

# CORPORATE GOVERNANCE MECHANISMS, SENSITIVE FACTORS AND EARNINGS MANAGEMENT IN NIGERIAN OIL AND GAS INDUSTRY

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## Abstract

Oil and gas industry is considered as the sector that contributes a big share to the Nigeria economy. This study investigated the effects of corporate governance mechanisms, sensitive factors on earnings management of quoted oil and gas firms in Nigeria using the sample of nine (9) listed oil and gas firms for the period of ten years (2004-2013). Discretionary current accruals was used as the proxy for earnings management. Corporate governance mechanisms (boards size, chief executive officer (CEO) duality, directors' ownership, audit committee size, audit committee independence), sensitive factors (corporate tax, corporate profit, corporate social responsibility) served as independent variables. The study concludes that corporate governance mechanisms curbs earnings management while sensitive factors increase earnings management. The study recommends that corporate governance regulations should be strengthened to reflect present challenges.

**Keywords:** Corporate Governance, Sensitive Factors, Earnings Management, Nigerian Oil and Gas Industry

## 1. INTRODUCTION

Oil and gas industry is considered to be one of the major and most influential industries in the global market with its operations covering every angle of the globe and with the world's energy heavily dependent on oil and gas products (Amnesty International 2004). Nowadays, activities in the petroleum industry are composed of various procedures in the upstream or downstream sectors comprising exploring, extracting, refining, transportation and marketing of the petroleum products. The sensitivity of petroleum resources is clearly reflected and continued to be reflected as the main resources for the Nigerian economy as well as the supreme foreign exchange earner contributing over 80% of government revenues, contributing 30% of GDP, 95% of the total export revenue which is used for the development of Nigeria's infrastructures and other industries (Nigeria Corporate 2007).

In Nigeria, petroleum resources for local consumption are managed and distributed by marketers. Domestic marketers comprise fewer than 30% of the downstream market shares while the major international market boosts the rest. The government faces challenges in the downstream sector- such as lack of resources to efficiently manage the aging infrastructures and a non-commercial pricing environment. Therefore, it is encouraging further private sectors investments in the sectors (Nigeria Corporate 2007). Federal government of Nigeria deregulates the downstream

sectors of oil and gas industry, allowed major marketers to import petroleum at competitive price, established private refineries to compete with NNPC refineries (Okunroumu 2004). Government refineries cannot meet the nation's demand because their production is always decreasing. For instance, petroleum production of 5,877,890.0 liters and 4,031,960.76 liters in the first quarter of 2009 and 2010 respectively, which is showing a decrease of 31.40 percent (CBN 2010).

The activities of the quoted oil and gas companies operating in the downstream sector are very important to the daily activities of the people and the nation, because they provide the services and resources (refining, supplying, Petroleum, Kerosene, Gas and other Petroleum products) to meet the need of the nation at the competitive price (Okunroumu 2004).

Oil and gas resources in Nigeria can be utilized through investment. Investors are always profit seekers and they are ready to invest in any economy, but there is problem of panic or uncertainty to lose their investment due to accounting policies, inadequate regulations or provisions that regulate the financial activities in the economy. For the success of any investments in the Nigerian economy or any other economy, government should create good financial reporting atmosphere that will guarantee safety, profit and security for the investment in order to institutionalize confidence to the investors.

Most investors and other stakeholders have interests in financial reporting because it contains information about earnings of their investments.

Reported earnings are considered to be valued relevance by the shareholders in estimating future returns (Das & Kim 2013). Financial analysts can find out effect of earnings management if it is included in future earnings forecast through large accruals (Abarbanell & Lehavy 2003).

Earnings Management is viewed as detrimental to a firm's value (Jiraporn et al. 2008). Kin (2008) groups earnings management into two categories: real-based earnings management and accrual-based earnings management. Real-based earnings management has to do with manipulation of real activities such as reducing discretionary expenditure, which has direct effect on cash flow; Accrual-based earnings management is the alteration of accruals or revisal of accruals through changes of accounting estimation. Real-based earnings management has direct effect to the cash flow, while accrual-based earning management has no direct effect to the cash flow (Roychowdhury 2006). Managers use either of the methods to manipulate incomes and reports unrealistic figures in the financial reports.

Financial reporting concern arises when there are conflicts of interests between managers and investors coupled with information asymmetries (Pandey 2005). Information asymmetries occur when one party (agents) or managers in the contract have more knowledge regarding critical information required in the contract other than outsider/investors (Pandey 2005). Agency relationship arises in any situation involving cooperative effort by two or more people (Adelegan 2009). The relationship between the stakeholders, who are the owners of the investments and the upper management, is pure agency relationship. If agency problem does not exist, financial reporting quality becomes a non-issue since managers do not have any incentive to misreport information.

In Nigeria, corporate scandals involve large companies such as African petroleum plc, Cadbury Nigerian plc, Lever Brothers plc (Ajibolade 2008). The bankruptcy of these giant corporations, locally and internationally, stemmed from influencing earnings, due to fraudulent practices by the board of directors and weak Corporate Governance Mechanisms (Fodio *et al.*, 2013). This study intends to find out the effect of corporate governance mechanism and sensitive factors in curving earnings management in Nigerian oil and gas industry. The study is divided into several sections, each section discuss a major topic such as literature review; method of conducting the study, presentation and discussion of the result, and conclusion and recommendations.

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Earnings management is viewed as detrimental to a firm's value (Jiraporn *et al.*, 2008) and its impact is important in the financial reporting quality. Information asymmetry between insiders and outsiders has the potential to decrease shareholders' wealth (Park & Shin, 2004) as the information will be less enlightening to shareholders (Teoh et al. 1998). Thus, effective corporate governance mechanisms could mitigate the information asymmetry and

reduce the divergence between shareholders and managers.

A large body of academic literature has examined the impact of corporate governance variables such as board characteristics and ownership structure on the earnings management (Cornett, Marcus & Tehranian, 2008; Dechow, Sloan & Sweeney, 1996; Iqbal & Strong, 2010; Park & Shin, 2004; Sarkar, Sarkar, & Sen, 2006; Xie et al., 2003), board composition and earnings management (DeFond & Jiambalvo 1994; Saleh & Iskandar 2005; Osma & Noguer 2007; Marra et al. 2011; Siagian & Tresnaningsih 2011), board process and earnings management (Shiri, Vaghfi, Soltani & Esmaeli, 2012), board structure and earnings management (Weisbach 1988; Brickley et al. 1997; Tosi et al. 1997; Conyon & Peck 1998). Mixed findings were reported from different locations of the world.

Board mechanisms, audit committee mechanisms and earnings management relationship are guided by agency theory on the assumption that corporate governance code is introduced mitigate managers' opportunistic behaviors. Corporate tax, CSR and earnings management are guided by political cost theory on the assumption that manipulated earnings cost organization extra tax and more CSR claim. Corporate profit and earnings management guided by the ethical theory on thinking that inflated profit cost managers to compensate investors out of capital.

### 2.1 Board Mechanisms

#### 2.1.1 Board Size (BS) and Earnings Management

One of the most important factors influencing the integrity of the financial accounting process involves board of directors whose responsibility is to provide independent oversight of management performance and to hold management accountable to shareholders for their actions (DeFond & Jiambalvo 1994; Dichev & Skinner 2002). Past studies such as Monks and Minow (2004) revealed that larger board put more time and resources to oversee management action. Yu (2008) put forward that small size board is usually fails to detect earnings management. Rahman and Ali (2006) find positive association between board size and earnings management. Base on the agency the study hypothesizes that:

*H<sub>1</sub>: Board size has a negative and significant relationship with earnings management.*

#### 2.1.2 CEO Duality (CEOD) and Earnings Management

CEO duality is Chief Executive Officer serving as the chief executive and also serves as the chairman of the board. Jensen (1993) posits that the role of the Chairman of the board is to monitor the CEO. Therefore, CEO-Chairman cannot perform both functions without conflicts of interest. Studies have investigated the relation between earnings management and the duality of CEOs. Gul and Wah (2002) report that firms with dual-role CEOs have more likely to manipulate discretionary accruals especially when the managerial ownership exceeds 25 percent. Rahman and Haniffa (2005) supported

that companies with CEO duality did not perform well and incline to do earnings management. Dey (2008) also finds partial support that the duality of CEOs has negatively related to the credibility of earnings announcements. In addition, Chang and Sun (2009) find a negative relation between dual-role of CEOs and earnings informativeness after SOX in cross-listed foreign firms. Mohamad *et al.* (2012) examine the impact of the tightening of corporate governance mechanisms on earnings management activities of the Government Linked Companies (GLC). They find that separation of chairperson and chief executive officers in the companies have a negative impact on earnings management activities in the post-transformation period. Bliss (2011) examines whether CEO duality affects the association between board independence and the demand for higher quality audit, using Australian samples of 799 listed public firms. The result is supporting that CEO duality compromising the board of director's independence. Base on the above argument and inline with agency theory the study hypothesizes that:

*H<sub>2</sub>: CEO duality has a positive and significant relationship with earnings management.*

### 2.1.3 Directors' Ownership (DO) and Earnings Management

Directors' shareholdings are the shares owned by the directors of a particular firm. Stocks ownership in organizations can lead to different expectations. Past studies posit that the likelihood of financial statement fraud increases with the percentage of stock owned by the directors. Cheng and Warfield (2005) examine the association between managers' equity incentives, stock ownership and earnings management for the period 1993-2000 using 9472 observations and find out that managers' stock ownership associated with earnings management on the notion that manipulated earnings might increase the value of their stocks. They can take advantage of the higher price and sales their stocks. Park and Park (2004) find managers modify discretionary accruals to inflate present time earnings before they sell their own firm stocks. The study hides on the agency theory and hypothesizes that:

*H<sub>3</sub>: Directors ownership has a positive and significant relationship with earnings management.*

## 2.2 Audit Committee Mechanisms

### 2.2.1 Audit Committee Size (ACS) and Earnings Management

Audit committee size is the number of directors in the audit committee. Although the law did not fix the number of directors in the committee, it has to be based on the firm size. Studies report that a large audit committee tends to improve the audit committee's status and power within an organization. Ghosh, Marra and Moon (2010) find that audit committee size is influencing discretionary accruals at the pre-period and not at the post period. Fodio *et al.* (2013) reported that audit committee size is significant and negatively associated with discretionary accruals. Vafeas (2005) reports that audit committee's performance

determined by committee size. Many members in the committee will enhance performance because there are more people on whom to draw. Xie *et al.* (2003) reveal insignificant relationship between audit committee size and discretionary accruals. In line with the agency theory the study hypothesizes that:

*H<sub>4</sub>: Audit committee size has a negative and significant relationship with earnings management*

### 2.2.2 Audit Committee Independence (ACI) and Earnings Management

Audit committee and its role in ensuring the quality of financial reporting contributed to the minimization of earnings manipulations. Klein (2002) posits that independent audit committees serve as superior monitor of the financial reporting process. Studies such as Carcello & Neal (2000) document a relation between greater audit committee independence and the quality of financial report. Abbott, Parker, Peters and Raghunandan (2003) and Klein (2002b) find that audit committee independence has a negative relationship with misstatement and earnings management. Xie *et al.* (2003) report a negative association between earnings management and the independence of audit committees. Bryan *et al.* (2004) find that an effective audit committee improves the credibility of reported earnings. Jenkins (2002) finds that independent audit committee mitigates income-increasing earnings management. Sun (2013) study find a negative and significant on the interaction of audit committee independence and audit industry specialization. The study expected negative relation base on agency theory. The study hypothesizes as that:

*H<sub>5</sub>: Audit committee independence has a negative and significant relationship with earnings management.*

## 2.3 Sensitive Factors

Sensitive factors mean soothing "needing to be treated with care and caution, so as not to cause trouble or offence" (Hornby, 2000 p.1070). This study identifies corporate tax, corporate profit and corporate social responsibility as sensitive factors to managers, because whenever managers are planning to manipulate earnings upward, they must be cautious with these sensitive factors because of their multiple effects of their actions to the shareholder's wealth. There are many sensitive factors in the financial reports but this study only considers corporate tax, corporate profit, and corporate social responsibility to examine their influence on earnings management.

### 2.3.1 Corporate Tax (CT) and Earnings Management

Researches explore that managers face problems when trying to boost financial reporting income, due to the tax cost, managers minimized reported income (Shackelford & Shevlin 2001). Similarly, managers trying to minimize income reported to tax authorities may report lower income to shareholders and thereby incur financial reporting costs (Frank *et al.* 2009). Some firms may be reporting higher book

income to shareholders and lower taxable income to tax authorities (Boynton, DeFilippes and Legel, 2005). But where there is no conformity between reported financial income and reported tax, research argues that firms are subject to greater scrutiny from regulators (Badertscher, Phillips, Pincus and Rego, 2009; Cloyd, 1995) and external auditors (Hanlon, Krishnan and Mills, 2006).

For example Boynton *et al.* (2005) indicated that total reported financial income and reporting tax differences taken from corporate U.S. Tax returns enlarged from \$43 billion in 1993 to \$313 billion in 1999, and that after reducing to (\$49) billion in 2001, the reported financial income and reporting tax gap dropped back to \$436 billion in 2003. Thus, evidence suggests that companies were engaging in increasingly aggrieve reporting practices during this period. Another study investigates whether Australian gold-mining firms were engaged in downward earnings management or upward earnings management during the periods 1985-1988 and 1988-1990 respectively. The study find that consistent with significant downward earnings management by Australian gold-mining firms during the period from June 1985 to May 1988 and upward earnings management during the period from 1988 to 1990 have not found in the accruals-based tests (Monem 2003). Another study examines that Slovenian property insurers over estimate provisions for claims outstanding and, consequently, reduce net income in order to reduce tax liability. The findings suggest that Slovenian property insurer' underestimate provisions for claims outstanding in order to reduce income tax burden (Morec 2012). In line with political cost theory firms are expected to pay tax base on their income i.e the higher the income, the higher the tax pay and this study hypothesizes that:

*H<sub>6</sub>: Corporate profit has a negative and significant relationship with earnings management.*

### 2.3.2 Corporate Profit (CP) and Earnings Management

Corporate profit is considered as road block to the managers for their unwanted attitude of income manipulation. Profit has considered as the key indicator of a firm's ability to pay dividend (Anil & Kapoor 2008). Previous literatures indicated that profit is the determining factor for dividend, as far as managers increase their earnings surely shareholders will ask better dividend. Because of that they may decide to report real earnings, for instance Amidu & Abor (2006) posit that corporate profitability and dividend payout ratios have a positive relationship. Gill, Biger, Tibrewala, and Palmer (2010) examine the determinants of dividend payout ratios using the American service and manufacturing firms. The study finds that for the entire sample, the dividend payout ratio is positively related to profit margin. Another study find that firms with larger profit are more likely to pay a dividend, while companies that are facing uncertainty about future profit would adopt lower payout (Prices & Puckett 1964; Lintne 1956). John & Muthusamy (2010) put forward that return on asset have positively related to the dividend payout, and consistent with the previous studies. Managers are expected to be ethical and reported the true income

as guided by ethical theory but managers manage earnings up word, investors will claim extra investment benefits. The study hypothesizes that:

*H<sub>7</sub>: Corporate profit has a negative and significant relationship with earnings management.*

### 2.3.3 Corporate Social Responsibility (CRS) and Earnings Management

Few researches that study the relation between corporate social responsibility and financial reporting behavior largely center on the opportunistic use of corporate social responsibility in financial performance. Petrovits (2006) investigates the plan use of corporate charity programs to achieve earnings targets and find that firms reported small earnings increases, increasing discretionary income, charitable funding choices. Chih, Shen and Kang (2007) find that corporate social responsibility firms are more destructive in accruals management but are less likely to involve in earnings loss avoidance and earnings smoothing. Prior, Surroca and Tribó (2008) test whether firms use corporate social responsibility tactically to promote earnings management and the result indicated a positive relation between earnings management and corporate social responsibility for controlled firms, but the result is not significant for uncontrolled firms. Yip, Staden and Cahan (2011) find that corporate social responsibility and earnings management has negatively related in the oil and gas industry, but positively related in the food industry. Kim, Park and Wier (2012) find that socially responsible firms are less likely to manage earnings through discretionary accruals, to manipulate real operating activities. Another Asian study revealed that Asian firms fairly with good corporate social responsibility have engaged significantly less with earnings management (Scholtens & Kang 2013). A study findings show that corporate social responsibility activities do not encourage the accounting manipulations, and on the other hand, discretionary accrual has not positively related to corporate social responsibility (Toukabri, Jilani and Benjama, 2014). Organizations are expected to carry out CSR to their host communities base on their earnings from such communities where earnings are inflated will cost the firms extra CSR claim from the communities as guided by political cost theory. The study hypothesizes that:

*H<sub>8</sub>: CSR has a negative and significant relationship with earnings management.*

## 3. RESEARCH METHOD

The study used the sample of nine (9) out of the thirteen (13) oil and gas firms quoted in Nigerian Stocks Exchange for the period of ten years (2004-2013). The study used only nine samples of firms that have availability of financial reports for the period of study and limited number of oil and gas firms listed in Nigeria. The study estimated earnings management using the model of Kothari, Leone and Wasley (2005). The data were collected from annual reports and published reports.

### 3.1 Estimation of Earnings Management

There are many models of estimating earnings management but Kothari, Leone and Wasley (2005) reveal higher detection of earnings management using Nigerian oil and gas data based on the researcher's comparison. Some studies argue that

discretionary current accruals (DCA) should be more susceptible to earnings management when compared to total discretionary accruals (Dimitropoulos & Asteriou, 2010; Jaggi, Leung, & Gul, 2009). The description of discretionary current accruals is as follows:

$$DCA_{it} = CA_{it-1} - [\alpha_1 (1/TA_{it-1}) + \alpha_2 (\Delta REV_{it} - \Delta REC_{it}) / TA_{it-1} + \alpha_3 (ROA_{it-1})].$$

Whereas: current accruals (CA) is measured by net income before extraordinary items plus depreciation and amortization minus cash flows from operation scaled by the total assets.

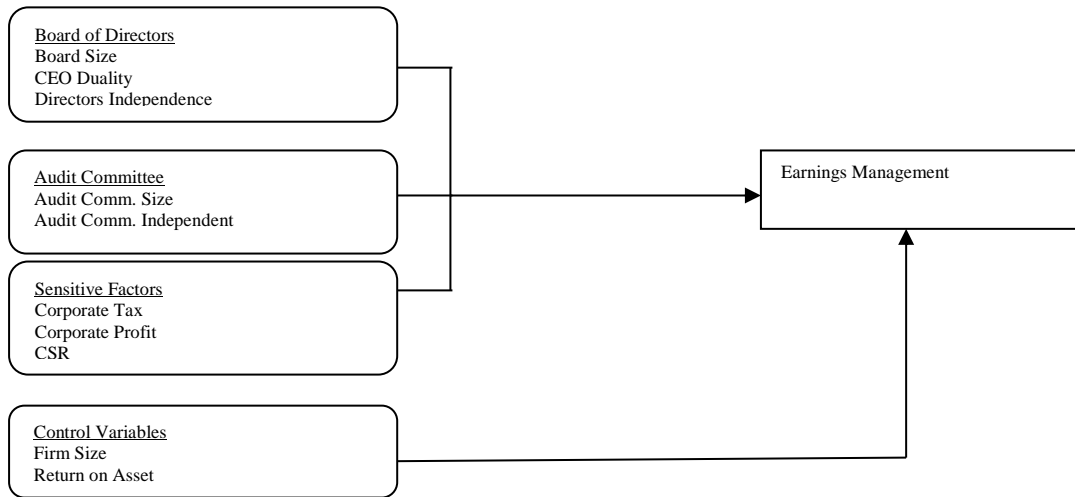


Figure 1. Research Framework of the Study

Model specification of the study is as follows:

$$DCA_{it} = \alpha + \beta_1 BS_{it} + \beta_2 CEOD_{it} + \beta_3 DO_{it} + \beta_4 ACS_{it} + \beta_5 ACI_{it} + \beta_6 CT_{it} + \beta_7 CP_{it} + \beta_8 CSR_{it} + \beta_9 FSIZE_{it} + \beta_{10} ROA_{it}$$

Table 1 explains the measurements and expected directions of the variables of the study.

Table 1. Variables Definition

| Variable | Definition                      | Measurement  | Expected sign |
|----------|---------------------------------|--|---------------|
| DA       | Discretionary Current Accruals  | Kathari et al. (2005).   | -             |
| BS       | Board size                      | Number of director in the board.   | -             |
| CEOD     | Chief executive officer Duality | Dummy "1" CEO serve as chairman of the board, "0" otherwise                    | +             |
| DO       | Directors ownership             | Ratio of directors stocks to the total shares.                                 | +             |
| ACS      | Audit committee size            | Number of directors in audit comm.   | -             |
| ACI      | Audit committee independence    | Ratio of non-executive directors to the total directors in the audit committee | -             |
| CT       | Corporate tax                   | Natural log of current year tax.   | -             |
| CP       | Corporate profit                | Natural log of current year profit.  | -             |
| CSR      | Corporate social responsibility | Natural log of expenditure on charity.   | -             |
| FSIZE    | Firm size                       | Natural log of total asset.  | +             |
| ROA      | Return on asset                 | Ratio of profit b4 tax to total asset.   | -             |

### 4. RESULT AND DISCUSSIONS

Kothari *et al.* (2005) model of estimation (p< 0.00) is significant at 1 percent, the model fitness R<sup>2</sup> is 98 percent, this allow further to estimate discretionary current accruals which is represented by the residuals of the current accruals model.

Correlation matrix in Table 2 shows that DCA has significant negative correlation with BS and FSIZE. DCA have significant positive correlation with ROA. ACS is significant with DCA at 5 percent, while BS, FSIZE and ROA are significant to DCA at 1 percent. No correlation is found above 0.60 between the independent variables which indicates that multicollinearity issue is not a concern in this study.

Table 2. Pearson Correlation Matrix

|       | DCA      | BS      | CEOD    | DO      | ACS     | ACI      | CT      | CP      | CSR     | FSIZE | ROA |
|-------|----------|---------|---------|---------|---------|----------|---------|---------|---------|-------|-----|
| DCA   | 1        |         |         |         |         |          |         |         |         |       |     |
| BS    | -0.352** | 1       |         |         |         |          |         |         |         |       |     |
| CEOD  | 0.036    | 0.119   | 1       |         |         |          |         |         |         |       |     |
| DO    | 0.187*   | -0.070  | 0.120   | 1       |         |          |         |         |         |       |     |
| ACS   | -0.195*  | 0.315** | 0.080   | 0.042   | 1       |          |         |         |         |       |     |
| ACI   | 0.092    | 0.129   | -0.228* | -0.191* | 0.162   | 1        |         |         |         |       |     |
| CT    | 0.050    | 0.092   | -0.167  | -0.015  | 0.080   | 0.052    | 1       |         |         |       |     |
| CP    | -0.047   | 0.304** | -0.122  | -0.004  | 0.285** | -0.130   | 0.391** | 1       |         |       |     |
| CSR   | 0.088    | 0.136   | 0.111   | 0.029   | 0.177*  | -0.349** | 0.211*  | 0.424** | 1       |       |     |
| FSIZE | -0.362** | 0.532** | 0.203*  | 0.075   | 0.393** | -0.181*  | 0.114   | 0.595** | 0.495** | 1     |     |
| ROA   | 0.474**  | 0.032   | -0.154  | 0.026   | 0.248** | 0.169    | 0.309** | 0.338** | 0.299** | 0.109 | 1   |

\*\*Significant at the 0.01 level (1-tailed).

\*Significant at the 0.05 level (1-tailed).

Descriptive statistic in Table 3 indicates that the range of earnings management is between -0.844 and 0.853, and the skewness is 1.519 which fall within the acceptable region. The average number of board size (BS) is 8.8 ranging from minimum 6 directors to maximum of 11 directors in the board. The mean of CEOD is 0.190 which means that about 19% of the sample practice CEO duality. The average ratio of directors' ownership is 0.136 with minimum value of 0 and the maximum value of ratio 0.600. The average number of audit committee (ACS) is 5.730 with the range between 4 to 8 members. The

average ratio of audit committee independence (ACI) is 0.742 ranging from 0.500 to 1.000. The average log of corporate tax (CT) and corporate profit is 8.806 percent and 8.333 percent respectively. The average log of expenditure spent on CSR 5.993 percent. The average log of total asset (FSIZE) is 10.433 percent. The average ROA is 0.100 ranging from -0.480 to the maximum of 0.980. The skewness of the data for all variables ranging from -0.738 to 1.945 which fall within the acceptable region, indicating that the data is normal.

Table 3. Descriptive Statistics

| Variables | Mean   | Min    | Max    | Skewness |
|-----------|--------|--------|--------|----------|
| BS        | 8.800  | 6.000  | 11.000 | -0.368   |
| CEOD      | 0.190  | 0.000  | 1.000  | 1.617    |
| DO        | 0.136  | 0.000  | 0.600  | 1.027    |
| ACS       | 5.730  | 4.000  | 8.000  | -0.541   |
| ACI       | 0.742  | 0.500  | 1.000  | 0.033    |
| CT        | 8.806  | 8.014  | 9.612  | -0.257   |
| CP        | 9.372  | 8.333  | 9.970  | -0.738   |
| CSR       | 5.993  | 5.000  | 8.562  | 0.517    |
| FSIZE     | 10.433 | 8.829  | 11.712 | -0.557   |
| ROA       | 0.100  | -0.480 | 0.980  | 1.945    |
| DCA       | -0.100 | -0.844 | 0.853  | 1.519    |

Table 4 shows that the variables explain about 55 percent of the model ( $R^2 = 55\%$ ) and F statistic 9.491 significant at 1 percent, which indicates that the model is fit. The individual contributions of the variables indicate that BS is significant in reducing earnings management at 10 percent. This is consistent with the findings of Fodio *et al.* (2013); Karamanou and Vafeas (2005). CEOD is significantly increasing earnings management at 5 percent level. This indicates that the more CEO and chairman are different persons the less earnings management will be incurred. This is consistent with findings in Klein (2002) and Mohamad *et al.* (2012). DO significantly increase earnings management at 1 percent showing that directors' ownership increase earnings management. This finding in line with finding in Cheng and Warfield (2005). ACS is found significantly reducing earnings management at 10 percent level which is consistent with finding in Fodio *et al.* (2013) and Yang and Krishnan (2005). Result for ACI shows that ACI is significantly

increasing earnings management at 5 percent which is consistent with the findings of Fodio *et al.* (2013) and Xie *et al.* (2003).

For the sensitive factors, the result indicates that CT is negatively related to earnings management but is not significant, indicating that CT is not contributing to decrease earnings management. CP is found significantly increasing earnings management at 10 percent, instead of decreasing earnings management. Finding for CSR reveals that CSR is significantly increasing earnings management. This is contrary to the prediction of the study which expected negative relationship between CSR and EM. The finding for FSIZE (coefficient -0.243, *t*-statistics -3.697, *p* value 0.000) shows that big firms are less engaged in earnings management which is significant at 1 percent. This finding is in line with finding in Inaam, Khmoussi and Fatma (2012). For the ROA the finding reveals that ROA is positively and significantly related to earnings management at 1 percent level.

Table 4. OLS Regression Result

| Variables               | Coefficient | t-Statistics | P-value |
|-------------------------|-------------|--------------|---------|
| BS                      | -0.023      | -1.552       | 0.063   |
| CEOD                    | 0.109       | 1.842        | 0.035   |
| DO                      | 0.001       | 2.688        | 0.005   |
| ACS                     | -0.063      | -2.382       | 0.010   |
| ACI                     | 0.223       | 1.672        | 0.050   |
| CT                      | -0.069      | -1.208       | 0.116   |
| CP                      | 0.116       | 1.410        | 0.081   |
| CSR                     | 0.061       | 2.135        | 0.018   |
| FSIZE                   | -0.243      | -3.697       | 0       |
| ROA                     | 0.67        | 5.385        | 0       |
| R <sup>2</sup>          |             | 0.546        |         |
| Adjusted R <sup>2</sup> |             | 0.488        |         |
| F-statistics            |             | 9.491***     |         |

## 5. CONCLUSION AND RECOMMENDATION

The objective of the study is to examine the effects of corporate governance variables and sensitive factors toward curving earnings management. The study shows that corporate governance and sensitive factors play a significant role in managing earnings management. The result reveals that board size, audit committee size and non CEO duality (independent leadership) play a significant role in curving earnings management, while directors stock ownership, audit committee independence, corporate profit and corporate social responsibility have significant role of increasing earnings management. The result also shows that corporate tax does not contribute to earnings management practices.

The study has the following limitations; first, there is limited number of oil and gas firms listed in Nigeria stock market; second the data are collected manually as no availability of data in any data base; third, there were some missing date. Based on the study findings, the study recommends that government should consider these empirical findings to support future policies developments in enhancing the earnings quality in order to attract more foreign investors to invest in Nigerian companies. Practitioners, managers, and decision makers should also consider these findings in their decision making.

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