Earnings Management and Performance of Nigerian Quoted Manufacturing Companies: The Balanced Scorecard Approach

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Abstract

Globally, the genuineness of reported performance has been put to question in the face of large scale fraud through earnings management which has led to several corporate failures in the past. This study examined the relationship between earnings management and performance of quoted manufacturing companies in Nigeria. The target population consist of 63 manufacturing companies listed on the Nigerian Stock Exchange (NSE) during the study period (2007-2016). A sample of 56 companies that remained continuously listed on the NSE during the study period and that also possess usable data was purposively drawn. The study used secondary data sourced from NSE and annual reports of the companies under consideration. Data were analyzed using descriptive and inferential (Correlation and Multiple regression) statistics. The results revealed that of the three performance measures employed in the study, only inventory turnover (IT) is influenced jointly by AEM and REM moderated by firms' characteristics (F(4, 555) = 3.904, Adj. R² = 0.114, p < 0.05) Meanwhile AEM and REM had Insignificant effect on Net Profit Margin (NPM) (β₁ = 0.0859; t(560) = 0.27, p > 0.05; β₂ = -1.132, t(560) = -1.53, p > 0.05) and Sales Growth (SG) (β₁ = 10.979; t(560) = 0.92, p > 0.05; β₂ = -3.511, t(560) = -0.93, p > 0.05). The study concluded that earnings management shows no evidence of enhancing the performance of Nigerian quoted manufacturing companies. It was recommended that each firm should entrench as part of its process, procedure that guarantee fundamental principles of integrity, objectivity, confidentiality, independence and professional competence and due care as well as due professional behavior within the rank and file of the Organization.

Keywords: Corporate failures, Earnings management, Manufacturing companies, Nigeria, Performance

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**Background to the Study**

The present business atmosphere has witnessed fast and essential change with far reaching results for corporate entities globally. Management responds to aggressive worldwide competition which includes improved quality and risk controlling initiatives, efficient structures and procedures and superior accountability to guarantee more relevant, reliable and timely information for effective decision making and to ensure confidence and trust of the investors of the effectiveness and efficiency in which their investments are utilized (Basioudi, 2014). This response by drivers of economic activities of organizations in preserving their stewardship function emanated from the separation of ownership from management which is the main cause of agency problem has steered a fundamental issue by creating information asymmetry that aided the unscrupulous behaviour of the executives, predominantly in relation to accounting information manipulation.

Explicitly, the agency problem as identified above arises from the existence of information asymmetry and the disparity in information sharing between the shareholders who are the owners of the business and the managers (agents) in the principal – agent contractual relationship (Ejeagbesi, Nweze, Ezeh & Nze 2015). Asymmetric information between the executives and shareholders significantly heightens the unhindered means of accomplishing the practice of earnings management in organizations. The prevalence of asymmetric information creates difficulty for owners of the business (shareholders) to detect earnings management (Okolie, 2014). According to Kashmiri (2014), the company's share value has been revealed to be a good indicator of the future value of its earnings giving the reason why existing and potential investors in publicly quoted companies are more interested in the reports of the earnings of such public organization. This study describes management of earnings as a tactic employed in an organization by the management to purposefully misstate the earnings of the company in order to meet a prearranged target.

The genuineness of reported performance has been put to question in the face of large scale misappropriation of funds and corporate failures globally. Nigeria has had also, its fair share of the destructive pills. Badawi, (2008) and Okolie, (2014) gave a description of those companies that were found to have engaged in different circumstances of accounting scandals as a result of earnings smoothing in the years past. Notable among such scandals are the famous cases of African Petroleum (AP), Cadbury Nigeria Plc, African International Bank, Oceanic Bank Plc, Savannah Bank, Afribank Plc and more recently in 2016 the inconclusive case Stanbic IBTC Bank Plc. The cost of material misstatement as a result of earnings smoothing to investors, the corporate organizations and even the wider society as a whole is colossal. This is made evident in the loss of enormous sums of money every year by investors to fraud and corporate collapse. Bakre (2007) revealed that investors in Nigeria had lost several billions of naira as a result of falsification and deliberate overstatement of companies accounts and consequently led to their failure or got the companies into severe financial and market valuation distress. Subsequently, the myriad of corporate scandals has caused a doubt on the quality of earnings being reported by companies. This has also cast doubt on the reported performance as major collapse of some of these organizations has failed to efficiently restrain earnings management globally in which Nigeria is not an exception (Okolie, 2014).
The gap identified in the literature stems from the application of financial measures. Studies in the field of management accounting have shown that most conventional performance measurement approaches were largely predicated on financial performance measures. It is interesting through, to note that there is few evidence of empirical research known to the researcher that specifically addresses the use of the Balanced Scorecard to measure the performance of firms in relation to earnings management using both accrual based earnings and real activity earnings management in one single model. The present study has therefore contributed some important empirical evidence on the relationship between earnings management and performance of quoted manufacturing companies in Nigeria.

**Literature Review**

**Conceptual Review**

**Earnings Management**

Earning is the company's net profit generated from its activities which has been described as the most imperative element in the financial statements as they are indicative of the level at which the management has utilized the specific resources of the organization during the accounting period (Okolie, 2014). Earnings symbolize the track of allocation of resource in the stock markets as the speculative company's share value is the present value of its future earnings. Thus, an improved earning is an indication of an improvement in the value of the company and vice versa (Okolie, 2014). Giving the relevance of earnings in the financial statements for the purpose of determining the value of a corporate entity, the item has been described as a manipulative tool by the management in order to achieve a predetermined objective (Schipper, 1989). Earnings management can be defined as determined intrusion in the accounting reports with the intention of achieving various selfish interests. Healy and Wahlen (1999) emphasized that “earnings management occurs when management uses judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about underlining economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers,”

**Types of Earnings Management**

There are mainly two types of earnings management employed by management to manipulate earnings: management of earnings through accounting decisions which is known as accounting earnings management or accrual-based earnings management (AEM) and management of earnings through real business decisions or real activities identified as real earnings management (REM) or real activity-based earnings management.

**Accrual-Based Earnings Management**

Generally, accrual is defined as the difference between net income and actual cash flow from operating activities. A fundamental feature of accruals is that they tend to revert over time, which may cause any predetermined earnings management to be entirely unsuccessful when considered in its entirety over a period of time (Dharan, 2003). The implication of this is that executives who adopt accrual earnings management may not depend on accruals alone to present robust earnings. The unsuspecting executives who manipulate accruals are ultimately caught in the web, when the accumulated accrued items consistently continue to wind down
over time, subduing future earnings and hence, share prices. The consequence of this event over a period of time will force managers to account for earnings losses with real cash earnings. Careful examination of the magnitude of reported accruals by companies and analysis of the trend over time, corporate players and analysts are hopeful of identifying organizations that are building up accruals (Dharan, 2003).

The technique of earnings smoothening arises from the use of accounting policies. Accrual method of earnings management occurs in the process of preparing financial statements by the executives. To a greater extent, it involves the discretion of managers in the choice of accounting principles (Kothari, Mizik & Roy Chowdhury, 2012). Because choices of accrual are usually directed by the generally accepted accounting principle such as the U.S GAAP or the International Financial Reporting Standards, Accrual-based earnings management could be detected in some ways through vigorous accounting analysis (Kothari et al., 2012). Accrual-based earnings management has received considerable attentions from majority of scholars (DeAngelo, 1986; Healy, 1985; Jones & Sharma, 2001; Kothari, Leone & Wegsley, 2005).

Current and non-current accruals are the two major forms of accruals. Current accruals arise as the items involved are current assets and current liabilities (Palepu, Healy & Bernard, 2003). The utmost vital long-term accruals are choices in respect of amortization and depreciation charges. Current accruals have been largely employed by most of the studies seeking for the evidence of earnings management (Dechow & Gee, 2006; Sloan, 1996; Spohr, 2004). However, long-term accruals are indispensable when assessing the returns on stock and net income relationship (Loftus & Sin, 1997; Richardson, Sloan, Soliman & Tuna, 2001). Accrual-based earnings management is achieved through accounting policies that executives are permitted to estimate in the course of preparing the financial reports. Accounting policies are set by the regulators and currently; the International Accounting Standard Boards (IASB, 2010) is saddled with the responsibility making changes to the IFRS. Nevertheless, executives are at liberty to choose some certain accounting policies in the context of the law to amend financial statements.

**Real Earnings Management**

The concept of real earnings management (REM) was first introduced by Schipper (1989). Specifically, he described real earnings management as a process of timing financing or investment decisions to manipulate reported earnings. Real earnings management involved real business activities whose effect is directly linked to operating cash-flows. Similarly, Ewert and Wagenhofer (2005) described real earnings management as variations in the structure of real business activities aimed at altering earnings. Roy Chowdhury (2006) also defined real earnings management as deviation from usual operating practices, driven by managers need to deceive some stakeholders into trusting that some specific financial reporting objectives have been achieved in the course of normal operating activities.

In view of the definitions given above, it can be deduced that real earnings management modifies earnings through the mechanisms of timing of real business activities decisions such as operating, investing or financing activities in line with the pre-determined earnings. These
decisions have a direct effect on the operational cash flows and ultimately on the earnings. In summary, executives influence the real operating decisions to satisfy their personal interests which do not translate to a credible and reliable depiction of economic performance of the organization.

**Figure 1:** Description of real earnings management  
**Source:** Sellami, (2015)

**Performance Variables**
In finance literature, performance of firm is basically measured on two basic criteria. Either market base measures are used or accounting measures. Both types of measures have their own bag of advantages and disadvantages and their use depend upon prevailing market conditions and corporate governance environment (Asad, Husnain & Hammad, 2013). Conceivably, both methods represent investors’ returns but are not likely to mirror the total value generated by the company. Equally, huge arrays of metrics have been suggested for management to serve as a yardstick in gauging the improved elements of organizational performance (Kaplan & Norton, 1992). To assess a firm’s overall economic contribution, however, more comprehensive measures are required. One such comprehensive indicator is balanced scorecard.

**Balanced Scorecard as a Measure of Firm Performance**
The Balanced Scorecard (BSC) is a strategic planning and management system used in aligning the activities of the company to its vision and strategy, develop both internal and external communication and observe organizational performance against the set strategic goals. Balanced Scorecard is a performance measurement tool that considers not only financial measures but also customer satisfaction, business process and learning measures (Okello, 2013).
The Financial Perspective: The financial perspective is considered as the most important perspective among the others, particularly in relation to key strategy implementation and assessment of organizations' performance. The financial perspective seeks to answer the question: to succeed financially, how should we appear to our stakeholders? Usually, it occupies the topmost part of the BSC. This is usually actualized through the provisions of the organisations' mission and vision statements and the transformation of financial issues into sustainable goals and minimal cost (Niven, 2011). Ronchetti (2006) argued that the financial perspective, defines financial strategic objectives and financial performance measures that provide evidence of whether or not the company's financial strategy is yielding increased profitability and decreased costs. He further state that this view also captures how the organization must look to customers in order to succeed and achieve the organization's mission; thus, achieving financial strategic objectives is the primary means to realize the company's mission. Banker, (2014), found that increased profitability was only related to increase in repeat business through customer retention and creation of customer loyalty thereby leading to increase in shareholders.

The Customer Perspective: The customer perspective of the balanced scorecard identifies and defines the value proposition for the targeted market segments and measures the company's success in the chosen segments. Understanding of customer satisfaction level may help a company to enhance their customer services thereby increase their sales turnover and revenue as a result of loyalty enjoyed from the customer.

Internal Process Perspective: Internal Process perspective refers to internal business processes and aims at measuring the areas of internal excellence required efficiency and effectiveness in business operations through reduction of cost. The internal processes are a mechanism through which performance expectations are achieved (Amaratunga, Baldry & Sarshar, 2001). Internal process perspective should not be viewed along the traditional aspects of cost; time and quality only but also include effectiveness, efficiency and people who have an interest in it (Kanji & Sa, 2002). In an environment of effective internal business processes, different aspect of internal audit function in an organisation cooperate and collaborate better provide results in cost efficient and timely manner which translates into higher performance delivery as cost is being reduced there will be achievement of profit maximization.

The learning and growth perspective: The learning and growth perspective is the foundation of any strategy and focuses on the intangible assets of an organization, mainly on the internal skills and capabilities that are required to support the value-creating internal processes. In organisations “possible measures are professional growth of associates, internal promotion levels, associate satisfaction, associate retention, associate empowerment, managers and the organization's, training levels and cycle times, cross training levels of associates and line managers, information technology use, access to strategic information, new initiatives explored or implemented, and community participation and knowledge exhibited by general managers” (Denton and White, 2012). An organisation's human capital (its people), can learn and innovate, contributing to organisation's value; that is, the wealth added through people. Developing an organization's human capital contributes to its financial value (Brexanda, 2015).
Earnings Management and Firms' Performance
Managers engage in earnings management in order to maximize their wealth. Reported earnings in financial statement might not accurately reflect the companies' fundamental position, which steadily results to poor earnings quality (Ching et al., 2015). Since investors consider the earnings reported in the financial statements to be significant and beneficial in predicting future returns, alteration in the reported earnings in the financial statements will erode investors' confidence. Thus, the absence of investors' confidence in the earnings reported can negatively affect the market evaluation of the company because the investors are the leading set of people that provide needed capital support to the economic system.

Executives are motivated to involve in earnings manipulation by several incentives. Extant literature on earnings management has debated these incentives under two major headings: opportunistic earnings management and beneficial earnings management. Misstatement of earnings to accomplish some private incentives (management desired goals) comprises opportunistic earnings management and alteration of earnings to actualize stockholders' incentives involves beneficial earnings management (Jiraporn et al., 2008; Rezaei, 2012). Omonuk, (2007) claimed that executives are involved in the management of earnings opportunistically by altering revenues and expenses in differing financial years for the purpose of achieving planned reporting incentives. Succinctly, they apply their freedom of choice in making decisions about financial reports in order to take advantage of an opportunity that amounts to their own benefit (Jiraporn, Miller, Yoon & Kim, 2008). Figure 2 presents earnings management motivations discussed in prior literature.

Figure 2: Motivation for earnings management.
Source: Almasarwah (2015)

Empirical Review
In this study, the relationship between earnings management and firms' performance was estimated with two different metrics for earnings management measurement which include: accrual-based earnings management and real earnings management. While performance was measured employing three out of the Balanced scorecard cardinals namely Net profit margin (Financial), Sales Growth (Customer) and Inventory Turnover (Internal Process).
Prior empirical studies showed a significant but negative association exists between earnings management and firm performance (Ardekani, Younesi & Hashemijoo, 2012; Farooqi, et al., 2014; Kang & Kim, 2011). A sample of 250 firms selected from major 500 companies listed on the Bombay Stock Exchange (BSE) for a period of 4 years, between 2009 and 2012 was used by Gill, Biger and Mand (2013) in investigating earnings management, firm performance, and the value of Indian manufacturing firms, the findings from the multiple regression analysis indicated that the more intense the practice of earnings management, the higher the adverse effect on firm rate of return on assets in the following year. The study also found that the selfish motives of management caused market reaction by lowering share prices and market value of the firms.

Fairfield, Whisenant and Yohn (2003), documented evidence on the impact of earnings management and firm performance by sampling United States companies for a period of 1963-1992 and found that working capital accruals have an inverse correlation with potential profitability. Sayari, Omri, Finet and Harrathi (2013) investigated whether discretionary accruals possess information content on the Tunisian market and tested whether earnings management practices affect stock prices of Tunisian firms. To this end, the methodology used was that of event studies. The study confirms that discretionary accruals allow Tunisian investors to better evaluate firm value and optimally form their stocks portfolios.

The study conducted by Kang (2011) examined if earnings management amplifies the relationship between corporate board governance and performance of firms in Korea by using multivariate regressions of sample of firms listed on the Korea Stock Exchange (KSE) from 2005 to 2007. The result showed a negative relationship between real activity-based earnings management and firm performance. Further empirical evidence showed that a manager's abnormal activities have a significant and negative effect on future performance earnings and cash flow (Gunny, 2005). Kang and Chun (2010) also examined high abnormal real activity among groups that are using portfolios and found that the manager's discretionary activities have a negative influence on the performance of the firm. It was further shown that those negative effects continued until three years after they engaged in real activity-based earnings management. Wei (2008) conducted research on accounting-based earnings management and real activities manipulation. The study documents evidence that firms suspected of real activities manipulation have lower future operating performance relative to firms not suspected of real activities manipulation.

Meanwhile, Aref, Nejat and Muhammed (2012) conducted a research on the relationship between earnings management and performance of acquiring firms in Malaysia during period of 2004-2010. Earnings management measured by discretionary accruals derived from modified Jones model and firm's performance estimated by monthly Cumulative Abnormal Return. The firms used were drawn from both listed cash and share acquirers' firms on Bursa Malaysia in the period of 2004-2010. The results presented a negative relationship between earnings management preceding and performance of firms following the acquisition date for share acquirer firms.
Research Question
In order to achieve the set objectives, this study sought to answer the following question:

1. What is the link between earnings management and performance of Nigerian quoted manufacturing companies?

Rationale and Development of the Hypothesis
Management of earnings is an intentional manipulation of the reported earnings with the aim of achieving certain personal benefits (Ruiz, 2016). Flexibility allowed by Generally Accepted Accounting Practice and because it is expensive to compel and impose more stringent financial reporting guidelines gave chances for such manipulation. Earnings management has been classified into three categories by Dechow and Skinner (2000), these include: Real Earnings Management (REM) otherwise known as fraudulent accounting, accruals management and cash flow earnings management (CFEM). Fraudulent accounting comprises of accounting selections which negate the provision of GAAP; accruals earnings management which entails adoptions within GAAP which attempt to conceal the true economic performance of the company. Real earnings management arises where managers embark on activities that encompass changing a firm’s original operating activities in an attempt to enhance present accounting period earnings (Dechow et al., 2000). However, fraudulent accounting and accrual-based earnings management are actualized by the choice of methods of accounting used to denote the fundamental or principal activities and not altering the actual underlying economic activities of the firm. Prior empirical studies showed a significant but negative association exists between earnings management and firm performance (Ardekani, Younesi & Hashemijoo, 2012; Farooqi, Harris & Ngo, 2014; Kang & Kim, 2011). Fairfield et al. (2003), documented evidence on the impact of earnings management on firm performance by sampling United States companies for a period of 1963-1992 and found that working capital accruals have an inverse correlation with potential profitability.

Ho: There is no significant link between earnings management and firm performance of Nigerian quoted manufacturing companies.

A priori expectation: It is expected that a significant link will exist between earnings management and performance of Nigerian quoted manufacturing companies.

Theoretical Framework
Agency Theory
The separation between owners and managers creates an agency relationship. An agency relationship exists when one or more persons (the principal or principals) hire another person or persons (the agent or agents) as decision-making specialists to perform a service. (Ireland, Hoskisson & Hitt, 2011). Top managers are hired hands who may very likely be more interested in their personal welfare than that of the shareholders (Berle and Means, 1932). Agency problem arises where management emphasises such policies that increase the size of the firm or that diversify the firm into unrelated businesses to the detriment of the
shareholders that result in a reduction of dividends and stock price. Agency theory is related to examining and deciding two problems that are prominent in relationship between principals and (shareholders) and their agents (board of directors): The agency problem that arises when the desires or objectives of the owners and the agents conflict or it is difficult or expensive for the owners to verify what the agent is actually doing. The executives may be more interested in increasing their salary than raising stock dividends (Olowookere, 2008). The principal-agent problem arises when a principal compensates an agent for performing certain act that are useful to the principal and costly to the agent, and where there are elements of the performance that are costly to observe. This is the case to some extent for all contracts that are written in a world of information asymmetry, uncertainty and risk. Wheelen and Hunger (2010) are of the opinion that, the probability that agency problem will occur increases when shares are owned by a large number of dispersed shareholders in which no single investor owns more than a small proportion of the entire issued shares. A similar problem will also arise when the corporate board is composed of persons who know less about the company or who are personal friends of top management, and when a larger percentage of members of the board are executive directors.

Consequently, in order to curtail the possibility of the ethical threat associated with separation of management from control and achieve optimality, principals and agents are involved in contractual agreement including the institution of control procedures such as auditing. The principal and agent connection as portrayed in agency theory is significant in appreciative of how the phenomenon of an auditor has evolved. Agents are appointed by the principals and transfer the authority to make some decisions to them. As a result, agents are entrusted with the resources of the firms by the principals. But asymmetric information between principals and agents has engendered divergent interests. Subsequently, lack of trust in the agents necessitated the initiation of certain control mechanisms, such as the audit, to strengthen this trust (Welch, 2003). Agency theory therefore is an important accountability economic theory which elucidates the development of audit quality.

**Resource Dependence Theory**
The resource dependence theory as propounded by Pfeffer (1972), maintains that the board is an essential link between the firm and the external resources that a firm need to maximize its performance. According to this theory the board is an important strategic resource for the firm in terms of knowledge, contact with the business world, source of capital, new markets/competitors, so that increased diversification on the board is positive for firm performance (Eklund, Palmberg & Wiberg, 2009). According to Eklund et al. (2009), Pfeffer (1972) in the revised edition of the book, holds that resource dependence was originally developed to provide an alternative perspective to economic theories of mergers and board interlocks, and to understand precisely the type of inter-organizational relations that have played such a large role in recent ‘market failures (Pfeffer, 2003). The motivation of those running the organization was to ensure the organization’s survival and to enhance their own autonomy, while also maintaining stability in the organization’s exchange relations. These were the drivers behind many of the organization’s observed actions. Moreover, when it came to explaining strategy, power often trumped profits, an insight distinctly at odds with the
dominant economic approaches of the time. In the same vein, Hillman and Dalziel (2003) proposed an integrated perspective that acknowledges disadvantages in agency theory and that boards operate as resource catalysts for organizations by providing linkages to necessary resources. Hillman et al. (2003) further enunciate the notion of board wealth, which includes human capital (expertise, experience, and reputation) and relational capital. Relational capital is networks and linkages to external constituencies.

Methodology
This study examined the relationship between earnings management and performance of Nigerian quoted manufacturing companies. Ex-post facto research design was adopted. The target population consisted of 63 manufacturing companies listed on the Nigerian Stock Exchange (NSE) during the study period (2007-2016). A sample of 56 companies that remained continuously listed on the NSE during the study period and that also possessed usable data was purposively drawn. Secondary data used were sourced from the annual reports of the companies under consideration. Data were analyzed using descriptive and inferential (Correlation and Multiple regression) statistics. In testing the hypothesis, the following regression model was adapted from the work of Ching et al. (2015):

\[
\begin{align*}
\text{NPM} &= \beta_0 + \beta_{\text{AEM}} \times \text{AEM}_i + \beta_{\text{REM}} \times \text{REM}_i + \beta_{\text{F-SIZE}} \times \text{F-SIZE}_i + \beta_{\text{F-AGE}} \times \text{F-AGE}_i + \epsilon_i \\
\text{SG} &= \beta_0 + \beta_{\text{AEM}} \times \text{AEM}_i + \beta_{\text{REM}} \times \text{REM}_i + \beta_{\text{F-SIZE}} \times \text{F-SIZE}_i + \beta_{\text{F-AGE}} \times \text{F-AGE}_i + \epsilon_i \\
\text{IT} &= \beta_0 + \beta_{\text{AEM}} \times \text{AEM}_i + \beta_{\text{REM}} \times \text{REM}_i + \beta_{\text{F-SIZE}} \times \text{F-SIZE}_i + \beta_{\text{F-AGE}} \times \text{F-AGE}_i + \epsilon_i
\end{align*}
\]

Where:
- \text{AEM} = Accrual-based Earnings Management
- \text{REM} = Real activity-based earnings management
- \text{NPM} = Net Profit Margin
- \text{SG} = Sales Growth
- \text{IT} = Inventory Turnover
- \text{F-SIZE} = Firm Size
- \text{F-AGE} = Firm Age
- \beta_0, - \beta = Coefficient of correlation
- \epsilon = Error term

Variables Definition and Measurement
Independent Variable
The independent variable for the purpose of this work is earnings management which is categorized into:
- i. Accrual-based earnings management (AEM) and
- ii. Real activity-based earnings management (REM)

Accrual-based earnings management (AEM): Many studies have employed different models in measuring accrual-based earnings management (Akhgar, 2015; Arkan, 2015; Beslic, Beslic, Jaksic & Andric 2015). Literature review has shown that the modified Jones model (1991) is the most favoured model when measuring accrual-based earnings management, which is consistent with the study of Dechow and Skimmer (2000). For the purpose of this study
therefore, the modified Jones model (1995) was adopted to measure accrual-based earnings management (AEM). This was achieved through the following steps:

1. Calculating the total accruals by equation:

\[ \text{TAC}_{it} = \text{NI}_{it} - \text{CFO}_{it} \]

Where;
- \( \text{TAC}_{it} \) = Total accruals of firm \( i \) in year \( t \),
- \( \text{NI}_{it} \) = Net income of firm \( i \) in year \( t \),
- \( \text{CFO}_{it} \) = Operating cash flow of firm \( i \) in year \( t \).

2. The study used the parameters of the modified Jones model (1995) through the linear regression model of the sample of selected companies for each year in calculating discretionary accrual as follow:

\[ \frac{\text{TAC}_{it}}{\text{A}_{it-1}} = \alpha_0 + \alpha_1 \left( \frac{1}{\text{A}_{it-1}} \right) + \alpha_2 \left( \frac{\Delta \text{REV}_{it} - \Delta \text{REC}_{it}}{\text{A}_{it-1}} \right) + \alpha_3 \left( \frac{\text{PPE}_{it}}{\text{A}_{it-1}} \right) + \varepsilon_{it} \]

where:
- \( \text{TAC}_{it} \) = Total accruals
- \( \text{A}_{it-1} \) = The book value of total assets for company \( i \) in year \( t-1 \),
- \( \Delta \text{REV}_{it} \) = The change in revenue for company \( i \) between year \( t \) and year \( t-1 \),
- \( \Delta \text{REC}_{it} \) = The change in account receivables for company \( i \) between year \( t \) and year \( t-1 \),
- \( \text{PPE}_{it} \) = The total property, plant and equipment of company \( i \) in year \( t \),
- \( \alpha_{0,1,2,3} \) = Estimated parameters,
- \( \varepsilon_{it} \) = The residuals

And by applying the model above on the companies under consideration for each year of the study (2007–2016), the non-discretionary accruals were then calculated using the equation:

\[ \frac{\text{NDAC}_{it}}{\text{A}_{it-1}} = \bar{\alpha}_1 \left( \frac{1}{\text{A}_{it-1}} \right) + \bar{\alpha}_2 \left( \frac{\Delta \text{REV}_{it} - \Delta \text{REC}_{it}}{\text{A}_{it-1}} \right) + \bar{\alpha}_3 \left( \frac{\text{PPE}_{it}}{\text{A}_{it-1}} \right) \]

Where;
- \( \text{DAC}_{it} = \text{TAC}_{it} - \text{NDAC}_{it} \)

3. Calculating the discretionary accruals by the equation:

\[ \frac{\text{DAC}_{it}}{\text{A}_{it-1}} = \frac{\text{TAC}_{it}}{\text{A}_{it-1}} - \frac{\text{NDAC}_{it}}{\text{A}_{it-1}} \]
Real activity-based earnings management (REM): Roychowdhury (2006), Zang (2006) and Gunny (2005) considered three measures in studying the degree of real earnings management: the cash flow from operating activities abnormal levels, expenses discretionary in nature and costs of production. In this study, cost of production measure was used as a degree of real earnings management and the following model was used to estimate the level of production costs:

\[
\frac{\text{PROD}_{it}}{\text{TA}_{it-1}} = \alpha_0 \frac{1}{\text{TA}_{it-1}} + \alpha_1 \frac{\text{SALE}_{it}}{\text{TA}_{it-1}} + \alpha_2 \frac{\Delta \text{SALE}_{it}}{\text{TA}_{it-1}} + \alpha_3 \frac{\Delta \text{SALE}_{it-1}}{\text{TA}_{it-1}} + e_{it}
\]

where:
- \( \text{TA}_{it-1} \) = is total assets for firm \( i \) year \( t-1 \),
- \( \text{PROD}_{it} \) = is sum of cost of sales and change in inventory during the year for firm \( i \) year \( t \),
- \( \text{SALE}_{it} \) = is sales for firm \( i \) year \( t \),
- \( \Delta \text{SALE}_{it} \) = is change in sales for firm \( i \) from year \( t-1 \) to year \( t \),
- \( \Delta \text{SALE}_{it-1} \) = is change in sales for firm \( i \) from year \( t-1 \) to year \( t-2 \)

Dependent Variable
The dependent variables represent the measure of firm performance that may be influenced by audit quality and earnings management. In line with the Balanced Scorecard (BSC) framework, this study will employ the following variables as measures of firm performance:

i. Financial- Net Profit Margin (NPM)
ii. Customer – Sales Growth (SG)
iii. Internal Processes – Inventory Turnover (IT)

Financial (Net Profit Margin): The financial perspective is considered as the most important perspective among the others, particularly in relation to key strategy implementation and assessment of organizations’ performance. This study used net profit margin as the measure of firm performance in line with BSC dictates and this was calculated thus:

\[
\text{Net profit for the period} \times 100 \quad \text{Sales Revenue}
\]

Customer: Understanding of customer satisfaction level may help a company to enhance their customer services thereby increase their sales turnover and revenue as a result of loyalty enjoyed from the customer. This study measured customers’ loyalty with percentage change in sales revenue growth which was measured as:

\[
\text{Sales Revenue for the current year} \_ \text{Sales Revenue for the previous year} \times 100 \quad \text{Sales Revenue for the previous year}
\]
**Internal Processes:** internal business processes aim at measuring the areas of internal excellence, required efficiency and effectiveness in business operations through reduction of cost. The internal processes are a mechanism through which performance expectations are achieved. This study employed efficiency ratio of Inventory Turnover which measures the efficiency in the utilization of financial resources of the organization thus:

\[
\text{Inventory Turnover (IT)} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}
\]

**Control Variables**
For the purpose of this study, firm size and firm age were employed as control variables which were measured as follows:

**Firm Size (Fsize):** Natural log of company's total assets (Babatolu et al., 2016; Ching et al., 2015; Zabojnikova 2016).

**Firm Age:** Firm age will be measured as the number of years of the firms from incorporation. This is the date of commencement of business recognized recognized by Companies and Allied Matters Act (1990).

**Analysis**

**Descriptive Statistics**
The descriptive statistics for measures of earnings management, firms' performance and control variables are shown in table 1. The table consists of 560 observations from 56 Nigerian quoted manufacturing companies from 2007 to 2016.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>N</th>
<th>Mean</th>
<th>Sd</th>
<th>min</th>
<th>max</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEM</td>
<td>560</td>
<td>0.012</td>
<td>0.367</td>
<td>-4.016</td>
<td>5.207</td>
<td>2.024</td>
<td>103.210</td>
</tr>
<tr>
<td>REM</td>
<td>560</td>
<td>0.000</td>
<td>0.301</td>
<td>-2.277</td>
<td>3.347</td>
<td>2.246</td>
<td>40.476</td>
</tr>
<tr>
<td>NPM</td>
<td>560</td>
<td>0.945</td>
<td>19.620</td>
<td>-0.967</td>
<td>464.305</td>
<td>23.585</td>
<td>557.514</td>
</tr>
<tr>
<td>SG</td>
<td>560</td>
<td>4.799</td>
<td>3.996</td>
<td>0.006</td>
<td>32.873</td>
<td>2.656</td>
<td>14.044</td>
</tr>
<tr>
<td>IT</td>
<td>560</td>
<td>15.665</td>
<td>1.909</td>
<td>11.126</td>
<td>20.103</td>
<td>-0.061</td>
<td>2.207</td>
</tr>
<tr>
<td>FSIZE</td>
<td>560</td>
<td>45.679</td>
<td>17.063</td>
<td>1.000</td>
<td>93.000</td>
<td>-0.250</td>
<td>3.339</td>
</tr>
</tbody>
</table>

**Source:** Author's Computation (2018), underlying data from annual reports of firms listed on NSE

Table 1 shows the average value of accrual-based earnings management (AEM) to be 0.012 with a standard deviation of 0.367. However, the values range from -4.016 to 5.21 during the period. This implies that there is a wide range in the value of accrual-based earnings management of the companies. Real activity-based earnings management (REM) takes values between -2.28 and 3.35 for the period considered in this study. However, the average
value is 0.00 with a standard deviation of 0.30 implying that all the sampled firms have relatively low real activity-based earnings management that are widely varied.

Net profit margin (NPM), the mean value for all the companies during the period is 0.067; this means that; on average, the companies make 6.7 percent net income with the total sales recorded during the period. The maximum value is 11.811 and the minimum value is -5.213 with a standard deviation of 0.847. The minimum and standard deviation values indicate that the company's net profit margins are relatively low while some are high. Also, during the period, the average value of the sales growth is 0.945 implying that, all the sampled firms recorded about 94.5 percent growth in their sales during the period. The maximum sales growth recorded during the period is 464.305 while the minimum is -0.967, however; the standard deviation is 19.620. These show that the sampled firms have diverse sales growth and that there are situations of very low and high sales growth. The inventory turnover ratio of the firms on average; during the years is 4.799. This clearly suggests that the selected firms on average; have replaced inventory about 4.799 times from 2007 to 2016. Also, the maximum value of 32.873 and minimum value of 0.006 suggest that the company have different inventory turnover ratios reaching an all-time high of 32.873 between 2007 and 2016. The standard deviation value is 3.996 suggesting there is much variability of the inventory turnover in the sampled companies.

Firm size (FSIZE) measured as natural log of company's total assets hovers around 11.13 and 20.10 with an average value of 15.67 signifying that there is much variability in the sizes of the selected firms during the period of this study. The minimum and maximum age of firm (FAGE) measured as the numbers of years of the firms from incorporation are 1 year and 93 years with an average age of 45 years and a standard deviation of 17.06. The average age, minimum, maximum and standard deviation indicates that the ages of the firms varied during the period.

Correlation Result
The correlation results indicate the level of association between each pair of the dependent, independent and control variables. The correlation analysis also examines the level of association among the independent variables to uncover any association that is high and can cause multicollinearity problem.
Table 2: Correlation Matrix of the Variables

<table>
<thead>
<tr>
<th></th>
<th>NPM</th>
<th>SG</th>
<th>IT</th>
<th>AEM</th>
<th>REM</th>
<th>FSIZE</th>
<th>FAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPM</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG</td>
<td>0.0032</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>-0.0678</td>
<td>0.1191*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEM</td>
<td>0.0054</td>
<td>-0.0335</td>
<td>0.007</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REM</td>
<td>-0.0067</td>
<td>-0.0205</td>
<td>-0.0288</td>
<td>0.0233</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSIZE</td>
<td>0.1545*</td>
<td>-0.0005</td>
<td>0.0930*</td>
<td>-0.0697</td>
<td>-0.042</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FAGE</td>
<td>0.1614*</td>
<td>-0.0263</td>
<td>-0.1138*</td>
<td>-0.0012</td>
<td>-0.0249</td>
<td>0.2080*</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Author's Computation (2018), underlying data from annual reports of firms listed on NSE.

The correlation among the independent variables is between -0.0012 and 0.0233 indicating a weak correlation. Also, among the dependent and independent variables, the correlation coefficient takes value between -0.0005 and 0.1614 indicating weak correlation. In addition, majority of the associations among the independent variables are significant at 5% significance level. Given these correlations results, variance inflation factor (VIF) test was conducted determine if the correlation could affect our results.

Regression Result
Table 3 shows the regression results of the relationship between earnings management and firms' performance. L-M statistic was used to test for the presence of random effects in the underlying pooled OLS model. Panel effects are shown in the results, hence the study used Hausman's specification test to choose between fixed and random effects.
Table 3: Relationship between Earnings Management and Firms’ Performance

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLES</th>
<th>Net Profit Margin (NP)</th>
<th>Sales Growth (SG)</th>
<th>Inventory Turnover (IT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>OLS</td>
<td>RE</td>
<td>FE</td>
<td>OLS</td>
</tr>
<tr>
<td>AEM</td>
<td>0.1278</td>
<td>0.0859</td>
<td>0.0605</td>
</tr>
<tr>
<td></td>
<td>(0.2912)</td>
<td>(0.3224)</td>
<td>(0.3349)</td>
</tr>
<tr>
<td>REM</td>
<td>-0.0908</td>
<td>-0.1332</td>
<td>-0.1091</td>
</tr>
<tr>
<td></td>
<td>(0.0666)</td>
<td>(0.0869)</td>
<td>(0.1045)</td>
</tr>
<tr>
<td>FSIZE</td>
<td>0.0577**</td>
<td>0.0342</td>
<td>-0.1645</td>
</tr>
<tr>
<td></td>
<td>(0.0096)</td>
<td>(0.0239)</td>
<td>(0.1652)</td>
</tr>
<tr>
<td>FAGE</td>
<td>0.0068*</td>
<td>0.0077</td>
<td>0.0325</td>
</tr>
<tr>
<td></td>
<td>(0.0035)</td>
<td>(0.0076)</td>
<td>(0.0300)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.1647***</td>
<td>-0.8334*</td>
<td>1.1508</td>
</tr>
<tr>
<td></td>
<td>(0.2476)</td>
<td>(0.4455)</td>
<td>(1.4051)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observations</th>
<th>560</th>
<th>560</th>
<th>560</th>
<th>560</th>
<th>560</th>
<th>560</th>
<th>560</th>
<th>560</th>
<th>560</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.044</td>
<td>0.003</td>
<td>0.016</td>
<td>0.038</td>
<td>0.044</td>
<td>0.051</td>
<td>0.109</td>
<td>0.101</td>
<td>0.114</td>
</tr>
<tr>
<td>F-test</td>
<td>9.033</td>
<td>[0.000]</td>
<td>0.770</td>
<td>[0.549]</td>
<td>0.297</td>
<td>[0.880]</td>
<td>0.295</td>
<td>[0.880]</td>
<td>16.95</td>
</tr>
<tr>
<td>Wald-chi2</td>
<td>4.411</td>
<td>[0.351]</td>
<td>1.066</td>
<td>[0.900]</td>
<td>19.83</td>
<td>[0.000]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LM Test</td>
<td>125.52</td>
<td>[0.000]</td>
<td>0.03</td>
<td>[0.430]</td>
<td>728.03</td>
<td>[0.0000]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F(55, 498)</td>
<td>4.35</td>
<td>[0.000]</td>
<td>1.13</td>
<td>[0.2515]</td>
<td>13.73</td>
<td>[0.0000]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hausman</td>
<td>7.56</td>
<td>[0.109]</td>
<td>5.44</td>
<td>[0.2449]</td>
<td>14.05</td>
<td>[0.0071]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Author's Computation (2018), underlying data from annual reports of firms listed on NSE. *** p<0.01, ** p<0.05, * p<0.1

The results of these estimations are presented in Table 4.3 The earnings management indicators considered in this section are accrual-based earnings management (AEM) measured using modified Jones model (1995) and real activity-based earnings management (REM) using cost of production measure. Nevertheless, the firm characteristics indicators are firm size (FSIZE) measured as natural log of company’s total assets and firm age (FAGE) measured as the number of years of the firms from incorporation. Besides, the firms' performance indicators are the dependent variables in Models 1, 2 and 3 where earnings management and firm characteristics indicators are considered as the independent variables.
Normality Test

Figure 3: Normality Test

Figure 3 models I and II show that the error term are normally distributed, having seen that both their kernel density estimate follows the path of their normal density. However, Figure 3 model III, alternate the normally distributed function, this suggest that the error term of the model is not normally distributed. Nevertheless, this normality results could be ignored, according to Brooks, (2008) since the sample size is moderately large.

Multicollinearity Test

Table 4: Variance Inflation Factor (VIF)

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSIZE</td>
<td>1.09</td>
<td>0.918607</td>
</tr>
<tr>
<td>FAGE</td>
<td>1.06</td>
<td>0.942201</td>
</tr>
<tr>
<td>AEM</td>
<td>1.05</td>
<td>0.951236</td>
</tr>
<tr>
<td>REM</td>
<td>1.02</td>
<td>0.976021</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.06</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author's Computation (2018), underlying data from annual reports of firms listed on NSE
Note: 'AEM' represents accrual-based earnings management measured by using modified Jones model (1995). 'REM' represents real activity-based earnings management using cost of production measure. 'FSIZE' represents firm size measured as natural log of company’s total assets. 'FSIZE' represents firm size measured as natural log of company’s total assets. 'FAGE' represents firm age measured as the number of years of the firms from incorporation.

Judging from the result in the Table 4.4, the mean VIF value is 1.06 which is far less than 10. Specifically, the FSIZE, FAGE, AEM1 and REM VIF’s values are estimated to be 1.09, 1.06, 1.05 and 1.02 respectively. Likewise, their reciprocal of tolerance is close to more than 0.10. These indicate that the variables which are under consideration are not perfect linear combination of each other.

**Hausman’s Specification Test**

The Hausman's specification test results presented in Table 4.3 for NPM and SG models, Chi² = 7.56; p = 0.109 and Chi² = 5.44; p = 0.2449 suggest that the random effect estimation technique is the most valid technique for investigating the relationship between earnings management, proxied by AEM and REM, and firms’ performance measured as NPM and SG, while, fixed effect estimation technique is considered valid for the IT model. While the LM test statistics for the presence of random effect in NPM model is statistically significant, Chi² Stat. = 125.52, p = .000, that of SG is statistically not significant; Chi² Stat. = .03, p = .430. Also, the respective fixed effect F-Stat. and the associated probability value that all uᵢ=0 of 13.73 and 0.0000 indicate that the presence of fixed effect is statistically significant. Hence interpretation based on random effect is sufficient and valid for NPM model, pooled regression and fixed effect estimation techniques are sufficient and valid for SG and IT models respectively.

**Table 5: Heteroskedasticity Tests**

<table>
<thead>
<tr>
<th>Model</th>
<th>Breusch-Pagan test for heteroscedasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>315.62 [0.000]</td>
</tr>
<tr>
<td>II</td>
<td>6464.57 [0.000]</td>
</tr>
<tr>
<td>III</td>
<td>39.48 [0.000]</td>
</tr>
</tbody>
</table>

**Source:** Author’s Computation (2018), underlying data from annual reports of firms listed on NSE. Probability values in square bracket.

Again, this study used Breusch–Pagan/Cook–Wasberg test to assess the variance in the error terms (residuals) of the models, and the results as presented in Table 4.5 indicates that all the three models suffer from heteroskedasticity. As a result of this, panel robust standard error is employed to control for the potential heteroskedasticity problem.

**Discussion**

The random effect estimation results for NPM model presented in Table 4.3 indicate that AEM does not exert significant influence on NPM (β = .1278, p>.05), SG (β = 10.979, p>.05) and IT (β = .2847, p>.05). Also REM exerts no significant influence on NPM (β = -.0908, p>.05) and SG (β = -.3511, p>.05), but on IT (β = 3.0236, p<.05). The observed positive and
statistically significant influence of REM on IT implies that Real Activity-Based Earning Management has positive and significant influence on Inventory Turnover. In terms of the moderating influence of FSIZE and FAGE, while FAGE influences IT negatively ($\beta = -.1857$, $p<.05$), the influence of FSIZE on IT is positive but statistically insignificant.

Overall, the results revealed that of the three performance measures employed in the study, only inventory turnover (IT) is influenced jointly by AEM and REM moderated by firms’ characteristics $F = 3.904, p = .007$. The combined influence of AEM and REM moderated by FSIZE and FAGE is however insignificant on NPM and SG with respective Wald-Chi$^2$ Stat. $= 4.411, p = .353$ and $F = .297, p = .880$. Similarly, the models explanatory powers are weak with Adjusted $R^2 = .005, .038$ and $.114$ for NPM, SG and IT respectively. This implies that with respect to IT, only $11.4\%$ of the changes in mean value of IT are caused by AEM and REM moderated by FSIZE and FAGE, while the unexplained variations of $88.6\%$ are caused by other factors not included in the model.

On the basis of the above interpretations, the null hypothesis is not expected to be rejected. It is therefore concluded that accrual-based earnings management (AEM) and real activity-based earnings management moderated by firms’ characteristics of age and size do not exert significant influence on the performance of quoted manufacturing companies in Nigeria.

The findings in this study shows that both real and activity based earnings management do not have significant association with performance of Nigerian quoted manufacturing firms. The finding therefore supports the studies conducted by such authors as: Aref et al. (2012) whose results presented a negative relationship between earnings management and performance of firms following the acquisition date for share acquirer firms; Wei (2008) also documented evidence that firms suspected of real activities manipulation have lower future operating performance relative to firms not suspected of real activities manipulation. Kang (2011) study of firms listed on the Korea Stock Exchange (KSE) from 2005 to 2007 also showed a negative relationship between real activity-based earnings management and firm performance. Similarly, Fairfield et al. (2003), found that working capital accruals had an inverse correlation with potential profitability.

Conversely, the finding of this study did not align with the studies conducted by Gunny (2005) and Kang et al. (2010) who found positive and significant correlation between earnings management and firm performance. Similarly, Sayari et al. (2013) investigated whether discretionary accruals possess information content on the Tunisian market and tested whether earnings management practices affect stock prices of Tunisian firms and confirmed that discretionary accruals allow Tunisian investors to better evaluate firm value and optimally form their stocks portfolios. Other prior empirical studies that showed a significant association between earnings management and firm performance include Ardekani (2012); Farooqi (2014) and Kang et al. (2011).
Conclusion
This study examined the relationship between earnings management and firms' performance focusing on the quoted manufacturing companies on the Nigerian stock exchange. In achieving this objective, two metrics for measuring earnings management were analyzed namely: accrual based earnings management (AEM) and real activity based earnings management (REM). In line with Balanced Scorecard template, the study employed Net Profit Margin (NPM), Sales Growth (SG) and Inventory Turnover (IT) as performance measurement metrics. from 2007 to 2016 through correlations and linear regression. The descriptive results indicate an average value of accrual-based earnings management (AEM) to be 0.012 with a standard deviation of 0.367. However, the values range from -4.016 to 5.21 during the period. This implies that there is a wide range in the value of accrual-based earnings management of the companies. Real activity-based earnings management (REM) takes values between -2.28 and 3.35 for the period considered in this study. However, the average value is 0.00 with a standard deviation of 0.30 implying that all the sampled firms have relatively low real activity-based earnings management that are widely varied.

The regression analysis indicated that there is no causal link or significant relationship between earnings management practices measured by accrual-based earnings management and real activity-based earnings management practices and performance of quoted manufacturing companies in Nigeria. Earnings management indicators and other explanatory variables with Wald-Chi2 values of 4.41 (p = 0.353) and F-statistics value of 0.297 (p = 0.880) are not jointly statistically significant in relationship with firm performance in terms of net profit margin (NPM) and sales growth. However, the result of the fixed effect model has F-statistics value of 3.904 (p = 0.007) indicating earnings management indicators and other explanatory variables are jointly statistically significant in explaining variations in firm performance in terms of inventory turnover (IT).

The study recommended that at the firm's level, those saddled with the responsibility of ensuring compliance with ethical standards should ensure that there are documented policies and procedures on quality control and that these are communicated to staff through periodic training and capacity building. It is also recommended that the firm should put in place mechanism to monitor quality controls and ensure there are policies and procedures for dealing with non-compliance. Also, each firm should entrench as part of its process, procedure that guarantee fundamental principles of integrity, objectivity, confidentiality, independence and professional competence and due care as well as due professional behaviour within the rank and file of the organization.
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