

# Testing Financial Statement Fraud: Perspective of the M-Score Model in Nigeria and South Africa

<sup>1</sup>Ugbah, Andrew A. (PhD), <sup>2</sup>Kingsley C. Kanene, <sup>3</sup>Ofor, Nkechi T. (PhD), <sup>4</sup>Anigbogu N. Gerald

<sup>1&2</sup>Department of Accounting & Finance, University of Delta, Agbor, Delta State

<sup>3</sup>Department of Accountancy, Chukwuemeka Odumegwu Ojukwu University, Igbariam Campus, Anambra State

<sup>4</sup>Department of Accountancy, Nnamdi Azikiwe University, Awka Anambra State.

DOI: <https://dx.doi.org/10.47772/IJRISS.2023.7801>

Received: 23 June 2023; Accepted: 05 July 2023; Published: 26 August 2023

## ABSTRACT

In the past several years, financial statements fraud has cost market participants huge sum of loss and it has eroded market participants confidence in the audit financial report of organisations. This study therefore, examined the determinants of financial statement fraud in Nigeria and South Africa. The study specifically focus on firm size, leverage, board independence, institutional ownership, firm profitability and capital structure. **The population of the study comprised 510** quoted non-financial companies in the Nigeria Stock Exchange and Johannesburg Stock Exchange for the periods 2012 to 2018. A sample size of 70 was selected using random sampling techniques. The data collected were analysed using descriptive statistics and robust least square regression analysis. It was observed from the descriptive statistics that there is presence of financial statement fraud reporting among the quoted non-financial companies in Nigeria and South Africa. The results revealed that firm size was statistically significant in Nigeria and South Africa, leverage was statistically insignificant in Nigeria and South Africa, board independence was statistically significant in Nigeria but insignificant in South Africa, institutional ownership was statistically significant in Nigeria and insignificant in South Africa, firm profitability was statistically significant in South Africa but insignificant in Nigeria while capital structure was statistically insignificant in Nigeria and South Africa. The study recommended that the results have direct implications for further improvement of firm size, board independence, institutional investors and capital structure.

**Keywords:** Board Independence, Capital Structure, Financial Statement Fraud, Firm Size, Institutional Ownership, Leverage, Profitability

## INTRODUCTION

Financial statement is a formal record of financial activities of business organisations, person or other entity. Financial statements are aimed to provide information about the financial position performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. For a business enterprise, all the relevant financial information presented in a structured manner and in a form easy to understand is called the financial statements (Dabor & Adeyemi, 2009). According to Agbaje and Dare (2018, p. 66), users of financial statement are “managers of the firm, shareholders, employee, creditors, investors, government, journalists and other stakeholders of the company are very interested in the level of professionalism displayed the accountants and auditors”. Financial statement fraud is seen as transaction frauds intended to facilitate the theft or conversion of organizational assets to one’s personal use and statement frauds involving the intentional misstatement and omission of certain financial values to enhance the appearance of profitability and financial position to deceive stakeholders (Ehikioya, 2009).

Financial statement fraud is perpetrated through the process of overstatement and understatement of items of

accounts with the intention to cover up figures. Meanwhile, financial statement fraud undermines the reliability, quality, transparency and integrity of the financial reporting process, jeopardizes the integrity and objectivity of the auditing profession especially auditors and auditing firms and also diminishes the confidence of the capital markets as well as market participants in the reliability of financial information. Financial statement fraud in the past decades has been accompanied by lawsuits against auditors because of their suspected negligence in not detecting the financial statement fraud. As a result, auditors have risked the loss of money and loss of their reputations. This situation has pushed auditors and the related organization and institutions to improve the audit processes in order to be more effective in identifying risk and collecting evidence for issuing audit opinions on Financial Statements (Adeyemi & Olowookere. 2011).

The practices of financial statement fraud is fast becoming a key challenge for stakeholders in the global corporate setting and resulted to high demand of forensic accounting skills and high public demand for transformation of corporate governance system (Bhasin, 2013). Therefore, the most common forms of statement fraud are overstated revenue and inventory, while the most common forms of transaction fraud are fictitious payables and the conversion of corporate assets to personal use. The detection of fraud indicators in financial statements has an important effect in determining financial statement fraud. *Because of the difficulty of determining fraudulent financial statements, both qualitative and quantitative techniques were employed by auditors.*

More importantly, companies in Nigeria and South Africa do not operate in a vacuum but the nature of the operating environment may have influence on the activities of the companies (Adomako & Danso, 2014). Gungoraydinoglu and Oztekin (2011) assert that the quality of the regulatory environment in Sub-Saharan Africa may hinder or enhance the operations of companies in the region. Prior studies in some Sub-Saharan African countries were acknowledged: **Abata and Migiro (2016) study in South Africa** revealed that board size, board independence, audit committee independence and audit committee size, ownership structure and audit quality is not significantly related to earnings management and financial statement fraud, while, in Nigeria, Anichebe, Agbomah and Agbagbara (2019) found out that audit committee size, board independence, board members financial expertise and financial statement fraud is positively and significantly related while board size has positive and insignificant impact on financial statement fraud likelihood while firm size as a control variable impacted positively and significantly on financial statement fraud likelihood and firm performance measured by return on assets is not significantly related to financial statement fraud likelihood and Dennis and Ogoun, (2018) found evidence that board independent directors and audit committees independent directors negatively fraudulent financial activities.

However, the extensive international findings on financial statement fraud may not be applicable to Nigeria and South Africa, in our opinion research methods and results are influenced by economic, social or legal realities in those countries in which the studies took place creates a knowledge gap (period gap, measurement gap and methodology gap). The vacuum created by existing literature shows that there is need for further studies on testing financial statement frauds among quoted companies in Nigeria and South Africa by employing Beneish M-score model in the measurement of financial statement fraud. The objectives of the study is to examine the influence of firm size, leverage, institutional ownership, board independence, profitability and capital structure on financial statement fraud in Nigeria and South Africa.

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### Financial Statement Fraud

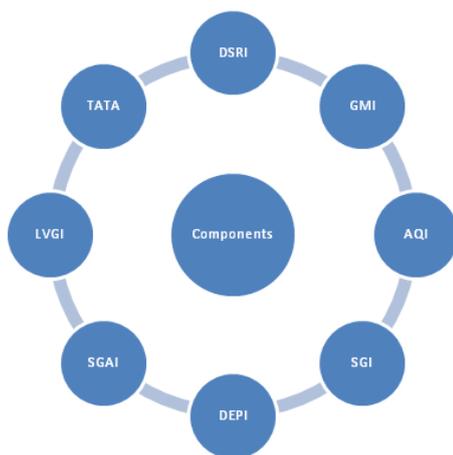
Financial reporting has been exacerbated by rapid globalization of the world economy and increasing adoption of a set of unified system of International Financial Reporting Standards (IFRS). Timely corporate financial reporting is an important qualitative attribute and a necessary component of financial accounting

(Dezort & Salterio, 2001). It is therefore expected that the application of IFRS would result in improved quality of accounting information, including timeliness, but that may not necessarily be the case in most developing countries. Adewale and Ibukun-Falayi (2018) also claimed that most Nigerian companies are still lacking in some financial reporting quality dimensions though they have adopted IFRS. One observable point of note from these submissions is that the IFRS affects some financial reporting quality constructs (such as timeliness), in different jurisdictions, remains a lingering question yet to be sufficiently and perfectly answered.

Uwuigbe, Eluyela, Uwuigbe, Obarakpo and Falola (2018) assert that the responsibility for appropriate and timely financial reporting lies on the shoulder of the board of directors as the apex governing body of a firm. This implies that corporate governance, as part of its objectives, provides a platform that ensures that quality financial reports are published and made public to users within the acceptable regulated time (Mohammed, Che-Ahmad & Malek, 2018a). Association of Certified Fraud Examiners (ACFE) (2016) view financial statement fraud as a declaration of company's financial position by falsification, intentional misstatements and omitting certain elements of the statements and with the intention of deceiving the users of the statements. Fraud is also seen as an intentional misrepresentation, concealment, or omission of the truth for the purpose of manipulation to the financial detriment of an individual or business organization which also include embezzlement, theft or any attempt to steal or unlawfully obtain, misuse or harm the asset of the organization (Adedure, 1998).

The accounting profession in Nigeria has been under intense pressure due to rising public expectations which is as a result of series of financial failures that occurred during the recessionary years of the late 80's till date. These financial failures happened too quickly after an 'unqualified' audit report was issued by the external auditors. In reality, the unqualified opinion is wrongly seen a certification that the firm or enterprise is solvent, liquid and has the capacity to adapt to the dynamics of the environment. Any subsequent failure of business resulting from management misjudgment, fraudulent practice, economic instability, inconsistency in micro and macroeconomic policies etc., are viewed as failures of auditors (Adeniji, 2004).

### Beneish M-Score Model



Beneish (1999) probit model of earnings manipulation states that financial statement distortions or preconditions that might prompt companies to engage in earning manipulation as a result of earnings management. It was observed that companies that had to restate their earnings to comply with GAAP are classified as GAAP violators of earnings manipulation in their financial statement. The Beneish probit model of earnings manipulation classified group of companies that had large discretionary accruals and had increasing sales but were not identified as GAAP violators in earnings manipulation. Anh and Linh (2016), argue that the M-score model is one of the useful techniques in detecting earnings manipulation behaviors of the companies and it could be applied for an improvement in financial reporting quality and a better

protection for investors. Beneish's probit model was considered variables related to financial information that would indicate whether financial statement fraud exists. The model uses changes in financial data from the year (t-1) before the earnings manipulation event is identified to the event year (t).

The variables included Beneish model is as follows: Days sales in receivables index (DSRI). This index compares the change in receivables with the change in sales. An increase in the days in receivables could "suggest revenue manipulation, Gross margin index (GMI). This index assesses the deterioration of the gross margin rate in the event year t as compared to the year t-1. Asset quality index (AQI). This measures whether the company has the propensity to record cost deferrals. It is calculated by comparing the change in noncurrent assets (excluding property plant and equipment as a percentage of total assets, Sales growth index (SGI), Depreciation index (DEPI). This index measures the change in depreciation rate from year t-1 to year t. If this is greater than 1, this means that the depreciation rate has slowed, which could mean that earnings are being manipulated upwards, Sales, general, and administrative expenses index (SGAI). This index compares the percentage of sales, general, and administrative expenses to sales from year t-1 to year t. If the increase in these expenses is disproportionate, it is considered a "negative signal about the company's future prospects, Leverage index (LVGI) This index measures the debt to asset ratio from year t to year t-1. An increase in leverage can indicate a desire to manipulate earnings to meet debt covenants. Total accruals to total assets (TATA) This ratio measures the proportion of earnings which are cash-based. The higher positive accruals are associated with a higher a higher likelihood of earnings manipulation. The M-Score is a mathematical model that uses eight financial ratios to identify whether a company is manipulating its earnings. The variables are constructed from the company's financial statements and create a score to describe the degree to which the earnings have been manipulated in a given listed company. It should be noted that the Beneish probit model M- Score revealed that M-Score of less than -2.22 suggests that the company will not be a manipulator of earnings. An M-Score of greater than -2.22 signals that the company is likely to be a manipulator of earnings which result to financial statement fraud (Beneish, 1999).

### **Firm Size and Financial Statement Fraud**

The size of the firm plays an important role in determining the kind of relationship the firm enjoys within and outside its operating environment. The larger a company is, the greater the influence it has on its stakeholders. The influence of size in the corporate environment cannot be overemphasized in Nigeria banking environment. Ali, Noor, Khurship and Mahmood (2015) in their study conducted to evaluate the impact of firm size on earnings management for textile sector of Pakistan covering 2004-2013 for fifty selected firms from the textile sector of Pakistan found out that there is positive and significant relationship of firm size and earnings management. Besides, Nalarreason, Sutrisno & Mardiaty (2019) used a sample of the financial report data from manufacturing companies listed on the Indonesia stock exchange for the 2013-2017 period. The result showed that firm size has a positive effect on the earnings management. Anichebe, Agbomah and Agbagbara (2019) sampled quoted agricultural firms in the Nigeria stock exchange covering 2013 and 2017 to empirically examine the determinants of financial statement fraud likelihood found out that firm size as a control variable impacted positively and significantly on financial statement fraud likelihood. However, Ghofir & Yusuf (2020) in a sample quoted companies in Indonesia covering 2014-2018 to empirically examine the effect of firm size on earnings management found out that firm size have no significant effect on earnings management. Some of the mixed findings cannot fit in Nigeria environment and the Beneish M-Score Model was not used in the previous study. Based on the explanations above, the hypothesis is as follows.

H1: Firm size has a significant influence on financial statement fraud.

### **Leverage and Financial Statement Fraud**

The presence of leverage makes management to engage in falsification of the financial statement to create a

favourable financial position (Baralexis, 2004), Leverage is the mixture of debt in the financing decision of business organizations. However, the higher the debt, the higher the stock market returns (Mohammed, 2017). Mulford and Comiskey (2011) argue that debt fund is the main reason for firms to engage in creative accounting. Moreover, a company saddled with high volume of long-term debt will eventually keep no cash and face the pressure of illiquidity. Leverage can be seen as the amount of money borrowed for business expansion, to increase production level and to maintain production volume and sales as well as aiming for higher earnings for better performance. The higher the amount of debt is a signal of highly leveraged firm. However, high leverage may be beneficial to the business organization in the period of windfalls and cause serious cash flow problems, in the period of economic recession which may be able to cover sales revenue and interest payment (Tudose, 2012) The usage of short-term debt requires companies to negotiate renewal of their credits periodically with magnitudes of risk refinancing.

Zarnegar and Hamidian (2016) examined the relationship between profitability, financial leverage and income smoothing at firms listed on Tehran stock exchange with a sample of one hundred and twelve (112) firms for the period of 2010 to 2015. In addition, the study established model and used descriptive. Pearson correlation and multivariate regression statistical analysis approach to analysed data and the result indicated that there is significant and direct relationship between income smoothing, financial statement fraud and financial leverage of the sampled firms Bassiouny, Soliman and Ragah (2016) examined the impact of firm characteristics on earnings management in Egypt and selected a sample of 300 firm-year observation from the period 2007 to 2011 and adopted the modified Jones model and used descriptive statistics, correlation and regression statistical method to analysed the data. The findings showed that there is a significant positive relationship between firms' financial leverage and earnings management as well as financial statement fraud. Vaklifard and Mortazavi (2016) examined whether leverage lead to move from accrual-based earnings management to real earnings management and financial statement fraud. The statistic sample of the study was 118 firms listed in Tehran Stock Exchange over the period of 2008- 2011. The multiple regressions analysis based on paneled data was the methodology employed by the study for verifying the relations between leverage and two strategies of earnings management and financial statement fraud. The results indicate that managers tend to engage more in real earnings management than accrual-based earnings management once leverage is increasing. Anagnostopoulou and Tsekrekos (2017) examined the effect of financial leverage on real and accrual based earnings management and used regression analyses method to analysed data. The study finds that leverage levels have positively and significantly affect upward real earnings management, with no significant effect on income-increasing accruals earnings management. Although all past studies indicated a positive relationship but none can fit into Nigeria environment. Based on the explanations above, the hypothesis is as follows.

H2: Leverage has a significant influence on financial statement fraud.

### **Board Independence and Financial Statement Fraud**

Effective monitoring is achieved when the board has majority of external and ideally independent directors (Aduda, Chogii & Magutu, 2013). Board independence is a fundamental attribute of corporate governance. Board independence is usually measured by scaling the number of independent (non-executive) directors by the size of the board. Board independence is defined as the percentage of independent non-executive directors on the board of directors (Bin & Yi, 2015).

In the opinion of Ilaboya and Obaretin (2015), a board is said to be independent when the number of independent non-executive directors not associated with top executives of the firm are more Makhlof, Laili, and Basah (2014) assert that independent boards of directors are more professional in shareholding firms and can more easily execute the supervising function, reduce the possibility of collusion of top executives, and prevent the abuse of company resources, thus improving organisational performance. This implies that management cannot be trusted, thereby calling for strict monitoring by the Board in order to

protect shareholders' interest.

The study of Matoussi and Gharbi (2011) in Tunisian listed firms documented from their study board independence and corporate fraud that a high percentage of outside directors on the board reduce the likelihood of fraud in the financial statements. In Nigeria, Appah and Emeh (2013) found that there is a significant relationship between board independence and timeliness of financial report and Anichebe, Agbomah and Agbagbara (2019) sampled quoted agricultural firms in the Nigeria stock exchange covering 2013 and 2017 to empirically examine the determinants of financial statement fraud likelihood found out that audit committee size, board independence, board members financial expertise and financial statement fraud is positively and significantly related while board size has positive and insignificant impact on financial statement fraud likelihood while firm size as a control variable impacted positively and significantly on financial statement fraud likelihood and firm performance measured by return on assets is not significantly related to financial statement fraud likelihood. Basuony, Mohamed, Hussain and Marie (2016) examined board characteristics, ownership structure and audit report lag in 11 Middle-Eastern countries and showed that board independence is significant to audit report lag and financial statement fraud. Although all past studies indicated a positive relationship but none can fit into Nigeria environment. Based on the explanations above, the hypothesis is as follows.

H3: Board independence has a significant influence on financial statement fraud

### **Institutional Ownership and Financial Statement Fraud**

Ownership structure of a company whether dispersed or concentrated is affected by the incidence of financial fraud that occurs. Barontini, (2008) maintains that firm ownership structure that is fully concentrated has the tendency of feeding the management favourable incentives in order to maximize the value of the firm by bridging the gap between management and shareholders' interests. The relationship between ownership structure and the performance of firms is an important and continued subject in the field of financial management for analyzing this relationship, "up to now different aspects of ownership structure are considered, for instance being insider or non-insider shareholders, shareholders concentration or dispersion, being whole or retail, being internal (domestic) or being foreign shareholders, being institutional or individual shareholders" (Ezaziet, Sadeghi, Alipour & Amjadi, 2011, p. 164). Bao and Lewellyn (2017) examined ownership structure and earnings management with a sample of one thousand and two (1200) firms in twenty-four (24) emerging markets and established indicated that controlling ownership is positively related to earning management. Usman and Yero (2012) examined ownership concentration and earnings management practice of the Nigerian listed conglomerates for a sample of thirty (30) firm-year paneled observations for the period 2004 to 2010. The study proxied earnings management using the modified Jones (1995) model and estimated panel ordinary least square (OLS) and controlled for fixed/random effects. The result shows a significant negative relationship between ownership concentration and earnings management. However, some of the mixed findings cannot fit in Nigeria environment. Based on the explanations above, the hypothesis is as follows.

H4: Institutional ownership has a significant influence on financial statement fraud.

### **Profitability and Financial Statement Fraud**

Profitability is defined as the relationship between the cash earnings generated by the company and the investments that earned the excess returns or profit to the organization (Alshati 2015). Traditionally, profit maximization is considered as the ulterior motive of every investor. Thus, the management strives to meet this expectation. However, a company can either make profit or a loss at the end of every financial year (Adebayo & Adebisi, 2016). On the premise of profitability in business organizations, "managers are solely to maximize the firms' wealth. Onyeka, Nnado and Iroegbu (2018, p. 2), assert that financial managers

principle of cash management must be “based on efficient practices for companies operating manufacturing sector desire to satisfy the diverse interests of stakeholders”. However, profitability is defined by Onyeka, Nnado and Iroegbu (2018) as the ability of corporate organisations to generate enough revenue in excess of operating expenses.

Profitability is the degree of efficiency and effectiveness with which organizational objectives and goals are achieved. Nyabuti, Momba and Chenge (2016) showed that creative accounting practices have a significant effect on the financial performance of a company and most companies used it abusively hence resulting in most collapses of many firms which brings about financial statement fraud. Ibadin, Izedonmi and Ibadin, (2012) studied how selected corporate governance attributes (such board size and independence; firm size, profitability, Big4 and leverage) affect timeliness of financial reports in Nigeria. They sampled a total of one hundred and eighteen (118) listed firms in Nigeria for the period of 2010 only. The study found out that profitability to be insignificantly associated with the timeliness of financial reporting, which is in tandem with Courtis (1976); Davis and Whittred (1980); Givoly and Palmon (1982) and Owusu-Ansah (2000). However, none of these studies attempted using Beneish M-Score Model. Based on the explanations above, the hypothesis is as follows.

H5: Profitability has a significant influence on financial statement fraud.

### **Capital Structure and Financial Statement Fraud**

Capital structure is defined as the combination of different sources of funds such as debt, preferred stock, retains earnings and common stock (Pahuja & Sahi 2012). Thus, a combination of these borrowed funds and the owner’s equity coupled with retained earnings over time are the make- up of what is called the capital structure. The term capital structure of a business organisation represents a proportionate relationship between debt and equity but basically it has been observed that it merely denotes the permanent long term finances of a company which includes long term debt, common stock, preferred stock and retained earnings. Capital structure of the insurance industry is made up of physical capital, debt capital and equity capital. Therefore, physical capital is tied to tangible assets such as working premises and computers. The capital of the insurance company is used by the insurers to keep equity capital in payment of claims even if more-than expected losses are incurred (Owusu-Ansah, Dontwi, Seidu, Abudulai & Sebil, 2010). Capital structure decision are influenced by a firm’s management such as would impact on the firms’ returns to the shareholders.

Obigbemi, Omolchinwa and Oluku (2017) investigated ownership structure and earnings management practices with a sample of one hundred and thirty seven (137) companies listed in Nigeria stock exchange and adopted modified Jones (1995) model to measured earnings management (discretionary accruals) established that ownership structure has a significant relationship with earnings management and financial statement practices in Nigeria. Nikoomaram Arabahmadi and Arabahmadi (2016) analysed the relationship between capital structure and earnings management and found out that capital structure has a positive relationship with earnings management on the sampled firms. Although previous studies established a positive relationship. But none attempted using the Beneish M-Score Model. Based on the explanations above, the hypothesis is as follows

H6: Capital structure has a significant influence on financial statement fraud.

### **Theoretical Framework**

The study was based on the agency theory and theory of inspired confidence to explain the determinants of financial statement fraud.

## **Agency Theory**

The agency theory was developed by Jensen and Meckley (1976). Agency theory is a useful economic theory of accountability that explains the development of the audit. Agency theory posits that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by the agents (Casterella, Jensen, & Knechel, 2007). The theory is based on the belief that the agent will be driven by self-interest rather than the desire to maximize the profits for the principal. The idea of agency theory is very useful in this study because in a modern corporation, there is a separation of ownership and management, resulting in agency costs associated with resolving the conflict between the owners and the agents in order to reduce the fraudulent reporting by management. This implies that management cannot be trusted, thereby calling for strict monitoring by the board in order to protect shareholders' interest with quality and timely financial reporting. Also, entrusting resources to the agent and in turn these agents must usually produce a quality report regarding the use of resources both in quantitative and qualitative manner in reducing high level of financial statement fraud.

## **The Theory of Inspired Confidence**

The theory of inspired confidence was developed by Limperg in the year, 1932. It states that the auditor derives his general function in society from the need for an expert and independent opinion based on that examination (Limperg, 1932 cited in Adeyemi & Olowookere, 2011). The function is rooted in the confidence that society places on the effectiveness of the audit and in the opinion of the accountant. This confidence is, therefore, a condition for the existence of that function; if the confidence is betrayed, the function, too, is destroyed, since it becomes useless, which invariably will lead to audit failures. It could be betrayed if the expectation of society is exaggerated, that is, it exceeds what the auditor is capable of performing. The theory of inspired confidence is applicable in this study because it helps to install confidence in the auditor for carrying out thorough checks on the book of accounts prepared by management for determining some fraudulent activities of the staff as well as management. This operation is very fundamental in reducing the level of financial statement fraud.

## **METHODOLOGY**

### **Research Design**

The research design adopted for this study is expo-facto research design which helps to examine the determinants of financial statement fraud in some selected quoted companies in Nigeria and South Africa. The justification for using ex-post facto is that they permit the observing of either one or more variables over a given period of time or due to its suitability for the quantitative survey research paradigm that underpins this study, because the quantitative measures of the variables, such as financial statement fraud and its determinants, cannot be altered or controlled by the researcher Under this research design data relating to the variables are collected at different time without any attempt on the part of the researcher to influence the situation. The data relating to the variables are collected at about the same time to basically describe the relationship between the variables under study.

### **Population of the Study**

The population of the study was made up of quoted non financial companies in Nigeria and South Africa.

More importantly, the sample population would consist of 170 companies whose shares are quoted on the floor of the Nigerian Stock Exchange (NSE, 2018) and 340 companies whose shares are quoted on the floor

of the Johannesburg Stock Exchange (JSE, 2018)

### Sample Size and Sampling Technique

In this study, the random and systematic sampling technique was adopted and our sampling technique was adjusted to ensure fair representative from each country's Stock Exchange in the sample size. Therefore, the sample size was based on the one-hundred and seventy (170) quoted companies as at 31 December, 2018 in Nigerian Stock Exchange (NSE, 2018 Fact Sheet). However, money deposit banks, insurance companies and other financials were excluded from the sample population. The justification for excluding these companies is based on the fact that these companies are financial service rendering companies. Therefore, we use the statistical formulae of Yamane (1967) to arrive at the sampled size of the remaining total population of 115 quoted companies. This was mathematically expressed as:

$$n = \frac{N}{1 + Ne^2}$$

Where N is the population size, n is the sample size, e is the chance allowed for error or the level of significance. The total population is now 115 listed companies. Given the population size and an assumed significance level of five percent (14%), the sample size is computed as;

$$n = \frac{N}{1 + Ne^2}$$
$$n = \frac{115}{1 + 115(0.14)^2}$$
$$n = 35.34$$

In order to avoid bias, random sampling techniques were used to select 35 quoted non-financial companies among the sampled population.

In Johannesburg Stock Exchange, samples companies consist of 3 beverages firms, 17 construction and materials firms, 8 chemical firms, 16 food producers and 7 food and drug retailers firms which made it a total of 51 quoted firms to be sampled. However, banks, support services, insurance and other service companies were excluded from the sample population. The justification for excluding these companies is based on the fact that these companies are service rendering companies. Therefore, the sample size was obtained using the Yamane (1981) formula:

$$n = \frac{N}{1 + Ne^2}$$

Where N is the population size, n is the sample size, e is the chance allowed for error or the level of significance. The total population is now 162 listed companies. Given the population size and an assumed significance level of five percent (15%), the sample size is computed as

$$n = \frac{N}{1 + Ne^2}$$
$$n = \frac{162}{1 + 162(0.15)^2}$$
$$n = 34.87$$

This value was approximated round-off to thirty-five (35) listed companies. In order to avoid bias, random sampling techniques was used to select 35 quoted non-financial companies among the sampled population.

### Model Specification and Measurement of Variables

The regression models of *Anh and Linh* (2016) was adapted for this study and it is shown below:

### Model 1: Nigeria

The functional form is given as;

$$FSF=f(FS; LEV; BDI;IOWN; PFT; CST).....(2)$$

While the explicit model in econometric form is given as:

$$FSF-\beta_0 + \beta_1FS + \beta_2LEV + \beta_3BDI + \beta_4IOWN + \beta_5PFT + \beta_6CST+\xi_i... ..(3)$$

### Model 2: South Africa

The functional form is given as;

$$FSF = f(FS; LEV; BDI; IOWN; PFT; CST).....(4)$$

While the explicit model in econometric form is given as:

$$FSF-\beta_0 + \beta_1FS + \beta_2LEV + \beta_3BDI + \beta_4IOWN + \beta_5PFT + \beta_6CST+\xi_i... ..(5)$$

Where:

FSF = Financial statement fraud i year t

FS = Firm Size

LEV = Leverage

BDI = Board independence

IOWN = Institutional ownership

PET = Profitability

CST = Capital Structure

### Method of Data Analysis

Considering the outlined specific objectives and the corresponding hypotheses, the study made use of robust least square, correlation, comparative and descriptive statistical techniques Generally, the descriptive analysis of the data was conducted to obtain the sample characteristics in respect to the selected variables. For the purpose of the other objective/hypotheses, the robust least square regression technique was used in determining the interaction effect of the independent variables on the dependent variable. Also, the correlation analysis was use to test the relationship between the variables. The analyses were conducted with EViews a version 9.0 econometric software package was used for the analyses.

### Measurement of Variables

For the measurement of financial statement fraud, we made use of Beneish Messod Score (M score) (1999) model as supported by *Anh and Linh (2016) and Omar, Koya and Sanusi, (2014)*. The M-score =  $-4.84+0.920 DSRI +0.528*GMI+0.404* AQI+0.892*SGI+0.115*DEPI -0.172 *SGAI 4.679*TATA-0.327*LVGI$

The eight indicators of every single nonfinancial listed company are put in to the Beneish regression model.

If the M-score is greater than (-2.22) benchmark, the company should be flagged as earnings manipulators. The M-score model and its 8 indicators were Days Sales in Receivables Index (DSRI), Gross Margin Index (GMI), Asset Quality Index (AQI), Sales Growth Index (SGI), Depreciation Index (DEP). Sales General und Administrative Expenses Index (SGAI), Leverage Index (LVGI) and Total Accruals to Total Assets (TATA). The measurement of the dependent variable and independent variables were presented in the table below:

**Measurement of Variables**

Variables	Definition	Measurement	Source
1. FSF	Financial statement fraud	Financial statement fraud was measured by Beneish M- score.	Anh and Linh (2016) and Omar Koya and Sanusi, (2014)
2. FS	Firm size	It was measured by the natural log of total asset.	Oshodin and Ikhatun (2018)
3. LEV	Leverage	It was measured by the ratio of total debt to total assets.	Al-Najjar and Clark, 2017, Dada, (2015).
4. BDI	Board independence	It was measured by the proportion of non-executive	Alsmady (2018)
5. IOWN	Institutional ownership	It was measured by the proportion of shares owned by the institutional shareholders.	Abata and Migiro (2016)
6. PFT	Profitability	It was measured by ratio of profit after tax by total assets	Onyeka, Nnado and Iregbu,(2018).
7. CST	Capital structure	It was measured by the ratio of total short-term debt divided by total assets	

Source: Researcher’s Compilation (2020)

**PRESENTATION AND ANALYSIS OF DATA**

The descriptive statistics shows the description of the mean, standard deviation and normality test. The below is the descriptive statistics of Nigeria for the period of 2012 to 2018.

Table 1: Descriptive Statistics for Nigeria

Variables	Mean	Std. Deviation	Jarque-Bera	P-value	Observations
FSF	-11.32	32.63	175.32	0.00	217
FS	7.58	2.04	1060.0	0.00	217
LEV	58.46	20.55	0.41	0.81	217
BDI	64.50	14.32	3.97	0.14	217
IOWN	59.53	18.98	28.21	0.00	217
FPT	0.20	0.83	9446.09	0.00	217
CST	5.97	21.46	1741.13	0.00	217

Source: Author’s Computation (2020)

The descriptive statistics shows the description of the mean, standard deviation and normality test. The below was the descriptive statistics of the variables over the given period of the study. The standard deviation of financial statement fraud of quoted non-financial companies in Nigeria was 32.63. This indicates that financial statement fraud of firms among the quoted non-financial firms in Nigeria was more fraudulent in reporting of earnings with high level of earnings manipulation. The high value of the standard deviation (32.63) of financial statement fraud signifies the existence of fraudulent reporting. It was also observed on the average that financial statement fraud of the sampled firms was -11.32. This indicates that financial statement fraud value of  $-11.32 > -2.22$  revealed that the sampled firms were not free from financial statement manipulations in the audited annual reports. Firm size (FSI) measured by logarithms of total assets on the average was 7.58 with a corresponding standard deviation value of 2.04. This implies that firm size experience low level of variation among the quoted sampled firms in Nigeria, Leverage (LEV) on the average was 58.46 with a corresponding standard deviation value of 20.55. This implies that there was a high level of leverage among the sampled firms as revealed by the standard deviation value. In the case of board independence (BDI), the variable has an average value of 64.50 with a corresponding standard deviation value of 14.32. This indicates that about 65% of the board members among the sampled firms were non-executives. Institutional ownership (IOWN) on the average was 59.53 with a corresponding standard deviation value of 18.98. This indicates that about 60% of the ownership structures among the sampled firms in Nigeria were institutional shareholders. Furthermore, firm profitability (FPT) on the average was 0.20 with a corresponding standard deviation value of 0.83. This indicates that low value of standard deviation revealed the inability of the assets to generate returns among the sampled firms. In the case of capital structure (CST), the variable had an average value of 5.97 with a corresponding standard deviation value of 21.46. Lastly, the Jarque-Bera (JB) statistics showed that financial statement fraud, firm size, institutional ownership, firm profitability and capital structure were normally distributed at 1% level of significance except leverage and board independence which were abnormally distributed. The descriptive statistics of South Africa for the period of 2012 to 2018 was presented in table 2.

**Table 2:** *Descriptive Statistics for South Africa*

Variables	Mean	Std. Deviation	Jarque-Bera	P-value	Observations
FSF	-2.50	5.32	259159.2	0.00	242
FS	6.62	0.74	6.30	0.04	242
LEV	48.00	15.53	0.61	0.73	242
BDI	68.69	11.41	13.63	0.00	242
IOWN	40.03	22.73	13.83	0.00	242
FPT	5.16	8.17	1113.76	0.00	242
CST	32.82	13.52	7.25	0.02	242

*Source: Author's Computation (2020)*

The descriptive statistics shows the description of the mean, standard deviation and normality test. The below was the descriptive statistics of the variables over the given period of the study. The standard deviation of financial statement fraud of quoted non-financial companies in South Africa was 5.32. This shows that financial statement fraud of firms among the quoted non-financial firms in South Africa was less fraudulent in reporting of earnings with low level of earnings manipulation. It was also observed on the average that financial statement fraud of the sampled firms was -2.50. This indicates that financial statement fraud value of  $-2.50 > -2.22$  revealed that the sampled firms were not free from financial statement manipulations in the audited annual reports. Firm size (FSI) measured by logarithms of total assets on the average was 6.62 with a standard deviation value of 0.74. This implies that firm size experience low level of variation among the quoted sampled firms in South Africa. Leverage (LEV) on the average was 48.00 with a

corresponding standard deviation value of 15.53. This implies that there was a high level of leverage among the sampled firms as revealed by the standard deviation value. Also, board independence (BDI) on the average was 68.68 with a corresponding standard deviation value of 11.41. This indicates that about 69% of the board members in the sampled firms were non-executives. Institutional ownership (IOWN) on the average was 40.03 with a corresponding standard deviation value of 22.73. This indicates that about 40% of the ownership structures of the sampled manufacturing firms in South Africa were institutional shareholders. Firm profitability (FPT) on the average was 5.16 with a corresponding standard deviation value of 8.17. This indicates that low value of standard deviation revealed the presence of low level of profitability among the sampled firms. In the case of capital structure (CST), the variable had an average value of 32.82 with a corresponding standard deviation value of 13.52. Lastly, the Jarque-Bera (JB) statistics showed that financial statement fraud, firm size, board independence, institutional ownership, firm profitability and capital structure were normally distributed at 1% level of significance except leverage which was abnormally distributed. This implies that the variables showed a sign of normality.

### FINDINGS AND DISCUSSION OF RESULTS FOR NIGERIA

The robust least square regression technique is employed to test the effect of independent variables on the dependent variable. The result of the regression analysis of Nigeria is presented in the table below.

**Table 3: Robust Least Square Results for Nigeria**

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-35.13680	9.923089	-3.540913	0.0004
FS	0.108909	0.749907	0.145230	0.8845
LEV	-0.019230	0.065713	-0.292637	0.7698
BDI	0.283023	0.090848	3.115347	0.0018
IOWN	0.181546	0.070035	2.592231	0.0095
FPT	-0.090227	1.819262	-0.049595	0.9604
CST	0.062254	0.063605	0.978768	0.3277
<b>Robust Statistics</b>				
R-squared	0.033145	Adjusted R-square		0.005520
Rw-squared	0.109500	Adjust Rw-square		0.109500
Akaike info criterion	388.3839	Schwartz criterion		414.4907
Deviance	90317.56	Scale		15.48148
Rn-squared statistics	18.34344	Prob (Rn-squared stat.)		0.005418

It is observed from the table above that R2 which measures the strength of the effect of independent variables on the dependent variable has the value of 0.033145. This indicates that about 4% of the variation in financial statement fraud is jointly explained by firm size, leverage, board independence, institutional ownership, firm profitability and capital structure. The low value of R- squared revealed the exclusion of other possible variables that might contribute to financial statement fraud among the quoted non-financial companies in Nigeria. The Rn-statistics value of 18.34 and its associated p-value 0.00 showed that the model overall was statistically significant.

Following the above, firm size (FS) had a z-statistics value of 0.1452 and a probability value of 0.8845 which is statistically insignificant. The result was contrary to the findings of Anichebe, Agbomah and Agbagbara (2019) that firm size has the likelihood of influencing financial statement fraud. Therefore, we reject the alternative hypothesis and accept the null hypothesis which states that firm size has no significant influence on financial statement fraud. Leverage (LEV) had a z-statistics value of -0.2926 and a probability value of 0.7698 which is statistically insignificant. The result was contrary to the findings of Zarnegar and Hamidian (2016). Dalnial, Kamaluddin, Sanusi and Khairuddin (2014) Bassiouny, Soliman and Ragab (2016) that there is a significant positive relationship between firms' financial leverage and financial statement fraud. Therefore, we reject the alternative hypothesis and accept the null hypothesis which states that leverage has no significant influence on financial statement fraud.

Board independence (BDI) had a z-statistics value of 3.1153 and probability value of 0.0018 which is statistically significant at 1% level of significance. The result was in consonance with the findings of Basuony, Mohamed. Hussain and Marie (2016) and Anichebe, Agbomah and Agbagbara (2019). The result was contrary to the findings of Abata and Migiro (2016). Therefore, we reject the null hypothesis and accept the alternative hypothesis which states that board independence has significant influence on financial statement fraud. Institutional ownership (IOWN) had a z-statistics value of 2.5922 and a probability value of 0.0095 which is statistically significant at 1% level of significance. The result was in consonance with the findings of Obigbemi, Omolchinwa and Oluka (2017), Bao and Lewellyn (2017), Usman and Yero (2012) and Alzoubi (2016b) while contrary to the findings of Thomsen and Pedersen (2000). Therefore, we reject the null hypothesis and accept the alternative hypothesis which states that institutional ownership has significant influence on financial statement fraud.

Firm profitability (FPT) had a z-statistics value of -0.0495 and a probability value of 0.9604 which is statistically insignificant. The result was contrary to the findings of Zikra. Yohanis and Grace (2018). Therefore, we reject the alternative hypothesis and accept the null hypothesis which states that firm profitability has no significant influence on financial statement fraud. Capital Structure (CST) had a z-statistics value of 0.9787 and a probability value of 0.3277 which is statistically insignificant. The result was contrary to the findings of Nikoomaram. Arabahmadi and Arabahmadi (2016). Therefore, we reject the alternative hypothesis and accept the null hypothesis which states that capital structure has no significant influence on financial statement fraud.

## FINDINGS AND DISCUSSION OF RESULTS FOR SOUTH AFRICA

The result of the regression analysis of South Africa is presented in the table below.

**Table 4:** Robust Least Square Results for South Africa

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-2.379609	0.369902	-6.433082	0.0000
FS	0.005760	0.072769	0.079132	0.9369
LEV	-0.000758	0.003142	-0.241254	0.8094
BDI	-0.002909	0.004121	-0.705710	0.4804
IOWN	0.000127	0.001706	-0.074321	0.9408
FPT	0.025386	0.004532	5.601986	0.0000
CST	0.001015	0.003251	0.312296	0.7548

Robust Statistics				
R-squared	0.042492	Adjusted R-square		0.018045
Rw-squared	0.147312	Adjust Rw-square		0.147312
Akaike info criterion	390.1993	Schwartz criterion		418.9769
Deviance	104.2930	Scale		0.523503
Rn-squared statistics	36.31167	Prob(Rn-squared stat.)		0.000002

It is observed from table 12 above that  $R^2$  which measures the strength of the effect of independent variables on the dependent variable has the value of 0.042492. This implies that 4% of the variation in financial statement fraud is jointly explained by variations firm size, leverage, board independence, institutional ownership, firm profitability and capital structure. The low value of R- squared means the exclusion of other possible variables that might contribute to financial statement

fraud among quoted manufacturing companies in South Africa. The Rn-statistics value of 36.11 and its associated p-value 0.00 showed that the model overall was statistically significant. It was observed from the above that firm size (FS) had a z-statistics value of 0.0791 and a probability value of 0.9369 which is statistically insignificant. The result was contrary to the findings of Anichebe, Agbomah and Agbagbara (2019). The study therefore rejects the alternative hypothesis and accept the null hypothesis which states that firm size has no significant influence on financial statement fraud. Leverage (LEV) had a z-statistics value of -0.2412 and a probability value of 0.8094 which is statistically insignificant. The result was contrary to the findings of Zarnegar and Hamidian (2016), Dalnial, Kamaluddin, Sanusi and Khairuddin (2014) and Bassiouny, Soliman and Ragab (2016) that there is a significant positive relationship between firms' financial leverage and financial statement fraud. Therefore, the study rejects the alternative hypothesis and accept the null hypothesis which states that leverage has no significant influence on financial statement fraud.

Board independence (BDI) had a z-statistics value of -0.7057 and a probability value of 0.4804 which is statistically insignificant. The result was in consonance with the findings of *Abata and Migiro (2016) while contrary to the findings of Abdullah (2006)*, Basuony, Mohamed, Hussain and Marie (2016) and Anichebe, Agbomah and Agbagbara (2019). Therefore, the study rejects the null hypothesis and accepts the alternative hypothesis which states that board independence has significant influence on financial statement fraud. Institutional ownership (TOWN) had a z-statistics value of 0.0743 and a probability value of 0.9408 which is statistically insignificant. The result was in consonance with the findings of Thomsen and Pedersen(2000) and contrary to the findings of Obigbemi, Omolehinwa and Oluku (2017), Bao and Lewellyn (2017), Usman and Yero (2012) and Alzoubi (2016b). Therefore, the study rejects the null hypothesis and accepts the alternative hypothesis which states that institutional ownership has significant influence on financial statement fraud.

Firm profitability (FPT) had a z-statistics value of 5.6019 and a probability value of 0.0000 which is statistically significant at 1% level of significance. The result was in consonance with the findings of Zikra, Yohanis and Grace (2018). Therefore, we reject the alternative hypothesis and accept the null hypothesis which states that firm profitability has no significant influence on financial statement fraud. Capital Structure (CST) had a z-statistics value of 0.3122 and a probability value of 0.7543 which is statistically insignificant. The result was contrary to the findings of Nikoomaram, Arabahmadi and Arabahmadi (2016). Therefore, we reject the alternative hypothesis and accept the null hypothesis which states that capital structure has no significant influence on financial statement fraud.

## CONCLUSION AND RECOMMENDATION

The study focused on the determinants of financial statement fraud in Nigeria and South Africa. Financial statement fraud undermines the reliability, quality, transparency and integrity of the financial reporting process, jeopardizes the integrity and objectivity of the auditing professional especially auditors and auditing firms and also diminishes the confidence of the capital markets as well as market participants in the reliability of financial information. However, it was established that firm size was statistically insignificant in Nigeria and South Africa, leverage was statistically insignificant in Nigeria and South Africa, board independence was statistically significant in Nigeria but insignificant in South Africa, institutional ownership was statistically significant in Nigeria and insignificant in South Africa, firm profitability was statistically significant in South Africa but insignificant in Nigeria while capital structure was statistically insignificant in Nigeria and South statistically

## RECOMMENDATION AND POLICY IMPLICATIONS

In view of the research findings, the following recommendations are suggested:

1. The management of non-financial quoted companies in Nigeria and South Africa should effectively manage the size of the firm in order to reduce the incidence of financial statement fraud
2. Investors in Nigeria and South Africa should invest in highly leverage firms because it reduces the incidence of financial statement fraud in the long-run.
3. Also, management suggested that the presence of institutional investors increases the level of fraudulent reporting of earnings and statistically significant in Nigeria but insignificant in South Africa.
4. Management suggested that the capital structure of firms made up of debt increases the level of fraudulent reporting of earnings in *Nigeria and South Africa in the long-run*

## SUGGESTION FOR FURTHER STUDIES

Even though the current study narrowed the empirical gap, the outcome of this study provided a pathway for future research on the determinants of financial statement fraud. Therefore, it did not include financial quoted firms in Nigeria and South Africa thus the scope of generalization of results to other contexts and the entire non-financial quoted firms may be limited. However, sampling the entire quoted firms in Nigeria and South Africa may provide new findings but incorporating other possible variables that may determine financial statement fraud.

## REFERENCES

1. Abata, M.A., & Migiro, S.O. (2016). Corporate governance and management of earnings: Empirical evidence from selected Nigerian-listed companies. *Investment Management and Financial Innovations*, 13(2/1), 189-205.
2. Adebayo, P.A., & Adebisi, W.K. (2016). Effect of firm characteristics on the timeliness of corporate financial reporting: Evidence from Nigerian deposit money banks. *International Journal of Economics, Commerce and Management*, 4(3), 369-381.
3. Adedure, A.A. (1998). An investigation into frauds in banks. An unpublished thesis of University of Lagos.
4. Adeniji, A. A. (2004), Auditing and investigation. Lagos: Value Analysis Consult.
5. Adewale, A.A., & Ibukun-Falayi, O.R. (2018). The impact of international financial reporting standards (IFRS) adoption on the quality of financial statements of banks in Nigeria. Retrieved from: <https://ssrn.com/abstract=3099851>.

6. Adeyemi, S.B. & Olowookere, JK. (2011) Stakeholders' perception of audit performance gap in *International Journal of Accounting and Financial Reporting: 1*(1)
7. Aduda, J., Chogii, R., & Magutu, PO. (2013). An empirical test of competing corporate governance theories on the performance of firms listed at the Nairobi securities exchange. *European Scientific Journal*, 9(13), 107-137.
8. Agbaje, W.H., & Dare, F. (2018). Dynamic analysis of financial statement fraud on profitability of manufacturing firms in Nigeria, *International Journal of Business and Management Review*, 6(2), 65-81.
9. Adomako, S., & Danso, A. (2014). Regulatory environment, environmental dynamism, political ties, and performance: study of entrepreneurial firms in a developing economy *Journal of Small Business and Enterprise Development*, 21(2), 212-230.
10. U.. Noor, M.A., Khurshid, M.K., & Mahmood, A. (2015), impact of firm size on earnings management: A study of textile sector of Pakistan. *European Journal of Business and Management*. 7 (28), 47-56.
11. Al-Najjar, B., & Clark, E. (2017) Corporate governance and cash holdings in MENA: Evidence from internal and external governance practices. *Research in International Business and Finance*, 39, 1-12.
12. Alshattu, A.S. (2015). The effect of the liquidity management on profitability in the Jordanian commercial banks. *International Journal of Business and Management*, 10 (1), 6271.
13. A.A. (2018). The effect of board of directors' characteristics and ownership type on the timeliness of financial reports. *International Journal of Business and Management*, 13(6), 276-287.
14. Alzoubi, E.S.S. (2016b). Ownership structure and earnings management: *Evidence from Jordan*. *International Journal of Accounting & Information Management*, 24(2), 135-161.
15. Anh, N.H. & Linh, N.H. (2016). Using the M-score model in detecting earnings management: Evidence from non-financial Vietnamese listed companies. *VNU Journal of Science: Economics and Business*, 32(2), 14-23.8
16. Anichebe, A.S., Agbomah, D.J., & Agbagbara, E.O. (2019). Determinants of financial statement fraud likelihood in Listed Firms. *Journal of Accounting and Financial Management*. 5 (2), 1-9.
17. Anagnostopoulou, S.C., & Tsekrekos, A.E. (2017). The effect of financial leverage on real and accrual earnings management. *Accounting and Business Research*, 47(2), 191-236.
18. Appah, E., & Emeh, Y. (2013). Corporate governance structure and timeliness of financial reports of quoted firms in Nigeria. *European Journal of Business and Management*, 5(22), 34-45.
19. Association of Certified Fraud Examiners (ACFE) (2018). Global Headquarters, USA.
20. Bao, S.R. & Lewellyn, K.B. (2017). Ownership structure and earnings management in emerging market- An institutionalised agency perspective. *International Business Review*, 26 (5), 828-839.
21. Barontini, R., & Bozzi, S. (2008). Executive compensation and ownership structure: Empirical evidence for Italian listed companies, 1-30.
22. Bassiouny, S. W: Soliman, M. M. & Ragab, A. (2016). The impact of firm characteristics o earnings management: An Empirical study on the listed firms in Egypt. *The Business and Management Review*, 7(2), 91-101.
23. Baralexis, S. (2004), Creative accounting in small advancing countries: The Greek Case managerial *Auditing Journal*, 19(3), 440-461.
24. Basuony, M. A. K. Mohamed, E. K. A., Hussain, M. M.. & Marie, O. K. (2016). Board characteristics, ownership structure and audit report lag in the Middle East. *International Journal of Corporate Governance*, 7(2), 180-205
25. Beneish, M. D. (1999). The detection of earnings manipulation, *Financial Analysts Journal*, 55
26. Bhasin, M (2013). Corporate accounting scandal atsatyam: A case study of India's Enron. *European Journal of Business and Social Sciences*, 1 (12), 25-47
27. Bin, R.L.L., & Yi, L.S (2015). Board mechanisms and performance of government-linked companies on Bursa Malaysia. *Procedia Economics and Finance*. 31(1), 399-417.
28. Casterella, J.R., Jensen, K.L. & Knechel, WR. (2007). Litigation risk and audit firm characteristics <http://ssrn.com/abstract-989614>. Retrieved on 20/05/2013.

29. Courtis, J. K. (1976). Relationship between timeliness in corporate attributes. *Accounting and Business Research*, 6 (25), 45-56.
30. Dabor, EL., & Adeyemi, S.B. (2009), Corporate governance and credibility of financial statements in Nigeria, *Journal of Business Systems, Governance and Ethics*, 4(1), 13-24.
31. Dalmial, H., Kamaluddin, A., Sanusi, Z.M., & Khairuddin, K.S. (2014). Detecting fraudulent financial reporting through financial statement analysis. *Journal of Advanced Management Science* 2 (1), 17-22
32. A.P., & Ogoun, S (2018). The effects of corporate governance codes in curbing fraudulent activities in private organisations in Nigeria. *Journal of Accounting and Taxation*, 10(7), 85- 95.
33. F. T.. & Salterio, S. E. (2001). The effects of corporate governance experience and financial reporting and audit knowledge on audit committee members' judgments, *Auditing Journal of Practice and Theory* 20(2),3147.
34. D'Mello, R., Krishnaswami. S., & Larkin, P. J. (2008). Determinants of corporate cash holdings: Evidence from spin-offs. *Journal of Banking & Finance*, 32 (7), 1209-1220.
35. B.I. (2009). Corporate governance structure and firm performance in developing economies: Evidence from Nigeria. *Corporate governance*, 9(3), 231-243.
36. Ezazi, M. Sadeghi, S., Alipour, M. & Amjadi, H. (2011). The effect of ownership structure on share price volatility of listed companies in Tehran Stock Exchange: An Empirical evidence of Iran. *International Journal of Business and Social Science*, 12 (5), 163-169.
37. Givoly, D. &Palmon, D. (1982). Timeliness of annual earnings announcements: some empirical *Accounting Review*, 486-508.
38. Ghofir, A & Yusuf, Y. (2020).Effect of firm size and leverage on earnings management. *Journal of Industrial Engineering & Management Research* 1 (3), 218-225.
39. Gungoraydinoglu A., & Oztekin O. (2011), Firm- and country-level determinants of corporate leverage: *Some new international evidence. Journal of Corporate Finance*, 17 (5), 1457
40. I. M., Izedonmi, F., & Ibadin, P.O. (2012). The association between selected corporate governance attributes, company attributes and timeliness of financial reporting in Nigeria. *Research Journal of Finance and Accounting*, 3(9), 137-144.
41. Ilaboya, O.J., &Obaretin, O. (2015) Board characteristics and firm performance: Evidence from Nigerian quoted companies. *Academic Journal of Interdisciplinary Studies*, 4(1), 283-290
42. Jensen, M. C., & Meckling, W. (1976), Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305360.
43. Makhlof, M.H., Laili, N.H., & Basah, M.Y, (2014). Board of directors' characteristics and firms performance among Jordanian firms: Proposing conceptual framework. *International Journal of Technical Research and Applications*, 2(1), 18-23.
44. Matoussi, H., Gharbi, I. (2011). Board independence and corporate fraud: The case of Tunisian firms, politics and economic development.
45. Mohammed, GT. (2017). Impact of firm characteristics on firm value of listed healthcare firms in Nigeria. A Dissertation submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaria in Partial Fulfilment of the requirements for the award of a Master Degree in Accounting and Finance, 1-81.
46. Mohammed, I.A.. & Che-Ahmad, A. (2018a). Shareholder's involvement in the audit committee, audit quality and financial reporting lag in Nigeria. *Business and Economic Horizons*. 14(2), 355-374.
47. Mulford, C. W., & Comiskey, E. M. (2011). The financial numbers game: Detecting creative accounting practices. New York: John Wiley and Sons. Retrieved from <http://sites.google.com/site/mkjuy76>. On 25th April, 2017.
48. Nalarreason, K. M.; Sutrisno, T. & Mardiaty E. (2019).Impact of leverage and firm size on earnings management in Indonesia.*International Journal of Multicultural and Multireligious understanding* 6 (1), 19-24
49. Nikoomaram, H.; Arabahmadi, F. & Arabahmadi, A. (2016). The relationship between earnings management and capital structure. *International Journal of Finance and Managerial Accounting*, 1 (1), 51-56.

50. Nyabuti, V.O.; Memba, F., & Chege, C. N. (2016). Influence of creative accounting practices on the financial performance of companies listed in the Nairobi Securities Exchange in *International Journal of Management and Commerce Innovation*, 3(2), 45-59.
51. Obigbemi, I.F.; Omolchinwa, E.O. & Oluku, M.D. (2017). Ownership structure and earnings management practices of Nigeria Companies. *Journal of Internet Banking and Commerce*
52. Omar, N., Koya, R. K., Sanusi, Z. M., & Shafie, N. A. (2014). Financial statement fraud: A case examination using Beneish Model and ratio analysis. *International Journal of Trade, Economics and Finance*, 5(2), 184.
53. E., Ikhatua, J.O. (2018). IFRS adoption, firms' characteristics and the timeliness of financial information. *International Accounting and Taxation Research Group*, 2(1), 92-106.
54. Onyeka, V.N., Nnado, I.C., & Iroegbu, F.N. (2018). Effect of cash and liquid substitutes on profitability of selected quoted manufacturing firms in Nigeria. *European Journal of Business, Economics and Accountancy*, 6(2), 1-12.
55. Owusu-Ansah, E., Dontwi, I.K., Seidu, B., Abudulai, G., & Sebil, C. (2010). Technical efficiencies of Ghanaian general insurers. *American Journal of Social and Management Sciences*, 1-14.
56. Pahuja, A., & Sahi, A. (2012). Factors affecting capital structure decisions: empirical evidence from selected Indian firms, *Financial Industrial & Management Research*, 1 (3), 7786.
57. Tudose, M. B. (2012). Capital structure and firm performance. *Economy Transdisciplinary cognition*, 15(2), 76-82
58. Usman, S.H. & Yero, J.I. (2012). Ownership concentration and earnings management practice of Nigeria Listed Conglomerates. *American International Journal of Contemporary Research* 2(7), 157-171.
59. Uwuigbe, U., Eluyela, D.F. Uwuigbe, O.R., Obarakpo T., & Falola, I. (2018). Corporate governance and quality of financial statements: A study of listed Nigerian banks. *Banks and Bank Systems*, 13 (3), 12-23.
60. Vakilifard, H., & Mortazavi, M.S. (2016). The impact of financial leverage on accrual-based and real earnings management. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(2), 5360.
61. Yamane, T. (1967). *Statistics: An introductory analysis*, 2nd Ed., New York: Harper and Row.
62. Z., & Hamidian, M. (2016). Examining the relationship between profitability, financial leverage and income smoothing at firms listed on Tehran Stock Exchange. *Iranian Journal of Business and Economics*, 3 (3), 80-83.
63. Zikra, S., Yohanis, R., & Grace, T.P. (2018). Detection of fraudulent financial statements with fraud diamond. *Quest Journals Journal of Research in Business and Management*, 6 (5), 39-45