# CAPITAL STRUCTURE AND EARNINGS MANAGEMENT: A STUDY OF SELECTED LISTED CONSUMER GOODS MANUFACTURING FIRMS IN NIGERIA.

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#### Abstract

The aim of this paper is to investigate the relationship that exists between Capital Structure and Earnings Management in Selected Listed Consumer Good Manufacturing Companies in Nigeria. Furthermore the Study tested the role of Long Term Debt Ratio (LTDR), Short Term Debt Ratio (STDR) and Total Debt ratio (TDR) in the relationship. Modified jones model on Discretionary Accruals was used as a measure of Earnings Management. A simple random sampling technique was adopted in selecting a sample of 5 companies out of 21 listed Consumer Goods Manufacturing companies in Nigeria as at May, 2019. Data was collected over a period of 6 years (2012 - 2017). Regression analysis was carried out for a test of hypothesis and a correlation analysis to determine the relationship. The finding shows a positive but insignificant relationship between LTDR, STDR and earnings management while TDR has a positive and significant impact. The adjusted R square indicated that a positive relationship exists between Capital Structure and Earnings Management however, the relationship is not significant.

**Keywords:** Earnings Management, Capital Structure, Long Term Debt, Short Term Debt, Total Debt.

#### Words count 157

#### Introduction

The importance of financing decisions cannot be over emphasised since many of the factors that contribute to business failure can be addressed using strategies and financial decisions that drive growth and the achievement of organizational objectives (Salazar, Soto and Mosqueda, 2012). The finance factor is the main cause of financial distress (Memba and Nyanumba, 2013). Financing decisions result in a given capital structure and suboptimal financing decisions can lead to corporate failure. A great dilemma for management and investors alike is whether there exists an optimal capital structure. The objective of all financing decisions is wealth maximisation and the immediate way of measuring the quality of any financing decision is to examine its effect on firm's performance.

Company accounting reports contain information of a financial and economic nature, which can undergo adjustments carried out by managers. People with different needs and incentives may use freedoms allowed by law in order to serve private interests. The possibility of exercising discretion allows managers freedom in manipulating company accounting results, which is known as Earnings Management (EM). These interventions in results occur within accounting norms and principles, based on flexibility regarding the choice of certain accounting procedures.

Earnings management means reporting above or below the actual earnings through choosing the accounting methods that may lead to the desired result (Roychowdhury, 2006). Some financial indicators can be used to detect this phenomenon through using several available approaches and models, where some of these models are used to separate the non-discretionary accruals from the total accruals. Non-discretional accruals do not involve earnings management practice, whereas discretionary accruals are rich field for practicing the phenomenon of earnings management (Isenmila and Elijah, 2012). The non-discretionary component reflects business conditions that naturally create accruals, while the discretionary component identifies management choices. The result of pulling non-discretionary accrual amounts from the total accrual amount is a metric that reflects accruals that are due to management's choices alone. So, discretionary accruals are a better proxy for earnings management.

Capital structure has for long been regarded as an important parameter from a financial economist standpoint since it is linked with a firm's ability to meet the demands of various stakeholders (Jensen, 1986). Firms can obtain funds from either external or internal sources. Internal sources of funds include retained earnings while external sources include loans from financial institutions, trade credit, issuance of loan stock, and issuance of equity shares. The creation of a capital structure, therefore, can influence the governance structure of a firm which, in turn, may influence the ability of a firm to make strategic choices (Jensen, 1986).

The capital structure of business organizations consists of two sources, equity and debt. Using debt in the capital structure of firms differs from one country to another, from an industry to another, and also from firm to firm in the same industry and same country, depending on the needs of funding, and whether current stockholders have the desire and ability to provide the firm with its funding needs. The relationship between capital structure of firms and the practices of earnings management is still questionable, and there still exists no conclusive answer on whether debt affects or does not affect the practices of earnings management. Moreover, the consequences of earnings management may have strong negative effect on debt providers, in case the firm fails, and the fair value of its assets is less than its total financial obligations.

#### **Literature Review**

Capital structure refers to the firm's financial framework which consists of the debt and equity used to finance the firm. Capital structure is one of the popular topics among scholars in finance field. The ability of companies to carry out their stakeholders' needs is tightly related to capital structure. Therefore, this derivation is an important fact that we cannot omit. Capital structure in financial term means the way a firm finances their assets through the combination of equity, debt, or hybrid securities (Saad, 2010). In short, capital structure is a mixture of a company's debts (long-term and short-term), common equity and preferred equity. Capital structure is essential on how a firm finances its overall operations and growth by using different sources of funds. According to Myers (2001), "there is no universal theory of the debt-equity choice and no reason to expect one". However, there are several useful conditional theories, each of which helps to understand the debt-to-equity structure that firms choose.

#### **Financial Management and Capital Structure**

The term "Financial Management" connotes that fund flows are directed according to some plan. It connotes responsibility for obtaining and effectively utilizing funds necessary for the efficient operation of an enterprise. A formal definition of financial management would be the determination, acquisition, allocation and utilization of financial resources, usually with the aim of achieving some specific goals. To be more specific financial management is about analysing financial situations, making financial decisions, setting financial objectives, formulating financial plans to attain those objectives, and providing effective systems of financial control to ensure plans progress towards the set objectives.

Financial decision-making includes strategic investment decisions, such as investing in new production facilities or the acquisition of another company, and strategic financing decisions, like the decision to raise additional long-term loans. Thus, a financial manager is primarily concerned with two main types of interrelated decisions, i.e. investment decisions and financing decisions.

Investment decision includes:

- Strategic investment decision
- Tactical/operational investment decisions

Similarly financing decision also includes:

- Strategic financing decision
- Tactical/operational financing decisions.

The strategic financing decision typically involves deciding the most appropriate mix of equity and long-term debt finance in the firm's capital structure, also called as the capital structure decision. The tactical financing decision is related with ways to finance the firm's investment in its medium and short-term assets respectively.

# **Factors Influencing Capital Structure Decision**

A number of factors influence the capital structure decision of a firm. These factors can be categorized in to three categories, i.e., as per characteristics of the economy, characteristics of the industry and characteristics of the company.

#### **Characteristic of the Economy**

**State of capital market**: Study of the trends of capital market should be undertaken in depth since cost and availability of different types of funds is essentially governed by them. If capital market is going to be plunged in bearish state and interest rates are expected to decline, the management should employ measures that will enable it take advantage of the cheaper debt.

**Taxation**: In most countries of the world, Nigeria specifically the accounting principles and corporate tax provisions governing its financial environment favours debt over equity by allowing for tax deductibility of the cost of debt i.e. interest paid, while the return on equity is not considered a deductible expense.

**Policy of Term-Financing Institutions**: If financial institutions adopt harsh lending policy and prescribe highly restrictive terms, the management must give more significance to manoeuvrability and abstain from borrowing from those institutions so as to preserve the company's flexibility in capital funds.

#### **Earnings Management**

Earnings management may be defined as "reasonable and legal management decision making and reporting intended to achieve stable and predictable financial result" (Rahman, Moniruzzaman, and Sharif, 2012). Earnings management is not to be confused with illegal activities to manipulate financial statements and report results that do not reflect economic reality. These type of activities, popularly known as "cooking the books", involve misrepresenting financial results.

Earnings, sometimes called the "bottom line" or "net income" are the single most important item in financial statements. Given the importance of earnings, it is no surprise that the company management has a vital interest in how they are reported.

Earnings Management has aroused interest among different researchers regarding various aspects: to what extent company earnings are inflated; the quality of financial information disclosed by companies; and also the effectiveness of accounting norms and standards created with the aim of protecting shareholders who act based on these statements.

According to Scott (2011), manipulations in financial statements compromise the quality of accounting information, possibly affecting the investments allocated to different companies. Moreover, this practice can cause unmeritorious distribution of wealth, since investors with better information can increase their wealth at the expense of investors with poorer information. This often occurs as a result of the degree of subjectivity resulting from flexibility in accounting practices.

Earnings management is defined as the process of taking purposeful steps within the limits of Generally Accepted Accounting Principles to bring about a desired level of reported income (Tanewski and Bartholomeusz, 2006). Sometimes, earnings management phenomenon is exercised by managers just to satisfy the prior expectations of earnings. In other situations, the management may manage earnings to receive high financial rewards because the amount of these rewards depends on the amount of reported earnings. Managers may manage earnings also to reduce the amount of income tax payables, or to influence the firm's share market price. Additional motives are available for managers to exercise the phenomenon of earnings management, but these are the most common incentives. Earning management occurs when managers use personal judgment in

financial reporting in shaping business transactions. It is also to change financial results to mislead some stakeholders about the current financial health of the company.

Earnings management can be achieved by structuring of certain income and expense, changes in accounting policies and accruals management. Of all these mentioned earnings management techniques, accruals management is the most destructive to the worth of accounting reports because investors are unaware of the extent of such changes in accruals (Isenmila and Elijah, 2012).

Accrual is defined as the difference between the earnings and cash flow from operating activities. Accruals can be further divided into non-discretionary accruals and discretionary accruals.

Non-discretionary accruals are accounting modifications to the company's cash flows arising from business conditions in line relevant accounting standards while discretionary accruals are modifications to cash flows selected by the management (Fan and Wong, 2002).

Discretionary accruals symbolize the degree of earnings management. Discretionary accruals replicate biased accounting choices made by management. The size of discretionary accruals is indicated as a percentage of assets of a company. The higher the value of discretional accruals, the greater the earnings is maneuvered. In earnings management income may increase or decrease and it depends on choice of accounting principle.

# Theoretical Review Trade-Off Theory

As reviewed in Meyers (2002), the trade-off theory refers to the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits. Trade-off theory allows the provision for bankruptcy cost hence, the need to achieve an optimal capital structure. It states that there is an advantage to financing with debt (namely, the tax benefit) and that there is a cost of financing with debt (the bankruptcy costs and the financial distress costs of debt). The marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing. Empirically, this theory may explain differences in D/E ratios between industries, but it doesn't explain differences within the same industry.

#### **Pecking Order Theory**

The pecking order theory of capital structure as introduced by Donaldson (1961) is among the most influential theories of corporate leverage. It goes contrary to the idea of firms having a unique combination of debt and equity finance, which minimize their cost of capital. The theory suggests that when a firm is looking for ways

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

Pecking Order theory tries to capture the costs of asymmetric information which states that companies prioritize their sources of financing (from internal financing to equity) according to the principle of least effort, or of least resistance, preferring to raise equity as a financing means of last resort. Hence, internal funds is used first, and when that is exhausted, debt is issued, and when it is not sensible to issue any more debt, equity is issued.

#### **Agency Theory**

Jensen and Meckling (1976) states that "An agency relationship is a contract under which one or more persons (the principal[s]) engage another person (the agent) to perform some services on their behalf which involves delegating some decision-making authority to the agent". The problem is that the interest of managers and shareholders is not always the same and in this case, the manager who is responsible of running the firm tends to achieve his personal goals rather than maximizing returns to the shareholders. This means that managers will use the excess free cash flow available to fulfil his personal interests instead of increasing returns to the shareholders (Jensen and Ruback, 1983). Hence, the main problem that shareholders face is to make sure that managers do not use up the free cash flow by investing in unprofitable or negative net present value (NPV) projects. Instead these cash flows should be returned to the shareholders, for example through dividend payouts (Jensen, 1986).

#### **Empirical Review**

Several researchers have investigated the effect of firms' size on earnings management, among them is Cabej (2013), who studied this effect by using a sample of listed firms in Albania. Log of total assets is used to measure firms' size, while discretionary accruals was used to measure the practices of earnings management using Jones model. Results showed that Albanian listed firms are engaged in earnings management initiatives but there are no significant differences among firms of different sizes and the effect of their sizes on the practices of earnings management phenomenon.

Zhang and Liu (2009) carried out a study to investigate the impact of capital structure on earnings management and applied their study on Chinese listed firms from 2003 to 2007. The study demonstrates that the equity proportion of controlling shareholders has a U-shape relationship with earnings management practices, while a strong positive relationship of debt ratio on earnings management. In addition, the study shows that the equity proportion of executives and external majority shareholders' share impact on earnings management is weak.

An, Li, and Yu, (2013), investigated the effect of earnings management practices on financial leverage, and the way this relationship is affected by institutional environments. The study employed using the data of 25,798 firms across 37 countries along the years 1889-2009. The study found that firms with high earnings management practices tend to have high corporate leverage, and this positive relationship is attenuated by strong institutional environments. Moreover, the results of the study lend strong support to the agency theory of free cash flows.

Zamri, Abdul Rahman, and Isa (2013), investigated the impact of financial leverage on real earnings management. The primary purpose of this study was to determine whether the financial leverage has an impact on the real earnings management. The abnormal cash flows from operations, the abnormal production costs, and the abnormal discretionary model by Roychowdhury, 2006, is used in this study as a proxy for real earnings management. The study is based on 3,745 firm-year observations along the period 2006-2011, listed in Bursa, Malaysia. The study observed that a significant negative correlation exists between financial leverage and the practices of earnings management. It also observed that low leveraged firms have lower level of earnings management.

# Methodology

This paper adopted historical research design. The population of this study consisted of the Listed consumergoods manufacturing companies in Nigeria, which are 21 in number (NSE, May 2019). A simple random sampling technique was adopted in selecting a sample size of 5 from a population of 21.

# **Model Specifications**

The general model for this study is represented by;

# $\mathbf{Y}=\mathbf{f}(\mathbf{X});$

The general model of the study will therefore be;

 $\mathbf{EM}_{it} = \beta_0 + \beta_1 TDR_{it} + \beta_2 LTDR_{it} + \beta_3 STDR_{it} + \beta_4 SIZE_{it} + \beta_5 AGE_{it} + e_{it}$ 

In the above models:

# $EM_{it}$ = the level of earnings management (estimated based on modified Jones model)

# $TDR_{it} = Total \ debt \ ratio$ $LTDR_{it} = Long-term \ debt \ ratio$ $STDR_{it} = Short-term \ debt \ ratio$ $SIZE_{it} = Size \ of \ firm$ $AGE_{it} = age \ of \ firm$ $eit = error \ of \ the \ model$ $\beta_0 = the \ intercept$ $\beta_1-\beta_5 = the \ coefficients$

S/	VARIABLE	FORMULA	ТҮРЕ	MEASUREMENT	SOURCE
N	S				
1	Discretionary	TA/A (t-1) = $\beta_1$ (1/At-1) + $\beta_2$	dependent	To measure the practices of Earnings	Modified Jones
	Accruals - DA	$(\Delta \text{ in Rev-} \Delta \text{ in Rec}) / \text{At-1}) +$	Variable	Management	model, 1995
		$\beta_3$ (PPE/At-1) + $\epsilon_{it}$			
2	Total Debt	This is derived by dividing the	Independen	To measure the ratio of the Firm's	Zamri, Abdul
	Ratio - TDR	total debt by the total assets.	t Variable	total debts to its Assets.	Rahman,
					AndIsa, (2013);
					Tahir, (2011)
3	Long Term	This is derived by dividing the	Independen	To measure the ratio of the Firm's	Zamri, Abdul
	Debt Ratio –	long term debt by the total	t Variable	Long term debts to its Assets.	Rahman,
	LTDR	assets.			AndIsa, (2013);
					Tahir, (2011)
4	Short Term	This is derived by dividing the	Independen	To measure the ratio of the Firm's	Zamri, Abdul
	Debt Ratio –	short term debt by the total	t Variable	Long term debts to its Assets.	Rahman,
	STDR	assets.			AndIsa, (2013);
					Tahir, (2011)
5	Firm Size	This is derived by taking the	Control	To measure how a firm's size	Khan, (2011)
		Natural Log of a firm's total	Variable	depicted by its total assets informs	
		asset		earnings management	
6	Firm's Age	Log of the number of activity	Control	To measure how the length of a	Researcher
		years since establishment of	Variable	company's existence with its	model, (2019)
		company up to observation		Corporate Strategy in focus instigates	
		date.		earnings management	

#### **Measurement of Variables**

Source: Authors' Compilation

#### Where:

#### TA = Total Accruals

A<sub>it</sub>-1 = Total Assets at the beginning of the year

 $\Delta$  Rev<sub>it</sub> = Change in sales from year t-1 to t

 $\Delta$  Rec<sub>it</sub> = Change in receivables from year t-1 to t

**PPE**<sub>it</sub> = **Plant**, **property and Equipment** 

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  = Represents firms specific parameters.

 $\epsilon_{it}$  = Residual here represents the firm specific discretionary portion off accruals.

#### **Result Analysis and Findings**

	Ν	Minimum	Maximum	Mean	Std.
					Deviation
DA	30	0.0078	2.1437	0.2351	0.3812
TDR	30	0.1936	1.5045	0.5778	0.2859
LTDR	30	0.0098	0.3251	0.1012	0.0912
STDR	30	0.1613	1.4975	0.4766	0.2968
FSIZE	30	6.8325	8.5365	7.7425	0.5708
FAGE	30	1.6335	1.8261	1.7062	0.0751
Valid N	30				
(listwise)	50				

#### Source: Authors' SPSS Output

Table (1) basically provides a summary of the descriptive statistics from both the dependent and independent variables for the sampled firms. Result from the descriptive statistics indicates that the measure of Earnings management (EM), absolute discretionary accruals of the sampled listed consumer-goods manufacturing firms has an average value of 0.2351 with standard deviation of 0.3812, and minimum and maximum values of 0.0078 and 2.1437 respectively. The large value of standard deviation signifies that the deviation from the mean value

from both sides is wide, implying that the data is not around the mean. The average value of discretionary accrual of 0.2351 suggests that the sampled firms' rate of engagement in earnings management practice for the period covered by the study was 23.51%. This can further be said, that for every #100 accrual recorded in a period, there was #23.51 discretionary accrual recorded in the same period.

The table also indicates that the minimum and maximum values of Total debt ratio (TDR) are 0.1936 and 1.5045 respectively, with the mean value of 0.5778 and standard deviation of 0.2859. This shows that the data are clustered around the mean for the sampled firms. The mean value of 0.5778 implies that the gearing ratio of the sampled firms for the period under review was 57.78%. Since the gearing ratio is greater than 50%, the researcher concludes that the sampled firms are highly-geared within the periods covered by the study.

The descriptive statistics in Table 1 shows on average the Long-term debt ratio (LTDR) during the period of the study is 10.12%, from the mean value of 0.1012 with standard deviation of 0.0912. This implies that the data deviate from the mean from both sides by 9.12%. The standard deviation suggests that the data is clustered around the mean because it is lower than the mean. The minimum and maximum values of LTDR are 0.0069 and 0.3251 respectively.

Table 1 shows on average the Short-term debt ratio (STDR) during the period of the study is 47.66%, from the mean value of 0.4766 with standard deviation value of 0.2968. This implies that the data deviate from the mean from both side by 29.68%. The standard deviation suggests that the data are clustered around the mean because it is lower than the mean. The minimum and maximum values of STDR are 0.1613 and 1.4975 respectively. Table 1 also shows the mean value for the control variable, firm size (FSIZE) to be 7.7425 with minimum and maximum values of 6.8325 and 8.5365 respectively. The large standard deviation value of 0.5708 implies that the data are widely dispersed from the mean for the sampled firms.

Firm Age (FAGE) which was measured by the log of the number of activity years since establishment of company up to observation date indicates a mean value of 1.7062 and standard deviation of 0.0751. This implies that the data are clustered around the mean. The minimum and maximum values for Firm age (FAGE) are 1.6335 and 1.8261 respectively.

		DA	TDR	LTDR	STDR	FSIZE	FAGE
	Pearson Correlation	1					
DA	Sig. (1-tailed)						
	Ν	30	•				
	Pearson Correlation	.009	1				
TDR	Sig. (1-tailed)	.482					
	N	30	30				
	Pearson Correlation	147	.039	1			
LTDR	Sig. (1-tailed)	.219	.420				
	Ν	30	30	30			
	Pearson Correlation	.053	.952**	270	1		
STDR	Sig. (1-tailed)	.390	.000	.074			
	Ν	30	30	30	30		
	Pearson Correlation	314*	086	.535**	248	1	
FSIZE	Sig. (1-tailed)	.046	.325	.001	.094		
	Ν	30	30	30	30	30	
	Pearson Correlation	249	.085	.880**	189	.737**	1
FAGE	Sig. (1-tailed)	.092	.328	.000	.159	.000	
	Ν	30	30	30	30	30	30

TABLE 2:	Correlations
IADLL 4.	Correlations

\*. Correlation is significant at the 0.05 level (1-tailed).

\*\*. Correlation is significant at the 0.01 level (1-tailed).

Source: Author's SPSS Output

#### **Correlation Results**

The summary of the Pearson correlation Coefficients of the variables of the study are presented in Table 2

Analysis of the outcome from the correlation analysis as depicted in table (2) shows that a weak and insignificant positive correlation exist between Total debt ratio (TDR) and discretionary accruals (DA). This is out rightly indicated in the correlation coefficient (r) result as (0.009). This result basically implies that as the total debt of a firm increases, the level of earnings management in that company increases although the relationship tends to be weak and insignificant at 5%. More so, results from the table further depict the fact that a weak and insignificant positive correlation does exist between firms' Short-term debt ratio (STDR) and discretionary accruals (DA) from the correlation value of 0.053. This implies that as firms' short term debt increases, earnings management practice increases; but the relationship is weak and statistically insignificant at 5% level of significance.

Table 2 also shows a negative relationship between discretionary accrual (DA) and Long-term debt ratio (LTDR) from the correlation coefficient of -0.147 which is not statistically significant at 5% level of significance. This result implies that the long-term debt owe by the listed consumer-goods firms in Nigeria is not significantly related with their earnings management practices.

Results from Table 2 shows that the two control variables Firm size (FSIZE) and Firm age (FAGE) show a negative relationship with Discretionary accrual (DA) from a correlation coefficients of -0.314 and -0.249 respectively. This result implies that as firm size and firm age of sampled listed consumer-goods firms in Nigeria increase, their practice of earnings management decreases. However, this relationship is only statistically significant for firm size (FSIZE) at 5% level of significance.

#### **Regression Analysis**

Mod	R	R	Adjusted R	Std. Error of		Change Statistics				Durbin-
el		Square	Square	the Estimate	R Square	F	df1	df2	Sig. F	Watson
					Change	Change			Change	
1	.327ª	.207	.136	.38795488	.207	5.750	4	25	.046	2.329

TABLE 3: Model Summary<sup>b</sup>

a. Predictors: (Constant), FAGE, TDR, FSIZE, LTDR, STDR

b. Dependent Variable: DA

b. Dependent Variable: ROA

The table 3 above shows that coefficient of multiple determinations R-Square which explains the extent to which the independent variables affect the dependent variable is 0.207. This implies that 20.7% of the variations in the dependent variable were explained by the independent variables while 0.793 or 79.3% were affected by other variables outside the independent variables. The adjusted R-Square, a more conservative way of looking at the coefficient of determination is less than 50%. In this case, 0.136 or 13.6% of the variations in the dependent variable is explained by the independent variable. So this indicates that total debt ratio (TDR); long-term debt ratio (LTDR), short-term debt ratio (STDR), firm size (FSIZE) and firm age (FAGE) are not the major determining factors of Earnings management (EM) of the five (5) selected consumer-goods manufacturing companies in Nigeria. Only 0.864 or 86.4% of the variation are determined by other factors.

Table 4 below shows the results of F-stat= 5.750 which is significant at 5% with p value of 0.046 with Df (29). The Durbin-Watson value of 2.329 implies that there is absence of auto-correlation problem in the model.

Mode		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.451	4	.113	5.750	.046 <sup>b</sup>
1	Residual	3.763	25	.151		
	Total	4.214	29			

TABLE 4: ANOVA <sup>a</sup>
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a. Dependent Variable: DA

b. Predictors: (Constant), FAGE, TDR, FSIZE, LTDR, STDR

#### TABLE 5: Coefficients<sup>a</sup>

Model		Unstandardize	ed Coefficients	Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
	(Constant)	3.556	3.656		.973	.340
	TDR	.003	.263	.002	.010	.002
	LTDR	.841	1.804	.201	.466	.645
1	STDR	.362	.054	.251	.265	.793
	FSIZE	157	.207	235	756	.035
	FAGE	-1.287	2.794	253	460	.649

a. Dependent Variable: DA

# Source: Author's SPSS Output

The regression analysis (Table 5) shows the existence of direct impact of total debt ratio (TDR) on earnings management where the regression coefficient and *p*-value of the total debt ratio were (0.003, 0.002) respectively. It therefore, means that there was a significant impact at the confidence level of 95%. Accordingly, the researcher rejected the first hypothesis, which stated that, there is no significant relationship between total debt ratio and earnings management of listed consumer-goods firms in Nigeria and concludes that there is significant relationship between total debt ratio and earnings management for the period covered by the study.

As for the long term debt ratio (LTDR) of the firms, the results (as shown in Table 5) indicate that there exists a statistically insignificant direct impact of the equity ratio of the companies on earnings management where regression coefficient and p-value of the total debt ratio were 0.841 and 0.645 respectively. Accordingly, the researcher fails to reject the second hypothesis, which stated that, there is no significant relationship between long-term debt ratio and earnings management of listed consumer-goods firms in Nigeria.

The regression analysis (Table 5) shows the existence of insignificant direct impact of short term debt ratio (STDR) on earnings management where the regression coefficient and p-value of short term debt ratio were 0.362 and 0.793 respectively. Accordingly, the researcher fails to reject the third hypothesis, which stated that, there is no significant relationship between short-term debt ratio and earnings management of listed consumer-goods firms in Nigeria.

As for the control variable firm size (FSIZE), the results (as shown in Table 5) indicate that there exists a statistically significant indirect impact of firm size on earnings management where regression coefficient and p-value of firm size were -0.157 and 0.035 respectively. This implies that a 1% increase in firm size of the sampled firms will lead to a 0.157% decrease in discretionary accruals and earnings management practices will reduce accordingly.

The second control variable, Firm age (FAGE) indicates an indirect impact on earnings management from the regression coefficient of -1.287. This result implies that as the firms' age of the sampled firms increases, they engaged in downward earnings management activities to manipulate earnings and influence other various economic and financial activities. However, the impact is statistically insignificant from the p-value of 0.649. The multiple regression equation of the study is as follows:  $DA= 3.556+ 0.003(TDR) + 0.841(LTDR) + 0.362(STDR) - 0.157(SIZE) - 1.287(AGE) + E_{it}$ .

#### Conclusion

The current analysis considered the relationship between capital structure and earnings management of selected listed consumer-goods manufacturing companies in Nigeria. The study made use of total debt, Long term debt and short term debt ratios as proxies for the independent variable in the presence of two control variables; firm size and age of firms. The dependent variable was proxied by the Modified Jones (1991) accrual model. The analysis of discretionary accruals revealed that the selected listed firms have practices of earnings management. Data covering the period 2012-2017 regarding the independent variables for the firms included in the sample was analysed with discretionary accruals of the same period, and the finding shows a positive but insignificant relationship between LTDR, STDR and earnings management while TDR has a positive and significant impact. The researcher rejected the first hypothesis and failed to reject the second and third hypothesis based on the

output of Regression analysis. This conclusion means that whether firms use more or low debts in its capital structures, it informs the level of Earnings Management.

#### Recommendation

- This study is limited by the fact that the sample only covers six (6) years data from the Nigerian stock exchange market. As such, the limited sample size and time period inhibits generalizing the results to other samples and time periods.
- It is advised that subsequently researchers can consider a comparative study which will be applicable across industries and not limit it to an industry.
- Only three variables for capital structure were considered in this study. However, future research could consider other capital structure attributes or proxies which have a direct influence on the capital structure of companies such as Corporate Strategy and Ownership Structure.

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