

# Antecedents of Corporate Income Smoothing of Financially Distress Likelihood Quoted Companies in Nigeria

Rachel Konyefa Dickson (Ph.D.)

*Department of Management, Faculty of Management Sciences, Niger Delta University*

**Abstract:** The incessant income smoothing of corporate organisations has generated much concern by corporate reporting practitioners and academics worldwide. Though income smoothing is legal, it is deceptive. This study focused on the antecedents of income smoothing by financial distress likelihood quoted companies in Nigeria. It specifically examined the firm size, Leverage, board independence, managerial ownership and board gender diversity on income smoothing of financial distress likelihood zone companies in Nigeria.

It is an experimental research design covering six (5) years from 2014 to 2019. The entirety of the study was 114 non-financial companies quoted on the Nigerian Stock Exchange, while 59 companies constituted the sample size arrived at using Altman's Z-Score. The Eckle methodological model was used for the assessment of income smoothing before applying the dichotomous variable approach. Content analysis of annual financial reports of sampled companies was employed, and data were analysed using descriptive and inferential statistics such as Pearson correlation, variance inflation factor, panel and pooled least square regressions.

This study revealed that firm size, Leverage, board size, and managerial shares shareholdings have a positive relationship with income smoothing. Simultaneously, board independence and board gender diversity have no significant influence and were also negatively related to income smoothing of financial distress likelihood companies in Nigeria. We, therefore, recommend that an independent board made up of male and female of different disciplines and professional qualification in accounting and finance should be encouraged irrespective of the size of the firm. The recommendation is based on the need to ensure financial reporting quality instead of smoothing income even when the firm is at the threshold of financial distress in Nigeria

**Keywords:** Income Smoothing, Financial Distress Zone, Board and Firm Characteristics

## I. INTRODUCTION

The incessant income smoothing of corporate firms either in safe, grey or financial distress likelihood zone has generated much concern by corporate reporting practitioners and academics worldwide. Companies are in financial distress zone when they possess high fixed costs, illiquid assets, or revenues sensitive to economic downturns (Kenton, 2019). Companies in financial distress zone find it extremely difficult to meet their financial obligations. Where they do, they struggle seriously to meet such obligations to their

creditors. Management may be inclined to take actions to increase earnings of the company in financial distress zone when earnings are relatively low and to decrease earnings when earnings are relatively high, which is believed to be an alteration of accounting information (Abdullah, Al-Zabari, & Al Marshedi, 2018; Glaum, Keller, & Street, 2018). The main reasons deduced why managers engage in income smoothing are: maximising their wealth, reducing the perceived riskiness of the firm, enhancing firm value, meeting debt covenants, reducing tax and political costs and enhancing the reliability of financial forecasts. Guillaume and Pierre (2016) advocate that income smoothing is one form of incentive accounting concern with adjusting and manipulating fluctuations about some heights of earnings of safe, grey or financial distress likelihood zone business. Income smoothing is another form of earnings management. Chhabra (2016) states that when it comes to earning Management, two sentiments usually advanced: the first regards earning Management as false, while in the second scenario, the stakeholders consider such activity as Management using their preferences. The process of income smoothing is not legal as it uses false accounting procedures and interpretations to stabilise fluctuations in net income (Acharya & Lambrecht, 2015). When businesses do income smoothing, there is no correct information to determine their actual earnings, a process that helps the companies to avoid taxes. Guillaume and Pierre (2016) believe that people believe that manipulating incomes reduces the essential aspects of financial reports. Positive accounting theory has shown that Management applies accounting techniques or methods to report good news

Income smoothing can be detrimental to the firm or owners, mainly when repercussion occurs. Income smoothing practices have been linked to the collapse of high profile companies across the world like Enron, Lehman Brothers, Worldcom, Tyco, Adelphia, Health International Holdings (HIH) Insurance Group and Board of Control for Cricket in India (BCCI), Parmalat, Xerox, Oceanic Bank Nigeria Plc, Intercontinental Bank Nigeria Plc, Savanna Bank Nigeria Plc, Unilever Nigeria Plc, etcetera (Okaro, Okafor & Ofoegbu, 2013;; Manukaji, 2018; Aifuwa & Embele, 2019). For instance, Enron in 2001 indicated that profits were overstated by as much as \$586 million for four years, WorldCom in 2002 showed that operating expenses of \$3.8 billion were

capitalised thus overstating its profit, Tyco and Adelphia were estimated to the tune of \$460 billion were said to have been lost, while Cadbury Nig Plc books were criminally manipulated by Management leading to loss of over ₦15 billion (Okaro et al., 2013). This is an indication that many firms may have been operating with the likelihood or probability of being distressed. Financial distress zone companies face a lot of financial challenges.

Looking at the antecedents of income smoothing from the angles of the board and firm characteristics can have implications on income smoothing of firms in financial distress zone. Board characteristics of a company like board size, independence, board gender and the firm features or attributes like financial Leverage and firm size can either have a positive or negative relationship with income smoothing of companies in the financial distress likelihood zone. Ayadi and Boujelbene (2014) believe that managerial ownership has a positive impact on earnings management or income smoothing; Van der Zwet (2015) reported a negative relationship between the percentage of women and earnings Management, while Chi-Yih, Boon and Xiaoming (2012) showed that firms with more independent directors or large board size are more likely to engage in income smoothing. Moh and Winny (2014) indicated that the company's size has a significant effect on income smoothing.

However, the need for this study becomes vital because most studies on income smoothing were domiciled in developed economies of Europe and America. The issue has not received a robust empirical consideration in emerging economies, with Nigeria as a reference point. The only closely related study from Nigeria was by Manukaji (2018), who examined corporate governance and income smoothing in Nigeria. Though a plethora of studies from Nigeria has concentrated on corporate governance and earnings management but not income smoothing. This lack of developing country perspective to the issue lies the gap that this study desires to fill. The specific objectives are to examine the influence of firm size, the board size, Leverage, board independence, board gender diversity and, managerial shareholding on income smoothing of financial distress likelihood companies in Nigeria.

Following the introduction, section two focuses on the review of extant literature. Section three addresses the methodology, with emphasis on the research approach, population and sampling, model specification, and data estimation techniques. The estimation result is presented in section four, while section five addresses the conclusion and recommendations.

## II. LITERATURE REVIEW

### *Concept of Income Smoothing*

Income smoothing may be viewed from different perspectives. However, it is a miniature of earnings management. It is classified as a form of earnings

management, indicating that income smoothing is just a tiny aspect of earnings management. Ronen and Yaari (2008) define income smoothing as a deliberate attempt by Management to signal information to financial users. Michelson, Jordan-Wagner and Wootton (1999) define income smoothing as an accounting practice in which managers selectively reduce fluctuations that arise in profits during accounting exercises according to a framework of generally accepted accounting principles. Michelson, Jordan-Wagner and Wootton (2001) defined income smoothing as a technique used by a company manager to reduce the change in the reported amount of income using artificial or real earnings management to attain the desired income level. Belkaoui (2006) see income smoothing as reducing income fluctuations from one year to another by transferring income from the years of high earnings to the less favourable periods. Income smoothing is defined as the dampening of fluctuations in reported earnings over time (Ronen and Yaari 2008). In other words, Management is inclined to take actions to increase earnings when earnings are relatively low and to decrease earnings when earnings are relatively high. The main reasons that managers smooth earnings are: maximising their wealth, reducing the perceived riskiness of the firm, enhancing firm value, meeting debt covenants, reducing tax and political costs and enhancing the reliability of financial forecasts. Basically, income smoothing is the reduction of the variance in periodic profit over time to the extent allowed by accounting and management principles.

However, executive discretion is not used only in earnings management. For Coelho and Lima (2009), the discretionary power of executives also manifests in the degree of conservatism of firms. In essence, firms can be more or less conservative in their accounting policies, and the level of conservatism affects their accounting results. Hence, it is imperative to know how the interaction of the two perspectives can determine the quality of financial information and how the method of smoothing results can influence conditional conservatism. Lopes (2008) posits that conservative companies do not disclose optimistic statements. In not disclosing optimistic statements, the company reduces its current profits. However, income smoothing can also arise from the practice of non-disclosure of positive financial statements.

Corporate managers may be motivated to smooth their income (or security), assuming that income stability and growth rates are preferred than higher average income streams with more significant variability (Samak, El Said & El Latif, 2014). Samak, El Said and El Latif (2014) advanced two categories of income smoothing, such as the intentional or real income smoothing and the artificial income smoothing, which is the unintended income smoothing. Real (intentional) income smoothing indicates management actions that seek to control economic conditions that directly affect future corporate earnings. The intentional income smoothing affects the cash flow of the organisation. While the artificial type of income

smoothing may not directly affect the cash flow but reveals the manipulations carried out by Management to smooth income.

#### *Financial Distress Likelihood*

Financial distress likelihood or probability of a firm being distressed has been a concern of researchers for years (Ahmad, Altarturi, Hassanudin, Harun & Nurun 2014; Kenton, 2019). A firm can be operating, whereas it is unhealthy. Kenton (2019) indicates that financial distress usually involves at least two counterparts, a debtor and a creditor. Kenton (2019) notes that disregarding the signs of financial distress can be devastating for a company. This is because severe financial distress can have far-reaching implications on the ability of the company to settle maturing obligations. If this happens, bankruptcy may be the only option. Ahmad et al. (2014) posit that high fixed costs, illiquid assets, and revenues sensitive to economic recession tend to expose companies to financial distress. Davydenko (2005) states that the term "financial distress" is used in a negative implication in describing the financial situation of a company confronted with temporary inadequate liquidity and with the difficulties that ensue in fulfilling financial obligations on schedule and to the full extent.

Kenton (2019) enumerated different distress signals that Management should be wary of in managing the organisation's affairs. These include but are not restricted to weak profit arising from poor financial health and absence of financial flexibility. Restricted access to funds may lead to corporate failure. Weak sales growth or decline indicates the market is not positively inclined to the products and services being offered by the organisation. Ahmad et al. (2014) suggest that a company which is in financial distress likelihood can experience costs linked to the situation, such as more exclusive financing, opportunity costs of projects and less dynamic employees. Similarly, the cost of borrowing additional capital of the firm will generally increase, increasing the much-desired funds to make it extra challenging and costly.

Purnanandam (2005) described financial distress in terms of solvency. He advanced a theoretical model of corporate risk management in the presence of financial distress costs. Financial distress is viewed as an intermediate state between solvency and insolvency. A company is distressed when it misses interest payments or violates debt covenants.

#### *Relationship between Antecedents and Income Smoothing*

The antecedents examined in this study include firm characteristics and board characteristics. The firm attributes include firm size and financial Leverage, while board characteristics include board size, board independence, board gender and managerial shareholdings.

#### *Firm Size and Income Smoothing*

There exist different measures of firm size in extant literature. Brigham and Louis (2007) defined the size of a company as the average total net sales for the year. The company size is measured by the number of assets owned by the company, the company's revenue and the number of workforce or employees in the firm. Shen and Chih (2007) examined the impacts of corporate governance on earnings management. They argued that firms with good corporate governance tend to embark on fewer earnings management than large-sized firms that are more susceptible to earnings smoothing. Yang, Murind, and Ding (2008) observed that the proportion of Chinese firms involve with income-smoothing is greater than those of Singaporean, Japanese and U.S. firms. Moh and Winny (2014) indicated that the company's size has a significant effect on income smoothing. Following from the extant literature, we hypothesised that firm size has no significant relationship with income smoothing of distress likelihood companies.

#### *Leverage and Income Smoothing*

Leverage describes the extent of debt or external financing of the organisation. Where debtors cannot meet their obligations to the company, it has implications for the business's cash flow to the extent that the business may be unable to meet its obligations to creditors. The leverage ratio measures the ability of the company to finance its obligations. Debt ratio is defined as the ratio of total debt over its total assets, which can also be interpreted as the proportion of a company's assets that are financed by debt. A higher debt ratio means the company is highly levered and poses high financial risk. Malik (2013) explored the determinants of financial distress of non-financial companies on the Karachi Stock Exchange from 2003 to 2010 using the Z-score model. The results indicate that current ratio, profitability, solvency and Leverage are negatively correlated while efficiency is positively correlated.

Many studies have indicated a positive relationship between financial Leverage and financial reporting quality (Raffournir, 2006; Dedman, Lin Stephen, Arun & Hao 2008; Deumes & Knechel, 2008; Taylor, Tower & Neilson, 2010). These results suggested that firms with high debts are forced to disclose more information to satisfy their creditors (Zare, Kiafar, Rasouli, Sadeghi & Behbahani, 2013). On the other hand, Connors and Gao (2011), Monday and Nancy (2016) indicated that Leverage has a statistically significant but negative relationship with financial reporting quality. However, Fathi (2013), Haji and Ghazali (2013) and AL-Asiry (2017) revealed that Leverage has a statistically insignificant influence on financial reporting quality. Moh and Winny (2014) found that financial Leverage has a significant effect on income smoothing. Mohammad and Ehsan (2011) indicated that Leverage has a positive relationship with income smoothing in growth firms. The study, therefore, hypothesised that:  $H0_2$ : *Financial Leverage has no*

*significant influence on income smoothing of financial distress likelihood companies.*

#### *Board Size and Income Smoothing*

Board size is the totality of members that constitute the company's board of directors (Tafamel, Dania & Akrawah, 2016). Omoye and Eriki (2014) claimed that the size of the board is a fundamental issue of good corporate governance in both small and large firms as regards earnings management practices. Ahmadu, Tukur, and Aminu (2011) argued that large board size has a way of influencing the board's functions greatly, employing an excellent corporate governance structure. Jensen (1993) contends that a large board is less inclined to work adequately and is less demanding for the CEO to control. Fodio, Ibikunle, and Oba (2013) also found that board size and board independence are negatively and significantly associated with earnings management for listed Insurance companies in Nigeria. Chi-Yih, Boon and Xiaoming (2012) showed that the board of directors' size is not effective in curtailing income smoothing in China. Having examined previous studies, it is expected that board has a negative relationship with income smoothing companies in financial distress likelihood zone. The study, therefore, hypothesised that: *H<sub>03</sub>: Board size has no significant influence on income smoothing of financial distress likelihood companies.*

#### *Board Independence and Income Smoothing*

Board independence is seen as the proportion of independent or non-executive directors on the board of a company. An independent board has a large number of outside directors who are not executive directors of the company and have minimal or no business dealings with the firm to prevent conflicts of interest. The inclusion of non-executive directors and independent directors as part of the board characteristics of the company serves as a veritable platform for effective monitoring (Uadiale, 2012). Due to the high degree of impartiality of board independence, they stand up to the Chief Executive Officer (CEO) to protect the interest of all shareholders. Kyereboah-Coleman and Biekpe (2006), documented that firms were expected to increase the independence of their board to surmount poor performance. Kankanamge (2015) revealed that board independence has a significant negative relationship with the earnings management of the firms. Yang, Murind and Ding (2008) showed that firms with more independent directors are more likely to engage in income smoothing. Ali and Marziyeh (2012) showed a positive relationship between non-bound members' percent and income smoothing. Ali and Marziyeh (2012) indicated that internal auditor and increase in institutional stockholders' percent lead to income smoothing reduction. Still, there is a positive relationship between non-bound members' percent and income smoothing. Yang, Murinde and Ding (2008) showed that firms with more independent directors are more likely to engage in income smoothing. Chi-Yih, Boon and Xiaoming (2012) revealed that firms with more independent directors are more likely to

engage in income smoothing. Against the background of the above review, we, therefore, hypothesised that: *Board independence has no significant influence on income smoothing of financial distress likelihood companies.*

#### *Board Gender Diversity and Income Smoothing*

Board gender is defined as the female representation in the boardroom of corporate organisations. According to Tafamel, Dania and Akrawah, (2016) state that gender diversity signifies the presence of women set in the board with greater board diversity. Pathan and Faff (2013), argued that an excessive ratio of women sitting on the board could adversely affect the possibility of catching up with more capable male in the board. Omoye and Eriki (2014:555), quoted that "corporate boards with female directors and non-executive directors tended to enhance board monitoring and hence constrain earnings management. Arun, Almahrog and Ali-arihi (2015) showed that firms with a higher number of female and independent female directors are adopting restrained income smoothing practices in the U.K. Alquhaif, Abdul Latif and Chandren (2017) reveal a negative relationship between board gender diversity and earnings management, stating that women directors on the board are associated with less engagement in accretive share buyback activities. Wicaksana, Yuniasih, and Handayani (2017) showed that board diversity has a negative effect on earnings management means the higher board diversity, the lower-earning Management. Van der Zwet (2015) indicated a negative relationship between the percentage of women and earnings management. Moradi, Salehi, Bigli and Najari (2012) reported that gender diversity had no relationship with income smoothing. The following examined various extant findings; it is expected that female board members have a negative association with income smoothing companies in a financial distress likelihood zone. The study, therefore, hypothesised that: *H<sub>05</sub>: Board gender diversity has no significant influence on income smoothing of financial distress likelihood companies.*

#### *Managerial Shareholding and Income Smoothing*

Managerial shareholding means part of shares owned by the firm's chief executive officer and other executive directors. Manoranjan (2005) stated managerial shareholding as the fraction of equity shares held by insiders and promoters. Wenjuan, Gary and Shiguang (2009) view managerial ownership as the proportion of managers' stock ownership. Laiho (2011) viewed managerial ownership as the insider holdings by the board of directors and the management team. Extant studies showed a mixed relationship between managerial ownership and income smoothing, otherwise known as earnings management. Saftiana, Mukhtaruddin and Ferina (2017) reported that managerial ownership has no significant effect on earnings management. Alves (2012) found a negative relationship between managerial ownership and earnings management. However, the result is different from That of Guo and Ying (2015), who reported a positive relationship between managerial ownership and earnings

management. Mehmet. In the same vein, Suleyman and Mustafa (2014) showed that the association between managerial ownership and earnings management is positive and statistically significant. Ayadi and Boujelbene (2014) indicated that managerial ownership positively impacts earnings management or income smoothing. Against the backdrop of the mixed report in the extant literature, we hypothesised that:  $H0_6$ : *Managerial shareholding has no significant influence on income smoothing of financial distress likelihood companies.*

### III. METHODOLOGY

#### *Theoretical Framework and Model Specification.*

The positive accounting theory (PAT) underpinned this study. It was initiated by Watts and Zimmerman (1986) to explain why the agents (management or executive directors) act in a particular manner or taking specific actions. The underlying assumption of the positive accounting theory is that the relationship between the owner and the agent referred to as a set of contractual agreements or a set of contracts that specify and determine each party duties and expectations. The notion of the contract cost also implies the social and political cost imposed on the Management, which Management tries to address by offering more information about the firm's operation and performance to legitimise their behaviour.

The PAT theory's central development is based on the "rational economic person assumption", which assumes that managers are motivated particularly by self-interest and will behave opportunistically to maximise their self fish interest or utility through the use of accounting rules. (Watts & Zimmerman 1986). Thus, the self-interest assumption creates a need for organisations to establish alignment mechanisms to align principal and agent objectives, and these must be through the proper corporate governance structure. The positive accounting theory by Watts and Zimmerman (1986) describes the behaviour and interest of managers under certain conditions. The purpose of the positive accounting theory is to explain and predict why managers choose to adopt a particular accounting method. Management strives to report a positive view of the firm's performance. Showing a negative performance discourage investors and stakeholders. It is in the interest of Management to report positive profits. In effect, positive accounting theory permits Management to report good news using accounting and reporting techniques like income smoothing. Against the background of the theory, the model for the study is specified as:

The Z-Score used to determine companies in financial distress zone is specified as:

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + .6X_4 + 1.0X_5, \dots \dots \dots (1)$$

Where:

X1 = working capital / total assets

X2 = retained earnings / total assets

X3 = earnings before earnings and taxes / total assets

X4 = market value of equity / book value of debt

X5 = sales / total assets.

The model for this study is specified and measured as:

$$IS_{it} = \beta_0 + \beta_1 FSIZE_{it} + \beta_2 LEV_{it} + \beta_3 BSIZE_{it} + \beta_4 BIND_{it} + \beta_5 BGD_{it} + \beta_6 MS_{it} + \mu \dots \dots \dots (2)$$

Where;

IS=Income smoothing of the company "i" at a time "t" (where a company is an income smoother 1, otherwise 0 (Income Smoothing (I.S.) is measured using Eckle Index which is specified as:

$$Eckel \text{ index} = \frac{CV\Delta I}{CV\Delta S}$$

CVΔS where CVΔI: Earnings Change Coefficient of Variation while CVΔS: Sales Change Coefficient of Variation. The Eckle index permits companies to be divided into two groups such as smoother and non-smoother).

FSIZE=Firm size measured as the natural logarithm of total assets of company "i" at time "t"

LEV= Leverage measured as total debt divided by total assets of the company "i" at time "t"

BFSIZE= Board size measured as total members of the company "i" at time "t"

BIND= Board Independence measured as the total number of non-executive directors divided by the total board size of the company "i" at the time "t".

BGD=Board Gender Diversity measured as 1 where a company has a female in the board, otherwise 0. of company "i" at time "t"

MS=Managerial shareholding is measured as total executive shares divided by total shares of company "i" at time "t"

μ= error term

#### *Design And Method*

It is an ex post facto type of research and longitudinal in nature, covering periods of five years (2014-2018). The population of this study cuts across quoted non-financial firms on the Nigerian Stock Exchange as at December 31 2018. A total of one hundred and fourteen (114) firms constituted the population of this study. The sample size is fifty-nine (59) companies and was selected using Altman's Z-score to detect companies in the financial distress likelihood zone. The Altman Z-Score, based on discriminant analysis, includes fundamental financial ratios as inputs.

#### *Zones of Discrimination:*

- Z > 2.99 -"Safe" Zone
- 1.81 < Z < 2.99 -"Gray" Zone
- Z < 1.81 -"Distress" Zone

Historical data are obtained from the financial statements and accounts of sampled firms. Data collected are subjected to inferential statistics. The inferential statistic used includes pooled and Panel Least Square Regression. Similarly, the Hausman test as a diagnostic test is employed to determine which effect to emphasise in the regression analysis. That is whether to use a fixed-effect or random-effect model.

IV. ESTIMATION RESULT AND DISCUSSION OF FINDINGS

Table 1: Results of the Regression Analyses (Dependent Variable=Income Smoothing)

VARIABLE	RANDOM EFFECT Coefficient t-stat (P.V.)	FIXED EFFECT Coefficient t-stat (P.V.)
C	-0.085116 -2.169864 (0.0316)**	-0.086418 -2.041965 (0.0348)**
FSIZE	0.001559 1.312382 (0.1899)	-0.001571 1.212709 (0.2259)
LEV	0.004866 3.871943 (0.0000)***	0.004124 4.579891 (0.0000)***
BS	0.000140 0.422953 (0.6725)	8.13E-05 0.229910 (0.8183)
BI	-0.047411 -3.402106 (0.0000)***	-0.071616 -2.338024 (0.0179)**
BG	-0.201571 -2.127780 (0.0440)**	-0.117137 -2.202564 (0.0405)**
MO	7.64E-05 0.018143 (0.9855)	7.57E-05 0.016705 (0.9867)
R-squared	0.639025	0.644214
Adjusted R-squared	0.628396	0.634183
F-statistic	13.07939	6.708411
Prob(F-statistic)	0.000000	0.000000
Durbin-Watson stat	1.973987	2.062707
Hausman (P.V.)	0.5137	
Observations	253	253

Source: Researchers Computation (E-Views 8.0) 2019. (All variables are significant at the \*\*\*1%, \*\*5% and \*10% level).

*Probability values are in parenthesis*

The result of the Hausman test in Table 1, with a probability value of 0.5137, shows a preference for the random effect model since the probability value is over the 0.05% benchmark. Against the backdrop of the result of the Hausman test, the regression analysis will be based on the result of the random effect model.

The preliminary analysis of the random effect model revealed a coefficient of multiple Determination of 0.639025 and an adjusted value of 0.628396, which indicates that about 63% of

the systematic cross-sectional variation in income smoothing is accounted for by the explanatory variables of firm size, Leverage, board size, board independence, board gender and managerial ownership. The F-statistic of 13.07939 and the associated probability value of 0.000000 is statistically significant and indicates a linear relationship between the dependent and the explanatory variables. The Durbin-Watson statistic of 1.973987 is substantially close to the 2.00 benchmark and indicative of the absence of the problem of multicorrelation

First, firm size with a t-value of 1.3124 and probability value of 0.1899 implied that the result is statistically insignificant at the 5% level. This showed that firm size is a weak antecedent of income smoothing. The positive coefficient value of 0.00156 indicates that a unit increase in firm size could increase income smoothing by a tiny value of 0.01%. The result is consistent with the apriori expectation and, in accord with the position of Shen and Chih (2007), who claimed that large size firms are prone to conduct earnings smoothing. The result of the positive relationship also aligns with Moh and Winny (2014), who argued that the size of the firm is positively related to income smoothing.

With a t-value of 3,8719 and a probability value of 0.0000 at the 1% level of significance, Leverage revealed that the result is statistically significant. This indicates that Leverage or debt is a critical antecedent factor of income smoothing of financial distress likelihood firms. The positive coefficient value of 0.004866 indicates that a unit increase in Leverage could bring about a 5% increase in income smoothing of financial distress likelihood firms. The result corroborated Moh and Winny (2014), who found that financial Leverage has a significant effect on income smoothing. Mohammad and Ehsan (2011) also indicated that Leverage has a positive relationship with income smoothing in growth firms.

The result of board size reported a t-value of 0.422953 and a probability value of 0.6725, which indicates that the result is statistically insignificant in financial distress likelihood firms. The result implies that board size was a weak antecedent of income smoothing. While its positive coefficient value of 0.0014 indicates that a unit increase in firm size could result in about a 1% increase in income smoothing. The result is in tandem with Chi-Yih, Boon, and Xiaoming (2012), who showed that the board of directors' size does not effectively curb income smoothing in China.

The variable of board independence reported a negative t-value of -3.40216 and a probability value of 0.0000 at the 1% level of significance. The result indicates that there is a statistically significant relationship between board independence and income smoothing. The result suggests that board independence is a critical antecedent factor influencing income smoothing of financial distress likelihood firms. The negative coefficient value of -0.0474 revealed that a unit increase in board independence could bring about a 5% decrease in income smoothing. The result is at variance with

Ali and Marziyeh (2012) position, who found a positive relationship between non-bound members percent and income smoothing. In the same vein, the result is not consistent with the positions of Chi-Yih, Boon and Xiaoming (2012) and Yang, Murinde, and Ding (2008) who opine that firms with more independent directors are more likely to engage in income smoothing.

Board gender reported a t-value of -2.1278 and a probability value of 0.0000, which indicates that the result is statistically significant. The result shows that board independence is a critical antecedent factor that impacts negatively on income smoothing. The negative coefficient value of -0.2016 indicates that a unit increase in board gender could bring about a 20% reduction in income smoothing. The result is in tandem with Van der Zwet (2015) position, who reported a negative relationship between the percentage of women and earnings management. The result is at variance with the position of Moradi et al. (2012), who argued that gender diversity had no relationship with income smoothing.

Managerial shareholding reported a t-value of 0.018143 and a probability value of 0.9855. The result is positive, which means that managerial ownership increases income smoothing even though the increase is not statistically significant. By implication, managerial shareholding is a weak antecedent of income smoothing of financial distress likelihood firms in Nigeria. The result is consistent with the positive relationship reported by Ayadi and Boujelbene (2014), Guo and Ying (2015), and Mehmet et al. (2014). Even though our result was not significant, as reported by Mehmet et al. (2014).

#### V. CONCLUSION AND RECOMMENDATIONS

This study investigated the antecedents of income smoothing of financially distressed likelihood firms in Nigeria. The issue of income smoothing was anchored on the Positive Accounting Theory (PAT), which shows that Management could apply a particular accounting technique to smoothing income to report good news to owners or stakeholders for personal management interest. The analyses' outcome has shown that firm size, board size, and managerial shareholdings were weak enhancing antecedents and were positively related to income smoothing. In contrast, board independence, Leverage and board gender diversity were critical antecedents and were negatively related to income smoothing. There was no much divergence between the results and prior studies. The study then concluded that the antecedents of income smoothing are either positively related or negatively related to income smoothing among financial distress likelihood firms in Nigeria.

The study, therefore, recommends as: firm size should not be a yardstick for income smoothing. That irrespective of the size of the firm, concerted efforts should be made towards quality financial reporting. Whether in financial distress likelihood or not, Management of firms should ensure that debt or Leverage is not a basis for income smoothing. Where restrictive covenants exist with the debt contract, Management should be

discouraged from such contracts. The board of firms should be organised so that the size of the board reflects the firm size. It should be made of people with integrity and transparent characters capable of forestalling and discouraging income smoothing. Board be populated with people with credibility and accountability capable of controlling and monitoring the activities of Management. Women should be part of any constituted board of firms in Nigeria. This is because women are known to be risk-averse and would not want to be involved in things that could affect their credibility, like income smoothing. Managerial shareholdings should not in any way promote income smoothing in Nigerian firms. Irrespective of the proportion of shares or ownership by Management, they should carry out their administrative task and duties creditably well.

#### REFERENCES

- [1] Abdelfatah, M. A. (2014). Corporate governance, auditor quality and the reliability of audited financial statements in Libyan banking sector. *Ph.D Thesis*, Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia
- [2] Acharya, V.V. & Lambrecht, B.M (2015). A theory of income smoothing when insiders know more than outsiders. *The Review of Financial Studies*, 28(9), 2534-2474
- [3] Ahmad, K., Altarturi, B.H.M., Hassamudin, M.T.T., Harun, M.Y., & Nurun, N. (2014). Identifying financial distress firms: A case study of Malaysia's Government Linked Companies (GLC). *International Journal of Economics, Finance and Management* 3(3), 141-150.
- [4] Ahmadu, U.S., Tukur, G., & Aminu, S.M. (2011). Board independence and firm financial performance: Evidence from Nigeria. *Journal of African Research Consortium Nairobi*, 1-24.
- [5] Aifuwa, H.O & Embele, K. (2019). Board characteristics and financial reporting quality. *Journal of Accounting and Financial Management* 5(1), 30-49
- [6] Al-Asiry, M. (2017). Determinants of quality of voluntary corporate disclosure in emerging countries: A Cross National Study. Doctoral Thesis- University of Southampton, 1-215.
- [7] Ali, R. M., & Marziyeh, M. (2012). Corporate governance mechanism and income smoothing in Iran. *Journal of Basic and Applied Scientific Research*, 2(3), 3188 - 3194.
- [8] Alquhaif, A. S., Abdul Latif, R. & Chandren, S. (2017). Women on board of directors and real earnings management: Accretive Share Buyback in Malaysia. *Asian Journal of Finance & Accounting*, 9(2), 48-59.
- [9] Alves, S. (2012). Ownership structure and earnings management: Evidence from Portugal. *Australasian Accounting, Business and Finance Journal*, 6(1), 57-74.
- [10] Arun, T. G., Almahrog, Y. E. & Aliaribi, Z. (2015). Female directors and earnings Management: Evidence from U.K. companies. *International Review of Financial Analysis*, 39(1), 137-146.
- [11] Ayadi, W.M., & Boujelbene, Y. (2014). The relationship between ownership structure and earnings quality in the French on text. *International Journal of Accounting and Economics Studies*, 2(2), 80-87.
- [12] Belkaoui, A. (2006). The smoothing of income numbers: Some empirical evidence of systematic differences between core and periphery industrial sector. *Journal of Business Finance and Accounting*, 2(4), 36-53
- [13] Chhabra, S. (2016). Earning Management: A Study. *Splint International Journal of Professionals*, 3(11), 40-44.
- [14] Chi-Yih, Y., Boon, L. T., & Xiaoming, D. (2012). Corporate governance and income smoothing in China. *Journal of Financial Reporting and Accounting*, 10(2), 120 - 139.

- [15] Coelho, A. C. D., & Lima, I. S. (2009), setembro-dezembro). Conservadorismo condicional: requisito para a qualidade dos lucros e para a eficiência informacional da contabilidade. *Revista Eletrônica de Administração – REAd*, 15 (3), 1-26.
- [16] Connors, E. & Gao, L.S. (2011). Corporate environmental performance, disclosure and Leverage: an integrated approach. *International Review of Accounting, Banking and Finance*, 3(3), 1-26.
- [17] Dechow, P. M., Sloan, R. G. & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by SEC. *Contemporary Accounting Research*, 13 (1), 1-35.
- [18] Dedman, E., Lin Stephen, W.J., Arun, P. & Hao, C.C. (2008). Voluntary disclosure and its impact on share prices: Evidence from the U.K. Biotechnology Sector. *Journal of Accounting and Public Policy*, 27(3), 195-216
- [19] Deumes, R. and Knechel, W.R. (2008). Economic incentives for voluntary reporting on internal risk management and control systems. *Auditing: A Journal of Practice and Theory*, 27(1), 35-66
- [20] Eckel, N. (1981). The income smoothing hypothesis revisited. *Abacus*, 17(1), 28-40.
- [21] Fathi, J. (2013). Corporate governance system and quality of financial information. *Mediterranean Journal of Social Science*, 4(2), 129-142.
- [22] Fodio, M, Ibikunle, J. & Oba, V. (2013). Corporate governance mechanisms and reported earnings quality in listed Nigerian insurance firms. *International Journal of Finance and Accounting*, 2(5), 279 - 286.
- [23] Forbes, D.P., & Milliken, F. (1999). Cognition and corporate governance: Understanding board of directors as a strategic decision-making group. *Academy of Management Review*, 3(2), 489-505.
- [24] Guillaume, O., & Pierre, D. (2016). The convergence of US GAAP with IFRS: A comparative analysis of principles-based and rules-based accounting standards. *Scholedge International Journal of Business Policy & Governance*, 3(5), 63-72.
- [25] Guo, H., & Ying, Q., (2015). Investor attention and earnings management: Empirical evidence from listed firms in China. *Research Journal of Finance and Accounting*, 6(20), 53 – 58.
- [26] Haji, A.A. and Ghazali, N.A.M. (2013). The quality and determinants of voluntary disclosures in annual reports of Shari'ah compliant companies in Malaysia. *Humanomics*, 29(1), 24-42.
- [27] Jensen, M.C. (1993). The modern industrial revolution, exit and failure of internal control. *Journal of Accounting and Economics* 25, 133-168.
- [28] Kankanamage, C. A. (2015). The relationship between board characteristics and earnings management: Evidence from Sri Lankan listed companies. *Kelaniya Journal of Management*, 4(2), 36-43.
- [29] Kenton, W. (2019). Financial distress. Retrieved from [www.financialdistress.wikipedia.com](http://www.financialdistress.wikipedia.com) May 27, 2019
- [30] Kyereboah-coleman, A., & Biekpe, N. (2006). The link between corporate governance and performance of the non-traditional export sector: evidence from Ghana. *Corporate Governance*, 6(5), 609–623.
- [31] Laiho, T. (2011). Agency theory and ownership structure – Estimating the effect of ownership structure on firm performance, Economics Master's thesis, Department of Economics, Aalto University,
- [32] Lopes, A. B. (2008). A teoria dos contratos, governança corporativa e contabilidade. In S. Iudicibus, & A. B. Lopes (Coord.). *Teoria avançada da contabilidade*. (pp. 170-185).
- [33] Malik, R. K. (2013). Determinants of financial distress evidence from KSE 100 Index. *Business Review - Volume 8 Number 1*, 7-19.
- [34] Manukaji, I.J & Ijeoma, J. (2018). Corporate overnance and income smoothing in the Nigerian Deposit Money Banks. *International Journal of Business & Law Research* 6(1), 27-38.
- [35] Martinez, A. L. (2013) Earnings management in Brazil: a literature survey. *BBR – Brazilian Business Review*, 10(4), 1-31.
- [36] Mehmet, A., Suleyman, I., & Mustafa, S. (2014). The effects of corporate ownership structure and board size on earnings management: Evidence from Turkey. *International Journal of Business and Management*, 9(12), 123-132.
- [37] Michelson, S.E., Jordan-Wagner, J., & Wooton, C.W. (2001). Accounting income smoothing and stockholder wealth. *Journal of Applied Business Research*, 10(3), 96-110.
- [38] Michelson, S.E., Jordan-Wagner, J., & Wootton, C.W. (1999). The relationship between the smoothing of reported income and risk-adjusted returns. *Journal of Economics & Finance*, 24(2), 141-159.
- [39] Moh, B. A., & Winny, K. A. (2014). Income smoothing: Impact factors, evidence in Indonesia. *International Journal of Small Business and Entrepreneurship Research*, 3(1), 21 - 27.
- [40] Mohammad, N., & Ehsan, K. (2011). An investigation of the income smoothing behavior of growth and value firms (Case Study: Tehran Stock Exchange Market). *International Business Research*, 4(4), 84 - 93.
- [41] Monday, I.I. & Nancy, A. (2016). Determinants of voluntary disclosure quality in emerging economies: Evidence from firms listed in Nigeria Stock Exchange. *International Journal of Research in Engineering and Technology*, 4(6), 37-50.
- [42] Moradi, M., Salehi, M., Bighi, S. J. & Najari, M. (2012). A study of relationship between board characteristics and earnings management: Iranian scenario. *Universal Journal of Management and Social Sciences*, 2(3), 45-57
- [43] Okaro, S.C., Okafor, G.O & Ofoegbu, G. (2013). Corporate fraud in Nigeria- a two case study. *International Journal of Research in Management*, 3(6), 9-17.
- [44] Omoye, S.A., & Eriki, P.O. (2014). Corporate governance determinants of earnings management: Evidence from Nigerian Quoted Companies. *Mediterranean Journal of Social Sciences MC SER Publishing, Rome-Italy*, 5 (23), 553-563.
- [45] Pathan, S., & Faff, R (2013). Does board structure in bank really affect their performance? *Journal of banking and finance* 37, 1573-1589.
- [46] Purnanandam, A. (2005). Financial Distress and Corporate Risk Management: Theory & Evidence. *Working Paper*, Ross School of Business, University of Michigan
- [47] Raffournier, A. (2006). The Determinants of voluntary financial disclosure by Swiss non-financial listed firms. *European Accounting Review*, 4(2), 261-280
- [48] Ronen, J., & Yaari, V. (2008). *Earning Management: Emerging insights in theory, practice and research (First Edition)*. New York, USA: Springer Science, Business Media, LLC.
- [49] Saftiana, Y., Mukhtaruddin, Putri, K. W. & Ferina, I. S. (2017). Corporate governance quality, firm size and earnings management: Empirical Study in Indonesia Stock Exchange. *Investment Management and Financial Innovations*, 14(4), 105-120.
- [50] Samak, N. A., El Said, H. H., & El Latif, G. A. (2014). Corporate governance and income smoothing: Case of the Egyptian listed companies. *International Journal of Management Research and Development*, 4(3), 23 - 42.
- [51] Shen, Chung-Hua, & Chih, Hsiang-Lin (2007). Earnings management and corporate governance in Asia's emerging markets. *Journal Compilation*, 15(5), 999–1021.
- [52] Spinos, E. (2013). Managerial ownership and earnings management in times of financial crisis: evidence from the USA. Erasmus Universiteit Rotterdam, Working paper.
- [53] Tafamel, A.E., Dania, O.R., & Akrawah, O.D. (2016). Board gender diversity: Evidence from Nigerian banking industry. *International Journal of Gender Studies and Research UNIBEN*, 4 (1/2), 184-196.
- [54] Taylor, G., Tower, G. and Neilson, J. (2010). Corporate communication of financial risk. *Accounting and Finance*, 50(2), 417-446.
- [55] Uadiale, O.M. (2012). Earnings management and corporate governance in Nigeria. *Research Journal of Finance and Accounting*, 3 (3), 1-10.



- [56] Van der Zwet, S. (2015). Board diversity and earnings management. (Master Thesis)Accountancy track, University of Amsterdam
- [57] Watts, R.L., and Zimmerman, J.L. (1986). Towards a positive theory of the Determination of accounting standards. *TheAccountingReview*,53(1),112---134.
- [58] Wenjuan, R. &Shiguang G. (2009), Managerial Ownership and Firm Value: Evidence from China's Civilian-run Firms, School of Accounting and Finance, University of Wollongong, NSW, 2522.
- [59] Wicaksana, K. A. B., Yuniasih, N. W., &Handayani, L. N. C. (2017). Board diversity and earning Management in companies listed in Indonesian stock exchange. *International Journal of Scientific and Research Publications*, 7(12), 382 – 386.
- [60] World Bank, (2002). An Assessment of the private sector in Nigeria. The World Bank Group.
- [61] Yamane, T. (1967).*Statistics: An Introductory Analysis*, (2<sup>nd</sup>ed.). New York: Harper and Row.
- [62] Yang, C., Murinde, V., & Ding, X. (2008). Ownership structure, corporate governance and income smoothing in China.
- [63] Zare, R., Kiafar, H., Rasouli, F., Sadeghi, L. and Behbahani, S. (2013). Examining financial Leverage, profitability and firm life influencing non-financial information disclosure quality. *Acta Universitatis Danubius: Oeconomica*, 9(6), 163-175.