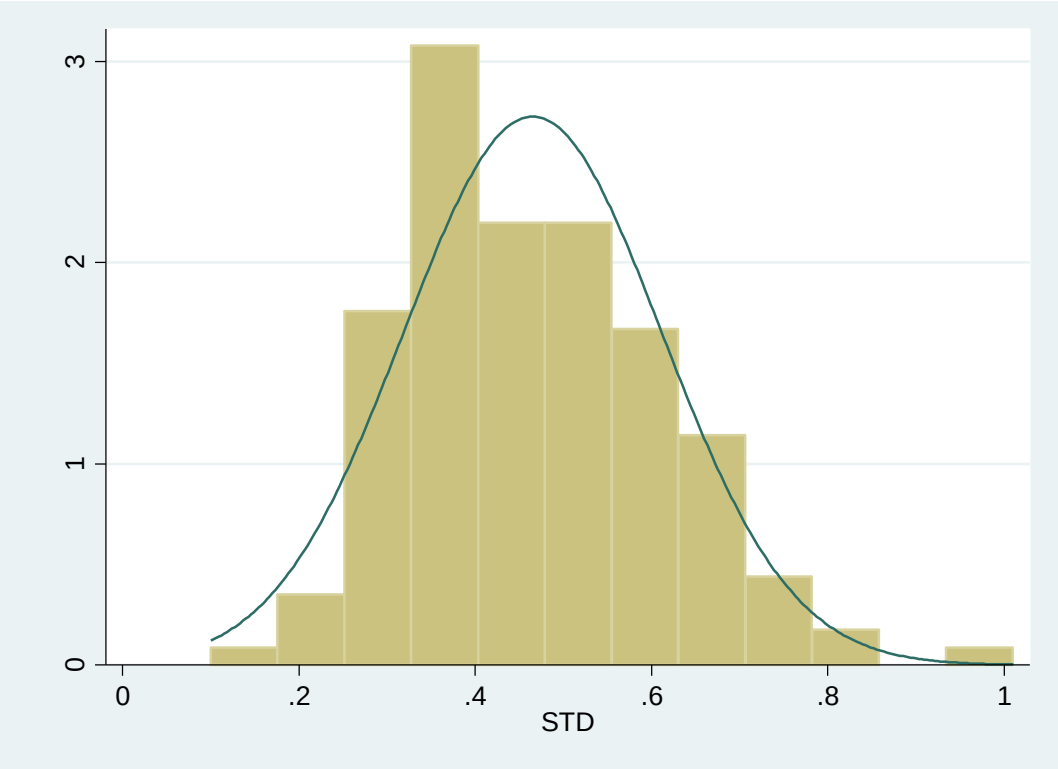
```
. *(8 variables, 150 observations pasted into data editor)

. sktest tobinq ltd std ef
```

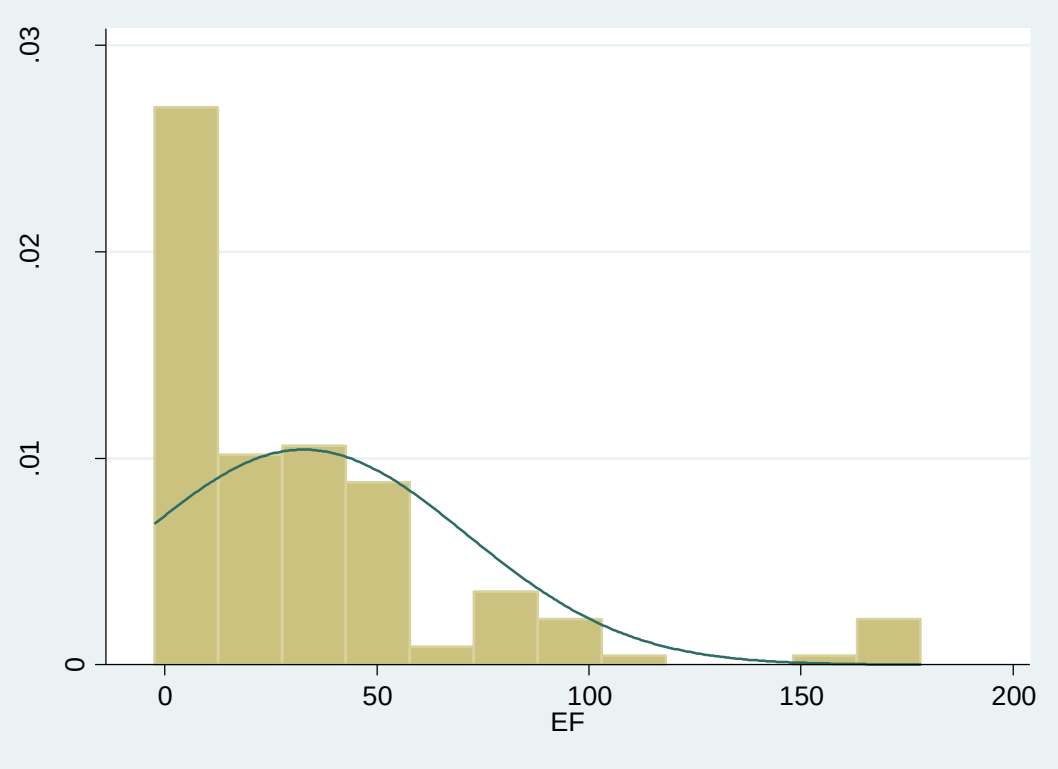
Skewness/Kurtosis tests for Normality

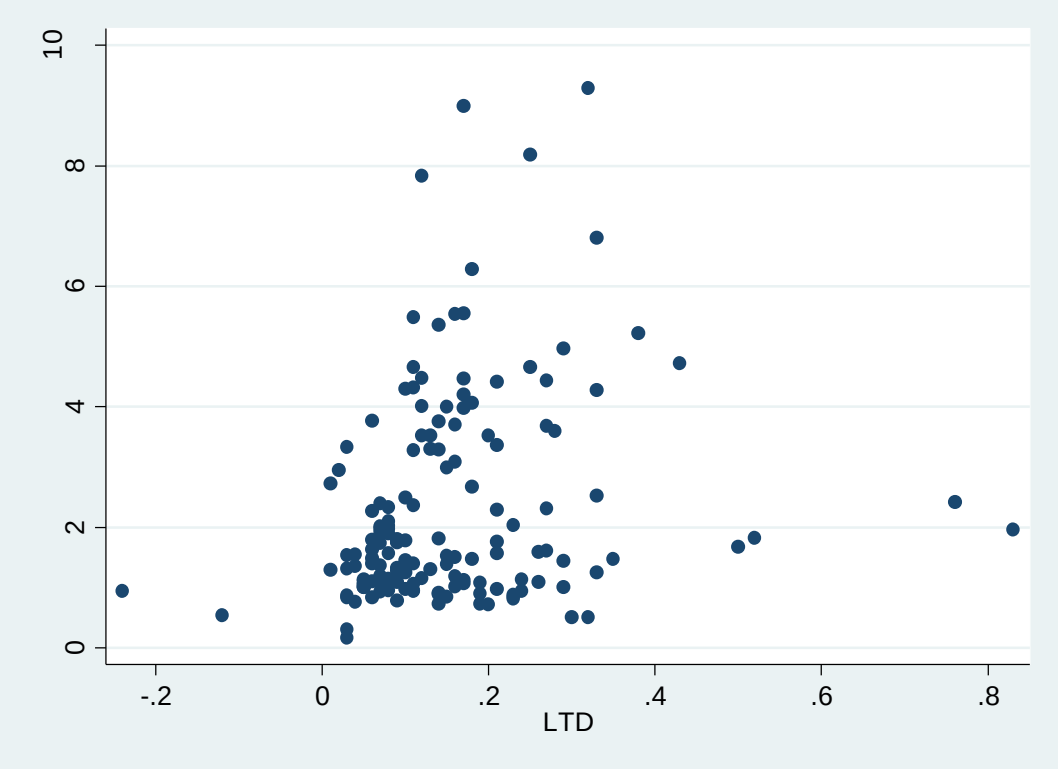
				joint	
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
tobinq	150	0.0000	0.0001	41.54	0.0000
ltd	150	0.0000	0.0000	59.38	0.0000
std	150	0.0035	0.2400	8.85	0.0120
ef	150	0.0000	0.0000	51.64	0.0000

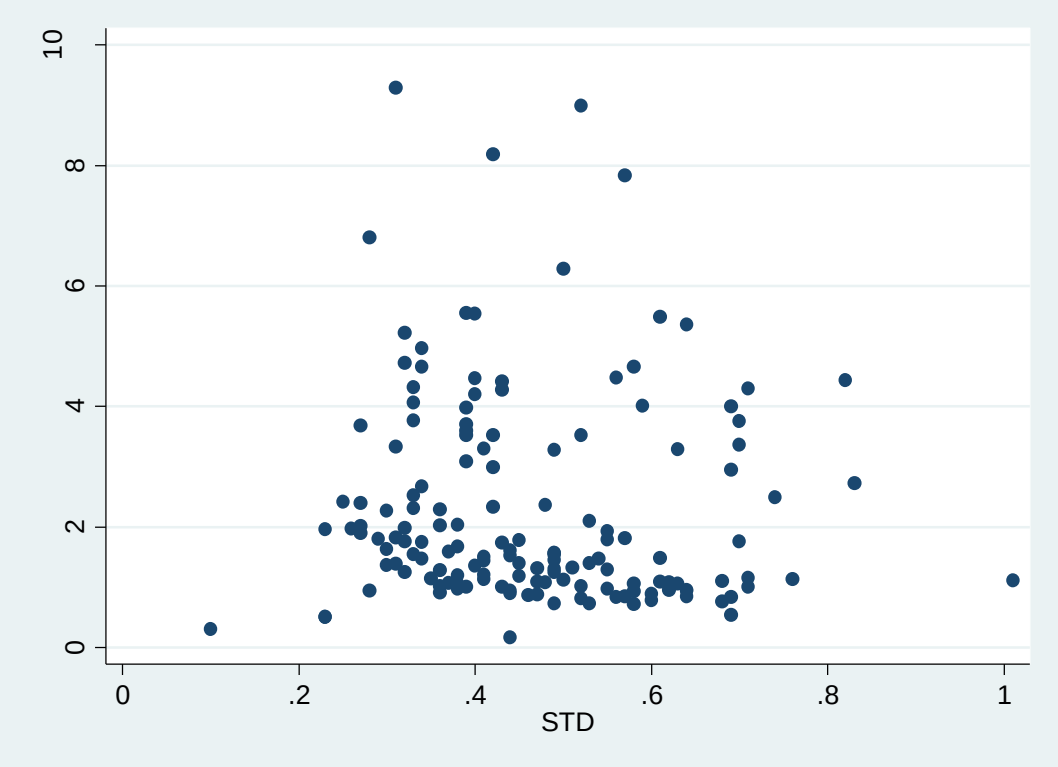

0
.1
.2
.3
.4
.5
0
2
4
6
8
10
Tobin Q

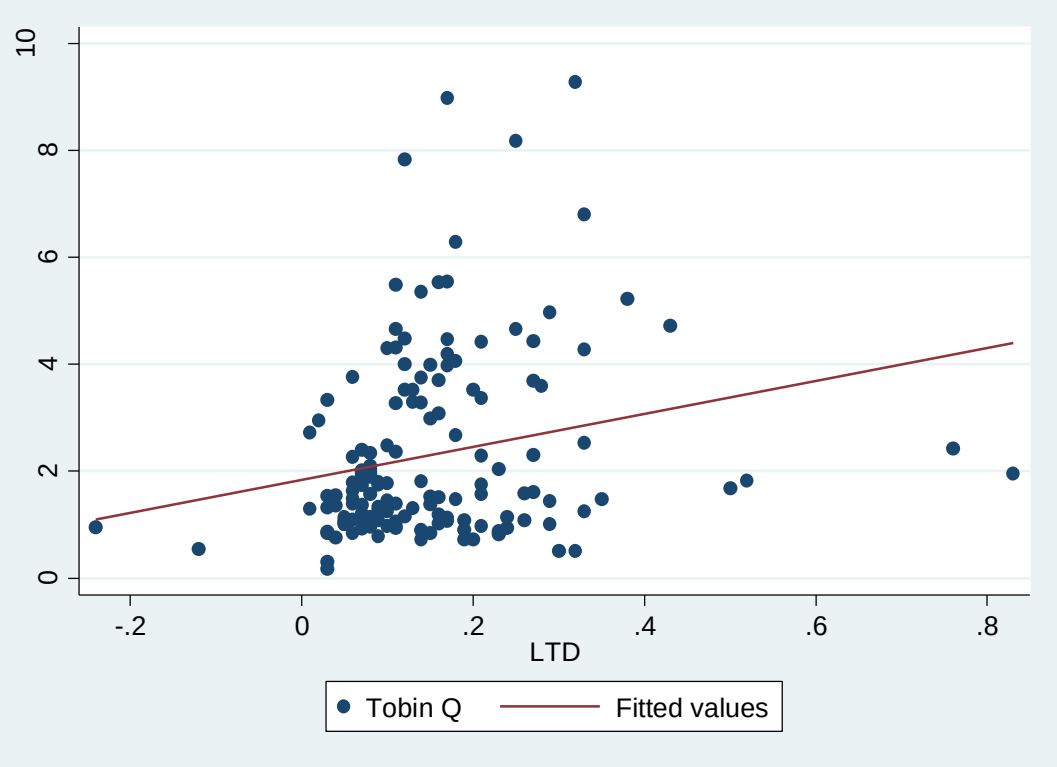

0
1
2
3
4
5
-.2
0
.2
.4
.6
.8
LTD

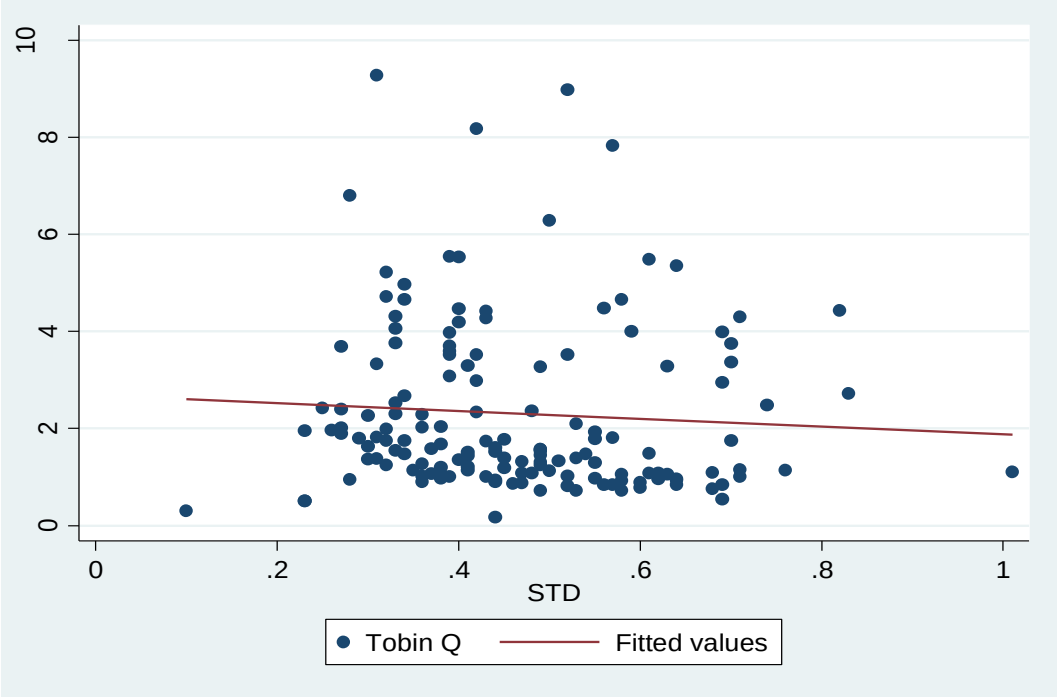

0
1
2
3
0
.2
.4
.6
.8
1
STD

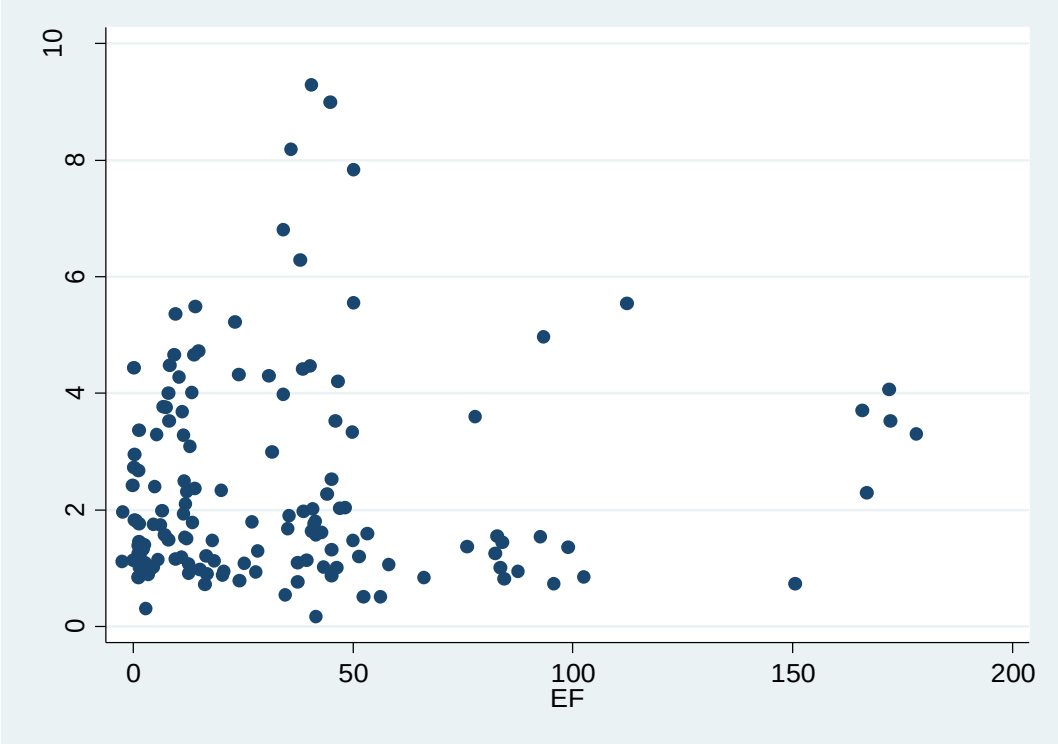

0
.01
.02
.03
0
50
100
150
200
EF


10
8
6
4
2
0
-.2
0
.2
.4
.6
.8
LTD


10
8
6
4
2
0
0
.2
.4
.6
.8
1
STD


10
8
6
4
2
0
-.2
0
.2
.4
.6
.8
LTD
Tobin Q
Fitted values


10
8
6
4
2
0
0
.2
.4
.6
.8
1
STD
Tobin Q
Fitted values


10
8
6
4
2
0
0
50
100
150
200
EF

```
. estat hettest, fstat

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of tobinq

         F(1 , 148)    =     7.52
         Prob > F      =   0.0069
```

```
. regress tobinq ltd std ef
```

Source	SS	df	MS	Number of obs	=	150
				F(3, 146)	=	3.22
Model	28.4463749	3	9.48212497	Prob > F	=	0.0245
Residual	429.618663	146	2.94259358	R-squared	=	0.0621
				Adj R-squared	=	0.0428
Total	458.065038	149	3.074262	Root MSE	=	1.7154

tobinq	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ltd	3.221632	1.149945	2.80	0.006	.9489441	5.49432
std	.3947092	1.052539	0.38	0.708	-1.685472	2.47489
ef	.0051442	.0038573	1.33	0.184	-.0024792	.0127677
_cons	1.46471	.632863	2.31	0.022	.2139541	2.715466

```
. estimates store OLS

. glm tobinq ltd std ef, family(gaussian) link(identity)

Iteration 0:   log likelihood = -291.76048

Generalized linear models                         No. of obs         =        150
Optimization     : ML                             Residual df        =        146
                                                  Scale parameter    =   2.942594
Deviance         =  429.6186632                   (1/df) Deviance    =   2.942594
Pearson          =  429.6186632                   (1/df) Pearson     =   2.942594

Variance function: V(u) = 1                       [Gaussian]
Link function    : g(u) = u                       [Identity]

                                                  AIC                =   3.943473
Log likelihood   = -291.7604818                   BIC                =  -301.9341
```

tobinq	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
ltd	3.221632	1.149945	2.80	0.005	.9677821	5.475482
std	.3947092	1.052539	0.38	0.708	-1.668229	2.457648
ef	.0051442	.0038573	1.33	0.182	-.0024161	.0127045
_cons	1.46471	.632863	2.31	0.021	.2243215	2.705099

```
. estimates table OLS GLS, stats(chi2 df N aic bic rank r2) star(.05 .01 .001)
```

Variable	OLS	GLS
_		
ltd	3.2216322**	
std	.39470917	
ef	.00514421	
_cons	1.4647101*	
tobinq		
ltd		3.2216322**
std		.39470917
ef		.00514421
_cons		1.4647101*
Statistics		
chi2		9.6671097
df		146
N	150	150
aic	591.52096	591.52096
bic	603.5635	603.5635
rank	4	4
r2	.06210117	

legend: * p<.05; ** p<.01; *** p<.001

Fiscal Year	croid	Companies	Exchange Sector	Tobin Q	LTD	STD	EF
2009	1	Cadbury Nig	Consumer	0.91	0.14	0.36	12.67
2010	1	Cadbury Nig	Consumer	3.09	0.16	0.39	12.94
2011	1	Cadbury Nig	Consumer	1.21	0.09	0.41	16.59
2012	1	Cadbury Nig	Consumer	2.34	0.08	0.42	20.04
2013	1	Cadbury Nig	Consumer	4.32	0.11	0.33	23.99
2014	1	Cadbury Nig	Consumer	3.28	0.11	0.49	11.54
2015	1	Cadbury Nig	Consumer	1.51	0.16	0.41	12.29
2016	1	Cadbury Nig	Consumer	1.19	0.16	0.45	11.06
2017	1	Cadbury Nig	Consumer	1.53	0.15	0.44	11.74
2018	1	Cadbury Nig	Consumer	1.07	0.17	0.37	12.68
2009	2	Dangote Flour Mills	Consumer	1.3	0.01	0.55	28.42
2010	2	Dangote Flour Mills	Consumer	1.79	0.06	0.55	27.15
2011	2	Dangote Flour Mills	Consumer	0.93	0.07	0.58	28.02
2012	2	Dangote Flour Mills	Consumer	1.08	0.19	0.48	25.32
2013	2	Dangote Flour Mills	Consumer	1.48	0.18	0.54	18.11
2014	2	Dangote Flour Mills	Consumer	1.16	0.12	0.71	9.61
2015	2	Dangote Flour Mills	Consumer	1.11	0.05	1.01	-2.44
2016	2	Dangote Flour Mills	Consumer	0.78	0.09	0.6	24.19
2017	2	Dangote Flour Mills	Consumer	0.76	0.04	0.68	37.45
2018	2	Dangote Flour Mills	Consumer	0.54	-0.12	0.69	34.67
2009	3	Dangote Sugar	Consumer	0.17	0.03	0.44	41.61

2010	3	Dangote Sugar	Consumer	3.33	0.03	0.31	49.9
2011	3	Dangote Sugar	Consumer	1.14	0.05	0.41	39.49
2012	3	Dangote Sugar	Consumer	1.01	0.05	0.39	46.27
2013	3	Dangote Sugar	Consumer	2.03	0.08	0.36	46.98
2014	3	Dangote Sugar	Consumer	1.2	0.07	0.38	51.41
2015	3	Dangote Sugar	Consumer	1.06	0.05	0.38	58.15
2016	3	Dangote Sugar	Consumer	0.84	0.06	0.56	66.15
2017	3	Dangote Sugar	Consumer	1.54	0.03	0.49	92.74
2018	3	Dangote Sugar	Consumer	1.36	0.04	0.4	98.98
2009	4	Flour Mills Of Nigeria	Consumer	1.09	0.26	0.47	37.39
2010	4	Flour Mills Of Nigeria	Consumer	1.59	0.26	0.37	53.27
2011	4	Flour Mills Of Nigeria	Consumer	1.48	0.35	0.34	50
2012	4	Flour Mills Of Nigeria	Consumer	1.25	0.33	0.32	82.34
2013	4	Flour Mills Of Nigeria	Consumer	1.44	0.29	0.41	83.89
2014	4	Flour Mills Of Nigeria	Consumer	1.01	0.29	0.43	83.56
2015	4	Flour Mills Of Nigeria	Consumer	0.82	0.23	0.52	84.35
2016	4	Flour Mills Of Nigeria	Consumer	0.73	0.19	0.53	95.77
2017	4	Flour Mills Of Nigeria	Consumer	0.85	0.15	0.64	102.54
2018	4	Flour Mills Of Nigeria	Consumer	0.73	0.14	0.49	150.62
2009	5	Guinness Nig	Consumer	2.99	0.15	0.42	31.52
2010	5	Guinness Nig	Consumer	3.98	0.17	0.39	34.2
2011	5	Guinness Nig	Consumer	4.47	0.17	0.4	40.28
2012	5	Guinness Nig	Consumer	4.42	0.21	0.43	38.61
2013	5	Guinness Nig	Consumer	3.53	0.2	0.42	46.04
2014	5	Guinness Nig	Consumer	2.53	0.33	0.33	45.06
2015	5	Guinness Nig	Consumer	2.04	0.23	0.38	48.34
2016	5	Guinness Nig	Consumer	1.57	0.21	0.49	41.66
2017	5	Guinness Nig	Consumer	1.61	0.27	0.44	42.94
2018	5	Guinness Nig	Consumer	0.95	-0.24	0.28	87.59
2009	6	Honywell Flour Mill	Consumer	3.29	0.14	0.63	5.41
2010	6	Honywell Flour Mill	Consumer	1.78	0.1	0.45	13.51
2011	6	Honywell Flour Mill	Consumer	0.98	0.1	0.38	15.13
2012	6	Honywell Flour Mill	Consumer	0.9	0.19	0.44	16.80
2013	6	Honywell Flour Mill	Consumer	1.13	0.17	0.5	18.55
2014	6	Honywell Flour Mill	Consumer	0.94	0.24	0.44	20.61
2015	6	Honywell Flour Mill	Consumer	0.88	0.23	0.47	20.32
2016	6	Honywell Flour Mill	Consumer	0.72	0.2	0.58	16.36
2017	6	Honywell Flour Mill	Consumer	0.51	0.3	0.23	52.33
2018	6	Honywell Flour Mill	Consumer	0.51	0.32	0.23	56.39
2009	7	International Breweries	Consumer	1.96	0.83	0.23	-2.28
2010	7	International	Consumer	2.42	0.76	0.25	-0.08

		Breweries					
2011	7	International Breweries	Consumer	1.76	0.21	0.7	1.30
2012	7	International Breweries	Consumer	3.37	0.21	0.7	1.30
2013	7	International Breweries	Consumer	4.66	0.25	0.34	9.38
2014	7	International Breweries	Consumer	3.69	0.27	0.27	11.27
2015	7	International Breweries	Consumer	2.31	0.27	0.33	12.17
2016	7	International Breweries	Consumer	2.37	0.11	0.48	14.00
2017	7	International Breweries	Consumer	4.66	0.11	0.58	13.88
2018	7	International Breweries	Consumer	1.68	0.5	0.38	35.16
2009	8	Nascon Allied	Consumer	1.75	0.09	0.34	4.63
2010	8	Nascon Allied	Consumer	2.4	0.07	0.27	4.96
2011	8	Nascon Allied	Consumer	1.15	0.08	0.35	5.66
2012	8	Nascon Allied	Consumer	1.99	0.07	0.32	6.58
2013	8	Nascon Allied	Consumer	3.77	0.06	0.33	6.89
2014	8	Nascon Allied	Consumer	1.74	0.07	0.43	6.31
2015	8	Nascon Allied	Consumer	1.57	0.08	0.49	7.09
2016	8	Nascon Allied	Consumer	1.49	0.06	0.61	8.05
2017	8	Nascon Allied	Consumer	1.93	0.07	0.55	11.54
2018	8	Nascon Allied	Consumer	2.1	0.08	0.53	11.89
2009	9	Nestle Nig	Consumer	4.28	0.33	0.43	10.54
2010	9	Nestle Nig	Consumer	4.73	0.43	0.32	14.87
2011	9	Nestle Nig	Consumer	5.23	0.38	0.32	23.21
2012	9	Nestle Nig	Consumer	6.81	0.33	0.28	34.19
2013	9	Nestle Nig	Consumer	9.29	0.32	0.31	40.59
2014	9	Nestle Nig	Consumer	8.19	0.25	0.42	35.94
2015	9	Nestle Nig	Consumer	6.29	0.18	0.5	38.01
2016	9	Nestle Nig	Consumer	4.3	0.1	0.71	30.88
2017	9	Nestle Nig	Consumer	8.99	0.17	0.52	44.88
2018	9	Nestle Nig	Consumer	7.84	0.12	0.57	50.22
2009	10	Nigeria Breweries	Consumer	4.2	0.17	0.4	46.57
2010	10	Nigeria Breweries	Consumer	5.55	0.17	0.39	50.17
2011	10	Nigeria Breweries	Consumer	3.6	0.28	0.39	77.78
2012	10	Nigeria Breweries	Consumer	4.97	0.29	0.34	93.45
2013	10	Nigeria Breweries	Consumer	5.54	0.16	0.4	112.36
2014	10	Nigeria Breweries	Consumer	4.07	0.18	0.33	171.96
2015	10	Nigeria Breweries	Consumer	3.53	0.12	0.39	172.32
2016	10	Nigeria Breweries	Consumer	3.71	0.16	0.39	165.91
2017	10	Nigeria Breweries	Consumer	3.3	0.13	0.41	178.30

2018	10	Nigeria Breweries	Consumer	2.29	0.21	0.36	166.83
2009	11	Nigerian Enamelware	Consumer	4.44	0.27	0.82	0.17
2010	11	Nigerian Enamelware	Consumer	2.73	0.01	0.83	0.23
2011	11	Nigerian Enamelware	Consumer	2.95	0.02	0.69	0.30
2012	11	Nigerian Enamelware	Consumer	1.83	0.52	0.31	0.36
2013	11	Nigerian Enamelware	Consumer	1.39	0.15	0.31	1.18
2014	11	Nigerian Enamelware	Consumer	1.25	0.1	0.49	1.24
2015	11	Nigerian Enamelware	Consumer	1.1	0.06	0.68	1.31
2016	11	Nigerian Enamelware	Consumer	1.08	0.07	0.62	1.41
2017	11	Nigerian Enamelware	Consumer	1.01	0.05	0.71	1.43
2018	11	Nigerian Enamelware	Consumer	1.06	0.05	0.63	1.42
2009	12	Nigerian Northen Flour Mill	Consumer	1.82	0.14	0.57	0.67
2010	12	Nigerian Northen Flour Mill	Consumer	2.68	0.18	0.34	1.22
2011	12	Nigerian Northen Flour Mill	Consumer	1.31	0.13	0.49	1.55
2012	12	Nigerian Northen Flour Mill	Consumer	1.45	0.1	0.49	1.36
2013	12	Nigerian Northen Flour Mill	Consumer	1.4	0.11	0.45	1.61
2014	12	Nigerian Northen Flour Mill	Consumer	1.28	0.09	0.36	1.77
2015	12	Nigerian Northen Flour Mill	Consumer	1.14	0.24	0.76	0.02
2016	12	Nigerian Northen Flour Mill	Consumer	0.31	0.03	0.1	2.96
2017	12	Nigerian Northen Flour Mill	Consumer	0.84	0.03	0.69	1.24
2018	12	Nigerian Northen Flour Mill	Consumer	0.85	0.23	0.57	1.17
2009	13	Pz Cussons	Consumer	1.9	0.08	0.27	35.57
2010	13	Pz Cussons	Consumer	1.97	0.08	0.26	38.71
2011	13	Pz Cussons	Consumer	1.76	0.09	0.32	41.19
2012	13	Pz Cussons	Consumer	2.02	0.07	0.27	40.93
2013	13	Pz Cussons	Consumer	2.27	0.06	0.3	44.12
2014	13	Pz Cussons	Consumer	1.63	0.06	0.3	40.57
2015	13	Pz Cussons	Consumer	1.8	0.09	0.29	41.44
2016	13	Pz Cussons	Consumer	1.02	0.05	0.36	43.40
2017	13	Pz Cussons	Consumer	1.32	0.03	0.47	45.14
2018	13	Pz Cussons	Consumer	0.87	0.03	0.46	45.11
2009	14	Unilever Nig	Consumer	3.53	0.13	0.52	8.20
2010	14	Unilever Nig	Consumer	4.48	0.12	0.56	8.34
2011	14	Unilever Nig	Consumer	4.01	0.12	0.59	13.36
2012	14	Unilever Nig	Consumer	5.49	0.11	0.61	14.17
2013	14	Unilever Nig	Consumer	5.36	0.14	0.64	9.64
2014	14	Unilever Nig	Consumer	3.76	0.14	0.7	7.48

2015	14	Unilever Nig	Consumer	4	0.15	0.69	8.00
2016	14	Unilever Nig	Consumer	2.49	0.1	0.74	11.69
2017	14	Unilever Nig	Consumer	1.37	0.07	0.3	75.91
2018	14	Unilever Nig	Consumer	1.55	0.04	0.33	82.79
2009	15	Vitafoam Nig	Consumer	1.33	0.09	0.51	2.16
2010	15	Vitafoam Nig	Consumer	1.4	0.06	0.53	2.47
2011	15	Vitafoam Nig	Consumer	1.09	0.09	0.61	2.81
2012	15	Vitafoam Nig	Consumer	0.96	0.08	0.62	3.08
2013	15	Vitafoam Nig	Consumer	1.06	0.11	0.58	3.11
2014	15	Vitafoam Nig	Consumer	0.96	0.11	0.64	3.03
2015	15	Vitafoam Nig	Consumer	1.02	0.16	0.52	4.63
2016	15	Vitafoam Nig	Consumer	0.89	0.14	0.6	3.51
2017	15	Vitafoam Nig	Consumer	0.94	0.11	0.64	3.37
2018	15	Vitafoam Nig	Consumer	0.98	0.21	0.55	3.88