FINANCIAL ACCOUNTING METHODS AND EXECUTIVE COMPENSATION: A COMPARATIVE STUDY OF PRE AND POST IFRS ADOPTION BY MANUFACTURING FIRMS

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ABSTRACT: This paper examines the relationship between financial accounting methods and executive compensation in pre and post IFRS era of manufacturing firms in Nigeria for a 7 year period. Financial accounting variables considered in the study are discretional receivable accruals, discretional inventory accruals and discretional depreciation accruals. Tests were conducted to determine whether financial accounting methods variables have any statistically significant relationship with executive compensation variable using simple regression Analysis. Executive compensation variable was regressed on financial accounting methods variable on both eras independently. The results from the analysis showed that discretionary accounts receivable accruals and discretionary inventory accrual have no statistically significant relationship with executive compensation of firms in the manufacturing sector of Nigeria in both pre and post IFRS periods. In contrast to the other two variables of financial accounting methods, discretionary depreciation has significant relationship with remuneration of executive directors implying earnings manipulation and in sync with agency theory.

KEYWORDS: Financial Accounting method, Executive Compensation, Pre and Post IFRS Adoption, Discretional Accruals, Account Receivable Accruals, Depreciation

INTRODUCTION

The last two decades has witnessed a phenomenal rise in executive compensation largely due to inflationary pressure and the divorce of management and ownership authority of firms. This separation of ownership and running of the firm and placement of the responsibility on top management as the main makers of control system in modern firms, gave rise to conflict of interest between managers and shareholders. This is the agency theory that implies that managers have the intent to maximise their personal wealth at the expense of shareholders. Therefore, to align the interest of managers with that of shareholders, firm designs executive remuneration contracts to constrain management to act in the best interest of shareholders Jensen and Meckling (1976). A well designed executive remuneration package maximizes firm’s benefit and reduces the costs related to executives, hence minimizing costs and risk for the shareholders. Büher (2010). The crux of the issue is whether compensation driven contracts utterly addresses the agency problem or constitute part of the agency problem. This problem has witnessed increased attention by researchers over the years. The reason for this renewed interest is not far fetched as...
the phenomenal increase in wages of executive impacts on the return to equity due to shareholders.

One prominent means by which management exercise their control in firms is in financial accounting and reporting process, precisely in accounting choice policy. Watts and Zimmerman (1978) extended the agency theory and developed positive accounting theory, a proposition that managers by exercising judgements in financial reporting attempt to maximise their benefit through increases in reported earnings that are used as a base measure in executive incentive bonus plans. Several studies on financial statements-disclosed earnings which serve as the bottom-line upon which firms’ performance is assessed indicate that earnings contain more information than rather primitive constructs like operating cash flow. Gomez, Okumura, and Kunimura (2000). In other words, the correlation between earnings and future stock returns and the correlation between earnings and future performance are higher than the correlation between cash flows from operations and these variables. Such improvement in information content is obtained by the use of accruals. This is so because accruals mitigate the problems of timing in measuring cash flows over short interval (Dechow 1994). In this sense, accruals contain the accounting adjustments necessary to cancel variations related to the operating cash cycle. She posits further that since timing and matching issues makes cash flow inefficient in measuring firm performance, and accruals are designed to mitigate these problems, it means, then that accruals will improve earnings ability to reflect firm’s performance. DKW (1998) also asserts that earnings predict future cash flow better than current cash flow. This phenomenon can be attributed to the forecasting power of accruals.

However, GAAP and IFRS allows certain discretions (managers deliberate choices on alternative accounting methods, often labeled in the literature as “professional judgment”), in reporting accounting numbers, especially discretionary accruals items which possibly contain management’s expectations about future cash flows and/or management’s intention to manipulate information. Subramayam (1996) assert that managerial discretion is the source of earnings smoothing. Moreover, that executive remuneration is either tied to accounting earnings (for example, bonus) or stock prices (for example, stock options) makes the executive compensation contract to create strong incentives and may induce earnings management by firm agents (executive directors). Lan Sun (2012) Some scholars even argue that large executive pay packages are the result of powerful managers setting their own pay and extracting rents from firms. (Carola and Dirk) Managers accomplish this income smoothing using discretionary accruals. Amr Hassan (2012).The users of financial statements rely and are unsuspecting about the audited financial information they receive. Likewise firm owners will presume executive remuneration contract mitigates the principal-agent problem but, in reality, where management (preparers of financial statements) has everything at their disposal to misrepresent those statements within the provisions of . Fields et al. (2001) believe the demand for accounting and accounting regulation implies that accounting disclosures and accounting-based contracts are efficient ways of addressing market imperfections. The question then arises, is there truly a correlation between the choice of accounting method and executive remuneration; does management apply their discretion in choice of accounting method in the interest of the shareholders and users of financial statements and/or if managers use their accounting choice discretion on accruals to maximize their remuneration benefits. There is however scant empirical
literature in third world countries especially in Nigeria that investigates and attempts to proffer solutions to these questions. This study therefore aims to fill this gap and ascertain the impact of accounting methods and its correlation with executive’s compensation in Nigeria’s pharmaceutical companies.

The main purpose of this study is to ascertain the relationship between Financial Accounting Methods and Executives Remuneration of quoted manufacturing firms in Nigeria. The objective of the study therefore is to investigate the relationship between Discretionary Accounts Receivable Accrual and remuneration of executive directors. It aims also to ascertain the association between Discretionary Inventories Accrual and remuneration of executive directors. To examine the correlation between Discretionary Depreciation Accrual and remuneration of executive directors.

LITERATURE /THEORETICAL UNDERPINNINGS

Conceptual Framework

Discretionary Account Receivables Accrual
Since almost all manufacturing firms in Nigeria have credit sales, accounts receivable accruals are almost a necessary accrual component of revenue. Accounts receivables are debts owed to the firm by their customers. Sometimes some of these customers never pay part or all of their debt, which makes their debt bad, hence bad debt. In compliance with the matching concept, a proportion of bad debt to be charged to the accounting period is to be estimated by management known as provisions for bad and doubtful debt which is usually a percentage of the Account Receivables. Managers also make the call on decisions as to write-off of bad debts and provisions for bad and doubtful debt. Decisions of increases and reductions in provisions are all judgements of management, as well as recognition of ‘bad debt written-off and later recovered’. Hence, potential for manipulation in receivables and receivables-related accounts is well established. For example, Beasley et al. (2000) find that receivables and inventory are the most misstated asset accounts on the balance sheet. Accounts receivable accruals are almost a necessary accrual component of revenue. Accounts receivable is commonly used through techniques such as trade-loading and premature revenue recognition to manipulate earnings (Dechow et al. 1996). Stubben (2006) in his study shows that firms manage accounts receivable accruals to meet not only earnings forecasts, but also sales forecasts. He further shows that such revenue manipulation behavior is more significant for growth firms whose valuation is hypothesized to depend more on revenues than on earnings. Based on similar reasons, Marquardt and Weidman (2004) predict and find that firms issuing equity, who are often growth firms, are more likely to manage earnings using accounts receivables as companies may manipulate receivables to increase sales or earnings (Caylor, 2010). A case in point is American Italian Pasta, which inflated its receivables to support overstated sales (U. S. SEC, 2008). Other companies, like Gateway for instance, have understated the allowance for doubtful accounts to decrease expenses and increase earnings (U.S. SEC, 2003).

Discretionary Depreciation Accruals
Depreciation is the systematic procedure for allocating the cost of fixed assets over their useful lives (IAS 4). In determining depreciation, the following four critical decisions have to be made:
Ascertainment of the cost of the asset, estimating the useful life of the asset, determining the residual or scrap value of the asset and the selection of the depreciation method. All of these decisions are made by managers, and have impact on financial reporting. Amongst the methods for example are the straight-line method (spreading the depreciation charge equally over the assets useful life) - which reports higher earnings and the Reducing balance method (charges higher depreciation at the beginning of asset life and reduces with subsequent years). Other areas of judgements many of which offer an opportunity to manage earnings is in Writing off long-term assets:

Selecting the write-off method - Management has to decide what method to use to write-off newly acquired long-term operating asset. Some methods result in greater expense in the current period than others.

Selecting the write-off period - Management must often estimate the “useful” life of a long-term asset, which can be substantially shorter than its actual physical life. Estimating salvage value - Some long-term assets retain substantial value at the end of their estimated useful lives. This value must be estimated in order to record the correct annual expense amount. The value may be realized 10, 15, or even 30 years in the future, so there can be a range of reasonable estimates. Change to non-operating use - If a long-term asset is changed from operating to non-operating use, it will no longer be necessary to record depreciation or amortization expense. This is permissible when a company ceases to use an asset for operating purposes. Researchers have either explicitly or implicitly considered a company's depreciation policies in their analyses of the quality of the firm's earnings. The overriding consensus is that straight-line depreciation is an income-increasing method and all accelerated methods are income decreasing. For example, Comiskey (1971) examined the market reaction to a switch from straight-line to accelerated depreciation. He studied 11 steel companies in 1968 that had changed methods in that year and reported that four of the 11 firms were able to prevent a decline in EPS from 1967 to 1968 simply by changing to a different depreciation method. Dhalimal, Salamon, and Smith (1982) reported that management-controlled firms are more likely than the owner controlled firms to use straight-line depreciation. Aside the choice of accounting methods, managers make the call on the rate of depreciation, estimated life and salvage value. The longer the useful life of an asset and the greater the scrap value, the less its depreciation will be over its life. And a lower depreciation raises reported earnings and boosts book value.

**Discretionary Inventory and Accruals**

Firms are going concerns and therefore it is expected that at any year end, a firm may have quantities of stock on hand to meet the day to day demand. Thus inventory constitutes goods manufactured. The gross profit arises when sales revenue exceeds cost of sales (total opening stock + cost of manufactured goods less closing stock). There is therefore a relationship between the value of closing stock, cost of sales and size of gross profit, valuation of inventory becomes invaluable (Ebirim 1999). However, GAAP provides management choices of different valuation methods which basically include First-in-First-Out (FIFO), Last in Last Out (LIFO) and the Weighted Average Method. All of these methods have different significant impact on reported earnings; FIFO reports higher earnings, followed by the Weighted Average and then the LIFO. Currently, every manufacturing company uses the FIFO which portrays the prevalent desire to report higher profits especially in an inflationary economic environment as Nigeria. The GAAP
requires method of valuation to be specified in Financial reports, and the Principle of consistency, however makes it difficult for firms to switch between methods; however, in stock valuation, determining the quantity of stock held, deciding the price of the quantity held, the replacement value of the stock at the accounting date etc are areas of management discretions which the books is not required to compulsorily state and have proven to be areas usually exploited in earnings management. Hamilton, C. (n.d)

According to Hamilton, C. (n.d) the overstatement of inventory is one of the most common manipulations in financial statements. This type of manipulation, he argues is carried out by top management and is usually motivated by the desire to attain some financial goals or benchmark and subsequently their compensation. He further asserted that management may be motivated to report high earnings to satisfy shareholders, achieve compensation targets or maintain bank lending covenants. This is usually carried out through timing schemes, expenses record as inventory and valuation schemes. In addition, the FIFO/LIFO question is one of the most obvious areas of discussion when considering the effects of an accounting method choice on a firm's quality of earnings. Because inventory make up a large percentage of the assets on the typical balance sheet of a manufacturing or merchandising company, and because the cost of the inventory sold is one of the largest single expense items on the typical income statement of manufacturing and merchandising companies, researchers and analysts have had a heightened interest in how inventory method decisions affect a company's earnings quality. However, since such changes must be reflected on the income statements, managers would rather use areas of discretion to carry out their accrued inventory manipulations. Other operational areas that are potential targets of accounting manipulation are stated below:

Income overstatement is the most common area of potential manipulation which may involve artificially inflating sales, or improper accounting entries that cause earnings to be overstated (Vesta Insurance Group Inc., for example), or overstating inventory (Gibson Greetings Inc.), or overstating assets and retained earnings (Seaboard Corp.).

Understatement of expenses or payables is a method employed to inflate earnings. Accounting irregularity examples in this category include artificially-reduced expenses (Rent Way Inc.), inappropriate recording of expenses (Chicago & North Western Holdings), understating accounts payable (Guilford Mills Inc.), and undervaluing contract costs (Gunther International Ltd). Improper Revenue Recognition is one of several ways used to manipulate revenue. Among the examples in this research are: premature recognition of sales (Systems Network Corp. recognised revenue in 1996, which should have properly been reported in 1997), shipment manipulations (Structural Dynamics Research Corp. found that certain shipments intended for sale to, or through, third party distribution channels, apparently did not represent valid sales), inappropriate recognition of gains on derivatives transactions (Safety Kleen Corp.), improper recording of receivables and recording previously unrecognised expenses (Park Electrochemical Corp.), and inappropriately recorded revenues (Allscripts Inc., sales (McKesson HBOC Inc.), and transactions (JDN Realty Corp.). Time Differentiation is another form of manipulation. There are eight companies in the sample that overstated their earnings using this method. For example, Exide Corp. improperly deferred a pre- fiscal 1998 charge until fiscal 1998 and 1999. Transactions were booked in the wrong periods by Informix Corporation. Legato Systems Inc.
recorded contracts as revenue in the third quarter that should have been recorded as revenue in the first and second quarters of 2000.

Executive Compensation
Execution compensation is defined as executive directors’ remuneration which includes salaries, wages, and expenses. Despite substantial heterogeneity in pay practices across firms, most CEO compensation packages contain five basic components: salary, annual bonus, payouts from long-term incentive plans, restricted option grants, and restricted stock grants. In addition, CEOs often receive contributions to defined-benefit pension plans, various perquisites, and, in case of their departure, severance payments. (Frydman and Jenter) (n.d). The relative importance of these compensation elements has changed considerably over time.

Management compensation agreements
Management compensation contract is aimed at alleviating the conflict of interest between corporate managers and stockholders; these plans are designed to motivate managers to maximize firm value (Smith and Watts, 1982). However, the structure of management compensation agreements varies across firms because the costs and benefits of monitoring and motivating managers is a function of the firm’s nature of investment opportunities. Smith and Watts (1991) argue that the actions of managers are less costly to monitor when the firms have relatively more assets-in-place than when the firm’s value is comprised largely of growth opportunities. In addition, managers of firms with relatively more growth opportunities are likely to enjoy more decision-making discretion because of the notion that these managers have better information about the firm’s investment opportunities than the firm’s stockholders; In other words, managers of firms with relatively more assets-in-place are not likely to have as much specific relevant knowledge as managers of growth firms would have. Consequently, Smith and Watts predict that the latter are more likely to use incentive compensation schemes that tie executive remuneration to measures of firm performance (such as accounting earnings or stock price). In addition, Smith and Watts (1991) argue that accounting numbers are inefficient performance measures for firms with relatively more growth opportunities due to conservatism in accounting; the need for objective and verifiable numbers limits the willingness of accountants to recognize income that depends on future events which are uncertain (Consistent with this, Collins et al).

Earnings Based Compensation
Executive compensation typically consists of four components: base salary – the fixed component of compensation, stock options, long-term incentive plans and annual bonus plans (Murphy, 1999). Larker et al. (2007) show a positive association between abnormal accruals and the weight of accounting-based pay in the compensation package, suggesting that accounting based pay provides stronger incentives for earnings manipulation than equity-based compensation. Regarding bonus plans specifically, Murphy (1999) points out that these plans consist of three basic components: performance measures, performance standards, and the structure of the pay-performance relation. Prior research largely focuses on how the structure of pay-performance relation provides incentives for earnings management (Healy, 1985; Holthausen et al. 1995; Gaver et al. 1995). While these studies assume that earnings are the performance measure used in bonus plans, Murphy (1999) indicates that cash flow may also be
used as a performance measure. Perry and Zenner (2001) report that in 1995 around 15 percent of firms employed cash-flow based performance measures. Recent anecdotal evidence suggests that cash-flow-based performance measures are increasing in popularity, allegedly due to concerns over management manipulation of earnings (Leone, 2004). In a sample of 165 firms in year 2005 Huang, Marquardt, and Zhang (2010) report that around 20% percent of the firms use cash flow based performance measure in their bonus plans.

Conceptualized fig
EMPIRICAL REVIEW

Empirical Review
The earnings management literature describes the incentives among managers to exploit the flexibility in GAAP to manage accounting reports in ways that affect earnings quality. Researchers have examined the effect of bonus plans on those choices with mixed results. For example, while Healy (1985) examines accrual choices around the lower and upper bounds of bonus plans showing that managers make accounting/accrual choices as if they affect compensation, later research, i.e., Gaver et al. (1995), and Holthausen et al. (1995), is unable to confirm his results along the lower bound. While Gaver et al. (1995) suggest their results are “more consistent with the income smoothing hypothesis than with Healy's bonus hypothesis,” Holthausen et al. (1995) argue that “Healy's results at the lower bound are likely to be induced by his methodology.” Another alternative explanation for the mixed results is that incentives and behaviour have changed over time. For example, Holthausen et al. (1995) discuss the evolution of bonus plans from pools plans to budget-based incentive arrangements. It makes sense that managers would respond to incentives and make accounting choices to manage earnings. Murphy (1999) documents the use of accounting performance measures in annual incentive plans of large corporations. Other studies document a significant statistical association between variants of accounting earnings and incentive pay (e.g., Antle and Smith 1985; Lambert and Larcker 1987; Jensen and Murphy 1990; Sloan 1993). Perhaps most directly, another line of research examines accounting method choices (Abdel-Khalik et al. 1987, Healy et al. 1987), discretionary accruals (Balsam 1998), and nonrecurring transactions (Gaver and Gaver 1998), showing that compensation appears to be affected by these choices, providing indirect evidence that managers manipulate reported income to maximize their bonuses.

Given that managers can take actions to manage reported earnings, earnings-related disclosures, and even the perception of earnings (Schrand and Walther 2000), it is not surprising that Clinch and Magliolo (1993) report that management discretion could limit the effectiveness of earnings as a performance measure in compensation contracts. Thus cash flows from operations are often used by researchers to approximate performance because cash flows are less subject to accounting accruals and deferrals, and consequently mitigate sources of potential manipulation (Cheng et al. 1997). Prior researchers, i.e., Kumar et al. (1993) and Natarajan (1996), do not find a significant association between cash flows from operations and CEO compensation after controlling for net income. However, Nwaeze et al. (2006) find that cash flows from operations are compensation contract-relevant, especially when the quality of earnings relative to the quality of cash flows from operations as a measure of performance is low. While there are no studies directly linking the level and structure of management compensation to accounting irregularities, a large number of studies provide evidence about the linkage between management compensation and earnings management or manipulation. Dye (1988) states that as long as accounting data are used in compensation contracts, incentives will arise to manage these data. Elitzur and Yaari (1995) examine how insider trading and executive incentive compensation affect earnings management. Their results indicate that there is a systematic relationship between executive incentive compensation and earnings manipulation. This implies that executive incentive compensation can motivate management to increase the degree of earnings manipulation. Elitzur and Yaari also indicate that the design of compensation schemes can affect
management’s earnings manipulation practices. Healy (1985) examines the effect of executive earning-based bonus plans on accrual policies and accounting procedure choice decisions. He indicates the bonus schemes and performance plans are explicitly dependent on accounting earnings. His results suggest that bonus plans motivate management to select accrual and accounting procedures that maximise the present value of their own bonus. Further, the adoption or modification of a bonus plan has a high probability of causing changes in accounting procedures. Holthausen, Larcker, and Sloan (1995) extend the work of Healy (1985) and examine the degree to which earnings manipulation is driven by maximisation of short-term bonus value. Their results support Healy’s bonus maximization hypothesis. Guidry et al. (1999) find that business unit managers from multinational conglomerates manipulate earnings to maximise their short-term bonus plans. Duru and Iyengar (2001) explore the relationship between compensation variables and accounting- and market-based performance measures. Their evidence shows that CEOs’ bonuses are more closely tied to accounting performance measures like earnings before interest and taxes (EBIT) and earnings per share. However, CEO incentive compensation is associated with the firms’ market-based returns, which explicitly or implicitly incorporate accounting data.

**METHODOLOGY**

**Data**

The accessible population of the study constitutes all listed breweries, cement, food, health & care product and consumer staple manufacturing companies in Nigeria. The research was based on firms with complete data for the periods under investigation (2007 – 2011 pre IFRS) and (2012 – 2013 post IFR. The data covered a total period of seven years (5 years pre IFRS and 2 years post IFRS) from 2007 to 2013. The research uses secondary data obtained from financial statements of the studied firms and the Nigeria Stock Exchange fact book.

**Variables**

All the variables of the study were measured with the use of interval scale. The scale is considered appropriate to measure the numerical extent to which the object on which the scale is applied to possesses the variable being measured.

The main variables of the study are:

**Independent variable:** Financial Accounting Methods. Financial accounting methods are defined as managers’ accounting method choices including adjustments known as accruals which are the difference between reporting earnings and operating cash flows (which is equal to Accrual components of earnings). Accounting accruals (estimates)—adjustments to operating cash flows in calculating net income—are the means for achieving a desired earnings figure. By their nature, accruals involve estimation, require subjective judgments, and are difficult for auditors to objectively verify before their realization (Jackson and Pitman, 2009).

**Dependent variable:** Executive Compensation.
Executive compensation is defined as executive directors’ remuneration which includes salaries, wages, and expenses.

**Model Specification**

Managers use accrual-based earnings management techniques to provide flexibility within accounting rules to manage firm earnings perhaps to increase their benefits.

Our primary regression follows from model (2) in Balsam (1998) as cited in Balsam (2010). Balsam hypothesizes and finds that the use of income-increasing discretionary accruals increases compensation; and that of Shalve, Zhang and Zhang (2010) who used the following model to examine the relation between depreciation and amortization expenses and CEO bonuses:

\[
\text{CHANGE\_BONUS}_t = a_0 + a_1 \text{RET}_t + a_2 \Delta \text{ROA}_t + a_3 \Delta \text{DEP/AMORT}_t + e
\]

where; RET is Stock returns and \(\Delta \text{ROA}_t\) is changes in return on assets. Industry and year fixed effects are also included in the regression. Change in the accounting-based performance measure is decomposed into two parts: one for change in depreciation and amortization expenses (\(\Delta \text{DEP/AMORT}_t\), change in depreciation and amortization scaled by beginning total assets) and one for change in ROA before depreciation and amortization (\(\Delta \text{ROA}_t\), net income before extraordinary items and depreciation and amortization scaled by beginning total assets).

Following Shalve, et al. (2010), regression Analysis was used in this study. A cross-sectional regression analysis was used to estimate the effect of these variables on the compensation packages.

The functional relationships between the variables are thus:

\[
\Delta \text{EXR} = f(\Delta \text{AR}) \text{..........................................................}1
\]
\[
\Delta \text{EXR} = f(\Delta \text{INV}) \text{..........................................................}2
\]
\[
\Delta \text{EXR} = f(\Delta \text{DEP}) \text{..........................................................}3
\]

From the above functional relationship, the econometric models are specified thus:

\[
y = a_1 + \beta_1 x_1 + \varepsilon_{1t}
\]
\[
y = a_2 + \beta_2 x_2 + \varepsilon_{2t}
\]
\[
y = a_3 + \beta_3 x_3 + \varepsilon_{3t}
\]

Where:

- \(y\) is the executive directors’ remuneration (\(\Delta \text{EXR}\)) in year \(t\) less executive directors’ remuneration in year \(t-1\) for firm \(I\) scaled by lagged total assets.
- \(x_1\) is accounts receivables (AR) in year \(t\) less account receivables in year \(t-1\) scaled by lagged total assets;
- \(x_2\) is inventory accruals (IA) in year \(t\) less inventory accruals in year \(t-1\) scaled by lagged total assets.
- \(x_3\) is depreciation in year \(t\) less depreciation in year \(t-1\) scaled by lagged total assets;
- \(\alpha\) = intercept term
- \(\beta\) = estimation coefficients
- \(\varepsilon\) = estimation error term
RESULTS/FINDINGS

The data collected for analysis: five years pre IFRS (2007 – 2011) are presented in tables 1-3 and two years Post IFRS (2012 – 2013) are shown in tables 4=6 below.

Financial Accounting Methods and Executive Compensation in Pre IFRS Era

Hypothesis 1

H0: There is no statistically significant relationship between Discretionary Accounts Receivable Accrual and remuneration of executive directors?

The result of the researcher’s analysis is presented in tables 1, 2 and 3:

Table 1: Simple Regression Analysis of the relationship between Change in Accounts Receivable and Change in Executive Directors’ Remuneration in pre IFRS era.

Model: \( \Delta \text{EXR} = f(\Delta \text{AR}) \)

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<td>1</td>
<td>.084a</td>
<td>.007</td>
<td>-.045</td>
<td>44321.130</td>
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a. Predictors: (Constant), Changes in Accounts Receivable

ANOVA

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<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<tr>
<td>Regression</td>
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<td>267534614.633</td>
<td>.136</td>
<td>.716b</td>
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<td>Residual</td>
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<td>19</td>
<td>1964362527.611</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td>37590422639.238</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Change in Executive directors’ Remuneration

b. Predictors: (Constant), Change in Accounts Receivable.

Coefficients

<table>
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<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<th>Sig.</th>
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<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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<td>(Constant)</td>
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<td></td>
<td></td>
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<td>17682.350</td>
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<td>Discretionary Accounts</td>
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<tr>
<td>Receivable Accrual</td>
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</tr>
</tbody>
</table>

a. Dependent Variable: Change in Executive directors' Remuneration.
The computed results show an R square value of 0.007, which indicates that 0.70 percent of the variation in Change in Executive Directors’ Remuneration, can be explained by variability in Change in Accounts Receivable. This suggests that change in accounts receivable has a very weak relationship with Change in Executive Directors’ Remuneration. However, the intercept of the regression is positive, meaning that change in accounts receivable has a positive relationship with change in executive directors’ remuneration. The coefficient is -0.001, ceteris paribus (all things being equal), this means that an increase in change in accounts receivable will lead to a decrease in change in executive directors’ remuneration.

The ANOVA F-value is 0.136 which is statistically insignificant at a level of 0.05 this suggests that there is no linear relationship between the variables. The analysis shows a p-value of 0.716 which is far above the conventional level of 0.01 and 0.05 levels of significance. We therefore accept the null hypothesis and conclude that change in accounts receivable does not have significant relationship with change in executive directors’ remuneration.

**Hypothesis 2**

H0: There is no statistically significant association between Discretionary Inventories Accrual and executive Directors’ remuneration?

**Table 2: Simple Regression analysis of the relationship between Change in Inventory and Change in Executive Director’s Remuneration in pre IFRS era.**

Model: \( \Delta \text{EXR} = f(\Delta \text{INV}) \)

Ordinary Least Square (OLS)

**Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<td>.072</td>
<td>.023</td>
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*a. Predictors: (Constant), Change in Inventories*

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<td>1836435667.205</td>
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<tr>
<td>Total</td>
<td>3759042639.238</td>
<td>20</td>
<td></td>
<td></td>
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</tbody>
</table>

*a. Dependent Variable: Change in Executive directors' Remuneration*

**Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>9445.394</td>
<td>11048.703</td>
<td>.855</td>
</tr>
<tr>
<td></td>
<td>Change in Inventories</td>
<td>007</td>
<td>.006</td>
<td>.268</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Change in Executive directors' Remuneration*
The computed results show an R square value of 0.072, which indicates that 7.2 percent of the variation in Change in Executive Directors’ Remuneration can be explained by variability in Change in Inventory. This suggests that change in inventory has a very weak relationship with Change in Executive Directors’ Remuneration. However, the intercept of the regression is positive, meaning that change in inventory has a positive relationship with change in executive directors’ remuneration. The ANOVA F-value is 1.469 which is statistically insignificant at a level of 0.05 this suggests that there is no linear relationship among the variables. The analysis shows a p-value of 0.240 which is far above the conventional level of 0.01 and 0.05 levels of significance. We therefore accept the null hypothesis and conclude that change in inventory does not have a significant relationship with change in executive directors’ remuneration.

**Hypothesis 3**

H0: There is no statistically significant correlation between Discretionary Depreciation Accrual and remuneration of executive directors.

**Table 3. Simple Regression Analysis of the relationship between Change in Depreciation and Change in Executive Directors’ Remuneration in pre IFRS era.**

Model: ΔEXR = f(ΔDDEP)

Ordinary Least Square (OLS)

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.445a</td>
<td>.198</td>
<td>.156</td>
<td>39832.010</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Discretionary Depreciation Accrual

**ANOVAa**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>7445230552.813</td>
<td>1</td>
<td>7445230552.813</td>
<td>4.693</td>
<td>.043b</td>
</tr>
<tr>
<td>Residual</td>
<td>30145192086.425</td>
<td>19</td>
<td>1586589057.180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37590422639.238</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Change in Executive directors' Remuneration

b. Predictors: (Constant), Change in Depreciation

**Coefficientsa**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>3396.497</td>
<td>10610.259</td>
<td>.445</td>
<td>.320</td>
</tr>
<tr>
<td>1</td>
<td>Discretionary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depreciation Accrual</td>
<td>.067</td>
<td>.031</td>
<td>2.166</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Change in Executive directors' Remuneration

, p < 0.05 and p < 0.10, respectively

Source: SPSS Version 20 Output, Computed from Table data 2007-2011
The computed results show a correlation coefficient of 0.445 which indicates a fair relationship between change in depreciation and change in executive directors’ remuneration. However, the intercept of the regression is positive, meaning that change in depreciation has a positive relationship with change in executive directors’ remuneration.

The ANOVA F-value is 4.693 which is statistically significant at a level of 0.05 suggesting that there is a strong linear relationship between the variables. The analysis shows a p-value of 0.043 which is less than the conventional level of 0.05 and 0.1 levels of significance. We therefore reject the null hypothesis and conclude that change in depreciation has significant relationship with change in executive directors’ remuneration.

**Financial Accounting Methods and Executive Compensation in Post IFRS Era**  
**Hypothesis 1**  
Ho1: There is no statistically significant relationship between Discretionary Accounts Receivable Accrual and remuneration of executive directors?

The result of the researcher’s analysis is presented in tables 4, 5 and 6:

**Table 4: Simple Regression Analysis of the relationship between Change in Accounts Receivable and Change in Executive Directors’ Remuneration in post IFRS era.**  
Model: \( \Delta \text{EXR} = f(\Delta \text{AR}) \)

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.002(^a)</td>
<td>.000</td>
<td>-.125</td>
<td>669497.493</td>
</tr>
<tr>
<td>a. Predictors: (Constant), Discretionary Accounts Receivable Accrual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>10705935.389</td>
<td>.000</td>
<td>.996(^b)</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>8</td>
<td>448226893041.389</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| a. Dependent Variable: Executive directors’ Remuneration |
| b. Predictors: (Constant), Discretionary Accounts Receivable Accrual |

**Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant) Discretionary Accounts Receivable Accrual</td>
<td>227917.886</td>
<td>213598.873</td>
<td>1.067</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>.000</td>
<td>.045</td>
<td>-.002</td>
</tr>
</tbody>
</table>

| a. Dependent Variable: Executive directors’ Remuneration |
The computed results show an R square value of 0.00, which indicates that 0.00 percent of the variation in Change in Executive Directors’ Remuneration, can be explained by variability in Change in Accounts Receivable. This suggests that change in accounts receivable has no relationship with Change in Executive Directors’ Remuneration. However, the intercept of the regression is negative, meaning that change in accounts receivable has a negative relationship with change in executive directors’ remuneration. The coefficient is 0.000, ceteris paribus (all things being equal), this means that an increase in change in accounts receivable will have no effect in change in executive directors’ remuneration.

The ANOVA F-value is 0.000 which is statistically insignificant at a level of 0.05 this suggests that there is no linear relationship between the variables. The analysis shows a p-value of 0.996 which is far above the conventional level of 0.01 and 0.05 levels of significance. We therefore accept the null hypothesis and conclude that change in accounts receivable does not have significant relationship with change in executive directors’ remuneration.

**Hypothesis 2**

Ho2: There is no statistically significant association between Discretionary Inventories Accrual and executive Directors’ remuneration?

**Tab 5. Simple Regression Analysis of the relationship between Change in Inventory and Change in Executive Directors’ Remuneration in pre IFRS era.**

Model: \( \Delta \text{EXR} = f(\Delta \text{INV}) \)

Ordinary Least Square (OLS)

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted Square</th>
<th>R Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.489a</td>
<td>.239</td>
<td>.144</td>
<td>583978.116</td>
<td>a. Predictors: (Constant), Discretionary Inventories Accrual</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVAa</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>857582327642.863</td>
<td>1</td>
<td>857582327642.863</td>
<td>2.515</td>
<td>.151b</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>2728243522623.638</td>
<td>8</td>
<td>341030440327.955</td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>Total</td>
<td>3585825850266.501</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Executive directors' Remuneration

ISSN: 2052-6393(Print), ISSN: 2052-6393(Print)
b. Predictors: (Constant), Discretionary Inventories Accrual

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Discretionary Inventories Accrual</td>
<td>343208.226</td>
<td>198497.982</td>
<td>.489</td>
<td>1.729</td>
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<tr>
<td></td>
<td></td>
<td>.143</td>
<td>.090</td>
<td></td>
<td>1.586</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Executive directors’ Remuneration

The computed results show an R square value of 0.239, which indicates that 23.9 percent of the variation in Change in Executive Directors’ Remuneration can be explained by variability in Change in Inventory. This suggests that change in inventory has a weak relationship with Change in Executive Directors’ Remuneration. However, the intercept of the regression is positive, meaning that change in inventory has a positive but weak relationship with change in executive directors’ remuneration.

The ANOVA F-value is 2.515 which is statistically insignificant at a level of 0.05 this suggests that there is no linear relationship among the variables. The analysis shows a p-value of 0.151 which is far above the conventional level of 0.01 and 0.05 levels of significance. We therefore accept the null hypothesis and conclude that change in inventory does not have a significant relationship with change in executive directors’ remuneration.

Hypothesis 3
Ho: There is no statistically significant correlation between Discretionary Depreciation Accrual and remuneration of executive directors.

Table 6. Simple Regression Analysis of the relationship between Change in Depreciation and Change in Executive Directors’ Remuneration in pre IFRS era.
Model: \( \Delta \text{EXR} = f(\Delta \text{DDEP}) \)
Ordinary Least Square (OLS)

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.445a</td>
<td>.198</td>
<td>.156</td>
<td>39832.010</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Discretionary Depreciation Accrual

ANOVAa


<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>7445230552.813</td>
<td>1</td>
<td>7445230552.813</td>
<td>4.693</td>
<td>.043</td>
</tr>
<tr>
<td>Residual</td>
<td>30145192086.425</td>
<td>19</td>
<td>1586589057.180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37590422639.238</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Executive directors' Remuneration  
b. Predictors: (Constant), Discretionary Depreciation Accrual

Coefficients\(^a\)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>3396.497</td>
<td>10610.259</td>
<td>.320</td>
<td>.752</td>
</tr>
<tr>
<td>1</td>
<td>.067</td>
<td>.031</td>
<td>.445</td>
<td></td>
</tr>
<tr>
<td>Discretionary Depreciation Accrual</td>
<td>.031</td>
<td>.445</td>
<td>2.166</td>
<td>.043</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Executive directors' Remuneration  
Source: SPSS Version 20 Output, Computed from Table data 2012-2013

The computed results show a correlation coefficient of 0.445 which indicates a fair relationship between change in depreciation and change in executive directors’ remuneration. However, the intercept of the regression is positive, meaning that change in depreciation has a positive relationship with change in executive directors’ remuneration.

The ANOVA F-value is 4.693 which is statistically significant at a level of 0.05 this suggests that there is a strong linear relationship between the variables. The analysis shows a p-value of 0.043 which is less than 0.05 levels of significance. We therefore reject the null hypothesis and conclude that depreciation predicts executive directors’ remuneration.

**DISCUSSION**

After independently testing the three Hypotheses drawn up by the researcher for both pre and post IFRS eras, some findings were made and these findings are discussed below.
In general, the findings with respect to discretionary depreciation accrual hypothesis for both eras provide evidence that there is some kind of relationship between financial accounting methods and executive compensation. This is largely supported by Meigs and Meigs (1984) in their book titled accounting the basis for business decisions.

However, the findings regarding the discretionary accounts receivable accrual and discretionary inventory accrual hypotheses for both eras are nevertheless less convincing. These hypotheses do not support the central hypothesis this notwithstanding leaves open a number of interpretation to the central hypothesis depending on the perspective.

Furthermore, worthy of note is the fact that discretionary accounts receivables accruals in pre IFRS and post IFRS shows a weak and no relationship respectively, the discretionary inventory accruals in pre and post IFRS shows a very weak and weak relationships respectively whereas
the fair significance in discretionary depreciation accruals remained same irrespective of the difference in data quantum for both eras could be a pointer to a non significant improvement as regards subjectivity in financial reporting with the translation from Nigerian GAAP to International Financial Reporting Standards (IFRS). In other words, IFRS accounting standards is still subjective hence the necessary use of management discretion for quality reporting.

IMPLICATION TO RESEARCH AND PRACTICE

This study provides a basis for policy makers to look at how they can make corporate governance policy that will protect the interest of existing and potential investors. For industry practitioners seeking ways to improve their financial accounting methods this study provides a platform for better understanding of which areas to improve. shareholders should set up a committee to realign the interest of the executive directors with that of the principal by introducing stock option compensation and they should not tie this to company’s bottom-line (i.e., company’s performance). The decision about the company’s accounting policy should not be left in the hands of executive directors rather it should be done jointly with non-executive directors. Also the accounting procedures as well as accounting policy be reviewed from time to time by an accounting policy committee set up by shareholders. The findings of depreciation having a significant relationship with executive compensation collaborates agency theory where managers act in self interest and calls for further research on potential ways of mitigating agency risks.

CONCLUSION

The research goal was to determine whether there is any significant relationship between financial accounting methods and executive compensation from 2007 to 2011 pre IFRS era and 2012 to 2013 post IFRS era in the manufacturing sector of Nigeria. The research result suggest that there is no statistically significant relationship between discretionary accounts receivable accrual and executive directors’ remuneration and that there is also no significant relationship between discretionary inventory accrual and executive directors’ remuneration, however, it showed that there is a significant relationship between discretionary depreciation accrual and executive directors’ remuneration in both eras. Note that variation in executive directions’ remuneration could also be as a result of change in the number of executive directors in the employment of a given company in any particular year. This study examined the correlation of change in accounts receivable, inventory and depreciation.

The research result showed that there is no significant relationship between discretionary accounts receivable accrual, inventory accrual and executive directors’ remuneration. In contrast discretionary depreciation accrual has a significant relationship with executive directors’ remuneration. The findings on discretionary depreciation accrual corroborate largely the agency theory that managers adopt accounting choices that serve their interest by creating the impression that the firm is doing very well while in actual sense the company may be down in terms of real performance. The researcher’s results indicate that there is some relationship between financial accounting methods and executive compensation.
FUTURE RESEARCH

The findings from our analysis have provided invaluable insights that should be of interest to practitioners, scholars, investors and policy makers. Certain issues arising from the firms provide avenues for further research as outlined below:

The study considered the relationship between financial accounting methods and executive compensation of quoted manufacturing companies in pre and post IFRS periods. Future research might carry out same study but with consideration to other factors like government policies, stock performance, legal and political system etc that might be responsible for changes in Executive compensation. A comparative analysis of the various financial accounting methods can also be carried out in further research as this study merely focused on comparison between pre and post IFRS periods. Further research can extend this study by replicating the methodology to investigate data of companies in the insurance sector. Moreover, the data sample can be separated and analyzed by industry. In this way a contribution could be made to developing a more industry specific theories. Future research has an opportunity to test longer time periods.

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