Influence of Debt Financing on Income Smoothing Practices among Listed Deposit Money Banks in Nigeria

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Abstract
This study examined the influence of debt financing on income smoothing among Nigerian listed deposit money banks. The study is specifically examined the influence of total debt ratio on income smoothing. Data collected from sampled twelve (12) listed Nigerian DMBs out of the fourteen (14) listed banks for period from 2009 to 2021. Data were analyzed using random effect panel regression. The results revealed that total debt to equity ratio exerts negative and significant influence on income smoothing measured by absolute discretionary accrual ($t = -2.87$; $p<0.05$) respectively. These implied that an increase in total debt ratio will reduce income smoothing. This suggests that the probability of being income smoother is lower when a firm has higher total debt. The study concluded that total debt ratio was negatively influenced the income smoothing among listed deposit money banks. The study therefore, recommends that Nigerian banks should carefully manage their debt levels so as to avoid income smoothing practices by management.

Keywords: Debt Financing, Income Smoothing, Deposit Money Banks, Nigeria.

1.0 Introduction
The users of accounting information depend heavily on financial reports of firms in making informed economic decisions. In particular, the investors often use the reported profit or earnings of the firm as the main benchmark in the decision-making process. This reliance on the reported profits and earnings of the firm by investors has made income smoothing a worldwide phenomenon among corporate firms. Management uses this income smoothing technique to minimize profits swings in the financial statements to lower market risk associated with the company's shares, which may raise the share price. According to Baik et al. (2020) and Thoharo et al. (2021), managers prioritize consistent earnings due to investor preference. Income smoothing is a strategy used to enhance the appearance of financial statements and allay investor fears regarding the company's financial difficulties.

One of the firm factors suggested in theoretical literature is the firms’ debt financing. Literature argues that the level of debt used by a firm can substantially influence the manager’s decision to use accounting discretion which would result in income smoothing (El Deeb & Ramadan, 2020; Holinata, 2020). This argument is situated within the debt covenant hypothesis of positive accounting theory. In line with this hypothesis, a firm may practice income smoothing so as to reassure the debtors of their ability to repay their loans or fulfill their debt covenant. The capital structure, which indicates how much equity a company owns derives from loans to creditors and frequently serves as a representation of the debt financing. The company's risk tolerance increases with its debt load. The greater the expense that the business will have to bear to settle these bills. This implies that the likelihood that the business won't be able to repay the debt in line with the terms of the contract that both management and creditors agreed
upon increases with the amount of the company's debt. As a result, businesses with large leverage ratios frequently use income-smoothing techniques (Paiva, 2018).

Income smoothing practices is prominent in developing countries understandably due to the nature and structure of their economies (Paiva, 2018). Developing countries largely rely on the primary products as source of revenue which makes their economies to be susceptible to external economic shocks. The instability in the country’s macroeconomic environment in terms of revenue generation in turn leads to fluctuations in the corporate firm’s earnings. Management of business firms in developing nations uses earnings smoothing to try to win over creditors and investors, and sometimes to carry out a personal bonus scheme.

Though the prevalence of income smoothing practices in developing countries is not illegal and can bring short term gain to the firms (Susanto & Pradipta, 2019). Thus, there is consensus that such practices may threaten the long-term growth and survival of the firms as the consequences of the earnings manipulation in the short term rear its head. In line with this, many studies have attributed the failures of Diamon banks and Intercontinental Bank to earnings management practices which is one of the techniques of income smoothing (Okaro et al., 2013) and (Susanto & Pradipta, 2019). Hence, there is need to mitigate income smoothing practices since it is mainly opportunistic in nature in developing countries. Research efforts have thus been committed to the understanding of the factors that determine the income smoothing practices among corporate firms.

Additionally, according to Okaro and Okafor (2013), a number of corporate governance blunders in Nigeria, including those at Skye bank, and Diamond bank, have hindered the ability of businesses to maximize the wealth of their equity holders internally by fostering organized and concentrated corruption within the organizational structure. These corporate failures have been attributed to the use of accounting discretion in the form of income smoothing. It was argued that the manipulation of corporate earnings in way that hide the market reality contributed to the collapse of most of the firms in Nigeria (Okaro & Okafor, 2013). Hence, stemming the tide of corporate failures in Nigeria requires adequate control of income smoothing practices.

Arguments have been put forward in both theoretical and empirical literature that debt financing is a potential factor shaping the income smoothing practices among corporate firms. Within the framework of the positive accounting theory, it was indicated that firms desire to fulfill debt covenant with the creditors leave them with no choice than to engage in income smoothing so as to assure the creditors of their ability to repay their loan. Empirical evidence to back this submission has emerged (Dickson, 2021; Husaini & Sayunita, 2016; Mohammadi & Arman, 2016; Supriyanto et al., 2016). There are however studies that failed to find impact of debt financing on income smoothing practices including Megarani et al. (2019) and Wijaya et al., (2020).

While substantial efforts have been made in literature to understand how debt financing can be leveraged to mitigate arbitrary income smoothing practices in literature, there is no consensus on the subject matter. This implies that conducting a country-specific studies is needed to understand what is applicable in the country regarding the use of debt financing to control income smoothing practice while sector-specific studies is expected to help in understanding how applicable are the debt financing in controlling the income smoothing practice in certain sector. In addition, existing studies on how income smoothing is affected by debt financing is shallow. The very few studies such as Dickson, (2021) and Salami et al. (2022) that exist have failed to investigate how can impact of debt financing on income smoothing
practices. This study therefore specifically investigated how debt financing affect income smoothing in Nigerian banking sector for the period of 13 years from 2009 to 2021. Based on previous discussion, this study provides the answer to this question. What is the impact of total debt ratio on income smoothing practices among listed financial firms in Nigeria?

2.0 Literature Review and Hypotheses Development

Odu et al. (2023) assessed the effect of external audit attributes on income smoothing in listed deposit money banks in Nigeria covering a study period of ten (10) years spanning from 2012 to 2021 over ten (10) banks. multiple regression estimation technique to established that Audit Firm Size (AFS) exerted a negative significant effect on INSM while Non-audit Service Fees (NASF) and Audit Tenure (ATN) exerted a positive significant effect on INSM of listed deposit money banks in Nigeria. Ibrahim et al. (2023) examined the effect of firm structural attributes on capital structure adjustments of selected 35 manufacturing companies in Nigeria from 2010-2021. The study used multivariate analysis to revealed that assets tangibility and firm size had positive and significant effect on capital structure adjustments whereas non-debt tax shields had negative but significant effect on capital structure adjustments. Ajiboye and Olagunju, (2023) considered the influence of investment decision on the market value of Nigerian 12 listed deposit money banks (DMBs) from 2010 to 2021. Panel regression to established that return on capital employed recorded positive and significant influence on the market value of listed Nigerian DMBs.

Salami et al., (2022) examined the nexus between bank funding strategy and income smoothing practices among sample of 16 Nigerian DMBs for the period 2007-2017. Data were analysed using appropriate panel regression model. The results showed that bank funding drive prompts Nigerian DMBs’ income smoothing practices via discretionary provision for loan losses (DPL) regardless of their solvency status and reflects majorly in their motive for external financing, deposit and non-deposit funding other than internal funding strategy. George and Chukwu, (2022) investigated the association between related party transaction and income smoothing with moderating influence of capital adequacy on the relationship using data from eleven listed commercial banks in Nigeria for nine years from 2012 to 2020. Results showed that deposits from related party were positively and significantly associated with income smoothing in Nigeria, suggesting that as deposits from related party increase, the level of income smoothing also increases. Further results showed that capital adequacy significantly moderated this relationship by changing the direction of the relationship from positive to negative.

Thoharo et al. (2021) carried out an empirical study to look into the motivation behind income smoothing while taking capital structure, financial crisis, and management's opportunistic actions into account. Path analysis was utilised to analysed the data obtained from listed manufacturing firm in Indonesia Stock Exchange between 2014 and 2018. The study revealed that income smoothing techniques are not significantly impacted by capital structure. Kustono et al. (2021) investigated the effects of institutional ownership on income smoothing incentives and the quality of earnings across 130 Indonesian manufacturing enterprises. To accomplish its goals, the study employed a quantitative strategy based on partial least squares. It was discovered that while financial leverage had a negative influence on income smoothing, institutional ownership had no such effect. Tulcanaza-Prieto et al. (2020) examined the relationship between leverage and real earnings management (REM) using data from non-financial companies listed on the Korea Composite Stock Price Index between 2010 and 2018. In suspected firms, the study found a strong and positive correlation between leverage and REM; in non-suspect enterprises, no such correlation was found. Additionally, they found that the positive and strong correlation between
the debt ratio and earnings management is more pronounced in the second half of the fiscal year. Holinata (2020) employed data generated from a total of 44 listed manufacturing companies in Indonesia for a period covering 2016 and 2018 to empirically investigate the implication of company size, profitability, debt ratio, audit committee, independent commissioner, and foreign ownership on income smoothing. The study used binary logistic regression in achieving the objectives of the study while income smoothing was measured from using Eckel Index. It was reported in the results that debt to equity ratio failed to had any significant influence on income smoothing. Wijaya et al. (2020) examined the impact of profitability, financial leverage, and dividend policy on income smoothing using data from industrial businesses listed between 2016 and 2018 on the Indonesia Stock Exchange. Logistic regression was employed to analyze the data, and the Eckel index was used to reflect income smoothing. According to the analysis, business size has a considerable positive impact on income smoothing, but financial leverage, as measured by the debt-to-equity ratio and dividend policy, has a minor impact. Profitability was found to have a significant negative impact on income smoothing. EL Deeb and Ramadan (2020) investigated the implication of financial distress, on earnings management among 42 companies listed on the Egyptian stock exchange market over the period between 2015 and 2017. Panel regression analysis with earnings management measured with accrual model discretionary component. The results of their analysis revealed that financial distress significantly impact earnings management practices. Focusing on the non-financial firms in Egypt with data obtained for the period covering 2010 to 2015.

Shuaibu and Muhammad (2019) examines the impact of income smoothing on the financial performance of listed deposit money banks in Nigeria using annual report and accounts of eight (8) sampled banks for the period 2012-2017. The study employed ordinary least square to revealed that income smoothing (LLP) have negative and insignificant impacts on financial performance (ROA, ROE) of DMBs in Nigeria.

Oktasari (2020) investigated the impact of capital structure, as measured by total debt ratio, on earnings management in a sample of manufacturing companies listed on the Indonesia Stock Exchange from 2013 to 2017. The data was analysed using panel fixed effects and the sampled firms were gathered using a purposive random sampling procedure. The results of the study demonstrated that total debt ratio, which represents a firm's capital structure, has a favourable and significant impact on earnings management. Younis (2018) examined the existence of income smoothing practices in Egypt and reported the differences concerning firm characteristics between smoothers and non-smoothers firms. Income smoothing in the study was measured using Eckel Model while the objectives of the study were subjected to logistic regression. They submitted that there exists prevalence of income smoothing practices in Egyptian firms. In particular, 62.7% are smoothers, while, 37.3% are non-smoothers. It was further revealed total debt to equity ratio contribute significantly in the prediction of income smoothing behavior. The impact of the audit committee, firm size, profitability, and leverage on income smoothing was examined by Indrawan et al. (2018) using a sample of manufacturing companies listed on Indonesia stock exchange between 2013 and 2015. The data collected were analyzed using panel regression technique. The study reported that firm size has a direct positive influence on income smoothing, profitability exerts an adverse effect on income smoothing, while debt to equity ratio was found to record an adverse effect on income smoothing. Based on the previous review, from the reviewed literature, only Alzoubi (2017) jointly investigated how debt financing affect earnings management while such study on income smoothing is not found. This study fills the gap by examining how the influence of debt financing (weakens or strengthen) the income smoothing. Given these arguments and majority of empirical findings in the literature, the following hypotheses are formulated:
Ho: There is no significant influence of total debt ratio on income smoothing practices among listed financial firms in Nigeria.

3.0 Methodology
This study employed the longitudinal research design. The population of the study consists of 14 listed banks on the Nigerian Exchange Group. Out of these 14, sampled of 12 banks were purposively selected for this study. Secondary data were obtained from the annual reports of the sampled banks from 2009 to 2021. Panel regression and binary logit were used due to the conceptualization of the income smoothing adopted in this study in addition to relevant data.

Dependent Variable
In order to measure the dependent variable of the study represented by earning management, the study used the discretionary accrual to be obtained following the performance adjusted modified Jones (1991) accrual model of Kothari et al. (2005) given has

\[
\frac{T^A_{it}}{A_{t-1}} = \delta_1 \left( \frac{1}{A_{t-1}} \right) + \delta_2 \left( \frac{\Delta REV_{it} - \Delta REC_{it}}{A_{t-1}} \right) + \delta_3 \left( \frac{PPE_{it}}{A_{t-1}} \right) + ROA_{t-1} + \mu_{it}
\]

Where:
\( T^A_{it} \) = The total accrual of firm i in year t
\( A_{t-1} \) = The first lag of total asset of firm I at year t
\( \Delta REV_{it} \) = The difference between contemporaneous revenue and previous year revenue for firm i
\( \Delta REC_{it} \) = The difference between contemporaneous account receivables and previous year account receivables for firm i
\( PPE_{it} \) = Property plant and equipment of firm I at time t.
\( ROA_{t-1} \) = First lag of total assets
\( \mu_{it} \) = The residual of the model
\( \delta_1, \delta_2, \text{ and } \delta_3 \) = The parameters of the model

The total accrual is obtained as:
\[
T^A_{it} = NI_{it} - CFO_{it}
\]

Where:
\( NI_{it} \) = Net income of firm i at time t
\( CFO_{it} \) = Net cash flow from operation for firm i at time t

Independent Variable
The independent variable of the study comprises debt financing and audit quality. In line with other similar literature (Alzoubi, 2017), the study proxy total debt ratio with the debt-to-equity ratio which is obtained by dividing the firm’s total debt by the total equity of the firm in a given year.

Control Variables
In line with previous literature (Akhoondnejad et al., 2013), the study includes three different control variables in the income smoothing model. They include the firm size, firm’s age and managerial shareholding.
Table 1: Summary of Measurement of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Type of Variable</th>
<th>Variable Labels</th>
<th>Measurement</th>
<th>Supporting Scholars</th>
<th>Expected Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Smoothing</td>
<td>Dependent</td>
<td>ICS</td>
<td>Absolute value of discretionary accrual</td>
<td>Odu et al. (2023)</td>
<td></td>
</tr>
<tr>
<td>proxied by discretionary accrual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total debt to equity ratio</td>
<td>Independent</td>
<td>TDER</td>
<td>The ratio of total debt to equity</td>
<td>Indrawan et al. (2018); Alzoubi (2017)</td>
<td>+</td>
</tr>
<tr>
<td>Firm size</td>
<td>Control</td>
<td>FS</td>
<td>Log of total assets</td>
<td>Younis (2018); Indrawan et al. (2018); Ibrahim et al. (2023)</td>
<td>-</td>
</tr>
<tr>
<td>Firm age</td>
<td>Control</td>
<td>AGE</td>
<td>The number of years since the firm is listed on the Nigeria Exchange</td>
<td>Demir &amp; Bahadir (2014); Akhoondnejad et al. (2013)</td>
<td>±</td>
</tr>
<tr>
<td>Managerial shareholding</td>
<td>Control</td>
<td>MSH</td>
<td>Proportion of the firm share held by management or directors</td>
<td>Vu et al. (2018); Akhoondnejad et al. (2013)</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Authors Compilation (2023)

Model Specification

The study based on the model of Indrawan et al. (2018). Hence, the model for achieving this objective is expressed in stochastic form as:

\[ ICS = f(TDER, FS, AGE, MSH) \]
\[ ICS_{it} = \beta_0 + \beta_1 TDER_{it} + \beta_2 FS_{it} + \beta_4 Age_{it} + \beta_6 MSH_{it} + \epsilon_{it} \]  

Where:

- \( ICS_{it} \) = income smoothing of company \( i \) at time \( t \)
- \( TDER_{it} \) = Debt ratio of firm \( i \) at time \( t \)
- \( FS_{it} \) = firm size of firm \( i \) at time \( t \)
- \( AGE_{it} \) = age of firm \( i \) at time \( t \)
- \( MSH_{it} \) = Managerial shareholding of firm \( I \) at time \( t \)
- \( \epsilon_{it} \) = Error term that is white noise
- \( \beta_i \) = time invariant firm specific effect of firm \( i \)
- \( \beta_0 \) = Constant term
- \( \beta_1-\beta_4 \) = Regression Coefficients.
4.0 Results and Discussion

Descriptive statistics

Table 2: Descriptive Statistics of Variables

<table>
<thead>
<tr>
<th></th>
<th>ICS</th>
<th>TDER</th>
<th>FIS</th>
<th>AGE</th>
<th>MSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.182</td>
<td>8.075</td>
<td>25.412</td>
<td>24.667</td>
<td>1.727</td>
</tr>
<tr>
<td>Median</td>
<td>0.128</td>
<td>6.303</td>
<td>25.738</td>
<td>21.000</td>
<td>0.771</td>
</tr>
<tr>
<td>Maximum</td>
<td>2.017</td>
<td>190.938</td>
<td>28.000</td>
<td>50.000</td>
<td>31.000</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.0002</td>
<td>-9.621</td>
<td>21.927</td>
<td>3.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.208</td>
<td>16.407</td>
<td>1.422</td>
<td>14.586</td>
<td>3.337</td>
</tr>
<tr>
<td>Skewness</td>
<td>4.947</td>
<td>9.549</td>
<td>-0.464</td>
<td>0.311</td>
<td>5.346</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>40.808</td>
<td>102.918</td>
<td>2.243</td>
<td>1.680</td>
<td>41.311</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>9927.484</td>
<td>67264.560</td>
<td>9.329</td>
<td>13.833</td>
<td>10283.500</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000</td>
<td>0.000</td>
<td>0.009</td>
<td>0.001</td>
<td>0.000</td>
</tr>
<tr>
<td>Sum</td>
<td>28.354</td>
<td>1259.719</td>
<td>313.472</td>
<td>32976.670</td>
<td>1726.493</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>6.695</td>
<td>41724.400</td>
<td>3964.343</td>
<td>3848.000</td>
<td>269.376</td>
</tr>
<tr>
<td>Observations</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
<td>156</td>
</tr>
</tbody>
</table>

Source: Authors Computation, 2023.

The results of the descriptive statistics of the variables are contained in Table 2, which revealed the average income smoothing based on accrual model is found to be 0.182 on average with standard deviation of 0.208. The results further show that the average total debt ratio was 8.075 per cent. The estimated average age of the banks is 24.67 years while firm size and managerial shareholding respectively have average of 25.412 and 1.727 per cent respectively.

Table 3: Estimated Matrix of Correlations

<table>
<thead>
<tr>
<th></th>
<th>ICS2</th>
<th>TDER</th>
<th>FS</th>
<th>AGE</th>
<th>MSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICS</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDER</td>
<td>-0.026</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIS</td>
<td>-0.165</td>
<td>-0.249</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>0.174</td>
<td>-0.047</td>
<td>-0.013</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>MSH</td>
<td>0.028</td>
<td>-0.049</td>
<td>0.089</td>
<td>-0.170</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Authors Computation, 2023.

The correlation coefficients results presented in Table 3 with correlation coefficient of 0.001 implies that income smoothing measures using discretionary accrual and Eckel Index are positively related. In addition, the results reveal that total debt to equity ratio with coefficient of -0.026 is negatively associated with discretionary accrual respectively. Also, the estimated coefficient of -0.165 firm size is negatively associated with discretionary accrual respectively while age of the bank is positively associated with discretionary accrual. Firm age is positively associated with the income smoothing measured with discretionary accrual with coefficient of 0.174 respectively. Also, the respective correlation coefficient of -0.028 imply that managerial shareholding is positively associated with income smoothing measured with and discretionary accrual.

### Table 4: Summary of Diagnostic Tests Results

<table>
<thead>
<tr>
<th>Test</th>
<th>Total Debt Model</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variance Inflation Factors test for Multicolinearity</td>
<td>Highest VIF = 1.33</td>
<td>No Multicolinearity</td>
</tr>
<tr>
<td></td>
<td>Mean VIF = 1.178</td>
<td></td>
</tr>
<tr>
<td>Breusch-Pagan test for heteroskedasticity</td>
<td>Chi2 = 16.19</td>
<td>Presence of heteroscedasticity</td>
</tr>
<tr>
<td></td>
<td>Prob &gt; Chi2 = 0.0001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F stat = 8.498</td>
<td></td>
</tr>
<tr>
<td>Wooldridge test for serial correlation</td>
<td>Prob &gt; Chi2 = 0.0154</td>
<td>Presence of first order serial correlation</td>
</tr>
</tbody>
</table>

**Source:** Authors Computation, 2023.

This study conducted diagnostic tests for multicolinearity, heteroscedasticity and serial correlation in respect of the objective of the study. The results of the variance inflation factor for model revealed a highest VIF of 1.133. The results of the Breusch-Pagan test for heteroscedasticity shows that there is problem of heteroscedasticity in the estimated model of the study as shown by Breuch-Pagan probability value of 0.0001 which is less than 0.05. For the serial correlation, the results show presence of first order serial correlation in the model for objective with p value of 0.0154. The study controls for the violation by obtaining the results with robust standard error.

### Panel Regression Results

#### Table 5: Estimated Panel Regression (Random Effect)

<table>
<thead>
<tr>
<th>ICS2</th>
<th>Coef.</th>
<th>St.Err.</th>
<th>t-va</th>
<th>p-val</th>
<th>[95% Conf]</th>
<th>Interval</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDER</td>
<td>-.001</td>
<td>0</td>
<td>-2.87</td>
<td>.004</td>
<td>-.001</td>
<td>0</td>
<td>***</td>
</tr>
<tr>
<td>FS</td>
<td>-.027</td>
<td>.015</td>
<td>-1.81</td>
<td>.07</td>
<td>-.056</td>
<td>.002</td>
<td>*</td>
</tr>
<tr>
<td>Age</td>
<td>.003</td>
<td>.001</td>
<td>1.74</td>
<td>.081</td>
<td>0</td>
<td>.005</td>
<td>*</td>
</tr>
<tr>
<td>MSH</td>
<td>.004</td>
<td>.004</td>
<td>0.97</td>
<td>.331</td>
<td>-.004</td>
<td>.013</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.872</td>
<td>.405</td>
<td>2.15</td>
<td>.031</td>
<td>.078</td>
<td>1.665</td>
<td>**</td>
</tr>
</tbody>
</table>

Mean dependent var 0.182  SD dependent var 0.208
Overall r-squared 0.363  Number of obs 156
Chi-square 22.351  Prob > chi2 0.000
R-squared within 0.004  R-squared between 0.356
Chow F 2.11  Prob of Chow F 0.0230
Hausman F 2.94  Prob of Hausman F 0.5683

**Source:** Authors Computation, 2023.

*** p<.01, ** p<.05, * p<.1

The results of the random effect panel regression obtained using accrual model to measure income smoothing are contained in Table 5. The results of the Chow test for firm effect with p value of 0.0230 imply that the null hypothesis of no firm effect is rejected which rule out the pooled OLS from the
alternative panel regressions that be used in achieving the objective. The results of the Hausman test with p value of 0.5683 indicated that random effect panel regression performs better than fixed effect panel regression. Hence, the results in Table 5 revealed that total debt to equity ratio records negative and significant influence on income smoothing (t=-2.87; p<0.05) suggesting that the higher the ratio of debt to equity in the capital structure of the banks, the lower the tendency of the banks engaging in income smoothing. For the control variables, the results indicate that firm size is negatively associated with the income smoothing though only significant at 10 per cent (t=-1.81; p>0.05), the age of the bank is positively associated with income smoothing albeit at 10 per cent level of significance (t=1.74; p>0.05). In addition, the impact of managerial shareholding on income smoothing is found to be positive but not significant (t=0.97; p>0.05).

Discussion of Findings
The study found negative and significant influence of total debt to equity ratio on income smoothing among Nigerian listed Deposit Money Banks. The implication of this results is that firms that have higher debt component in their capital structure are less disposed to engage in income smoothing practices. The results here is contrary to expectation and contrasts the proposition of the debt covenant hypothesis where the pressure to fulfil debt covenant is expected to make the management to engage in income smoothing practices. On the other hand, the results found here agrees with the monitoring hypothesis of the positive accounting theory where the monitoring capacity of the creditors because of their interest in the firm discourages the management from engaging in earnings management and thus lowers income smoothing practices. The result found here however agrees with those of Kustono et al (2021) who reported negative impact of total debt to equity ratio on income smoothing. The findings disagree with the submission of Indrawan, et al. (2018) that companies are disposed to practice income smoothing to attract more investors by increasing income since higher debt to equity ratio is associated with investors risk and thus investors often demand higher profits from such companies. The results found here are equally inconsistent with the findings in previous other empirical literature such as Oktasari (2020), and Husaini and Sayunita (2016).

5.0 Conclusion and Recommendations
The study concluded that total debt ratio was negatively influenced the income smoothing among listed deposit money banks. The study therefore, recommends that Nigerian banks should carefully manage their debt levels so as to avoid income smoothing practices by management. This study has contributed to the body of knowledge by providing empirical evidence that there is a negative relationship between total debt ratio and income smoothing. This adds to the understanding of how debt levels can affect financial reporting behavior. One of the limitations is that the study only focused on the Nigerian Deposit Money Banks which gives no room for comparative analysis of the findings with other sectors of the economy which are less regulated.

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