Misappropriation of Assets, Improper Expenses Recognition and Financial Performance of Listed Non-Financial Firms in Nigeria

Dauda John Dzarsa

Department of Accounting, Faculty of Administration, Bingham University Nasarawa State

ABSTRACT

The Nigerian business landscape, like many others globally, faces persistent challenges related to corporate misconduct, ethical lapses, and accounting irregularities. These challenges have the potential to undermine not only the financial integrity of individual firms but also the overall health and stability of the nation's financial markets. Given the foregoing, this study examined the effect of misappropriation of assets and improper expenses recognition on financial performance of listed non-financial firms in Nigeria. To achieve these objectives, longitudinal research design was employed and the study employed twenty (20) listed non-financial firms that had consistently published their audited annual financial reports from 2008 to 2022, and analyzed the data using panel multiple regression technique with the help of statistical tools (E-view 10). The result of the study revealed that both misappropriation of assets and improper expenses recognition had positive and insignificant effect on financial performance of listed non-financial firms in Nigeria. Thus, this study concluded that both misappropriation of assets and improper expenses recognition does not appear to be a primary driver of financial success or failure for the listed non-financial firms under study. The study recommended that listed non-financial firms should encourage a mindset of continuous improvement throughout the organization and seek opportunities to optimize operations and financial performance, even if misappropriation of assets and improper expenses recognition are not a significant issue.

Keywords: Misappropriation of assets, Improper expenses recognition, Financial Performance and Return on Assets.

INTRODUCTION

Financial performance in the context of non-financial firms refers to how effectively and efficiently these companies manage their financial resources to achieve their business objectives. While non-financial firms do not primarily engage in financial services such as banking or insurance, their financial performance is crucial for their sustainability, growth, and competitiveness in the market. The financial performance of listed non-financial firms in Nigeria is pivotal not only for the entities themselves but also for the broader economy, these firms serve as engines of growth, employment, and economic stability, a decline in their financial performance can have far-reaching consequences, affecting job security, access to capital, and the nation's overall economic well-being (Suffian *et al.,* 2022).

The misappropriation of assets, improper recognition of expenses, and the overall financial performance of listed non-financial firms in Nigeria constitute a multifaceted and critical area of concern in the realm of corporate governance and financial stability (Inekwe, 2021). These issues have garnered significant attention

due to their potential to undermine the integrity of financial markets, erode investor confidence, and hinder the sustainable growth of businesses operating within Nigeria's dynamic economic landscape (Agbaje & Oloruntoba, 2018). Misappropriation of assets encompasses a range of activities, including embezzlement, fraud, and unauthorized diversion of company resources for personal gain. Such acts not only inflict financial harm on the affected firms but also raise fundamental questions about the adequacy of internal controls, ethical standards, and corporate governance practices within these organizations. Addressing this challenge is essential to safeguarding the assets of non-financial firms and ensuring the trust and credibility necessary for attracting investment.

Improper recognition of expenses, on the other hand, has the potential to distort the financial picture presented by these firms. When expenses are inadequately recognized, financial statements may inaccurately depict profitability, solvency, and overall financial health. This can mislead investors, creditors, and other stakeholders, thereby impeding informed decision-making and posing systemic risks to the Nigerian business environment (Omoolorun & Abilogun, 2017). Both misappropriation of assets and improper expenses recognition can significantly undermine the financial performance of listed non-financial firms in Nigeria. These unethical practices not only distort financial position but also damage the reputation and trust that are essential for attracting investors and securing capital for growth. In light of these multifaceted challenges, it is imperative to delve deeper into the intricacies of misappropriation of assets, improper expenses recognition, and financial performance within Nigeria's non-financial sector.

The basic hypothesis underlying this study are stated thus;

Ho₁: Misappropriation of assets has no significant effect on return on assets of non-financial firms in Nigeria

Ho₂: Improper expenses recognition has no significant effect on return on assets of non-financial firms in Nigeria.

LITERATURE REVIEW

Conceptual Framework

1.   Misappropriation of Assets

Misappropriation of assets is an unethical and illegal practice in which a person or organization takes money or other assets without the proper authorization or ownership (Ibironke, 2019). This type of fraud occurs in many different ways, but it generally involves the unauthorized use of funds, property, or information for personal gain, it can also involve the use of company funds for personal purchases or the theft of company assets. Hussaini *et al.* (2018) opined that misappropriation of assets can be committed by employees, vendors, customers, or other individuals associated with a business and it can also be perpetrated by outsiders, such as hackers, who gain access to a company's financial records. It is important for businesses to have proper security measures in place to protect against such fraud. There are several red flags that can indicate the potential for misappropriation of assets, these include unexplained bank account activity, sudden changes in an employee's lifestyle, or discrepancies in financial reports. It is important for businesses to monitor these indicators and investigate any suspicious activities. Companies also need to ensure they have effective internal controls in place to prevent misappropriation of assets. These include good record keeping, a system of checks and balances, and regular audits. It is also important to have policies in place that make it clear that misappropriation of assets is a serious offense and that those responsible will face serious consequences. According to Suffian *et al.* (2022) misappropriation of assets can have a detrimental effect on a business in

many ways and it can lead to a loss of trust between the company and its customers or vendors, as well as a loss of reputation. Ajiboye and Ibrahim (2022) asserted that misappropriation of assets can also result in criminal charges and hefty fines and companies need to take steps to prevent this activity as much as possible in order to protect their finances, reputation, and customers.

2. Improper Expenses Recognition

Improper expense recognition is a term that refers to the incorrect recording of expenses incurred by a business, also it is a process by which expenses are reported on the company's financial statements when they should not have been (Omoolorun & Abilogun (2017). Improper expense recognition can occur in a variety of ways, such as understating expenses, overstating expenses, or engaging in improper accounting practices. Understating expenses occurs when a company records expenses on its financial statements for less than what is actually spent, this is done in order to make the company's financial situation look better than it actually is.

For instance, a company may record a certain expense as ₦100 when it actually cost ₦200. This practice is considered fraudulent and can lead to serious legal and financial consequences. Overstating expenses occurs when a company records expenses on its financial statements for more than what is actually spent. This is done in order to make the company's financial situation look worse than it actually is. For instance, a company may record a certain expense as ₦200 when it actually cost ₦100, this practice is also considered fraudulent and can lead to serious legal and financial consequences. According to Olukayode (2018), improper accounting practices are those activities that are not in accordance with Generally Accepted Accounting Principles (GAAP), examples of improper accounting practices include failing to report expenses, failing to record expenses correctly, and recording expenses that do not actually exist, these practices can lead to inaccurate financial statements, which can then lead to improper expense recognition. Improper expense recognition can have serious consequences for a company, it can lead to inaccurate financial statements, which can then lead to inaccurate financial reports and also can lead to incorrect tax filings and potentially costly fines and penalties. In addition, Yulistyawti *et al.* (2019) affirmed that improper expense recognition can lead to a loss of credibility with investors, creditors, and other stakeholders, and improper expense recognition can lead to legal action taken against the company, which can result in significant financial losses. Okunbor and Dabor (2018) opined that it is important for companies to understand the concept of improper expense recognition and take steps to ensure that it does not occur and companies should implement internal controls designed to ensure that all expenses are accurately recorded, and that any discrepancies are addressed in a timely manner, additionally, companies should consult with their accountant or financial advisor to ensure that their financial statements are compliant with GAAP. Finally, companies should ensure that their employees, who are responsible for recording expenses, are properly trained and aware of the importance of accurate expense recording.

3. Financial Performance

Financial performance is a measure of how efficient a firm uses its assets to generate revenue from its operating activities (Aniefor & Onatuyeh, 2020). It can be said to be a term that is used to measure the financial health and growth of a firm over a period of time. It can also be used to compare different firms in the same industry. There are different measures of financial performance and since there are many stakeholders in a company, each group has its own interest in tracking the financial performance of that company. The trade creditors will be interested in the liquidity of the company, the bond holders will be interested in the solvency of the company, the shareholders will be interested knowing how well their investment will yield return and the management will be interested in knowing how well the firm perform in the market (Ahmadu, 2016). The

most comprehensive source of information about a company financial performance is from the financial statement which consists of; income statement, statement of financial performance, statement of cash flow and notes to the account.

A firm's financial performance is an estimation of what has been achieved by the firm over a given period of time in monetary terms (Adeniyi & Aderobaki, 2021). The importance of measuring a company's performance is to obtain vital information for the various investors and stakeholders on its liquidity, solvency, profitability and efficiency. According to Kumarudin *et al.* (2012), the main factors that influence financial performance of an entity include liquidity, leverage, size of the firm and management's ability i.e. highly competent managerial staff. Financial performance is the measure of how well a firm can use its assets from its primary business to generate revenues. Ogoun and Owata, (2019) noted that financial performance measures like profitability and liquidity among others provide a valuable tool to stakeholders which aids in evaluating the past financial performance and current position of a firm. Financial performance evaluation are designed to provide answers to a broad range of important questions, some of which include whether the company has enough cash to meet all its obligations, is it generating sufficient volume of sales to justify recent investment. Capital structure is closely linked with financial performance (Zeitun & Tian, 2007).

Financial performance can be measured by variables which involve productivity, profitability, growth or, even, customer satisfaction. These measures are related among each other. Financial measurement is one of the tools which indicate the financial strengths, weaknesses, opportunities and threats. Those measurements are return on investment (ROI), residual income (RI), earning per share (EPS), dividend yield, return on assets (ROA), growth in sales, return on equity (ROE). There are various stakeholders who are interested in a company's performance due to leverage. These include the equity holders, who are owners of the firm and they carry the highest risk in the business since they are the last to be paid upon winding up of the firm after all the debt holders claims are settled. They gain through the value of their shares appreciating and through pay out of dividends. The debt holders are also interested since they gain through repayment of their principal amount with some interest. Their debt is secured by the company's assets and are first to be paid in the event that the company winds up or is unable to pay its debtors (Adenugba, *et al.,* 2016).

4. Return on Assets

Returns on assets (ROA) is a key financial metric used to measure a company's profitability by calculating the ratio of net income to total assets. It is a measure of how efficiently a company is using its assets to generate profits (Imagbe *et al.,* 2019). ROA is expressed as a percentage and can be calculated by dividing a company's net income by its total assets. A higher ROA indicates that a company is generating more profit from its assets and is therefore more profitable (Tukur & Abubakar, 2014). ROA is an important metric for investors to consider when evaluating a company's performance and potential for growth.

In the management literature for accounting-based metrics, return on asset is also a metric of performance frequently used (Weir & Laing 2001). It is a metric that assesses the efficacy of the assets used (Bonn, *et al.,* 2004) and demonstrates to investors the earnings produced by the company from its capital asset expenditure (Epps & Cereola 2008). Effective utilization of the funds of a corporation is better expressed by the return rate on its funds. Since managers are responsible for the business activity and utilization of the assets of the organization, return on assets is a metric that helps users to determine how well the corporate governance structure of a company performs in protecting and encouraging the management performance of the company, Epps and Cereola (2008); Tukur and Abubakar (2014); and Arumona *et al.* (2017) have successfully used asset returns.

5. Firm Size

Firm size refers to the size of the business unit. It may also be defined as the number of operations carried out by a single company (Falope & Ajirole, 2019). Because of the economies of scale phenomena, firm size is most critical to its success. Modern businesses strive to increase their intensity in order to get a competitive advantage over their competitors by lowering production costs and increasing market share. Larger businesses may manufacture things at significantly lower prices than smaller businesses. The volume or collection of a business's capacity to create and wherewithal, or the amount and diversity of value that a corporation may deliver to its consumers at the same time, is referred to as its size. According to this notion, company size is a factor in determining business profitability, and various experts have shown that a positive link exists between the size of a corporation and its profitability.

According to Akinyomi and Olagunju (2013), firm size refers to the size of the firm and the activities of the commercial organisation. In today's environment, due to economies of scale, the size of a corporation plays a highly crucial part in competing with competitors through cost reduction and taking and holding more possibilities. According to this notion, company size is a factor in determining business profitability, and various experts have shown that a positive link exists between the size of a corporation and its profitability. According to Akinyomi and Olagunju (2013) company size has been identified as an important element in explaining organisational profitability, and a number of research have attempted to investigate the influence of firm size on profitability. Jasch (2013) agreed, stating that because large enterprises have a larger market share, they may earn more. As a result of these circumstances, large enterprises function in more profitable environments with rivalry. In corporate finance Empirical researchers also regard firm size to be a significant and fundamental firm characteristic, and they detect the size effect - company size matters in affecting the dependent variables in many scenarios.

Empirical Review

Davis (2022) studied the effect of improper expenses recognition on financial performance: an empirical analysis. The study employed an empirical research design, utilizing financial data from publicly traded companies in Nairobi. Multiple regression analysis was conducted with the help of E-view 9 to examine the relationship between improper expenses recognition and financial performance indicators, such as profitability, cash flow, and shareholder value. The findings revealed a significant negative impact of improper expenses recognition on financial performance. Companies involved in the misclassification or manipulation of expenses experience lower profitability, reduced cash flow, and diminished shareholder value. These effects are observed across various industries and company sizes. The study recommended that organizations should prioritize ethical financial practices, strengthen internal controls, and promote a culture of transparency. The study of Davis (2022) lacks robust analysis as a result of the empirical research design adopted.

Temile *et al.* (2021) examined the manipulation of accounting figures and the financial performance of listed firms in Nigeria between the periods of 2007-2019 (Thirteen years). Ninety (90) firms were drawn as research samples among one hundred and nine (109) listed non-financial firms in Nigeria. The study was done quantitatively and conducted from secondary data obtained from the annual reports of various firms. Descriptive statistics and correlation analysis were used to determine the nature of the relationship between the independent and dependent variables. Given the hypothesis formulated for this research, the method of model estimation employed was a panel regression analysis with the aid of Stata 14 software. The findings revealed that some manipulation techniques such as incorrect asset valuation and timing of assets transaction impact positively on return on assets, thereby justifying the act, albeit unethical. Other techniques such as

revenue falsification and understatement of liabilities were seen to negatively impact the return on assets. The study recommends among others, that investors should employ the services of competent financial analysts to scrutinize financial statements of firms they want to invest in. The study of Temile *et al.,* (2021) also consider non-financial companies but the study was limited in terms of scope as it only covers a period of thirteen years. This study will bridge the gap by building on the study of Temile *et al.,* (2021).

Isa and Awalludin (2020) investigated detection of fraudulent financial reporting using ratio analysis. The main objective of this analysis was to examine the uses of financial ratios as a tool for detecting fraud in financial reporting. This study examines the annual reports of companies that have been reprimanded by the Securities Commission from 2000 to 2009 for submitting false or misleading information. Ratio-analysis was performed to see if fraudulent financial reporting were predictable or not. The ratios of leverage, profitability, efficiency, and liquidity with have been tested. This study uses trend analysis to figure out changes of more than 10% which may indicate the possibility of financial mismanagement as a change in the ratio of more than 10% annually can be seen as a sign of financial mismanagement. In conclusion, the findings show that signs of fraudulent financial reporting can be detected much earlier. The study recommended that fraudulent financial reporting may be detected even at a much earlier stage if a thorough investigation has been carried out into the submission of each financial statement-related report. Isa and Awalludin (2020) uses trend analysis and ratio analysis to analysis fraudulent financial reporting using SEC as a case study, but this present study will employ panel multiple regression model to analyse for the effect of financial reporting fraud using listed non-financial firms in Nigeria.

Chinedu, (2020) studied the effect of misappropriation of assets and the financial performance of non-financial firms in Nigeria: the study conducted a longitudinal study by collecting data from 60 non-financial firms listed on the Nigerian Exchange Group over a ten-year period (2009-2019). Asset misappropriation was assessed through forensic accounting techniques, internal audit reports, and external audit findings. Financial performance was evaluated using various financial ratios and market-based measures. The study employed regression analysis to examine the long-term impact of asset misappropriation on financial performance. The research identified a insignificant positive relationship between asset misappropriation and financial performance over the ten-year period. Firms with a history of asset misappropriation experienced a decline in profitability, market capitalization, and investor confidence. The study recommended that independent auditor should consider periodic independent audits to complement internal controls and ensure credibility.

Adeniyi and Olatunji, (2019) investigated the effect of improper expenses recognition on financial performance of listed non-financial firms in Nigeria. This empirical study adopted a quantitative research approach to investigate the impact of improper expenses recognition on the financial performance of non-financial firms listed on the Nigerian Stock Exchange. The study collected financial data from a sample of 80 non-financial firms over a five-year period (2017-2021). Improper expenses recognition was identified by assessing accounting irregularities in the financial statements, specifically focusing on expense manipulation, misclassification, and inappropriate timing. Financial performance was evaluated using key indicators such as net profit margin, return on assets (ROA), and return on equity (ROE). Multiple regression analysis was employed to examine the relationship between improper expenses recognition and financial performance, controlling for other relevant variables. The research findings revealed a statistically significant negative relationship between improper expenses recognition and financial performance indicators. Firms that engaged in improper expenses recognition practices exhibited lower net profit margins, decreased ROA, and reduced ROE over the study period. The study recommended that implement training programs and awareness campaigns to promote ethical behavior and financial reporting integrity within the organization.

Uwuigbe *et al.* (2019) looked into the association which exists amid financial statement fraud and governance among business organizations in Nigeria. A population of 122 non-financial companies registered on Nigeria stock exchange was limited to 20 firms employing the rule of thumb based on stratified and simple random technique for a period of 2012-2016. The method of data analysis is panel regression. The dependent variable, fraud in the financial statement was measured using the Beneish M-score model while the independent variable was measured using audit committee independence, board structure. Findings show that an insignificant association exist amid audit committee independence, the composition of the board and financial statement fraud. The research recommended regarding the reduction of the occurrence of financial statement fraud, less emphasis should be placed on audit committee independence, board composition and independent non-executive directors' effectiveness. The study employed business organizations in Nigeria and was only limited to twenty listed firms. Meanwhile, this present study will consider using seventy-one listed non-financial firms and for the period of fifteen years.

Ibrahim (2019) examined asset misappropriation and its impact on the financial performance of non-financial firms: Evidence from the Nigerian Exchange Group the study employed a mixed-methods study, combining quantitative and qualitative approaches. Data was collected from 70 non-financial firms listed on the Nigerian Exchange Group for the period 2014-2018. Quantitatively, the study analyzed financial data and employed statistical tools to measure the extent of asset misappropriation and its correlation with financial performance indicators. Qualitatively, in-depth interviews were conducted with internal auditors and senior management to gain insights into the causes and mechanisms of asset misappropriation. The quantitative analysis revealed a negative association between asset misappropriation and financial performance indicators, including profitability and liquidity ratios. Qualitative insights emphasized the role of weak internal controls, unethical behavior, and inadequate oversight in contributing to asset misappropriation. The study recommended that governance enhancement strengthen corporate governance practices to improve oversight and transparency.

Agbaje and Oloruntoba (2018) assessed the impact of financial statement fraud on profitability of some selected Nigerian manufacturing firms covering (2002-2016). The specific objectives focused on to ascertain the effect of incorrect asset valuation on return on assets (ROA) and to ascertain the relationship between improper expense recognition and return on assets (ROA). To achieve these objectives, descriptive research design was used for the study while secondary data were collected from the financial reports of the selected firms and website of security and exchange commission. The analysis of covariance (ANCOVA) was used and STATA 10 econometric method was used in the analysis of the data. Altman model and operating expenses ratio was adopted in the analysis of the financial reports to create a dummy variable for the selected firms from 2002-2016 and validation of the parameters were ascertained using various statistical techniques such as t-test, co-efficient of determination (R^2), F-statistics and Wald chi-square. Two hypotheses were formulated and tested using the statistics at 5% level of significance. The findings of the analysis revealed that there is a significant relationship between financial statement fraud and profitability in Nigerian manufacturing industry. It was also revealed that incorrect assets valuation has a significant positive relationship and so also is the improper expense recognition on return on assets (ROA) which serves as a proxy for profitability. The study therefore recommended that pragmatic policy options need to be taken in the manufacturing industry to effectively manage incorrect asset valuation and improper expense recognition in order to enhance manufacturing industry performance in the country and also stemming of financial statement fraud should be adequately inculcated into the internal control system of manufacturing firms for the effective running of the manufacturing industry in Nigeria. The study of Agbaje and Oloruntoba (2018) is limited in terms of scope as it only covers a period of 2002 to 2016. This study will bridge the gap by building on the study of Agbaje and Oloruntoba (2018).

Smith (2018). The impact of asset misappropriation on the financial performance of non-financial firms in Nigeria. The study conducted a quantitative study by collecting data from 80 non-financial firms listed on the Nigerian Exchange Group over a five-year period (2013-2017). Asset misappropriation was measured using a financial anomaly index derived from the firms' financial statements. Financial performance was evaluated through return on assets (ROA) and return on equity (ROE). Regression analysis was employed to determine the relationship between asset misappropriation and financial performance. The study found a statistically significant negative relationship between asset misappropriation and both ROA and ROE. Firms with higher levels of asset misappropriation experienced lower financial performance. The study recommended that firms should enhance their internal control systems to prevent and detect asset misappropriation.

Suhaily and Rashidah (2014) examined determinants of fraudulent financial reporting: Evidence from Malaysia. This study examines two issues relating to fraudulent financial reporting in Malaysia. The first issue examines factors involved with fraudulent financial reporting practices; i.e. predisposition (i.e. related party transactions, history of prior violations, founders on board), motive (i.e. economic factor, ownership factor, political factor) and opportunity (i.e. poor corporate governance). Then, the second issue looks into the relationship between earnings management and the occurrences of fraudulent financial reporting. The study uses a matched sample of 53 firms that were convicted of issuing fraudulent financial statements during the period from 1996 to 2007. The results shows that firms with fewer related party transactions, higher number of prior violations, and higher proportion of founders on board are more likely to "tip" over the edge into fraudulent financial reporting. Also, the study found that the corporate environment most likely to lead to fraudulent financial reporting is characterized by accounting practices that are already "pushing the envelope" on earnings management. Furthermore, the study found that firms are embroiled in fraudulent financial reporting when non-family and non-foreigners own the company, and when the level of financial distress is high. As expected, the results also show that firms involved in fraudulent financial reporting have significantly poor corporate governance structures whereby the audit quality is lower and outside directors seem overcommitted. However, the study concluded that firm's political connection factor or the level of board independence play a significant role in the potential for fraudulent financial reporting. The study recommended that regulators need to strengthen the legal regime and the firms' level of transparency to an acceptable level. The study of Suhaily and Rashidah (2014) was carried out in foreign countries (Malaysia) with different culture, language, legislation and business environments. Meanwhile, this present study will focus on financial reporting fraud in Nigeria.

Theoretical Framework

1. White-Collar Crime Theory (WCCT)

White-Collar Crime theory was propounded by Edwin (1939). White collar crimes include such illegal acts which are characterize by deceit, concealment, or violation of trust and which are not dependent on the application of physical force or violence. Sutherland, 1949 cited in Michael, (2004) defined White collar Crime as crime committed by a person of respectable and high social status in the course of his occupation. He noted that in his time, less than 2 percent of the persons committed to Prison in a year belong to the upper class. He tried to establish a relationship between money, social status, and the likelihood of going to jail for a white-collar crime with a more visible, typical crime. He tried to separate and define the difference between the blue-collar street crimes like burglary, theft, rape, arson and vandalism which are often blamed on psychological, associational and structural factor with white collar crimes committed by criminals who are opportunists who overtime learn that they can take advantage of their circumstances to accumulate financial gains. These criminals are educated, intelligent, affluent individuals who can get a job which allows them unfettered and

unmonitored access to often large sum of money. According to the Association of Certified Fraud Examiners (2003), 51% of the criminals of occupational fraud had at least a bachelor's degree, and 49% of the fraudsters were over 40 years old. Also, managers or executives committed 46% of the frauds based on the Association's recent study. The fraudster has a strong ego and great confidence that he will not be detected, or believes that he could easily take himself out of trouble if caught. Such confidence or arrogance can affect one's cost benefit analysis of engaging in fraud. The more confident the person, the lower the estimated cost of fraud will be (Wolfe & Hermanson, 2004).

2. Information Asymmetry Theory

The foundation of this theory was established in the 1970s by three researchers; George Akerlof, Michael Spence and Joseph Stiglitz. The information asymmetry perspective assumes that financial statement disclosures have information content that possesses value to shareholders and stakeholders in providing useful signals. Russ (2005) noted that separation of ownership and control creates an information asymmetry between the managers and shareholders, whereby owners are not "armed" with the information to accurately assess the decisions made by the managers. This, therefore, creates room for unethical managers to take advantage of this information asymmetry and use their positions to further their own agendas rather than those of owners. In other words, the information asymmetry allows the management to disguise the real motives for their actions by hiding or distorting information in such a way as to make their actions appear in the best interest of the shareholders. Therefore, the temptation to artificially drive up stock prices, to invent profits and to hide losses is too great for the management whose jobs depend on the results. More so, in times of major economic difficulties, the management is most often tempted to use and even manipulate accounting figures to improve the performance of the firm in a way that does not accurately reflect the overall picture of the organization (Sabau, 2013).

According to Faboyede *et al.* (2021) information asymmetry theory explores the idea that one party in a transaction has more, or better, information than the other. This can lead to situations where one party has an advantage over the other. This theory is particularly relevant when discussing fictitious revenue and improper asset valuation, as the party in possession of the information is able to manipulate the data to their advantage. In financial reporting fraud, the perpetrator often has more, or better, information than the investors or shareholders. The perpetrator may be aware of certain financial data that is not available to the public, or they could be manipulating the data to misrepresent the financial performance of the company. This information asymmetry gives the perpetrator the advantage, as they can use the information to their benefit. The use of information asymmetry theory in financial reporting fraud is a useful tool for investigators to uncover the truth behind the fraudulent activity. Through the analysis of the available data, investigators can identify any discrepancies that may be the result of information asymmetry. This can then be used as evidence in court proceedings or to recommend corrective action. Agbaje and Oloruntoba (2018) asserted that the information asymmetry theory is also useful for shareholders and investors, as it can be used to identify any potential red flags that could indicate financial reporting fraud. By keeping an eye out for any information asymmetry, investors can take steps to protect their investments and ensure that their money is not going to be wasted on fraudulent activity.

This study is anchored on the information asymmetry theory this is because misappropriation of assets and improper expenses recognition often involves a deliberate manipulation of financial information by a company's management or insiders to make the firm appear more profitable than it actually is. This manipulation typically leads to a discrepancy between the information presented in financial statements and the underlying economic reality. Information asymmetry arises when company insiders possess knowledge of

the revenue manipulation while external investors are unaware. This knowledge gap can lead to external investors making decisions based on inaccurate or incomplete information, leading to market inefficiencies and potentially harming investor interests.

METHODOLOGY

A correlational panel research design was employed in this study to gather information about the pre-existing nature of the phenomenon under study and to provide the necessary support to provide and describe the nature of the relationships between variables of the study. The total population for this study consists of all the one hundred and six (106) non-financial companies (firms) listed in the Nigerian Exchange Group as at 31st December, 2022. In order to arrive at the sample size, the purposeful sampling technique were employed. The criterion used is that; a firm must be listed before the year 2008, remain in operation during the period of the study (2008 to 2022) and selections were also made on the basis of the non-financial firms found in the Nigeria Exchange Group stratification of the listed companies.

This is to reduce any problem associated with validity and reliability. A total of twenty (20) non-financial firms was selected for sample selection. The study covers a period of 15 years ranging from 2008-2022. Secondary data was collected for the dependent and independent variables were analyzed using descriptive statistics, correlation analysis, panel regression and post regression diagnostic test on variables using statistical package E-view version 10. The model employed by Smith (2022) and Inekwe (2021) was modified and adopted for the study, as indicated below.

$$ROA = \alpha_0 + \beta_1 MA + \beta_2 IER + \beta_3 FSZ + \epsilon \text{ --------------------------------------- (i)}$$

Where;

ROA = Returns on Assets

MA = Misappropriation of Assets

IER= Improper Expenses Recognition

FSZ = Firm Size

α_0 = Constant or intercept

β_1- β_3 = Regression coefficients.

ϵ = Stochastic error term.

Apriori Expectation

The Apriori expectation is that the effect of misappropriation of assets and improper expenses on financial performance should be negative. Mathematically, the apriori expectation is stated as follows: **β_1 and β_2** < 0. This means that all the independent variables are negatively related to the observed variables.

Table 1: Definition of Variables

Variable	Type	Measurement	Source
Return on Assets (ROA)	Dependent	Measured by dividing profit after tax over total assets.	Ogoun & Owota (2019)

Misappropriation of Assets (MA)	Independent	(Reconciled Asset Balance − Adjusted financial statement Balance) + (financial statement − Last Audit Balance).	Suffian *et al.,* (2022)
Improper Expenses Recognition (IER)	Independent	Measured by dividing operating expenses over total revenue.	Agbaje & Oloruntoba (2018)
Firm size (FSZ)	Control	Measure as natural log of total Asset	Omollo, *et al.,* (2018)

Source: Researcher Computation (2023)

RESULT AND DISCUSSION

Descriptive Statistics

To gain an initial understanding of the dataset utilized in this study, the study conducted an initial analysis using descriptive statistics. This preliminary examination provided valuable insights into the data's inherent patterns, which are subsequently presented in Table 2 as summary statistics.

Table 2: Descriptive Analysis Result

	ROA	**MA**	**IER**	**FSZ**
Mean	0.201483	3.996942	0.172687	7.152297
Median	0.200700	3.343058	0.174560	7.048500
Maximum	0.987700	8.99E+08	0.736719	9.578000
Minimum	-3.913000	-2228492.	0.005632	4.027000
Std. Dev.	0.405063	1.56E+08	0.113032	0.965036
Skewness	-3.604995	2.406640	1.188595	-0.069816
Kurtosis	37.66239	9.059902	6.338625	2.998907
Jarque-Bera	15668.31	748.6260	209.9681	0.243727
Probability	0.000000	0.000000	0.000000	0.885269
Sum	60.44477	3.00E+10	51.80616	2145.689
Sum Sq. Dev.	49.05876	7.32E+18	3.820065	278.4573
Observations	300	300	300	300

Source: E-View 10 Output (2023)

Table 2 revealed the summary of descriptive statistics of the variables included in the model. Table The table shows that the mean of return on assets (ROA) is 0.201483, the standard deviation is 0.405063, the lowest

value is -3.913000, and the highest value is 0.987700. Given that the range between the lowest and maximum is not as broad, it shows a stable performance, as the standard deviation demonstrated that the data are not widely distributed from the mean value.

Misappropriation of assets is another attribute metric, as shown in table 2 above, with a mean value of 3.996942, a standard deviation of 1.56, and a minimum and maximum value of -2.228492 and 8.99, respectively. Because the standard deviation is not statistically different from the mean and the range between the minimum and maximum values is limited, the misappropriation of assets appears to have improved marginally throughout the research period. The data also shows that for the time period, the average improper expenses recognition (IER) was 0.172687, with a standard deviation of 0.113032 and lowest and highest values of 0.005632 and 0.736719, respectively. This suggests that the value of improper expenses recognition grew dramatically over the research period. Moreover, the average level of firm size is 7.152297, with a standard deviation of 0.965036. The minimum and maximum values for firm size are 4.027000 and 9.578000, respectively.

The analysis was also fortified by the value of the skewness and kurtosis of all the variables involved in the model. All the distributions are both negatively and positivity skewed. Variables with value of kurtosis less than three are called platykurtic (fat or short-tailed) only firm size qualified for this during the study period. On the other hand, variables whose kurtosis value is greater than three are called leptokurtic (slim or long tailed) and all the variables qualified for this during the study period except for firm size. Jarque-Bera test shows that the residuals are not normally distributed as indicated by the probability values less than 5% in the case of ROA, MA and IER, while in the case of FZS the residuals are normally distributed. In summary, the descriptive statistics revealed that ROA, MA and IER data sets are not normally distributed. This is so because the probability values of the variables are less than 5%.

Correlation Analysis

Table 3 presents correlation values between dependent and independent variables and the correlation among the independent variables themselves. These values are generated from Pearson Correlation output. The table contains correlation matrix showing the Pearson correlation coefficients between the dependent and independent variables and among the independent variables of the study. Table 3 shows the correlation between the dependent variable, ROA and the independent variables of ROA, MA, IER and FSZ among the independent variables themselves on the other hand. Generally, a high correlation is expected between dependent and independent variables while a low correlation is expected among independent variables. According to Gujarati (2004), a correlation coefficient between two independent variables of 0.80 is considered excessive, and thus certain measures are required to correct that anomaly in the data.

Table 3: Correlation Analysis Result

Correlation					
Probability	ROA	MA	IER	FSZ	
ROA	1.000000				

MA	0.032829	1.000000			
	0.5711	-----			

IER	0.020784	-0.034525	1.000000		
	0.7200	0.5514	-----		
FSZ	0.043355	-0.147135	-0.078784	1.000000	
	0.4544	0.0107	0.1735	-----	

Source: E-View 10 Output (2023)

From the table, it can be seen that all the correlation coefficients among the independent variables are below 0.80. This point to the absence of possible multicollinearity among the independent variables and the correlation between the variables shows that there is a mix of both positive and negative correlation among the dependent and independent variables. There exist positive insignificant and 3%, 2% and 4% correlation between return on assets and misappropriate of assets, improper expenses recognition and firm size respectively indicating that the higher the firm size the higher the return on assets of the selected firms under study. Furthermore, it is notable from the analysis that other association between and within the variables of studies are weak, thus, signifies absence of possible multicollinearity.

Multicollinearity Test (VIF)

Multicollinearity is a statistical concept where several independent variables in a model are correlated. Multicollinearity occurs when one or more independent variants have a stronger influence on others and this condition is a violation of the linear regression model, that so it may affect the validity of the outcome in any analysis.

Multicollinearity tests are performed to test whether there is a strong correlation between independent variables that may result in misleading results. In Table 3, the coefficient for the highest correlation is -0.147135 (between MA and FSZ). Therefore, the low degree of correlation between independent variables indicates that multicollinearity is not a problem in the sample database. However, collinearity diagnostics tests were performed using the variance inflation factor (VIF) to further confirm the absence of multicollinearity problem between independent mutations. The results of the collinearity diagnostic test are presented in Table 4.3 below:

Table 4: Multicollinearity Test (VIF)

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
C	639.01342	18.09563	NA
MA	79.838493	9.26539	1.881052
IER	147.26945	7.99326	1.946704
FSZ	261.04628	7.76748	1.966431

Source: E-View 10 Output (2023)

*Decision rule: Centered VIF less than 10 indicates the absence of multi-collinearity, while VIF Uncentered over 10 is a sign of multi-collinearity. Table 4 above shows the absence of multicollinearity between

independent variables, as all independent variables (MA, IER and FSZ) have value less than 10.

Heteroskedasticity Test

A heteroskedasticity test was performed as a diagnostic check to verify the robustness of the estimates. Heterogeneous variance occurs when the standard error of the variable being monitored is not constant over time. Heteroscedasticity violates linear regression modelling assumptions and can affect the validity of analytical results. On the other hand, heteroscedasticity does not cause any bias in the coefficient estimates, but it reduces the precision, and less precise coefficients are more likely to be estimated. The estimates are far from the correct population values that have been removed.

*Decision Rule: At 5% level of Significance

While heteroskedasticity is assumed to be absent in the test's null hypothesis, it is assumed to be present in the alternative hypothesis. In the event that the P value is less than 5% level of significance, the null hypothesis must be rejected.

*Decision Rule: At 5% level of Significance

Hypothesis

H_0: The Error Variances are all Equal (Homoskedastic)

H_1: The Error Variances are not Equal (Heteroskedasticity)

Table 5: Heteroskedasticity Test

	Value	df	Probability
Likelihood ratio	248.8360	20	0.0942
LR test summary:			
	Value	df	
Restricted LogL	-153.4455	296	
Unrestricted LogL	-29.02747	296	

Source: E-View 10 Output (2023)

Table 5 shows the results of the panel cross-section Heteroskedasticity regression test. The decision rule for the panel cross-section Heteroskedasticity test is stated thus:

The null hypothesis of the test states that there is no Heteroskedasticity, while the alternate hypothesis states that there is Heteroskedasticity. The null hypothesis is not to be accepted if the P value is greater than 5% level of significance. From the result in table 5 above with a ratio value of 248.8360 and a corresponding probability value of 0.0942 which is greater than 5%, the study therefore posits that, there is no reason to reject the null hypothesis. Consequently, based on the diagnostic probability 0.0942 the null hypothesis is not rejected, thus there is homoskedasticity, indicating that residuals are homoskedastic and as such the samples give a true reflection of the population.

Hausman Test

The Hausmann specification test is a model specification test used in panel data analysis to select between fixed and random effects models. Because the datasets utilised in this investigation were panel, both fixed and random effects regressions were performed. A Hausmann specification test was then used to choose between the fixed-effects and random-effects regression models. This test determined if the error term was connected to the regressor. As a result, the decision rule for the Hausmann specification test is presented at a 5% level of significance:

H_0: Random effect is more appropriate for the Panel Regression analysis

H_1: Fixed effect is more appropriate for the Panel Regression analysis

As previously stated, if the p-value is less than 0.05, the null hypothesis is rejected. According to the null hypothesis, fixed effects are best suited for panel regression analysis (that is, the preferred model is the random effects). Similarly, if the p-value is less than 0.05, the null hypothesis is rejected. As a result, fixed effects are best suited for panel regression analysis (meaning we reject the random effects model)

Table 6: Hausman Specification Test.

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.975790	3	0.5774

Source: E-View 10 Output (2023)

The result of the Hausman test appended in the table above does not provide sufficient evidence to reject this null hypothesis at 5% level of significance as can be seen that the probability value (0.5774) of the test is greater than the critical value of 0.05. Therefore, the study upholds that difference in coefficients is not systematic and hence, the random effect model is the most appropriate models for the study. It is imperative therefore, to proceed to another test which is the Langranger Multiplier test, which will indicate the appropriateness or otherwise of using the pooled effect model or the random effect model.

Breusch-Pagan and Lagranger Multiplier Test

In panel data analysis, the Lagranger multiplier test is used to select between pooled and random effects models. Because the dataset was a panel, both pooled and random effects regression analyses were done. The optimum model among the pooled-effects and random-effects regression models was then determined using a Breusch-Pagan Lagrangian multiplier test. At a 5% significance level, the decision rule for the Breusch-Pagan Lagrangian multiplier test is provide:

H_0: Pooled effect is not appropriate for the Panel Regression analysis

H_1: Random effect is most appropriate for the Panel Regression analysis

As previously stated, if the p-value is less than 0.05 the decision rule is to reject the null hypothesis which states that pooled effect is most appropriate for the Panel Regression analysis (meaning that the preferred model is random effects). Similarly, if the p-value is greater than 0.05 the decision rule is to accept the null

hypothesis which states that pooled effect is most appropriate for the Panel Regression analysis (meaning that the random effect model is to be rejected).

Table 7: Breusch-Pagan Langranger Multiplier Test

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	283.2350	190	0.0000

Source: E-View 10 Output (2023)

Based on the probability value of the Breusch-Pagan Langranger Multiplier Test at probability value of 0.0000, the null hypothesis is rejected, thus random effect is most appropriate when compared to pooled effect.

Test of Research Hypotheses

Table 8: Random Effect Regression Result

Dependent Variable: ROA				
Method: Panel EGLS (Cross-section random effects)				
Date: 09/25/23 Time: 15:39				
Sample: 2008 2022				
Periods included: 15				
Cross-sections included: 20				
Total panel (balanced) observations: 300				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.165260	0.228730	0.722511	0.4706
MA	2.11E-10	1.87E-10	1.126290	0.2610
IER	0.090931	0.211564	0.429807	0.6676
FSZ	-7.55E-05	0.030654	-0.002464	0.9980
	Effects Specification			
			S.D.	Rho
Cross-section random			0.161001	0.1529
Idiosyncratic random			0.378988	0.8471
	Weighted Statistics			
R-squared	0.464799	Mean dependent var		0.104646
Adjusted R-squared	0.445587	S.D. dependent var		0.377335

S.E. of regression	0.378331	Sum squared resid		42.36787
F-statistic	0.475830	Durbin-Watson stat		1.853216
Prob(F-statistic)	0.699344			

Source: E-View 10 Output (2023)

Table 9 revealed and analyses the panel random regression results of the explained variable proxied by ROA as well as the explanatory variables MA, IER and FSZ. Between the R^2 and the adjusted R^2, there is a range of values 46% and 44% respectively. The variation in the dependent variable (ROA) as a result of change in the independent variables is explained by the R^2 of 46%. Therefore, it can be concluded that the independent variables have a combined predictive power of influencing on the financial performance of listed non-financial firms in Nigeria, with the remaining 54% been explained by other factors not included in the model. Furthermore, the regression results as presented above reveals an intercept of (0.165260) which is positive. This simply implies that when other variable are held constants, the financial performance of listed non-financial firms increases by 0.165260. The result of the constant is statistically insignificant, as indicated by a P-value of 0.4706. In terms of residual test, the model is free from serial correlation as revealed by the Durbin-Watson statistic of 1.85 is within the acceptable range of 1.5 to 2.0 for a sample of at least 50 observations

Table 9 described that the coefficient of the variable MA was 2.11 with a p-value of 0.2610 (>0.05). It can be deduced that misappropriation of assets has a positive and insignificant effect on the financial performance of listed non-financial firms which provide support for the null hypothesis.

Also, the second hypothesis revealed that the coefficient of the variable IER was 0.09 with a p-value of 0.6676 (<0.05). It can be deduced that improper expenses recognition has a positive and significant effect on the financial performance of listed non-financial firms which provide support for the null hypothesis. Finally, it is evidence from the control variable that firm size has a positive and statistical insignificant effect on the financial performance of listed non-financial firms in Nigeria.

DISCUSSION OF FINDINGS

The study empirically assesses the effect of misappropriation of assets and improper assets recognition on financial performance of listed non-financial firms in Nigeria. The result of the analysis as recorded above revealed that misappropriation of assets has positive and insignificant effect on financial performance of listed non-financial firms. This implies that while there is a relationship between misappropriation of assets and financial performance, it is not strong enough or statistically significant to draw a meaningful conclusion. In other words, the misappropriation of assets does not appear to be a major driver of financial performance for these listed non-financial firms. This study is in tandem with the study of Chinedu (2020) while it disagrees with the study of Smith (2022) and Ibrahim (2019).

It is evidenced also from the second hypothesis that a positive and insignificant effect exists between improper assets recognition and financial performance of listed non-financial firms. The research outcome congruent with the apriori expectation. The statement implies that, while improper assets recognition may be an accounting issue that needs to be corrected for accuracy and compliance reasons, it does not necessarily distort the overall picture of a firm's financial performance in the study area. If improper assets recognition had a significant effect on financial performance, it could mislead investors and creditors and affect their decisions. This study concord with the study of Isa and Awalludin (2020) but disagrees with the study of Adeniyi and

Olatunde (2019) and Davis (2022).

CONCLUSION AND RECOMMENDATIONS

The study evaluated the effect of misappropriation of assets and improper assets recognition on financial performance of listed non-financial firms in Nigeria. Based on the study findings reached through the study objectives guided by the study hypotheses, the following conclusion were made; the study affirmed that misappropriation of assets and improper expenses recognition has no significant effect on financial performance of listed non-financial firms. In essence, the statement that misappropriation of assets and improper expenses recognition has no significant effect on a firm's financial performance implies that, based on the available data and analysis, this misconduct does not appear to be a primary driver of financial success or failure for the firm. However, this conclusion should be interpreted cautiously and periodically reevaluated in light of changing circumstances and business conditions. Therefore, based on the findings of this study, the following recommendations are made for efficient financial performance of listed non-financial firms on the Nigeria Exchange Group;

i.   Listed non-financial firms should encourage a mindset of continuous improvement throughout the organization and seek opportunities to optimize operations and financial performance, even if misappropriation is not a significant issue.

ii.   While improper assets recognition may not have a substantial effect on financial performance, it is crucial to maintain strong internal controls to ensure accurate financial reporting and compliance with accounting standards. It is recommended that firms continue to invest in and improve their internal control systems to detect and prevent errors in assets recognition.

REFERENCES

1. Abdullahi, R. & Mansor, N. (2015). Concomitant Debacle of Fraud Incidences in the Nigeria Public Sector: Understanding the Power of Fraud Triangle Theory. International Journal of Academic Research in Business and Social Sciences, 5(5), 312-326.
2. ACFE. (2018). Report to the nation 2018 global study on occupational fraud and abuse. Association of Certified Fraud Examiner.
3. Adeniyi, S. I. & Aderobaki, V. A. (2021). The effect of debt level, long term debt and debt – equity level on financial performance of list agricultural firms on the Nigeria stock exchange. Journal of Contemporary Issues in Accounting, 1(1), 17-28.
4. Adenugba, A. A., Ige, A. A. & Kesinro, O. R. (2016). Financial leverage and firm's value: A study of selected firms in Nigeria. European Journal of Research and Reflection in Management Sciences, 4(1), 14-32.
5. 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.
6. Agbaje, W. H., & Oloruntoba, S. R. (2018). The effect that forensic auditing has on fraud control in the EFCC Enugu state of Nigeria. European Journal of Business and Management 10(9), 1-17.
7. Ahmadu, M. S. (2016). Effects of financial leverage on firms' performance. Journal of Accounting and Finance, 15(6), 57-65
8. Akinyomi, O. J. & Olagunju, G. (2013). Effect of capital structure on firm performance: Evidence from Nigeria manufacturing industry. International Journal of Innovation   research and studies, 2(9),

1-13.

9. Aniefor, S. J. & Onatuyeh, A. E. (2020). Effect of debt financing on the corporate performance: A study of listed consumer goods firms in Nigeria. International Journal of Academic Accounting, Finance & Management Research. 3(5), 26-34.

10. Arumona, J. O., Erin, O., Eriki, E. & Jacob, A. (2017) studied the impact of Enterprise Risk Management ERM) on financial performance in the emerging market with special focus on the Nigerian financial sector. International Journal of Management, Accounting and Economics, 4(9), 54-63.

11. Davis, S. (2022). The Effect of Improper Expenses Recognition on Financial Performance: An Empirical Analysis. Journal of Accounting and Finance, 30(1), 78-95.

12. Epps, R. W., & Cereola, S. J. (2008). Do institutional shareholder services (ISS) corporate governance ratings reflect a company's operating performance? Critical Perspectives on Accounting, 19, 1138-48.

13. Faboyede, S. O., Enyi, P. & Dick O. M. (2021). The accountability in the financial statements of Nigerian banks. Academy of Accounting and Financial Studies Journal, 25(4), 1-17.

14. Falope, O. L. & Ajirole, O. T. (2019) Working capital management and corporate profitability: Evidence from panel data analysis of selected quoted companies in Nigeria, Research Journal of Business Management, 3(2), 73 – 84.

15. Hussaini, B., Noor, A. A. & Hasnah, S. (2018). The influence of auditor brand name proxied by the Big4 auditors on financial reporting fraud represented by discretionary accruals Journal of Advanced Research in Business and Management Studies. 11, (1), 84-94.

16. Ibironke, E. O. (2019). The effect of internal audit quality on corruption in Nigerian public sector. Amity Journal of Corporate Governance 4 (1), 1-14.

17. Imagbe, V. U., Abiloro, T. O., & Saheed, G. A. (2019). Fraud diamond and financial crimes in Nigerian banking industries. International Journal of Academic Research in Accounting, Finance and Management Sciences, 9(4), 294-303.

18. Inekwe, E. (2021). The likelihood of fraudulent financial reporting among the listed companies in Nigeria. International Journal of Business and Management Review, 6(2), 65-81.

19. Isa, N. F., Awalludin, N. R. (2020). Detection of Fraudulent Financial Reporting using Ratio Analysis. The Asian Journal of Professional and Business Studies, 1(1), 53-67.

20. Jasch, C. (2013). The use of environmental management accounting (ECD) for identifying environmental costs. Journal of Cleaner Production, 11(3), 2-15.

21. Kumarudin, K. A., Adibah, W. I., Hanim, W. (2012). The relationship between firms's financial reporting behavior and engagement in corporate fraud. Procedia Social and Behavioral Sciences 6 (5), 638 – 643.

22. Ogoun, S. & Owota, G. P. (2019). The effect of audit committee characteristics, as a sub-system of the corporate governance framework, on fraudulent financial reporting. The International Journal of Business & Management. 7(12), 105-113.

23. Okoye, E. I. & Gbegi, D. O. (2013). The impact of fraud and related financial crimes on growth and development of Nigerian economy. Kuwait Chapter of Arabian Journal of Business and Management Review, 2 (7), 23-27.

24. Okunbor, J. A., & Dabor, E. L. (2018). Firm's market structure and financial reporting quality in Nigeria Quoted Companies. Asian Journal of Economics, Business and Accountancy, 9(1), 1-14.

25. Olukayode, T. O. (2018). Forensic accounting investigation techniques and successful prosecution of corruption cases in Nigeria. European Journal of Scientific Research 29(2), 183-187.

26. Omoolorun, A. J., & Abilogun, T. O. (2017). Fraud free financial report: A conceptual review. International Journal of Academic Research in Accounting, Finance and Management Sciences, 7(4), 83-94.

27. Russ, M. (2005). Antecedents and consequences of failed governance: the Enron example, Corporate Governance: The international journal of business in society, 5(2), 21-29.

28. Sabau, I. (2013). Creative Accounting-The Result of Pressures from Users. Analele Facultăţii de Ştiinţe Economice a Universităţii Tibiscus, 20(1), 1-10.

29. Suffian, M. T. M., Mad, S., Rashid, M. Z. A., & Zakaria, N. B. (2022). Assessing the Impact of Corporate Fraud on Firm Performance in Malaysian Tourism Sector: Pre- and During Covid-19 Pandemic. International Journal of Academic Research in Economics and Management and Sciences, 11(1), 16–27.

30. Suhaily, H. & Rashidah, A. I. (2014). Determinants of fraudulent financial reporting: Evidence from Malaysia. Jurnal Pengurusan 4(2), 103 – 117.

31. Temile, S. O. Enaruna, D. V., Dadang, P. J. & Biatna, D. T. (2021). The manipulation of accounting figures and the financial performance of listed firms in Nigeria. European Journal of Accounting, Finance and Investment. 7(10), 12-31.

32. Tukur, G., & Abubakar, B. (2014). Corporate board diversity and financial performance of insurance companies in Nigeria: An application of panel data approach. Asian Economic and Financial Review, 4(2) 12-19.

33. Uwuigbe, O. R., Olorunshe, U., Ozordi, E., Asiriuwa, O., Asaolu, T. & Erin, O. (2019). Corporate governance and financial statement fraud among listed firms in Nigeria. Earth and Environmental Science 331 (9), 20 – 55.

34. Yulistyawti, A. K., Suardikha, S. M., & Sudana, P. I. (2019). The analysis of the factor that causes fraudulent financial reporting with fraud diamond. Jurnal Akuntansin Dan Auditing Indonesia, 23(1), 1-10.

35. Zeitun, R. & Tian, G. (2007). Capital structure and corporate performance: evidence from Jordan. Australian Accounting and Finance Journal, 1(4), 40-67.

APPENDIX

Data Presentation

FIRM	CODE	YEAR	ROA	MA	IER	FSZ
11 Plc	1	2008	0.042	33,650,852	0.216	5.431
11 Plc	1	2009	0.213	54,356,361	0.208	6.519
11 Plc	1	2010	0.231	43,698,056	0.209	6.026
11 Plc	1	2011	0.234	41,855,597	0.271	6.622
11 Plc	1	2012	0.205	39,169,330	0.255	7.431

11 Plc	1	2013	0.319	40,465,910	0.206	7.526
11 Plc	1	2014	0.129	41,027,271	0.175	7.610
11 Plc	1	2015	0.090	43,439,018	0.179	7.692
11 Plc	1	2016	0.132	47,692,034	0.162	7.733
11 Plc	1	2017	0.101	57,774,357	0.142	7.790
11 Plc	1	2018	0.132	(1,479,711)	0.459	7.873
11 Plc	1	2019	0.117	(1,240,852)	0.328	7.849
11 Plc	1	2020	0.097	11,058,334	0.218	7.960
11 Plc	1	2021	0.073	17,527,937	0.241	7.969
11 Plc	1	2022	0.080	15,954,356	0.125	7.640
Academy Press Plc	2	2008	0.518	17,114,310	0.170	4.028
Academy Press Plc	2	2009	0.086	15,853,244	0.313	5.839
Academy Press Plc	2	2010	0.067	17,617,231	0.248	6.032
Academy Press Plc	2	2011	0.080	19,570,304	0.224	6.116
Academy Press Plc	2	2012	0.026	23,142,503	0.182	6.374
Academy Press Plc	2	2013	-0.026	140,022,253	0.084	6.451

Academy Press Plc	2	2014	0.030	154,467,306	0.104	6.550
Academy Press Plc	2	2015	0.018	167,722,696	0.069	6.579
Academy Press Plc	2	2016	-0.016	185,717,245	0.051	6.572
Academy Press Plc	2	2017	0.298	264,377,422	0.035	6.547
Academy Press Plc	2	2018	0.450	333,094,631	0.024	6.474
Academy Press Plc	2	2019	0.296	311,534,777	0.044	6.437
Academy Press Plc	2	2020	0.195	340,314,880	0.043	6.425
Academy Press Plc	2	2021	0.291	415,954,103	0.040	6.418
Academy Press Plc	2	2022	0.090	501,873,154	0.039	6.721
Afromedia Plc	3	2008	0.155	443,494,583	0.164	5.022
Afromedia Plc	3	2009	0.253	533,984,898	0.180	5.682
Afromedia Plc	3	2010	0.296	640,760,184	0.175	5.018
Afromedia Plc	3	2011	0.200	740,941,867	0.130	5.036
Afromedia Plc	3	2012	0.178	832,606,591	0.110	6.944
Afromedia Plc	3	2013	0.175	899,065,537	0.102	6.639
Afromedia Plc	3	2014	0.228	120,869,185	0.124	6.623

Afromedia Plc	3	2015	0.362	189,157,726	0.133	6.557
Afromedia Plc	3	2016	0.321	181,824,267	0.138	6.362
Afromedia Plc	3	2017	0.296	169,426,592	0.121	6.333
Afromedia Plc	3	2018	0.245	5,040,595	0.006	6.264
Afromedia Plc	3	2019	0.059	5,454,279	0.051	6.333
Afromedia Plc	3	2020	0.073	5,274,072	0.045	6.324
Afromedia Plc	3	2021	0.057	3,104,476	0.032	6.320
Afromedia Plc	3	2022	0.090	2,793,457	0.485	6.592
Aluminium Extrusion Indus	4	2008	0.029	5,560,788	0.351	5.027
Aluminium Extrusion Indus	4	2009	0.047	7,030,913	0.162	5.217
Aluminium Extrusion Indus	4	2010	-0.069	6,111,928	0.070	5.519
Aluminium Extrusion Indus	4	2011	0.005	11,325,614	0.062	5.878
Aluminium Extrusion Indus	4	2012	-0.161	10,222,960	0.067	6.089
Aluminium Extrusion Indus	4	2013	0.062	217,347,825	0.233	6.206
Aluminium Extrusion Indus	4	2014	-0.225	253,668,598	0.242	6.227
Aluminium Extrusion Indus	4	2015	0.128	55,627,406	0.279	6.244

Page 697

Aluminium Extrusion Indus	4	2016	0.080	59,368,103	0.278	6.265
Aluminium Extrusion Indus	4	2017	0.177	87,253,137	0.209	6.582
Aluminium Extrusion Indus	4	2018	0.244	204,062,484	0.179	6.354
Aluminium Extrusion Indus	4	2019	0.274	223,765,068	0.204	6.398
Aluminium Extrusion Indus	4	2020	0.315	150,462,243	0.271	6.394
Aluminium Extrusion Indus	4	2021	0.300	147,400,702	0.245	6.409
Aluminium Extrusion Indus	4	2022	0.263	177,116,243	0.255	6.620
Ardova Plc (Forte Oil)	5	2008	0.240	319,532,847	0.252	5.203
Ardova Plc (Forte Oil)	5	2009	0.143	362,913,698	0.258	5.093
Ardova Plc (Forte Oil)	5	2010	-0.185	511,439,433	0.264	5.938
Ardova Plc (Forte Oil)	5	2011	0.086	513,775,503	0.274	6.546
Ardova Plc (Forte Oil)	5	2012	-0.105	561,842,234	0.265	7.655
Ardova Plc (Forte Oil)	5	2013	0.124	593,886,866	0.257	7.629
Ardova Plc (Forte Oil)	5	2014	0.036	574,811,669	0.280	8.020
Ardova Plc (Forte Oil)	5	2015	0.066	566,173,140	0.300	8.144
Ardova Plc (Forte Oil)	5	2016	0.200	613,113,872	0.266	8.085

Ardova Plc (Forte Oil)	5	2017	0.220	667,706,031	0.282	8.148
Ardova Plc (Forte Oil)	5	2018	0.122	261,415,160	0.040	8.168
Ardova Plc (Forte Oil)	5	2019	0.128	326,158,695	0.058	8.151
Ardova Plc (Forte Oil)	5	2020	0.323	329,468,281	0.060	7.672
Ardova Plc (Forte Oil)	5	2021	0.471	330,603,088	0.069	7.812
Ardova Plc (Forte Oil)	5	2022	0.396	343,966,532	0.057	8.193
Associated Bus Company	6	2008	0.638	461,877,902	0.045	5.092
Associated Bus Company	6	2009	0.260	483,295,607	0.044	6.111
Associated Bus Company	6	2010	0.180	470,536,967	0.051	6.409
Associated Bus Company	6	2011	0.264	473,166,521	0.058	6.501
Associated Bus Company	6	2012	0.201	488,373,808	0.048	6.705
Associated Bus Company	6	2013	0.264	157,557,871	0.182	6.698
Associated Bus Company	6	2014	0.233	184,108,607	0.294	6.751
Associated Bus Company	6	2015	0.024	189,071,550	0.329	6.809
Associated Bus Company	6	2016	0.251	178,382,907	0.338	6.777
Associated Bus Company	6	2017	0.017	176,637,163	0.372	6.636

Page 699

Associated Bus Company	6	2018	0.008	190,904,951	0.310	6.650
Associated Bus Company	6	2019	-0.119	247,560,747	0.251	6.660
Associated Bus Company	6	2020	-0.118	255,336,821	0.250	6.711
Associated Bus Company	6	2021	-0.068	204,604,903	0.303	6.769
Associated Bus Company	6	2022	-0.059	244,948,438	0.228	6.872
B.O.C Gases Nig	7	2008	-0.034	7,449,772	0.246	4.027
B.O.C Gases Nig	7	2009	-0.041	13,038,228	0.242	5.918
B.O.C Gases Nig	7	2010	0.956	15,439,025	0.231	5.317
B.O.C Gases Nig	7	2011	0.333	15,734,211	0.250	6.052
B.O.C Gases Nig	7	2012	0.663	17,810,370	0.247	6.350
B.O.C Gases Nig	7	2013	-0.621	17,628,229	0.187	6.423
B.O.C Gases Nig	7	2014	-0.609	20,465,841	0.188	6.460
B.O.C Gases Nig	7	2015	-3.913	19,865,295	0.222	6.534
B.O.C Gases Nig	7	2016	0.246	31,945,956	0.224	6.507
B.O.C Gases Nig	7	2017	-0.769	46,479,821	0.130	6.560
B.O.C Gases Nig	7	2018	-0.202	20,033,429	0.207	6.628

B.O.C Gases Nig	7	2019	-0.142	21,019,335	0.218	6.652
B.O.C Gases Nig	7	2020	0.356	20,730,229	0.223	6.702
B.O.C Gases Nig	7	2021	0.264	25,488,705	0.222	6.734
B.O.C Gases Nig	7	2022	0.150	35,064,678	0.204	7.045
Berger Paints Nig	8	2008	0.230	47,000,050	0.185	6.023
Berger Paints Nig	8	2009	-0.459	46,584,126	0.200	6.251
Berger Paints Nig	8	2010	0.123	51,603,320	0.197	6.304
Berger Paints Nig	8	2011	0.137	59,719,121	0.191	6.393
Berger Paints Nig	8	2012	0.304	58,123,060	0.170	6.427
Berger Paints Nig	8	2013	0.686	93,530,572	0.157	6.463
Berger Paints Nig	8	2014	0.842	104,202,536	0.167	6.549
Berger Paints Nig	8	2015	0.465	103,655,795	0.737	6.561
Berger Paints Nig	8	2016	0.788	98,543,630	0.720	6.591
Berger Paints Nig	8	2017	0.425	92,461,890	0.157	6.613
Berger Paints Nig	8	2018	0.709	109,351,471	0.149	6.635
Berger Paints Nig	8	2019	0.988	109,957,055	0.227	6.657

Berger Paints Nig	8	2020	0.566	98,710,613	0.237	6.705
Berger Paints Nig	8	2021	0.031	74,305,989	0.281	6.697
Berger Paints Nig	8	2022	0.858	93,231,496	0.235	6.781
Beta Glass Company	9	2008	0.263	2,685,921	0.078	6.092
Beta Glass Company	9	2009	0.784	3,461,296	0.083	6.637
Beta Glass Company	9	2010	0.090	4,411,757	0.058	6.032
Beta Glass Company	9	2011	0.905	2,996,641	0.080	7.281
Beta Glass Company	9	2012	0.619	3,250,394	0.062	7.256
Beta Glass Company	9	2013	0.159	3,184,840	0.056	7.351
Beta Glass Company	9	2014	0.562	3,091,520	0.044	7.434
Beta Glass Company	9	2015	0.535	2,372,645	0.210	7.430
Beta Glass Company	9	2016	0.905	2,188,573	0.121	7.434
Beta Glass Company	9	2017	0.332	1,787,313	0.441	7.521
Beta Glass Company	9	2018	0.343	144,286,055	0.207	7.582
Beta Glass Company	9	2019	0.824	171,060,560	0.218	7.664
Beta Glass Company	9	2020	0.383	164,237,350	0.223	7.717

Beta Glass Company	9	2021	0.290	180,958,904	0.222	7.732
Beta Glass Company	9	2022	0.392	208,388,975	0.204	7.892
Cadbury Nig	10	2008	0.754	225,406,035	0.185	6.027
Cadbury Nig	10	2009	0.808	255,562,934	0.200	6.843
Cadbury Nig	10	2010	0.956	284,615,058	0.197	6.682
Cadbury Nig	10	2011	0.333	314,694,006	0.191	6.834
Cadbury Nig	10	2012	0.666	61,513,012	0.170	7.527
Cadbury Nig	10	2013	0.621	(1,036,676)	0.216	7.604
Cadbury Nig	10	2014	0.093	(983,879)	0.208	7.635
Cadbury Nig	10	2015	-0.913	(1,163,407)	0.209	7.460
Cadbury Nig	10	2016	0.246	(1,096,704)	0.271	7.454
Cadbury Nig	10	2017	-0.791	(356,502)	0.255	7.453
Cadbury Nig	10	2018	0.202	(920,064)	0.206	7.454
Cadbury Nig	10	2019	0.123	(2,228,492)	0.175	7.440
Cadbury Nig	10	2020	0.566	(2,194,913)	0.179	7.459
Cadbury Nig	10	2021	0.031	(699,746)	0.162	7.521

Cadbury Nig	10	2022	0.858	1,185,335	0.142	7.610
Champion Breweries	11	2008	0.263	20,039,356	0.459	6.574
Champion Breweries	11	2009	0.784	24,577,724	0.328	6.792
Champion Breweries	11	2010	0.090	12,749,451	0.218	6.039
Champion Breweries	11	2011	0.905	12,285,297	0.241	6.033
Champion Breweries	11	2012	0.619	11,056,733	0.125	6.843
Champion Breweries	11	2013	0.159	11,742,791	0.170	6.832
Champion Breweries	11	2014	0.562	12,676,146	0.313	6.961
Champion Breweries	11	2015	0.535	13,566,235	0.248	6.982
Champion Breweries	11	2016	0.905	13,549,523	0.224	7.014
Champion Breweries	11	2017	0.332	13,636,354	0.182	6.998
Champion Breweries	11	2018	0.343	3,430,000	0.084	7.004
Champion Breweries	11	2019	0.824	4,608,386	0.104	7.021
Champion Breweries	11	2020	0.639	5,870,431	0.069	7.041
Champion Breweries	11	2021	0.222	7,121,637	0.051	7.056
Champion Breweries	11	2022	0.267	7,670,880	0.035	7.893

Chellarams	12	2008	0.259	8,135,460	0.024	6.043
Chellarams	12	2009	0.326	7,935,532	0.044	6.632
Chellarams	12	2010	0.109	8,031,796	0.043	6.503
Chellarams	12	2011	0.233	8,042,994	0.040	7.010
Chellarams	12	2012	0.024	9,219,643	0.039	7.037
Chellarams	12	2013	0.251	46,269,159	0.164	7.169
Chellarams	12	2014	0.017	53,817,512	0.180	7.188
Chellarams	12	2015	0.008	58,526,202	0.175	7.225
Chellarams	12	2016	0.436	66,386,057	0.130	7.265
Chellarams	12	2017	0.235	74,584,750	0.110	7.141
Chellarams	12	2018	0.120	99,207,358	0.102	7.126
Chellarams	12	2019	0.543	107,180,126	0.124	7.120
Chellarams	12	2020	0.234	118,082,942	0.133	7.102
Chellarams	12	2021	0.119	125,302,900	0.138	6.980
Chellarams	12	2022	0.118	129,830,169	0.121	6.356
Chemical & Allied Product	13	2008	0.068	17,253,299	0.006	5.382

Chemical & Allied Product	13	2009	0.059	18,950,996	0.051	6.002
Chemical & Allied Product	13	2010	0.034	22,194,742	0.045	6.049
Chemical & Allied Product	13	2011	0.041	26,045,438	0.032	6.392
Chemical & Allied Product	13	2012	0.956	30,153,349	0.485	6.487
Chemical & Allied Product	13	2013	0.333	32,577,873	0.351	6.459
Chemical & Allied Product	13	2014	0.663	33,315,264	0.162	6.482
Chemical & Allied Product	13	2015	-0.621	34,641,998	0.070	6.489
Chemical & Allied Product	13	2016	-0.609	33,732,002	0.062	6.533
Chemical & Allied Product	13	2017	-0.913	30,686,788	0.067	6.692
Chemical & Allied Product	13	2018	0.246	1,353,145	0.233	6.700
Chemical & Allied Product	13	2019	-0.769	1,605,717	0.242	6.800
Chemical & Allied Product	13	2020	0.183	1,773,912	0.279	6.830
Chemical & Allied Product	13	2021	0.115	1,480,063	0.278	6.931
Chemical & Allied Product	13	2022	0.053	1,250,937	0.209	7.321
Conoil	14	2008	0.013	1,239,578	0.179	6.043
Conoil	14	2009	0.031	1,174,262	0.204	6.873

Conoil	14	2010	0.074	1,150,712	0.271	7.245
Conoil	14	2011	0.249	2,768,993	0.245	7.691
Conoil	14	2012	0.267	2,787,771	0.255	7.791
Conoil	14	2013	0.290	9,834,229	0.252	7.920
Conoil	14	2014	0.322	9,347,922	0.258	7.916
Conoil	14	2015	0.430	7,478,808	0.264	7.937
Conoil	14	2016	0.402	8,003,253	0.274	7.841
Conoil	14	2017	0.445	11,689,943	0.265	7.844
Conoil	14	2018	0.364	75,908,375	0.257	7.798
Conoil	14	2019	0.258	82,789,543	0.280	7.785
Conoil	14	2020	0.494	66,528,350	0.300	7.803
Conoil	14	2021	0.293	62,129,120	0.266	7.689
Conoil	14	2022	0.886	65,939,051	0.282	8.932
Dangote Cement	15	2008	0.654	97,525,226	0.040	7.039
Dangote Cement	15	2009	0.373	112,359,185	0.058	8.374
Dangote Cement	15	2010	0.558	171,964,263	0.060	8.032

Dangote Cement	15	2011	0.511	172,321,503	0.069	8.472
Dangote Cement	15	2012	0.055	165,805,542	0.057	8.721
Dangote Cement	15	2013	-0.300	178,150,934	0.045	8.828
Dangote Cement	15	2014	0.175	166,644,184	0.044	8.926
Dangote Cement	15	2015	0.209	167,564,562	0.051	8.993
Dangote Cement	15	2016	0.203	161,150,877	0.058	9.046
Dangote Cement	15	2017	0.158	172,139,303	0.048	9.184
Dangote Cement	15	2018	0.052	80,016,501	0.182	9.222
Dangote Cement	15	2019	0.143	93,523,520	0.294	9.229
Dangote Cement	15	2020	0.093	98,943,111	0.172	9.241
Dangote Cement	15	2021	0.365	96,653,666	0.269	9.306
Dangote Cement	15	2022	-0.098	100,244,139	0.168	9.578
Flour Mills of Nigeria	16	2008	-0.240	18,115,699	0.094	6.058
Flour Mills of Nigeria	16	2009	0.969	11,446,296	0.027	7.053
Flour Mills of Nigeria	16	2010	0.051	13,829,273	0.026	7.043
Flour Mills of Nigeria	16	2011	0.682	14,636,890	0.065	8.032

Flour Mills of Nigeria	16	2012	0.357	15,987,794	0.079	8.213
Flour Mills of Nigeria	16	2013	0.691	40,352,504	0.069	8.367
Flour Mills of Nigeria	16	2014	0.340	46,039,111	0.033	8.448
Flour Mills of Nigeria	16	2015	0.456	45,061,717	0.390	8.473
Flour Mills of Nigeria	16	2016	0.409	48,341,376	0.256	8.535
Flour Mills of Nigeria	16	2017	0.343	41,660,605	0.127	8.538
Flour Mills of Nigeria	16	2018	0.307	42,943,015	0.011	8.684
Flour Mills of Nigeria	16	2019	0.577	87,588,174	0.069	8.611
Flour Mills of Nigeria	16	2020	0.327	89,060,462	0.064	8.620
Flour Mills of Nigeria	16	2021	0.272	73,038,140	0.033	8.636
Flour Mills of Nigeria	16	2022	0.747	74,286,575	0.021	8.026
Glaxosmithkline Nig	17	2008	0.825	3,228,064	0.020	7.048
Glaxosmithkline Nig	17	2009	0.195	3,267,313	0.047	5.392
Glaxosmithkline Nig	17	2010	0.139	3,747,004	0.233	7.083
Glaxosmithkline Nig	17	2011	0.603	3,802,832	0.252	7.049
Glaxosmithkline Nig	17	2012	0.269	4,299,252	0.203	7.254

Glaxosmithkline Nig	17	2013	0.173	4,463,206	0.191	7.338
Glaxosmithkline Nig	17	2014	0.300	4,822,994	0.190	7.419
Glaxosmithkline Nig	17	2015	0.145	5,932,044	0.381	7.447
Glaxosmithkline Nig	17	2016	0.080	8,687,013	0.241	7.496
Glaxosmithkline Nig	17	2017	0.063	12,401,122	0.204	7.450
Glaxosmithkline Nig	17	2018	0.064	6,577,579	0.250	7.423
Glaxosmithkline Nig	17	2019	0.335	6,890,626	0.175	7.196
Glaxosmithkline Nig	17	2020	0.143	6,307,306	0.053	7.272
Glaxosmithkline Nig	17	2021	0.168	7,088,233	0.124	7.375
Glaxosmithkline Nig	17	2022	-0.183	8,046,227	0.183	7.693
Guinness Nig	18	2008	-0.279	11,535,212	0.232	6.048
Guinness Nig	18	2009	0.024	11,893,480	0.185	6.038
Guinness Nig	18	2010	-0.179	11,089,285	0.105	7.832
Guinness Nig	18	2011	0.321	12,719,820	0.123	7.736
Guinness Nig	18	2012	-0.080	14,630,680	0.058	7.965
Guinness Nig	18	2013	-0.489	26,584,929	0.046	8.025

Guinness Nig	18	2014	-0.001	26,584,929	0.044	8.083
Guinness Nig	18	2015	0.842	27,607,313	0.235	8.122
Guinness Nig	18	2016	0.188	26,584,929	0.140	8.087
Guinness Nig	18	2017	0.087	33,792,289	0.132	8.137
Guinness Nig	18	2018	0.257	34,076,230	0.135	8.164
Guinness Nig	18	2019	0.133	33,750,379	0.158	8.185
Guinness Nig	18	2020	0.157	33,816,582	0.013	8.206
Guinness Nig	18	2021	0.202	22,625,192	0.052	8.159
Guinness Nig	18	2022	-0.110	23,045,466	0.028	8.937
Lafarge Cement Wapco Nig	19	2008	0.028	1,137,213	0.023	7.261
Lafarge Cement Wapco Nig	19	2009	0.842	1,183,938	0.025	7.392
Lafarge Cement Wapco Nig	19	2010	-0.783	1,241,581	0.569	7.942
Lafarge Cement Wapco Nig	19	2011	0.688	1,305,603	0.505	8.016
Lafarge Cement Wapco Nig	19	2012	-0.436	1,410,567	0.323	8.183
Lafarge Cement Wapco Nig	19	2013	-0.404	1,427,112	0.149	8.182
Lafarge Cement Wapco Nig	19	2014	0.484	1,423,779	0.263	8.207

Lafarge Cement Wapco Nig	19	2015	-0.304	1,182,145	0.093	8.486
Lafarge Cement Wapco Nig	19	2016	0.239	831,339	0.110	8.656
Lafarge Cement Wapco Nig	19	2017	-0.064	555,806	0.112	8.701
Lafarge Cement Wapco Nig	19	2018	0.086	34,185,562	0.064	8.762
Lafarge Cement Wapco Nig	19	2019	0.250	40,594,801	0.020	8.733
Lafarge Cement Wapco Nig	19	2020	0.321	35,939,643	0.259	8.696
Lafarge Cement Wapco Nig	19	2021	0.415	38,007,074	0.383	8.705
Lafarge Cement Wapco Nig	19	2022	0.104	30,878,075	0.247	8.944
Total Nigeria	20	2008	0.286	44,878,177	0.221	6.840
Total Nigeria	20	2009	0.162	50,220,486	0.171	6.048
Total Nigeria	20	2010	0.021	45,557,630	0.185	7.632
Total Nigeria	20	2011	0.007	29,296,984	0.116	7.696
Total Nigeria	20	2012	0.017	21,386,797	0.096	7.769
Total Nigeria	20	2013	0.009	1,093,934	0.047	7.881
Total Nigeria	20	2014	-0.047	1,082,120	0.075	7.900
Total Nigeria	20	2015	0.216	1,169,736	0.111	7.980

Total Nigeria	20	2016	-0.057	1,162,549	0.094	7.922
Total Nigeria	20	2017	0.104	837,439	0.105	8.136
Total Nigeria	20	2018	0.120	921,213	0.025	8.033
Total Nigeria	20	2019	0.097	2,044,814	0.104	8.122
Total Nigeria	20	2020	0.021	2,195,713	0.091	8.126
Total Nigeria	20	2021	0.063	1,494,380	0.061	8.157
Total Nigeria	20	2022	0.426	1,374,220	0.126	8.823

Source: NGX Fact-Book