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Determinants of Earnings Quality of Listed Consumer Goods Firms in Nigeria

Etim Osim Etim[1], Nsima Johnson Umoffong[2], Augustine Brendan Inyang[3] and Nsikan Umanah[4]

[1](Corresponding Author) Department of Accounting, Faculty of Business Administration, University of Uyo, Nigeria. E-mail: osimacc@gmail.com; etimosimetim@Uniuyo.edu.ng
[2]Department of Accounting, Faculty of Business Administration, University of Uyo, Nigeria
[3]Faculty of Management and Social Sciences (MASS), TopFaith University Mkpatak, Nigeria. E-mail: ab.inyang@Topfaith.edu.ng; austin.brendan@gmail.com
[4]Department of Accountancy, School of Business, Akwa Ibom State Polytechnic, Ikot Osurua, Ikot Ekpene, Nigeria. E-mail: nsikanumanah2013@gmail.com

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Abstract: The study was carried out to examine determinants of earnings quality of listed consumer goods companies in Nigeria. This was premised on the unprecedented corporate failures and falsified financial statements of many companies across the globe. *Ex-post* facto research design was adopted for the study. Seventeen (17) listed consumer goods companies were selected purposively from a population of twenty-two (22) companies listed by Nigerian Stock Exchange Group as at 31st December, 2021. The selected companies were those with up to date financial data required for the study. Data collected were analyzed using descriptive and inferential statistics. The dependent variable-Earnings Quality (EQ) was arrived at using modified Jones model. Four (4) determinants of EQ were modeled (Leverage, managerial ownership, firm size and liquidity) as the regressors. Results of the analysis revealed that leverage had a negative and significant effect (β= 0.31052; t= -2.7867, p – value =0.004< 0.05) on earnings quality, managerial ownership had a positive but in significant effect (β = 0.122705; t= 1.0409, p – value =0.3001 > 0.05) on earnings quality, firm size and liquidity had positive and significant effect (β = 0.571090; t= 2.0374, p – value =0.0039; β = 0.104974, t= 3.0703, p – value =0.0027<0.05) on EQ of listed consumer goods companies in Nigeria over the period of the study. It was concluded from the findings that high leverage is inimical to earnings quality and enhanced recommended that managers of consumer goods companies restrict the usage of excessive debts in managing the businesses as well as paying special attention to liquid assets as this impact positively on EQ.

Keyword: Earnings Quality, managerial ownership, firm size, liquidity

1.1. Introduction

The traditional motive for classical businesses was the generation of profits, which transformed to the wealth maximization philosophy pursued by managers over the years. Anchored in this philosophy was the compensation of directors and other stakeholders such as shareholders and employees, and payment of taxes to government, and among others, based on earnings generated over a time frame.

The philosophy made room for creative accounting, window dressing and other earnings management schemes which over time have caused some draw back in the financial reporting value chain across the world. The ripples been unprecedented corporate failures like those of Enron and Worldcom, in USA, Afribank and Oceanic bank in Nigeria, and many others which call to question what determine earnings quality of reporting entities. Earnings quality concerns the extent a firm's reported earnings accurately reflect income generated for a period. It is concerned with information that is relevant, reliable, complete and not tampered with in its nature, scope and disclosure. The importance of earnings and it quality is fundamental because the short and long- runs and liquidity, solvency and sustainability of a business and the expectations of stakeholders depend on it. Thus, necessity to carry out an evaluation of the determinants of earnings quality of companies as there seems to be two extremes - companies with high earnings quality on the one end and those with low earnings quality on the other, with compelling determinants which are observable in both.

In general terms, earnings should be in tandem with underlying economic activity of a business and cash flows generated devoid of irregularities of any form. The quality of earnings may be measured in terms of attributes such as accrual quality, persistence, predictability, smoothness and factorial earnings. Factorial earnings derived from effective usage of the factors of production; inputs required to produce goods and services (outputs).

Corporate attributes are variables of interest that can affect the quality of earnings in an organization both positively, and negatively. These constructs of interest range from leverage, liquidity, firm size, profitability, ownership structure, firm age, and firm growth pattern, and many others. Latent attributes among these form the focus and variables of this study.

1.2. Statement of the Problem

The opportunistic behavior of managers which stems from the conflict of interest between the agents and principal relationship in running the affairs of business has brought about several researches on diverse areas of earnings and earnings management as well as causes of corporate failures for which earnings quality was identified as one of the key factors. The cases of corporate failures and falsification of annual financial statements by directors of companies requires academic empirical studies to carefully examine the variables of determinants that make for earnings quality. In this study, we focus on listed consumer goods firms in Nigeria considering leverage, managerial ownership, firm size and liquidity of these entities. This study is pretrised on the fact that may studies have been conducted in this shape, but sectoral analysis particularly for consumer goods sector is lacking in the literature, hence the current research.

1.3. Objective of the study and Hypothesis Development

The objective of this study was to examine determinants of earnings quality of listed consumer goods companies in Nigeria. In line with this objective, we developed the hypothesis: leverage, managerial ownership, firm size and liquidity has no significant effect on earnings quality of listed consumer goods companies in Nigeria.

1.4. Significance of the study

The study is conducted to make empirical contribution to accounting and financial reporting literature on some determinants of earnings quality with a view to ensure the reporting of accurate, reliable, relevant, timely and significant earnings information which would be of use in informed economic decisions by investors, creditors, policy makers, entity managers as well as those in the academic.

1.5. Scope and Limitations of the study

Determinants of earnings quality of listed consumer goods firms in Nigeria is the scope of this study. The study was conducted in Nigeria using listed consumer goods firms covering the period 2015 – 2021 financial years for twenty-two (22) listed firms on the floor of Nigerian Stock Exchange Group as at 31st December, 2021. The research focused on one sector only; the consumer goods firms in Nigeria. The results of the study may be generalized to other sectors of the Nigerian Economy since earnings quality determinants are assumed to apply to types of companies, despite the scope and limitation.

2. Review of Related Literature

The main concepts of the study are reviewed in this section of the paper, and carried out under conceptual, theoretical and empirical review sub-headings.

2.1. Conceptual Review

Select concepts are reviewed in this section.

2.1.1. Earnings Quality

Earnings quality had no clear definition in the International Accounting Standards framework, but enumerate a number of qualitative attributes expected in earnings to be regarded as high quality. These attributes are relevance, faithful representation, comparability, materiality, reliability and understanding. Others are completeness, timeliness, faithful presentation and consistency (Etim, Nsima and Eno, 2021). Earnings quality may therefore mean the appropriateness in reporting corporate performance over a time period. Aldamen, Duncan and Martinov-Bennie (2016) referred to earning quality as making available more detailed financial information about an organization to its individual users in decision making; the ability of a reported earnings to predict a company's future earnings. Peterson, Schmardebeck and Wills (2015) view earnings quality as that earnings stated on the financial statement, before identifying the extraordinary items that is regarded as an adequate signal for futuristic earnings.

It therefore implies that, when the qualitative characteristics of accounting information are adhered to when preparing and presenting financial statements, it may be assumed earnings quality is enhanced since income manipulations would have been be reduced to the barest minimum and the economic reality of company clearly portrayed.

In the literature, some reasons advanced for income smoothing, and perhaps tampering with the earnings quality include to decrease taxes liability, attracting new investors or as part of a strategy to make business more attractive, retention of managerial positions as well as managerial pecks, and among others. These reasons might easily be uncovered, when analysis of the determinants of earnings quality are critically examined.

2.1.2. Determinants of Earnings Quality

Firms are characterized by certain underlying attributes that best describe or represent their brands or businesses in the market place. Ahmed and Khan (2013) described these determinants as variables of interest which include among others firm size, leverage, liquidity, capital, profitability, firm age, dividend, market share, operating expenses and the ownership structure. The aforementioned determinants are not "one-fit-all', consequently for this study we select the more generic determinants for analysis; which are leverage, managerial ownership, firm size and liquidity, considered the most potent in influencing earnings quality of organizations.

2.1.2.1. Leverage: This is the relationship subsisting in the capital structure of an entity as it has to do with the existence of fixed charged bearing capital. It is one of the major elements in assessing risks and returns, and the future prospects of the entity. Leverage may be assessed either as financial or operating. One key ratio used for assessing leverage is the debt ratio, computed as total debts divided by total assets.

2.1.2.2. Managerial Ownership: This describes the proportion of shares attributed to insiders and block holders of an entity to the total number of shares issued. It is a determinant of control and key decision making framework in an entity, and therefore, imperative in earnings quality issues.

2.1.2.3. Firm Size: The measurement of firm size may be carried out using production capacity, volume of operation, capital employed, net worth, total assets, labour employed, raw materials and power consumed, value added as well as value of output Gaio and Raposo (2011) assert that, factors such as nature of the company, nature of products, capital employed, size of the market and quality of management affect the size of the firm. Firm size is therefore taken as a key determinant of company earnings.

2.1.2.4. Liquidity: This is the ease or efficiency with which an asset or security is converted into cash without affecting its market price. The ease at which an entity offset it maturing obligations without any risk of default. Liquidity may be measured in terms of market liquidity or accounting liquidity. Market liquidity examine the ease of buying or selling an asset at stable transparent prices at the stock market, while accounting was explained to mean paying maturing obligation with minimal risks.

Liquidity may be measured using some ratios such as current ratio, quick or acid test ratio, acid test variation ratio and cash ratio. These are computed to examine firm's ability to use liquid assets to cover its short term obligations.

2.2. Theoretical framework of the study

Two theories fit into this study, POSITIVE ACCOUNTING THEORY AND STAKEHOLDER THEORY. Positive Accounting Theory (PAT) was propounded by Watts and Zimmerman in 1978; stating that positive accounting is associated with the contractual view of the firm as a nexus of contracts, with accounting as one of the tools used to facilitate the formation and performance of contracts. This view holds that accounting practices evolve to mitigate contracting cost by establishing ex ante agreement among varying parties. In essence, the theory explained the various roles expected to be played by different stakeholders in an organization.

More so, the Stakeholders Theory (ST) originally developed by Freeman in 1984, stresses the interconnected relationships between a business, and its customers, suppliers, employer, investors, communities and others with stake in the organization. Freeman argued that a firm should create value for all stakeholders, not just for shareholders. In 1994, Freeman detailed the stakeholder theory of organizational management and business ethics that addresses morals and values in managing an organization.

These two theories formed the foundation for this study as positive accounting theory explains the contractual nexus associated with running a firm, while the stakeholder theory emphasizes the interconnectivity between the firm and it stakeholders in terms of addressing their expectations. It could then be seen that these theories are fundamental to determining earnings quality of any business.

2.3. Empirical Literature

Some select empirical studies by earlier researchers are summarized in this section in a tabular format

Table I: Summary of Empirical Studies used in the study

S/N	*Author(s) and Year of Research*	*Topic/Main Objective*	*Methodology*	*Major Findings*
1.	Krismiaji (2019)	Earnings Management and accounting conservatism in Indonesia	*Ex-post facto* research involving multiple regression analysis	Findings revealed that earnings management is positively affected by accounting conservation
2.	Nkiru and Godwin (2019)	Firm-specific attributes and earnings management of quoted conglomerate firms in Nigeria	Secondary data study using fixed effect model of multiple regression analysis.	Result revealed that leverage had negative and significant effect on earnings management of quoted conglomerate firms in Nigeria.
3.	Kenny and Luqman (2019)	Firm characteristic and financial reporting quality: evidence from non-financial firms in Nigeria	Multiple regression analysis involving descriptive and Inferential statistics to analyze secondary data	The results showed that firm size had positive and significant effect on financial reporting quality as against tangibility
4.	Akintoye, Adegbie, Nwaabia and Kwarbai (2019)	Earnings quality and growth of manufacturing companies in Nigeria	Time-series data analysis involving multiple regression analysis – descriptive and inferential statistics	Results showed that the quality of earnings had significant effect on turnover growth of the companies
5.	Anaekenwa, Samuel and Appolos (2019)	Earning persistence and firm performance in Nigeria	Panel data regression model using descriptive and inferential statistics	Findings revealed earning persistence had negative and insignificant effect on firm performance
6.	Deferighe and George (2020)	Audit firm attributes and financial reporting quality of quoted manufacturing firms in Nigeria	Time-series data study using involving multiple regression analysis techniques	Findings revealed that audit fees had significant influence on financial reporting quality of studied firms in Nigeria

contd..

7.	Kelvin (2020)	Firm characteristics and earnings quality of listed manufacturing firms in Nigeria	Panel data model involving Hausman test-descriptive and inferential analysis	Results revealed that there exist a positive and significant relationship between earning quality and firm characteristics
8.	Oladejo (2020)	Ownership structure and earnings quality of listed financial firms in Nigeria	*Ex-post facto* research design involving pooled OLS, fixed and random effect estimation techniques	Results showed that institutional ownership had positive and significant relationship with earnings quality as against managerial ownership.
9.	Segun, Taiwo, Mufiau and Temitope (2020)	Earnings persistence and Nigerian banking sector performance	Generalized method of moment (Gmm) and dynamic panel estimation techniques	Findings revealed that earnings of Nigerian deposit money banks are less persistent that is loss sustainable
10.	Gloria and Hussaini (2020)	Corporate attributes and earnings quality: the moderating effect of corporate age in Nigeria	Researchers adopted Thompson Reuter's data streams and accrual model developed by Collins *et al* (2017) as earnings quality proxy	Results revealed that corporate size was loss likely to reduced earnings manipulation, and that leverage, board's expertise and corporate age played a crucial role in reducing earnings manipulation
11.	Hayder and Mohand (2020)	The relationship between earnings quality and financial failure in Iraqi industrial companies	*Ex-post facto* research involving descriptive and inferential statistics- multiple regression model	Findings revealed that, the quantity of receivable in cash flow from operating activities has negative impact on value of the companies.
12.	Isam, Malik and Fares (2020)	The effect of earnings quality on companies performance in Jordanian market	Panel analysis involving econometric modeling	Results showed that return on Asset (ROA), Return on Equity (ROE) and Earnings per share (EPS) are affected by the quality of earnings
13.	Kustono, Roziq and Nanggala (2021)	Earnings quality and income smoothing motive in Indonesia	Data gathered were analyzed using partial least squares statistics	Findings revealed that institutional ownership had no effect on income smoothing
14.	Mawih (2021)	Earnings quality and foreign investors in Gulf Cooperation council countries of Oman, Kuwait and Kingdom of Saudi Arabia	Correlation analysis, descriptive statistics and Generalized Least Squares (GLS) regression analyses were used in secondary data analysis	Result showed distinct effects on how earnings quality measures attract FDI in those countries studied. Earnings persistence predictability and conservatism had positive response on FDI

Source: Researchers' compilation (2023)

2.4. Gap in the Literature

From the reviewed selected previous studies on earnings quality different sectors of various countries economies have been studied with no specific study devoted to consumer goods sector despite recorded failures and falsification of annual financial statements in the sector like in Nigeria (Onyema,2019); hence the need to also provide empirical evidence for this sector. Also, in the previous studies, managerial ownership a major firms' earnings determinant was not considered which the present study included in the modified Jones Model adapted for this study.

3. Research Methods

The methodology of the study are discussed in this section

3.1. Research Design

*Ex-post facto r*esearch design was adopted for the study. This is to permit the evaluation of independent variables possible influence on the dependent variable. The design allow for use of existing data not subject to manipulations.

3.2. Population and sample of the study

All listed consumer goods companies in Nigeria an at 31st December,2021 as contained in the Nigeria Stock Exchange annual reports constitute the population. As at that date, there were twenty-two(22) consumer goods companies (Appendix I) from which seventeen (17) were drawn purposively with up to-date financial statement covering the period of the study (Appendix II)

3.3. Sources and Nature of the Data

The sources of data were purely secondary gathered from published annual financial statements of sampled companies. The nature of data is panel data.

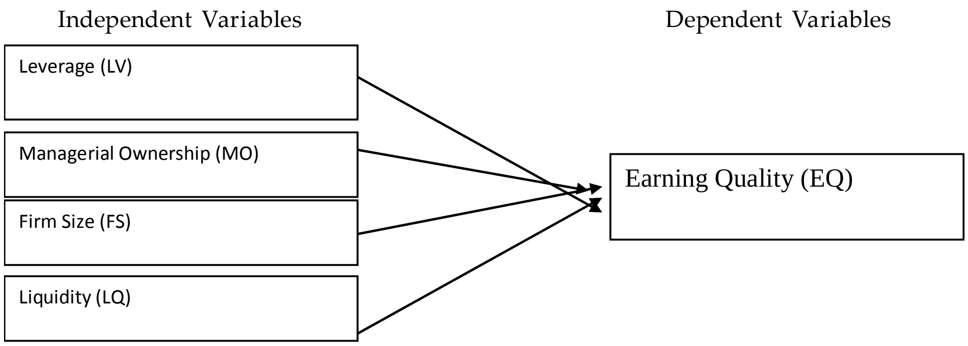
Table 2: Variables measurement and *Apriori* Expectations.

S/N	*Variables*	*Type*	*Abbreviation*	*Measurement*	*Apriori Expectations*
i.	Earnings Quality	Dependent	EQ	Modified jones model by dechow et al. (1995)	
ii.	Leverage	independent	LV	total debt: total assets	—
iii.	Managerial ownership	independent	MO	Managerial shares: shares outstanding	+
iv.	Firms' size	independent	FS	Log. of total assets	+
v.	Liquidity	independent	LQ	Current assets: current liability	+

Source: Researchers' Compilation (2023).

3.1. Model Specification: we specify the model conceptually and empirically. The conceptual model is diagrammatically shown on Figure 1.

Figure 1: Conceptual model of the study



Sources: Researchers' conceptualization (2023).

The models are developed to conform with the variables of the research.

The empirical model is adopted to measure earnings quality using the modified Jones model of estimating earnings quality. The modified model is stated as:

$TAC/TA_{(t-1)} = \beta_1\ (1/Ta_{t-1}) + \beta_2\ (\Delta \text{ in Rev} - \Delta \text{ in Rec})/(Ta_{t-1}) + \beta_3(PPE/Ta_{t-1}) + eii$

Where

TAC =Total Accruals

$TA\text{-}_{it-1}$ = Total Assets at the start of the year

ΔRev_{it} = change in sales from year t-1 to t

ΔRec_{it} = Change in receivables from year t-1 to t

PPE_{it} = Property, Plant, and Equipment

$\beta_{1,}\ \beta_{2,}\ \beta_3$ = Firms' specific parameters.

e_{it} = Residual representing the firm specific discretionary portion of accruals.

The modified Jones' model was used to determine earnings quality as used in the study. Incorporating the modified Jones model to conceptual model, we developed the econometric model in the form of multivariate metric as follows:

$$EQ = \beta_0 + \beta_1 LV + \beta_2 MO + \beta_3 FS + \beta_4 LQ +_{et}$$

Where,

EQ= Earnings Quality

LV= Leverage

Mo= Managerial Ownership

Fs= Firm Size
LQ= Liquidity
β_0 = Regression intercept
$\beta_{it\,1\text{-}4}$ = Coefficient of the explanatory variables
$_{et}$ = Stochastic error term

3.6. Method of Data Analysis

Descriptive and inferential statistics were applied in the analyses using mean, median, maximum, minimum, standard deviation, skewness and kurtosis. Inferential statistic were the product of panel data analysis and included t- statistic, p-value, R^2- square, adjusted R^2, Durbin-Watson (DW) statistic and F-ratio. The analyses were carried out at 5% level of significance as the basis for acceptance or rejection of hypotheses.

4. Results and Discussion of Findings

The results of the data analyses are presented and discussed in this section.

4.1. Descriptive Statistics

The nature of the data collected and their interrelationship, trend and direction was carried out using descriptive statistical tools as shown on Table 3.

Table 3: Descriptive statistics of the Variables

Statistic/Variable	*EQ*	*LV*	*MO*	*FS*	*LQ*
Mean	-0.0031647	0.570319	0.064622	7.623723	1.134185
Median	0.016000	0.570000	0.005000	7.690000	1.039000
Maximum	0.914000	1.504000	0.747000	8.590000	4.358100
Minimum	-1.136000	0.182000	0.00000	5.819000	0.074000
St. Deviation	0.186496	0.189698	0.152727	0.625447	0.644707
Skewness	-0.752105	0.747064	3.051936	0.410535	1.504660
Kurtosis	17.53286	6.670389	12.16862	2.587730	7.299581
Probability	0.0000	0.0000	0.00000	0.123351	0.00000
Observations	119	119	119	119	119

Source: Researchers' Computation (2023)

Table 3 was used to present the descriptive statistics for the variables of study. Earnings Quality (EQ) had mean value of -0.00365, median of -0.0160, maximum of 0.9140, minimum of -1.1360 and standard deviation of 0.186496 indicating wide fluctuations in the earnings of consumer goods companies in Nigeria over the period of study. The result show a negative skewness of -0.7521 and Kurtosis of 17.533 showing the data was above the standard normal curve.

Leverage (LV) had mean of 0.5703, median of 0.5700, maximum value of 1.5040, minimum of 0.1820 and standard deviation of 0.1897 explaining that there was less fluctuation in the variable over the period of the study. Skewness of 0.7471 and kurtosis of 6.6704 indicated positive inclination of the data which was above the normal curve.

Managerial ownership (MO) had mean value of 0.0646, median 0.0050, maximum 0.7470, minimum 0.0000 and standard deviation of 0.1527 indicating high rate of fluctuations in this variable over the period of the study. Skewness value of 3.0519 shows positive inclination to the mean of kurtosis and 12.169 showed that this valuable was above the standard normal curve.

Firms' size (FS) had mean value of 7.6237, median of 7.6900, maximum of 8.590, minimum of 5.819 and standard deviation of 0.6254 indicated less fluctuation in this variable over the period of the study. The skewness of -0.4105 indicated that the data set was negatively skewed with kurtosis of 2.5877 which is below the standard normal curve.

Liquidity (LQ) had mean value of 1.1342, median 1.0390, maximum 4.3580, minimum 0.0740 and standard deviation 0.6447 indicating less of fluctuation or variation in the data set over the period of the study. Skewness value was 1.5047 indicating positively inclined dataset and kurtosis value of 7.2996 which is above the standard normal curve.

The observations of one hundred and nineteen (119) was arrived at by multiplying the number of sampled listed consumer goods companies in Nigeria and the number of years chosen for the study.

4.2. Test of Multi-collinearity

Test of multi-collinearity was carried out using the variance inflation factor (VIF).

Table 4: Test of multi-collinearity

Variable	*Coefficient Variance*	*Uncentered VIF*	*Centered VIF*
C	0.5728	212.149	N/A
LV	0.01188	15.8819	1.57007
MO	0.01303	1.31762	1.66611
FS	0.00073	157.536	1.0442
LQ	0.00111	6.95375	1.68735

Source: Reseacher's Computation (2023)

The results shows absence of multi-collinearity in each of the independent variables as the centered VIF for each predictors were less than ten (10). This also implies that the variables for determinants of earnings quality (LV, MO, FS and LQ) are considered suitable for the study.

4.3. Correlation Matrix

The relationship between the variables of study was ascertained using correlation coefficient and also to further test the possible indication of multi-collinearity.

The results are shown on Table 5.

Table 5: Correlation Matrix

Variables:	*EQ*	*LV*	*FS*	*LQ*	*MO*
EQ	1.00000				
LV	-0.103135	1.00000			
FS	0.146995	-0.039414	1.00000		
LQ	0.255426	-0.582106	-0.76373	1.00000	
MO	0.081850	0.028835	-0.121698	-0.245059	1.00000
Observations	119	119	119	119	119

Source: Researchers' computation (2023)

From the data analysis, the relationship between all the independent variables were less than sixty percent (60%). This implies there was no indication of multi-collinearity in pairs of independent variables of the study. This was in conformity with the VIF results.

4.4. Co-integration Test

The was carried one for the assessment of long-run relationship among the variables using Eagle-Granger CO-integration statistical tool as presented on Table 6.

Table 6: Co-integration Test result

Dependent Variable	*Tau statistic*	*Prob **	*Z-Statistic*	*Prob.**	
LV	-6.820687	0.0000	-66.95332	0.000	
EQ	-11.71856	0.0000	-127.7168	0.000	
FS	-3.448448	0.0194	-21.95146	0.0060	
LQ	-6.249351	0.0003	-59.43559	0.0002	
MO	-5.72058	0.0123	-42.53337	0.0100	
*mackinnon (1996) P-values					
Intermediate Results					
	LV	EQ	FS	LQ	MO
RHO-1	0.567401	-1.082346	-0.186029	-.0503691	-0.360452
RHO S.E	0.083188	0.092362	0.053946	0.080599	0.071066
Residual Variance	0.018540	0.031068	0.123403	0.172566	0.012329
Long-run residual variance	0.018540	0.031068	0.123403	0.172560	0.012329
Number of lags	0	0	0	0	0
Number of observations	118	118	118	118	118
Number of stochastic trends**	5	5	5	5	5

** Number of stochastic trends in asymptotic distribution
Source: Researchers' Computation (2023).

From the result, all the variable of EQ, LV, FS, LQ and MO passed the long-run relationship test given the fact that the probability values of tau-statistic and Z-statistics were less than 0.05 level of significance for the individual variables.

4.5. Test of Hypothesis

Given the nature of the data which were panel, the Hausman test was conducted to determine the appropriate regression model to adopt Random Effect Model (RCM) and Fixed Effect Model (FEM). From the test, the random effect regression model was suitable for the analysis because the p-value were greater than 5% level of significance as it appropriately established the influence of all the predictors on the dependent variable-Earnings Quality (EQ).

The hypothesis of the study which was in line with the objective was stated as: Leverage, managerial ownership, firm size and liquidity has no effect on earnings quality of listed consumer goods companies in Nigeria. The results of the regression analysis for test of the hypothesis are presented on table 7.

Table 7: Random Effect Regression output for test of Hypothesis of the study

Variable	*Coefficient*	*Std. Error*	*T-statistics*	*Prob.*
C	-0.629050	0.24780	-2.5386	0.0125
LV	-0.310522	0.11143	-2.7867	0.0004
MO	0.122705	0.11789	1.0409	0.3001
FS	0.571090	0.28031	2.0374	0.0039
LQ	0.104974	0.03419	3.0703	0.0027
		Effects specification		
			S.D	*Rho*
Cross-section random			0.01825	0.0101
Idiosyncratic random			0.18078	0.9899
		Weighted statistics		
R-squared	0.10570	Mean dependent var		0.00352
Adjusted R-squared	0.07432	S.D dependent var		0.18557
S.E. of regression	0.17854	Sum. Squared resid.		3.63400
F- statistics	13.3686	Durbin-Watson stat.		2.08687
Prob. (F-statistics)	0.00005			
		Unweighted statistics		
Sum squared resid.	3.66311	Mean dependent var		-0.00365
		Durbin-Watson stat.		2.07027

Source: Researchers' Compilation (2023)

From the result, firm size (FS) and Liquidity (LQ) has positive and significant effect on Earnings Quality (EQ) of listed consumer goods companies in Nigeria. Managerial Ownership (MO) had positive but insignificant effect. Leverage (LV) had negative and significant effect on Earnings Quality (EQ). This implies that a percentage increase in FS and LQ would bring about significant effect on Earnings Quality (EQ), increase in Managerial Ownership (MO) would bring about insignificant effect and increase in Leverage (LO) would cause significant decrease or effect on Earnings Quality(EQ) of listed consumer goods companies in Nigeria.

The constant value -0.62905 indicated when the determinants studied in this research are held constant, there would be a significant negative effect on EQ. R^2 value 0.1057 and adjusted R^2 value of 0.0743 explained the variation in EQ attributed to the determinants.

The Durbin-Watson (DW) statistic value 2.087 showed no first-order auto correlation in the model. The null hypothesis was therefore rejected, and we concluded that variables studied have combined significant effect on earning quality of listed consumer goods companies in Nigeria.

4.6. Discussion of the Findings

The findings from the multiple regression analysis revealed leverage had a negative beta (-0.310522) as well as negative t-statistic (-2.7867) and P-value of 0.0004 which is statistically significant. This implies that leverage which explains borrowing strength of a business affect earnings quality negatively. This means that leverage can cause a slack on earnings quality. This result contradicts those of Gloria and Hassaini (2020) and Ojugbeli (2018) who found positive and significant influence of leverage on earnings.

Firm size (Fs) and Liquidity (LQ) had positive beta coefficients and t-statistics (=0.571090, t=2.0374) (-0.104974, t=3.0703) with P-value <0.05 indicating that these variables are positive determinants of earnings quality of listed consumer goods Companies in Nigeria. The in line with those of Wenjuan *et al.* (2011) who investigated China companies on governance structure and from value measured in terms of earnings quality and Oladejo (2020) that study effect of the managerial ownership variable though positive, was statistically insignificant.

Also, there was no indication of existence of multi-collinearly among the variables of the study with the conformation of long-run relationship among these variables.

5. Conclusion and Recommendations

The conclusion, recommendations, business implications of the findings as well as suggestions for further researches from part of this section.

5.1. Conclusion

From the results of the analysis, leverage showed negative and significant effect on earnings quality of listed consumer goods companies in Nigeria. Thus, it is a determinant of earnings quality. Managerial ownership disclosed positive and insignificant effect on earnings quality, indicating a moderating determinant of earnings quality implying share ownership may not have much effect on earnings quality.

Firm size and liquidity had positive and significant effect on earnings quality of listed consumer goods companies in Nigeria, and therefore, active determinants of earnings quality.

5.2. Recommendations

From the findings, the following recommendations are made;

i) Listed consumer goods companies in Nigeria should restrict from taking much debt liability has it has negative effect on earnings quality of the sector.
ii) Listed consumer goods companies in Nigeria should pay attention to their liquid assets as this is a good determinant of earnings quality.
iii) Managers of listed consumer goods companies should retain earnings to plough back into acquisition of more assets to grow the firm size and expand operations as this is an effective determinant techniques in preparing and presenting financial statements.
iv) Other determinants of earnings quality such as application of relevant accounting standards should be emphasized while minimizing adoption of earnings management techniques in preparing and presenting financial statements.

5.3. Business Implications of the Findings

The major business implication of the findings is the fact leverage which measure the extent of debt and equity financing has negative effect on earnings quality and thus should not be stretched beyond moderate limit to minimize excessive dilution of the capital structure and the pressure to paint earnings. Effective and efficient liquidity management philosophy should be imbibe as this variable is effective determinant of earnings and earrings quality.

5.4. Suggestion for Further Researches

The study should be replicated in other sectors of the Nigerian economy so as to identify the key determinants of earnings and earnings quality to enable development of regulatory framework to guide against unethical practices in earnings management.

5.5. Declaration of Interest

The authors declare no conflict of interest of any kind and that there is no external funding in the conduct of the study.

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Appendix 1: Population of the Study

S/N	*Name of Company*	*Date of Incorporation*
1.	Honey Well Plc	09/07/1985
2.	Dangote Sugar Refinery Plc	04/01/2005
3.	Nestle Nigeria plc	25/09/1969
4.	Unilever Nigeria Plc	04/11/1923
5.	Northern Nigeria Flour Mill Plc	29/10/1971
6.	UAC Food Plc	22/04/1931
7.	Cadbury Plc	09/01/1965
8.	Flour Mills Nigeria Plc	29/09/1960
9.	Champion Brewery Plc	31/07/1978
10.	McNichols	26/8/2004
11.	Guinness Nigeria Plc	29/04/1950
12.	International Brewery Plc	22/12/1971
13.	Mult-Trex International Foods Plc	30/01/1999
14.	Union Dicon Salt Plc	12/11/1991
15.	Golden Guinea Brewery Plc	26/09/1962
16.	Nigerian Brewery Plc	16/11/1946
17.	Tantalizer Plc	1/5/1997
18.	Nascon Allied Industries plc	11/2/1993
19	Chellarams Plce	13/8/1947
20	AG Leventis Foods Plc	11/3/1959
21	PZ Cussons Nigeria Plc	12/04/1948
22	Vita form plc	4/8/1962

Appendix 2: Sampled Companies

S/N	*Name of Company*	*Date of Incorporation*
1.	Tantalizer Plc	1/5/1997
2.	Cadbury Plc	09/01/1965
3.	Guinness Nigeria Plc	29/04/1950
4.	Honey Well Plc	09/07/1985
5.	Flour Mills Nigeria Plc	29/09/1960
6.	Nestle Nigeria Plc	25/09/1969
7.	Nascon Allied Industries plc	11/2/1993
8.	Northern Nigeria Flour Mill Plc	29/10/1971
9.	International Brewery Plc	22/12/1971
10.	Nigerian Brewery Plc	16/11/1946
11.	Dangote Sugar Refinery Plc	04/01/2005
12.	UAC Food Plc	22/04/1931
13.	Unilever Nigeria Plc	04/11/1923
14.	Chellarams Plc	13/8/1947
15.	PZ Cussons Nigeria Plc	12/04/1948
16.	Champion Brewery Plc	31/07/1978
17.	Vita form plc	4/8/1962