International Journal of Development and Sustainability
ISSN: 2186-8662 – www.isdsnet.com/ijds
Volume 8 Number 2 (2019): Pages 97-115
ISDS Article ID: IJDS18112501

Earnings management and corporate survival of listed manufacturing companies in Nigeria

Apollos Nwabuisi Nwaobia, Jerry Danjuma Kwarbai *, Olajumoke Olamide Fregene

Babcock university, Ikenne, Nigeria

Abstract

Studies have reported limited explanatory power of earnings due to reasons that include low quality of earnings. Though earnings management is permitted within the financial reporting framework in many jurisdictions, its practices depending on the intention and aggressiveness may dovetail into fraudulent financial reporting and thus may have implications not only on entity's share price but also on its going concern and ultimate survival. The main objective of the study therefore, was to examine the effect of earnings management on the survival of manufacturing entities in Nigeria. The population of the study was the 66 manufacturing companies listed on the Nigerian Stock Exchange as at 31 December 2016. A sample size of thirty companies with complete data for our study was purposively selected from the 66 listed manufacturing companies. The study was for a period of 12 years (2005 to 2016) and secondary data drawn from published financial statements of sample companies were used. Data were analysed using descriptive and inferential (OLS regression) statistics. Appropriate diagnostic tests were conducted on the data set. For our main hypothesis (H_{01}), Earnings management (EM) proxied by discretionary accruals jointly with corporate governance (CG) proxies exerted significant effect on corporate survival. Individual effects of EM and CG proxies on corporate survival were mixed.

Keywords: Corporate Governance; Corporate Survival; Discretionary Accruals; Earnings Management; Earnings Quality

Published by ISDS LLC, Japan | Copyright © 2019 by the Author(s) | This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Cite this article as: Nwaobia, A.N., Kwarbai, J.D. and Fregene, O.O. (2019), "Earnings management and corporate survival of listed manufacturing companies in Nigeria", *International Journal of Development and Sustainability*, Vol. 8 No. 2, pp. 97-115.

* Corresponding author. *E-mail address:* kwarbai.jerry@gmail.com

1. Introduction

The great need for sound economic and investment decisions by resource providers as well as other stakeholders leads to ever increasing demand for financial statements that are relevant to investors' economic and investment decisions in that they are faithfully represented and timely provided. Resource providers expect that financial information should truly reflect the economic reality of events and transactions that took place as well as conditions that existed at the reporting date. Again, it is expected that reported net earnings as much as possible should closely approximate the cash flows emanating from the ordinary activities of the entity and cash flows from its investing and financing activities. However accounting scandals such as Enron, WorldCom, Pamalat, Cadbury and others tend to suggest that the above expectations are not always met by financial information provided by the management of some organizations. It is believed that these scandals occurred because of the lack of reliable and relevant information needed for feasible decisions (Idialu, 2008). Corporate management, Accountants and Auditors are fingered as being at the centre of these scandals which resulted in pain to the investors, employees and other stakeholders who currently cast doubt on the accounting profession (Sunday et al., 2012). These scandals are however seen by these user groups as the aftermath of extreme aggressive earnings management.

Earnings management is seen as accounting practices by management intended to influence or misrepresent reported earnings through the use of accounting methods or accelerating expense or under-accruing expense or untimely recognition or deferment of revenue transactions (depending on target objective) or using other methods crafted to influence earnings. The term is understood to refer to "systematic misrepresentation of the true income and assets of corporations or other organizations" (Omoye and Eriki, 2014, p.553) or innovative ways of characterizing income, assets and liabilities (Donaldson and Werhane 2009). In crafting financial reports, the financial reporting frameworks allow for management estimates and judgements provided that they are reasonable in the circumstances and in line with industry practices. But earnings management takes place when managers in the use of judgements structure transactions to alter financial reports in such a way that they mislead stakeholders about the underlying economic performance of the company, or influence contractual outcomes that depend on reported financial information.

Kang and Kim (2011, p.53) have noted that "management could control reported earnings by making accounting choices or by making operating decisions discretionally." The accrual-based accounting system is seen to be a good platform for such discretional decisions and any form of manipulative accounting since accruals are components of earnings that are not reflected in current cash flows, and a great deal of managerial discretion goes into their construction (Bergstresser and Phillippon 2006). Financial statements and information provided therein not only reflect the economic and financial performance of an entity but also the efficiency and competence of management in utilizing all resources entrusted to them to create value for resource providers. This fact may create the incentive for aggressive earnings management and unfair accounting practices by management as they may desire fair appraisal by resource providers. Performance-based compensation packages may also provide additional motivation for management to engage in extreme aggressive earnings management that may likely hurt the survival of their organisations. In the light of these, Hassan and Ahmed (2012) had submitted that firm performance and shareholders' wealth are affected by

earnings management which by extension constitutes a threat to an entity's going concern and eventual survival.

Since financial reporting is the responsibility of management who are responsible for the choice of accounting policies, estimates and judgements relating to some major line items that appear in the financial statements as well as adequate disclosures and fair presentation of the financial statements, it becomes logical that earnings management is a corporate governance matter. In this regard, Dabor and Ibadin (2013) noted that the nature and credibility of corporate governance are indicative factors that determine the likelihood of management's engagement in earnings management. Credible corporate governance mechanisms, through effective monitoring of management, ensure compliance with the financial reporting framework and as such are expected to reduce earnings management practices. However, studies on earnings management have documented that weak corporate governance is associated with greater earnings management (Beasley 1999; Klien, 2002; and Egbunike et al., 2015). In reaction to this, various countries have tried to address this situation in order to guarantee the credibility of the financial statements through ensuring strong corporate governance mechanisms and strict compliance with accounting standards. Some countries have put in place improved legislative frameworks targeted at containing misrepresentation of financial information and thereby ensure improved financial reporting, for example, the United States' Public Accounting Reform and Investor protection Act, 2002 and Nigeria's Financial Reporting Council of Nigeria Act, 2011.

One of the fundamental key indices to the survival of any firm is solvency and liquidity (Nwaobia and Jayeoba, 2016). These relate to the ability of the firm to meet its debts as they fall due, whether in the short term or long term. A company could meet its obligations in the short term, but still face long-term solvency problem, if there are not enough resources to meet long-term debts. Thus, long term solvency and financial stability are important determinants of how safe a company is from failure because of its inability to meet its obligations. There lies the danger of any crafted accrual –based financial information that exceeds the "normal" bounds permitted by the accounting framework. In whatever name called, be it "earnings management", "innovative accounting" or "creative accounting", they deviate from the rules of standard accounting practices, "narrow down to the manipulation of accounting information by one or more people, who in turn get an unfair advantage as a result," (Hosho et al., 2013, p.42), translate to low earnings quality and do not fairly approximate cash flows. In such a scenario, management of liquid resources is likely to be difficult and the survival of the organization is put in jeopardy as a result of the likely disconnect between profits and cash flows.

Many studies have been undertaken in the area of earnings management both in Nigeria and other jurisdictions. Many of these studies examined the association between earnings management and corporate governance and/or performance (for example, Egbunike et al., 2015; Omoye and Eriki, 2014); some examined the effect of corporate governance and ownership structure on earnings management (for example, Ogbonnaya et al., 2016) while other studies explored the ways of detecting earnings management (for example, Vladu and Cuzdriorean, 2014). Hosho et al. (2013) were concerned with detection of creative accounting related fraud. Literature has not revealed significant studies on the effect of earnings management on the going concern and survival of manufacturing companies in Nigeria.

Our current study is timely and relevant at least for filling this identified gap in literature which calls further attention to the danger of any "innovative" accounting practice on the growth and survival of any entity. The rest of this paper is organized as follows. In section 2, we review extant literature and highlight the theoretical underpinning for the study. Section 3 presents the methodology of the study including measurement of variables. The empirical analyses, results and discussions are presented in section 4, while we conclude in section 5.

2. Review of literature

2.1. Conceptual review

Studies have reported limited explanatory/informative power of earnings due to reasons that include low quality of earnings associated with earnings management (Dechow et al. 2010). Though earnings management is permitted within the financial reporting framework in many jurisdictions, its practices depending on the intention and aggressiveness may dovetail into fraudulent financial reporting and thus may have implications not only on entity's share price but also on its going concern and ultimate survival. As Omar, Rahman, Danbatta and Sulaiman (2014) observed firms at the organisational level, may manage earnings for several reasons which include enhancing their credibility, increasing their stock price and reducing political and social costs. But at the individual level, managers may act opportunistically and unethically by manipulating earnings in order to enhance their compensation packages, or reported performance and thus their rating and reputation or values of their share options. When earnings management is driven by such motive, it becomes linked with fraudulent financial reporting and is perceived by users of financial information as bad and companies' reputations and credibility in the market may be damaged. At this level, Merchant and Rockness (2004) believes that earnings management does not provide true economic advantage to the organization. It may rather be detrimental in the long term.

Earnings management may take different forms. But Matsuura (2008) identified two broad categories of earnings management namely, accruals earnings management and real earnings management. Accruals may be non-discretionary (normal), that is, accruals that derive from an entity's normal business activities, recognized within its proper period but not paid or received, for example, unpaid taxes and other bills. These are not subject to earnings management. Abnormal or discretionary accruals derive from adoption of accounting practices that are outside the rules in the preparation and presentation of financial information to achieve a desired objective. Accruals earnings management is thus, the discretionary portion of accruals (Omar et al., 2014). Real earnings management is equated to discretionary cash flow from operations derived from the variance between actual cash flow and normal cash flow. Real earnings management is described by Roychowdhury (2006) as departing from normal operational practices with the primary objective of meeting short-term earnings goals.

Through accounting choices and intentional misapplication of accounting policies, managers may decrease earnings when earnings are relatively high and increase earnings when earnings are relatively low. This form

of earnings management is regarded as income smoothing, described by Ronen and Yaari (2008, p.317) as "the dampening of fluctuations in reported earnings over time." Mulford and Comiskey (2002) in Yadav (2013) described income smoothing as "a form of earnings management designed to remove peaks and valleys from a normal earnings series, including steps to reduce and "store" profits during good years for use during slower years." To achieve this objective, managers get involved in manipulation of financial statements and record fictitious revenues, conceal liabilities or expenses and artificially inflate reported assets (ACFE 2010). This includes situations where expenses are classified as assets and liabilities as equity (Kranacher, Riley and Wells, 2011). The reasons for smoothing earnings by managers as documented by Tudor (2010, p.62) include "maximizing their own wealth, reducing the perceived riskiness of the firm, enhancing firm value, meeting debt covenants, reducing tax and political costs and enhancing the reliability of financial forecasts."

Management may intervene in the financial reporting process through operational decisions. For example, managers may decide on the point to accelerate sales, to alter shipment schedules, delay research and development expenditure, maintenance expenditure and other costs (Dechow and Skinner, 2000), or change depreciation methods or their estimation bases for such items as warranties, provisions for inventory obsolescence or for doubtful receivables etc. just to improve on reported numbers. This is another type of accruals earnings management.

2.2. Theoretical underpinning

This study is anchored on the theory of reasoned action developed by Fishbein and Ajzen (1975) and its off-shoot, the theory of planned behaviour (Ajzen, 1991).

These theories are fundamentally based on cognitive belief system. They are indigenous to social psychology but have been found useful in the analysis of certain behaviours and actions in the management sciences. The theories are able to identify the potential factors that might influence an individual's behavioural intention to engage in earnings management practices or to report fraudulently. The intention to perform a behaviour is the immediate precursor to actual behaviour. The theories posit that intentions are a function of two constructs namely: attitudes towards performing a behaviour, which are in turn a function of belief relating to the consequence and desirability of such consequences in performing the behaviour and subjective norms concerning the behaviour, which are a function of beliefs concerning what important referents think about the behaviour and ones motivation to comply with those referents.

Applying these theories to our study, earnings management practices are carried out due to the expected outcome and on the approval of some important referents that have interests in it. These important referents include the Chief Executive Officers, the directors, the managers, the accountants and even the auditors (Sen and Inanga, 2008; Jensen and Meckling, 2006; Sweeney, 2005). These intentions could be as a result of the need to increase the profit of the company, to increase the market value of shares, to increase the reported figure of assets, to meet internal and external forecasts, to improve the credit rating of the organization and to achieve increase in bonus packages based on improved profit and market share (Levitt, 2010; Okoye and Alao, 2008; Dempsey et al., 2005).

Consequently, this intention metamorphoses into the behavior of earnings management which may be achieved through many of the discretionary accounting techniques for example, under accruing of expenses, recognizing premature revenue, aggressive capitalization, overvaluation of inventory, under-provision for bad and doubtful debts etc.

2.3. Empirical review

Many studies on the relationship between earnings management and corporate governance and/ or corporate performance implicate corporate governance on all techniques of earnings management. That is, the transmission mechanism for every earnings management practice, whether good or bad is corporate governance. This is not unexpected because once there are systemic deficiencies in corporate governance that generates the financial information, earnings management will thrive. There will be a great possibility of misrepresenting earnings by managers to achieve different objectives. In this light, Hassan and Ahmed (2012) documented evidence that corporate governance significantly impacts on firm performance in different magnitudes and directions. They particularly noted, in accord with Hassan (2011) and Gray and Clarke (2004), that institutional shareholding has an inverse relationship between it and discretionary accruals. It is believed that institutions have not only the financial expertise but more resources to check, monitor and detect the opportunistic behaviour of managers as well as discipline them.

The study by Olayinka (2012) equally confirmed the link between corporate governance and earnings management and submitted that board diversity and audit committee presence influence earnings management. Boards dominated by experienced outside directors and audit committees with financial expert's better monitor and control managers, thereby reducing earnings management. Uwalomwa, Daramola and Anjolaoluwa (2014) on their part documented that board size and board independence significantly discourage earnings management while CEO duality had a significant positive impact on earnings management.

Omoye and Eriki (2014) classified Nigerian listed companies into high and low earnings management practice levels and examined how corporate governance mechanisms relate to these levels. Results indicated, among others, that many Nigerian listed companies are involved in high earnings management practices and the corporate governance proxies of audit committee and board gender representation had negative and significant influence on the adoption of "absolute high earnings management." On the other hand, firm size, auditors' type and industry class, as control variables, were found to be statistically significant in determining absolute high earnings management levels of Nigeria quoted companies.

The work of Ogbonnaya et al. (2016) concluded that CEO duality and Managerial ownership have positive significant effect on earning management while Egbunike et al. (2015, p.482) concluded that "corporate governance practices such as the board size, firm size, board independence, and strength of the audit committee have significant influence on earnings management practices among Nigerian quoted companies" and called for improvement of audit quality, among other issues, as a deterrent to unwholesome earnings management.

Not much of existing literature deal directly with the link between earnings management and corporate survival but many of existing literature allude to the unethical nature of any extreme aggressive earnings management that is intended to deceive the user of the financial information and the ultimate effect on the long-run survival of any organization. Rodriguez- Ariza et al. (2016) documented evidence on the negative impact of discretionary accounting practices on corporate image and long-run survival of companies. They however noted a negative link between family control and earnings management as a result of highly concentrated ownership. Family firms have more incentives for controlling and monitoring managerial decisions, earnings management behaviour and the firms' subsequent loss of reputation.

The outcome of the study by Sanusi and Izedonmi (2014) indicated that commercial banks in Nigeria boost the market value of their shares through creative accounting (earnings management). They however submitted that the earnings management processes adopted in achieving this objective cannot be sustained for long and leads to the ultimate collapse of the companies and investors' loss of confidence in the stock market. In other words, since the company cannot continually deceive investors and potential investors with the figures derived by managing earnings, the reality of the situation must eventually be divulged.

Leyira and Okeoma (2014) reported a positive relationship between earnings management and organizational effectiveness. That is, organizations manage earnings to appear effective in their operations but they submitted that such accounting practice and associated scandal can destroy an institution and called for restoration of integrity and public confidence to accounting operations.

Jawad and Xia (2015) alerted on the moral hazard of transforming accounting numbers from what they actually are to what preparers desire. They contended that the "incurred loss approach" to earnings management that result in untimely huge loss recognitions (huge losses are recognized when they had become inevitable) speed up the death of entities.

Parsakis and Iatridis (2014) documented evidence that a firm's economic environment provides incentive for earnings management behaviour. They found that earnings quality of many firms decreased during the period of financial crisis following increased manipulation of earnings within the period.

A balanced judgement may not depreciate the fact that earnings management may not be always negatively associated with company survival as the above studies portray. Dechow and Skinner (2000) posited that accrual accounting tends to dampen the fluctuations of underlying cash flows, and thus create a more useful earnings number than current cash flows. In accord with this, Dechow and Schrand (2004) submitted that when accruals are used correctly, they mitigate the volatility in cash flows and thus improve the decision usefulness of cash flows. The submission of Dechow and Dichev (2002) is that one of the roles of accrual is to shift or adjust the recognition of cash flows over time and that the adjusted numbers better measure firm performance, while Melumad and Nissim (2008) believed that earnings smoothed with accruals increase earnings quality, since they improve earnings persistence.

On the basis of the above inconclusive debate and mixed results, this study proposed our main hypothesis that:

Ho_1: Earnings management has no significant effect on the corporate survival of manufacturing companies in Nigeria.

The subsidiary hypotheses are:

Ho_2: Earnings management has no significant effect on cash flow to total debts ratio of manufacturing companies in Nigeria.

Ho_3: Earnings management has no significant effect on shareholders' funds total assets ratio of manufacturing companies in Nigeria.

Ho_4: Earnings management has no significant effect on return on total assets of manufacturing companies in Nigeria.

3. Methodology

An *ex-post facto* research design was adopted in this study. The population consisted of 66 manufacturing companies listed on the Nigerian Stock Exchange as at 31 December 2016 (NSE Fact book 2016). A sample of 30 companies of different sizes was chosen on purpose, based mainly on availability of complete data within the study period. The study covered 360 firm-year observations for the period, 2005-2016. Secondary data extracted from the annual reports and accounts of sample companies were used for the study.

For our study, three variables were identified and discussed in this section. These are: dependent variable (corporate survival) represented by geometric mean of cash flow to debt ratio, return on assets ratio and shareholders' funds to total external debts ratio; the Independent variable of earnings management proxied by discretionary accruals; and control variable of corporate governance using the following proxies – board composition, institutional holdings and auditor size.

3.1. Measurement of variables

3.1.1. Corporate survival

Many factors contribute to the going concern and survival of an entity. Some of these factors, in addition to quality management, include the profitability, solvency, stability and liquidity of the entity. These factors are germane to the survival of a company because an entity that cannot generate enough cash flows from its operations to meet its short and long-term obligations as well as its operational needs cannot exist for long.

In this study, corporate survival has as its proxy the geometric mean of cash flow to debt ratio, return on assets ratio and shareholders' funds to total external debts ratio. The geometric mean of the three ratios is given as the nth root of the product of the three ratios.

3.1.2. Cash flow to debt ratio (CFOTD)

The ratio is given as:

$$\frac{\text{Annual cash flow}}{\text{Total liabilities}}$$

This ratio is a measure of a company's ability to service its debts from its annual cash flow. In addition, it gives an entity the leverage to raise further debt capital (depending on its existing debt structure) as it is useful in assessing the credit worthiness of a company.

3.1.3. Shareholders' funds to total external debts

This is defined as:

$$\frac{\text{Shareholders' funds}}{\text{Total External liabilities}}$$

This ratio measures the level of resources coming from internal providers of capital compared with external financiers. It complements the gearing or leverage ratio. It is a test of financial stability and indicates the extent of cover available to external liabilities. A low ratio indicates under-capitalisation and high dependence on external funding and could also be an indication of the vulnerability of an entity if external providers of resources, including suppliers reduce or withdraw their support.

3.1.4. Return on assets (ROA)

This ratio is defined as:

$$\frac{\text{PBT}}{\text{Total assets}}$$

This ratio measures management's efficiency in the utilization of all assets in generating profits and increasing cash flow and shareholders' funds. Profitability of any entity is important for the growth and survival of the organization.

3.1.5. Earning management/discretionary accruals (DiscAccrual)

Earnings quality is commonly applied as a proxy for earnings management which is measured using different approaches. These approaches include ex-post and ex-ante conservatism, value relevance, earnings persistence, earnings predictability, earnings smoothness, loss avoidance etc (Parskis and Iaditris, 2015). This study adopted McNichols' (2002) model, which implies that the changes in sales revenue and PPE are important in forming expectations about current accruals, over and above the effects of operating cash flows.

The modified model is as given in equation I. All variables in the model are scaled by average assets.

$$TCA_{jt} = \alpha_0 + \beta_1 CFO_{j,t-1} + \beta_2 CFO_{j,t} + \beta_3 CFO_{j,t+1} + \beta_4 \Delta \mathrm{Re}v_{j,t} + \beta_5 PPE_{j,t} + \mu_1 \text{ ....I}$$

Where:

TCA_{it} is total current accruals. Total current accruals comprise of annual change in current assets less annual change in current liabilities less annual change in cash plus annual change in debt in current liabilities plus annual change in taxes payable. Average Assets is lagged average assets, CFO_{it} is cash flow from operations. Cash flow from operations comprise of the net income before extraordinary items less total accruals, ∇REV_{it} is annual change in revenues, scaled by lagged average assets, PPE_{it} is property, plant, and

equipment, ε_{it} is the error term. In general, large (small) value of the residual corresponds to lower (higher) accrual and lower (higher) earnings quality.

The Standard deviation of the residual error in the model represents the earnings quality. It indicates that the estimated error in the current accruals is not associated with operating cash flow and it cannot be measured through determining the changes in income, machinery and equipment. The magnitude of this value is thus a measure of the level of discretionary accruals/earnings management.

This measure has been successfully used in previous studies such as Persakis and Iatridis (2015).

3.1.6. Board composition

Board composition is measured as the proportion of executive directors to non-executive directors. This ratio is taken to be a measure of the board's independence. It is expected that largely independent boards will check the opportunistic and discretionary behaviour of managers. Experienced and competent independent directors do not have much interest in the shareholding of the company, would want to maintain their reputation and thus are expected to ensure transparency in financial reporting. In this regard, board composition is likely to have a positive effect on reporting quality and corporate survival and therefore an inverse relationship with earnings management. This proxy of corporate governance has been used in earnings management studies by many authors including Hassan and Ahmed, (2012); Olayinka (2012), Uwalomwa, Daramola, and Anjolaoluwa (2014) and Omoye and Eriki (2014).

3.1.7. Institutional shareholding

The Nigerian Code of Corporate Governance 2018, section 17.3 requires that "the Board should encourage institutional investors to positively influence the standard of corporate governance and promote value creation in the companies in which they invest." In many cases, ownership concentrates on institutional investors as they have the resources to acquire a greater percentage of a company's shares. This gives them the incentive, power and resources to influence decisions, monitor and constrain managers' self-seeking behaviours. This also implies that they can influence the integrity of financial reporting. Institutional shareholding therefore could be positively related to transparent financial reporting and corporate survival and inversely related to earnings management. However, on the opposite side, it is possible for managers to concede to meeting the earnings goals of these institutional investors and thus get involved in earnings manipulations (Cornett, Marcus and Tehranian, 2008), which can negatively affect corporate survival.

In this study, this proxy is measured as the proportion of institutional holding to total equity shares.

3.1.8. Auditor size

Audits lend credibility to financial statements as it is expected that the level of misstatements, including manipulations, may not be material on audited financial statements. To achieve this implies that audit quality must be high. Some of the factors associated with audit quality are adherence to ethical requirements by, and the independence of, the auditor. Comparatively, it is believed that the large audit firms possess a greater level

of independence and adhere more to ethical requirements than the medium and small firms. As a result of their capacity and large client base, they may not be easily influenced by their clients. They therefore possess more powers and resources to monitor and constrain clients' earnings management practices. In this regard, it is expected that the size of the audit firm may positively influence the quality of corporate reporting and corporate survival.

However, it could also be noted that some of the high-profile corporate failures, for example, Enron and WorldCom, were associated with corporate governance and financial reporting failures and these companies were audited by one of the then "Big 5" audit firms.

This study employs dummy variables in the measurement of this proxy: a "Big 4" firm assumes the figure 1, and 0 for other firms.

3.1.9. Model specification

We specify the following regression model to examine the effect of earnings management on corporate survival:

$$CORPSURV_{it} = \beta 0 + \beta_1 DiscAccrual_{it} + \beta_2\ BoDcomp._{it} + \beta_3\ Instholding_{it} + \beta_4 Auditor\ Size_{it} + \varepsilon \quad \text{.................................... Model 1}$$

The study also examined the effect of earnings management on each of the sub-variables of corporate survival, namely:

$$CFOTD_{it} = \beta 0 + \beta_1 DiscAccrual_{it} + \beta_2\ BoDcomp._{it} + \beta_3\ Instholding_{it} + \beta_4 Auditor\ Size_{it} + \varepsilon \quad \text{....................................... Model 2}$$

$$SHFTD_{it} = \beta 0 + \beta_1 DiscAccrual_{it} + \beta_2\ BoDcomp._{it} + \beta_3\ Instholding_{it} + \beta_4 Auditor\ Size_{it} + \varepsilon \quad \text{.. Model 3}$$

$$ROA_{it} = \beta 0 + \beta_1 DiscAccrual_{it} + \beta_2\ BoDcomp._{it} + \beta_3\ Instholding_{it} + \beta_4 Auditor\ Size_{it} + \varepsilon \quad \text{.. Model 4}$$

3.1.10. A priori expectation

The study expects that earning management will have a negative effect on corporate survival (CORPSURV) while the control variables will have a positive effect on CORPSURV. That is, $\beta_1 < 0$ while $\beta_2 - \beta_4 > 0$.

4. Analyses, results and discussions

The study employed both descriptive and inferential statistics in the analyses.

Table 1. Descriptive Analysis

Variables		Mean	Median	Std. Dev.
AUDITSIZE	360	0.844011	1.000000	0.363351
BODCOM	360	0.512255	0.555556	0.186658
CFOTD	360	0.985028	0.207218	10.20488
CORPSURV	360	0.09105	0.351605	0.73616
INSTITUTIONAL HOLDING	360	0.424827	0.460000	0.32731
DISCACRUAL	360	-0.09105	0.351605	0.73616
ROA	360	-0.00630	0.068256	0.43463
SHFTD	360	0.8993	0.590761	1.36628

Source: Stata 13.0 output (2018).

Table 1 provides the descriptive statistics for the variables used in the study. The average board composition (BODCOMP) is 51.22%. Though extreme values do affect the mean values, this may not be considered high enough to confer reasonable independence on the Board to significantly influence decisions. The average percentage score for Institutional holding of the sampled firms used is 42.5%. The implication of this is that on the average, institutional shareholders, depending on their objective, may have capacity to reasonably determine the level of transparency of financial reporting and can check the opportunistic and self-seeking behaviors of managers. The percentage of the Big 4 audit firms auditing the sampled firms is 84.4%. Where these firms place premium on their quality control systems and adhere to ethical and independence requirements, it is expected that the level of earnings management among the sampled companies may be curtailed.

The average cash flow to total debt score is 0.985. This is an indication of a fairly good level of solvency and financial stability of the sampled companies. If their cash flows are well managed, the threat to their going concern status may be minimal. The mean score of 89.9% of shareholders' funds to total debt ratio is a good indication that our sampled companies are not largely dependent on external financiers for their existence. Their level of safety is good. The mean score for ROA (profitability) is -0.006, indicative of the effect of the losses incurred by some of the sampled firms within the study period. On the average, the geometric mean of the cash flow to total debt, shareholders fund to total debt and return on assets (Corporate survival) is 0.091, suggestive of moderate margin of safety from failure and average score of earnings management (Earnings Quality) is -0.0910, which suggests minimal earnings management and high earnings quality among the sampled companies. These indicators (results) are further explored in our regression modeling.

4.1. Inferential analysis

The study adopted both correlation and regression analyses. The regression analysis was anchored on panel regression model, the best model of which was determined using some diagnostic tests.

Table 2. Correlation Matrix

	1	2	3	4	5	6	7	8
1. CFOTD	1							
2. CORPSURV	0.9153	1						
3. INST. HOLDING	0.1195	0.0702	1					
4. DISCACRUAL	0.0006	0.0030	-0.0342	1				
5. ROA	-0.0045	0.3106	-0.0915	0.0012	1			
6. SHFTD	0.9996	0.9148	0.1192	-0.0005	-0.0042	1		
7. BODCOM	0.0090	-0.0269	0.0572	0.0120	-0.0020	0.0121	1	
8. AUDITSIZE	0.0323	0.0637	0.3184	-0.0368	0.0311	0.0296	0.0567	1

Source: Stata 13.0 output (2018)

Table 2 shows the relationship between earnings management (DISCACRUAL) and corporate survival alongside corporate governance variables used as control variables. It is revealed that there exists a positive correlation between earnings management (DISCACRUAL) and corporate survival variables except Return on Asset (ROA) (-0.0045) that shows a negative correlation. This implies that the quality of earnings based on lower discretionary accrual will translate to positive effect on the corporate survival of firms within the period of our study. Also, corporate survival was positively correlated with corporate governance variables except Board Composition that shows a negative correlation. This is not high enough to confer reasonable independence on the Board to significantly influence decisions. This is suggestive of a higher number of executive than non-executive; this; perhaps may allow for the opportunistic behavior of the executive directors. It is to be noted here that the correlation matrix in table 2 is a mere preliminary analysis of the relationship among the variables without necessary diagnostic tests on the dataset. Concluding on these results may not be appropriate; hence the OLS modeling in section table 3.

4.2. Ordinary Least Squares Regression Modeling

Our regression modeling for the main (H_1) and the three subsidiary (H_2 – H_4) hypotheses is given in Table 3.

In evaluating the regression model, we use Adj. R^2 to assess the proportion or percentage of the variance in the dependent variable that is explained by the independent variables within the model. The coefficients of the variables (denoted by β in the model) indicate the nature and magnitude of effect of each of the independent variables on the dependent variables and the extent the dependent variable will change following any change in the independent variables. The significance of the coefficients is evaluated using the p-value of the t-statistic while the overall goodness of fit of the model and its significance are assessed by the use of the p-value of the F-statistic

Table 3. Effect of Earnings Management on Corporate Survival

Dependent Variable:	Model 1 (H1) (**CORPSURV**)	Model 2 (H2) (**CFOTD**)	Model 3 (H3) (**SHFTD**)	Model 4 (H4) (**ROA**)

	Coeff.	P -Value	Coeff.	P -Value	Coeff.	P -Value	Coeff.	P -Value
Constant	0.1877	0.000*	1.3339	0.000	0.2585	0.000*	0.0979	0.000*
DISCACRUAL	0.0002	0.1670	0.0007	0.000*	0.0002	0.265	0.0004	0.750
INSTHOLD….	0.1443	0.000*	0.0835	0.030	-0.0229	0.395	0.0550	0.035
BODCOM	-0.1990	0.006*	-0.9825	0.000*	-0.1685	0.002*	-0.1124	0.003*
AUDITSIZE	0.0294	0.442	0.0329	0.706	0.0606	0.025*	0.0289	0.188
Adj.R²	0.0551		0.0113		0.0326		0.0319	
F- STAT.	6.24		2.03		4.02		3.96	
PROB. F-STAT.	0.0001*		0.0904		0.0033*		0.0037*	
HAUSMAN TEST	2.90 (0.5752)		1.10 (0.8936)		3.58 (0.4652)		3.13 (0.5364)	
BREUSCH-PAGAN TEST	686.14 (0.000)		211.16 (0.000)		141.61 (0.000)		412.36 (0.000)	
OBSERVATIONS	**360**		**360**		**360**		**360**	

Source: Stata 13.0 output (2018)

4.2.1. Diagnostic tests

Table 3 we present the Diagnostic tests that were carried out on models 1-4 to validate the correctness of the model specification. The Hausman test was first estimated to determine whether fixed or random effect is suitable for the model. The probability of this test showed 0.0.5752, 0.88936, 0.4652 and 0.5364, for models 1-4 respectively. All the Hausman test p-values are higher than the acceptable 5%, thus, the null hypothesis of estimate random effect was accepted. However, result of the Breusch and Pagan Lagrangian Multiplier test for random effects gave a p-value of 0.000 indicating that the random effect GLS regression is the best model to be used.

4.3. Results and discussions

Ho_1: Results indicated that earnings management EM), proxied by discretionary accrual and the corporate governance (CG) control variables have a joint significant effect on corporate survival ($P < 0.05$). However, the Adj. R^2 of 5.5% revealed a low explanatory power of the model. This implies that many other factors aside earnings management and corporate governance mechanisms affect the survival of an entity, for example, macro-economic policies within the entity's operating environment.

The individual effects are mixed. Earnings management (Discretionary accrual) has a positive effect on corporate survival; this effect is not significant ($P > 0.05$). This result appears to confirm the indication of low earnings management and high earnings quality revealed by our descriptive statistics. Low discretionary accrual enhances earnings quality and corporate survival while extreme aggressive earnings management as documented by Rodriguez- Ariza, Martinez-Ferrero and Bermejo-Sanchez (2016) lead to loss of reputation and is a threat to long run survival of the company. Other corporate governance variables like Institutional holdings and Audit size have a positive effect on corporate survival except BoDcom that exerted a significant negative effect. The influence of Institutional Holding was statistically significant. The negative influence of Board independence (composition) on corporate survival may indicate poor oversight over financial reporting and affirms the evidence adduced by Egbunike, Ezelibe and Aroh (2015) as well as Klien (2002) that weak corporate governance is associated with greater earnings management which of course threatens corporate survival. Our result is also in tandem with Jawad and Xia (2015) and Sanusi and Izedomi (2014) who warned of the moral hazard of earnings management and loss of confidence in the company's stocks which may lead to collapse of such companies.

The significant positive effect of institutional holdings on corporate survival disagrees with the study of Cornett, Marcus and Tehranian, (2008) who posited that managers may manipulate earnings to meet the earnings goal of institutional investors which can negatively affect corporate survival. It rather confirms the position that the actions of institutional investors may affect corporations positively as institutional investors have the capacity to constrain the opportunistic and self-seeking behaviours of managers.

Ho_2: The joint effect of earning management and corporate governance variables on CFOTD is positive but not significant ($P > 0.05$). The Adj. R^2 is very low at 1.13%, implying that many other determinants of this ratio are not included in our model. This result however is suggestive of the fact that the reported earnings of our sampled companies fairly approximated their cash flows; there were no noticeable earnings manipulations or discretional accruals. This appears to be in accord with Dechow and Schrand (2004) that appropriate use of accruals mitigates the volatility in cash flows and improve their decision usefulness.

As in Ho1, the individual effects are mixed. Discretionary Accrual, Audit Size, Investor holding exerted positive but significant effect on CFOTD while BoDcom negative effect., probably for the same reasons adduced above.

Ho_3: Model 3 results indicated that earnings management and corporate governance proxies exerted a significant joint effect on SHFTD ($p < 0.05$). The Adj. R^2 was 3.26%, implying that our explanatory variables could explain 3.3% of changes in SHFTD. Also, earnings management, Board composition and audit size exerted a significant effect on SHFTD. Some EM practices involve manipulation of the capital structure and liabilities, where liabilities may be recorded as equity (Kranacher, Riley and Wells, 2011). A fairly independent board and a truly independent auditor will constrain the manipulation of financial statements along this line. Therefore, this result is in accord with literature.

Ho_4: model 4 results also reveal that earnings management and corporate governance proxies exerted a joint significant effect on ROA ($P < 0.05$). The reported Adj. R^2 is 3.19% implying that our independent variables could explain about 3.2% of changes in ROA. Other factors are outside our model. The isolated effects are

mixed. BoDcomp negatively affected ROA while institutional Holding and Audit size do not exert significant effect on ROA. This appears to be in accord with Omar, Rahman, Danbatta, and Sulaiman (2014) who posited that EM thrives in organizations with weak governance processes. Poor governance structure gives managers room for self-seeking behaviour that may conflict with the objective of maximizing returns to shareholders. Institutional investors have the capacity to compel managers to act in a way that will benefit every shareholder as well as the capacity to short-change other equity holders. Where they are passive, managers may act to their own benefit.

DiscAccrual and Auditorsize exerted positive but insignificant effect on ROA. This is in line with the works of Leyira and Okeoma (2014) as well as the study by Cornetta, Marcus, and Tehranian, (2008). Where the objective is to improve the net income, EM easily achieves that through manipulation of revenues and expenses. Big audit firms have the powers to influence quality financial reporting that would reflect the economic reality of events and transactions of an entity within the reporting period.

Overall, this study affirms the theory of reasoned action that the behaviour performed by managers depends on expected consequences of that behaviour and the approval of important referents.

5. Conclusion and recommendations

This study concludes that earnings management, depending on its intensity and intention can negatively affect the survival of manufacturing companies in Nigeria. However, the study has not established evidence of extreme aggressive earnings management among the manufacturing companies sampled by this study. It was rather established that corporate governance has a role to play in mitigating the effect of earnings management on the survival of manufacturing entities in Nigeria.

The study recommends stringent monitoring of the financial reporting practices of corporate organizations in Nigeria by the Financial Reporting Council of Nigeria (FRCN), to constrain opportunistic reporting. FRCN and the Accountancy professional bodies should also mobilize all necessary resources to enable them meet the requirement of monitoring the practice standards of accounting firms in the country.

Monitoring of compliance with the provisions of the Nigerian Code of Corporate Governance by companies will help strengthen corporate governance practices. This will impact positively on the integrity of financial reporting and the risk of failure of entities as a result of fraudulent reporting. The limitation of this study is the lack of access to relevant data from all the 66 quoted manufacturing firms in Nigeria. This limitation however did not negatively impact on the results of the study and its generalization. We suggest that further studies should be conducted in other sector of the economy and probably with greater number of observations.

References

Association of Certified Fraud Examiners, (ACFE) (2010). *Report to the nations on occupational fraud and abuse.*available at https://www.acfe.com/rttn-asiapac.aspx (accessed on May 20, 2018).

Beasley, M.S. (1999), "An empirical analysis of the relation between the board of directors' composition and financial statement fraud", *The Accounting Review*, Vol. 71 No. 4, pp. 443-465

Bergstresser, D. and Philippon, T. (2006), "CEO incentives and earnings management", *Journal of Financial Economics,* Vol. 80 No. 3, pp. 511-529.

Cornetta, M.M. Marcus, A.J. and Tehranian, H. (2008), "Corporate governance and pay-for-performance: The Impact of earnings management", *Journal of Financial Economics,* Vol. 87, pp. 357–373.

Dechow, P. and Dichev, I. (2002), "The quality of accruals and earnings: the role of accrual estimation errors", *The Accounting Review,* Vol. 77 No. S-1, pp. 35–59.

Dechow, P., Ge, W. and Schrand, C. (2010), "Understanding earnings quality: A review of the proxies, their determinants and their consequences", *Journal of Accounting and Economics (Elsevier),* Vol. 50, pp. 344-401.

Dempsey, S.J., Hunt, H.G. and Schroeder, N.W. (2005), "Creative accounting and corporate ownership structure: An examination of extraordinary item reporting", *Journal of Business Finance and Accounting*, Vol. 20 No. 4, pp. 479-500.

Donaldson, T. and Werhane, P.H. (2009), *Ethical issues in business: A philosophical approach*, Prentice-Hall Inc, New Jersey.

Donaldson, T. and Werhane, P.H. (2009), *Ethical issues in business: A philosophical approach*, Prentice-Hall Inc, New Jersey.

Egbunike, A.P., Ezelibe, C.P. and Aroh, N.N. (2015), "The influence of corporate governance on earnings management practices: A study of some selected quoted companies in Nigeria", *American Journal of Economics, Finance and Management*. Vol. 1 No. 5, pp. 482-493.

Hassan, S.U. (2011), "Corporate governance and financial reporting quality: A case study of Nigerian money deposit banks", *International Journal of Research in Computer Application and Management,* Vol. 1 No. 26, pp. 12-19.

Hassan, S.U. and Ahmed, A. (2012), "Corporate governance, earnings management and financial performance: A case study of Nigerian manufacturing firms", *American International Journal of Contemporary Research,* Vol. 2 No. 7, pp. 214-226.

Hassan, S.U. and Ahmed, A. (2012), "Corporate governance, earnings management and financial performance: A case of Nigerian manufacturing firms", *American International Journal of Contemporary Research,* Vol. 2 No. 7, pp. 214-226*.*

Hosho, N., Matowanyika, K. and Chinoda, T. (2013), "Detection of creative accounting related frauds in the Zimbabwean cotton industry-the internal auditor's role: Evidence from one large cotton company", *Research Journal of Finance and Accounting,* Vol. 4 No. 7, pp. 42 -44.

Idialu, J.U. (2008), "Depreciation practices of quoted companies in Nigeria", *The Nigerian Accountant*, Vol. 41 No. 3, pp. 56-30.

Jawad, F.A.M. and Xia, X. (2015), "International financial reporting standards and moral hazard of creative accounting on hedging", *International Journal of Finance and Accounting,* Vol. 4 No. 1, pp 60-70.

Jensen, M. and Meckling, W. (2006), "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Contemporary Accounting Research,* Vol. 35 No. 18, pp. 118-154.

Kang, S. and Kim, Y. (2011), "Does earnings management amplify the association between corporate governance and firm performance?", *International Business and Economics Research Journal,* Vol. 10 No. 2, pp. 53-66.

Klein, A. (2002), "Audit Committee, board of director characteristics, and earnings management", *Journal of Accounting and Economics,* Vol. 33 No. 3, pp. 375-400.

Levitt, A. (2010), "The number game", *Review of Quantitative Finance and Accounting,* Vol. 27 No. 35, pp. 263-284.

Leyira, C.M and Okeoma, E.C. (2014), "The impact of creative accounting on organizational effectiveness: A study of manufacturing firms in Nigeria", *British Journal of Economics, Management & Trade,* Vol. 4 No. 12 pp. 2107-2122

Matsuura, S. (2008), "On the relation between real earnings management and accounting earnings management: Income smoothing perspective", *Journal of International Business Research,* Vol. 7 No. 3, pp. 63-77.

Melumad, N. and Nissim, D. (2008), "Line-item analysis of earnings quality", *Foundations and Trends in Accounting,* Vol. 3 No. 2, pp. 87-221.

Merchant, K.A. and Rockness, G. (2004), "The ethics of managing earnings: An empirical investigation", *Journal of Accounting and Public Policy,* Vol. 13 No. 8, pp. 79-94.

Nwaobia, A.N. and Jayeoba, O.O. (2016), "Tax planning and firms' liquidity. IJRDO", *Journal of Business Management,* Vol. 2 No. 10, pp. 1-22.

Okoye, E.J. and Alao, B.B. (2008), "The ethics of creative accounting in financial reporting: The challenges of regulatory agencies in Nigeria", *Certified National Accountant*, Vol. 37 No. 14, pp. 483-503.

Olayinka, M.U. (2012), "Earnings management and corporate governance in Nigeria", *Research Journal of Finance and Accounting,* Vol. 3 No. 3, pp. 1-10.

Omar, N., Rahman, R.A., Danbatta, B.L. and Sulaiman, S. (2014), "Management disclosure and earnings management practices in reducing the implication risk", *Procedia - Social and Behavioral Sciences (ElseVier),* Vol. 145, pp. 88-96

Omoye, A.S. and Eriki, P.O. (2014), "Corporate governance determinants of earnings management: Evidence from Nigerian quoted companies", *Mediterranean Journal of Social Sciences,* Vol. 5 No. 23, pp. 553-564.

Parsakis, A. and Iatridis, G.E. (2015), "Earnings quality under financial crisis: A global empirical investigation", *Journal of Multinational Financial Management,* Vol. 30, pp. 1-35.

Rodriguez-Arisa, L., Martinez-Ferrero, J. and Bermego- Sanchez, M. (2016), "Consequences of earnings management for corporate reputation: Evidence from family firms", *Accounting research Journal,* Vol. 29 No. 4, pp. 457-474.

Ronen, J. and Yaari, V. (2008), *Earning Management: Emerging Insights in Theory, Practice and Research,* 1st edition. Springer Science + Business Media, LLC. New York, USA.

Roychowdhury, S. (2006), "Earnings management through real activities manipulations", *Journal of Accounting and Economics,* Vol. 42, pp. 335-370.

Sanusi, B. and Izedonmi, P.F. (2014), "Nigerian commercial banks and creative accounting practices", *Journal of Mathematical Finance,* Vol. 4, pp. 75-83.

Sen, D.K. and Inanga, E.L. (2008), "Creative accounting in Bangladesh and global perspective", *Journal of Accounting and Public Policy,* Vol. 43 No. 18, pp. 69-83.

Sunday, O.E., Cornelius, M.O. and Obal, U.E. (2012), "The implication of occupational fraud and financial abuse on the performance of companies in Nigeria", *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 4 No. 7, pp. 516-533.

Sweeney, H.W. (2005), "Debt covenant violations and managers accounting responses", *Journal of Accounting and Economics*, Vol. 17 No. 15, pp. 251-308.

Tudor, A, (2010), "Income smoothing and earnings informativeness", *Journal of Management Sciences,* Vol. 11, pp. 302-314.

Uwalomwa U., Daramola, S.P. and Anjolaoluwa, O. (2014), "The effects of corporate governance mechanisms on earnings management of listed firms in Nigeria", *Accounting and Management Information Systems,* Vol. 13 No. 1, pp. 159–174.

Vladu, A.B., and Cuzdriorean, D.D. (2014), "Detecting earnings management: Insights from the last decade leading journals published research", *Procedia Economics and Finance (Elsevier),* Vol. 15, pp. 695-703.

Yadav, B. (2013), "Creative accounting: A literature review", *The SIJ Transactions on Industrial, Financial & Business Management (IFBM),* Vol. 1 No. 5, pp. 181-193.