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Abstract
This paper examines the relationship between discretionary accruals and investment decisions in African sub-region. The data used in this study are obtained from audited annual financial statements of selected firms quoted on the Nigeria Stock Exchange (NSE). A sample of fifty (50) subjects was used in this study. This sample is purposively selected to represent the different sectors of the Nigerian economy. This was done to ensure representativeness of the studied firms; the data however, covered the period 2000-2015. The E-Views statistical package is used to estimate the parameters of the model adopted for the study. The ordinary least square (OLS) method is used; this was to enable the causality of the variables to be explored. The results of the study show that accrual generating process is significantly and positively related to the three measures of corporate performance as represented by dividend per share, price per share studied. It was however recommended, amongst others, that; potential investors should always look beyond accounting numbers when assessing investment opportunities as window dressing might paint rosier pictures for investment opportunities. In assessing company’s management performance, efforts should be made not to restrict such assessments to traditional measures (such as return on investment) but should include such methods as balance score card and employee motivation.

Keywords: Discretionary Accrual, Corporate performance, Investment decisions, Earnings management, Accrual generating process.

Introduction
At various times, there has been unexplainable fall in the prices of securities across the world’s capital markets, the most recent being the popular economic meltdown, that started in the late 2007 in the USA and plunged so many investors and economies into distress. In response to this experience, various studies have been conducted into the causes of the meltdown and have adduced several reasons for its occurrence. Specifically, research focus has since been shifted to contemporary studies in the areas of audit quality, earnings management and corporate governance among others and each separately examining how financial statements quality has been influenced. The big audit firms over time have always been perceived to have higher audit quality, and thus, increase the investors’ confidence in the financial reports audited by them. However, Ching, Heng Teg and San (2015) observed
that when earnings management is added as a mediating variable in the perceived financial statements quality, it mediates the relationship between audit quality and financial performance. In this case, the audit quality that is delivered by either big-4 audit firms or non-big-4 audit firms does not truly improve the financial performance when earnings manipulation activities are conducted by the management given that analysis of earnings management often focuses on management’s use of discretionary accruals. Over time, research findings have required the development of models that estimate the discretionary component(s) of reported income. Existing models range from simple models in which discretionary accruals are measured as total accruals, to more sophisticated models that attempt to separate total accruals into discretionary and nondiscretionary components has since been developed. There is, however, no systematic evidence bearing on the relative performance of these alternative models at detecting earnings management (Callao, Jarne & Wróblewski, 2017). On the other hand, studies in area of corporate governance has emphasized the way in which entities are directed and controlled, within structures that formally separate supervisory and managerial functions, and that ensure accountability between these, and between the entity and its investors and other external stakeholders. In a free-market business context, the OECD has recently summed up the corporate governance challenges neatly in these terms: ‘Good governance helps to bridge the gap between the interests of those that run a company and those that own it, increasing investor confidence and making it easier for companies to raise equity capital and to finance investment’.

The OECD also states that corporate governance should always ‘help ensure that a company honours its legal commitments and firms value-adding relations with stakeholders including employees and creditors’. Worldwide, there is a spectrum of regulatory options for promoting high governance standards – principles-based approaches on one side and rules-based approaches on the other. The Sarbanes-Oxley Act of 2002 in the United States, a direct legislative response to Enron and WorldCom, has come to be seen as a benchmark in rules-based regulation – detailed in its prescription of what boards and executives must do for good governance and backed by the force of law. In contrast, a principles-based approach usually gives boards flexibility in deciding how they should implement generally-stated requirements for good governance. There are various models along the spectrum. It is fair to say that principles become more prescriptive when written in more details and accompanied by ‘comply or explain’ requirements (Diplock, 2005). On the basis of the forgoing, this study will therefore be conducted to ascertain the extent to which the adoption of discretion in the preparation and presentation of published accounts or statements impact on the integrity and accuracy of these statements and investment decisions thereof.

Literature Review

Doubts about the reliability of a company’s qualitative financial disclosure increase market participant expectations from the auditor’s report. The auditing process is supposed to serve as a monitoring device that reduces management incentives to manipulate reported earnings. Empirical studies confirm that it could be an efficient device under some circumstances and recognizes that our estimates of the informativeness of audit reports are unavoidably biased (e.g., because of a client’s anticipation of the auditing process). First, accounting plays a significant role in the contractual relations that form the modern corporation, presumably to mitigate agency costs (Moldoveanu & Rotman, 2001; Ole-Kristian, 2013; Rampling, 2013; Goshen & Squire, 2018). Second, accounting provides an avenue through which managers disseminate privately held information, and the specific
accounting method choice can play a key role in that communication process. Third, regulation of accounting affects the quality and quantity of financial disclosures, which in turn have welfare and policy implications in the presence of externalities. Managers whose incentives are consistent with those of the firms’ owners may exercise accounting choices to convey private information to investors; other managers may use discretion opportunistically, possibly inflating earnings to increase their compensation (Thomas, Fields & Vincent, 2001). The nature of accruals accounting has given opportunities of discretion to management in determining the actual earnings of a company. The most common approach is to manage the timing of some expenditure or recognition of revenues and expenses. Aman Iskandarand Teruya (2006) mentioned that the main role of accruals accounting is considered to have created some types of earnings management which are difficult to differentiate from appropriate accrual accounting choices. Mehrholassani, Khayatzadeh-Mahani and Emami (2015) also stated that managements prefer accruals accounting due to its low cost and difficulty to be observed. Consequently, earnings management becomes a critical issue that must be handled carefully.

The relationship between accruals and sales changes is outlined by the popular accrual models and is empirically summarized by a regression coefficient that is either firm- or industry-specific (Dechow & Dichev, 2002; Dopuch, Mashruwala, Seethamraju & Zach, 2005). Depending on the empirical estimation procedure, time-series or cross-sectional, the assumption underlying the estimation procedure is that a firm either has a stable accrual-generating process over time, or that a group of firms has a common accrual-generating process. Also, that the relation between accruals and sales changes is more complex than described by the common empirical models and depends on several factors that are firms specific such as credit and inventory policies. Using this intuition, along with a theoretical model developed by Dechow, Kothari and Watts (Dopuch, et al. 2005) show that these firm-specific characteristics, labeled “accrual determinants”, exhibit a large variation across time, and more importantly within an industry-group. In the results of an empirical study, Deloitte (2018) observed “that there are findings which confirm that companies more often overstate than understate their information, including not only financial statements published in accordance with GAAP, but also tax returns and regulatory filings”. They also argued that Generally Accepted Accounting Principles (GAAP) often require that judgment be exercised in preparing financial statements. For example, that judgment may relate to the amount of accounts receivable that are likely to be collected, the appropriate allocation pattern for the cost of equipment, or how long a marketable security is likely to be held.

In turn, exercising such judgments provides information to outsiders when information asymmetries are present. This is self-evident when the decision maker (e.g., manager) is disinterested and objective, although issues of consistency and comparability inevitably arise. Accounting choice also may be Beneficial because alternative accounting methods may not be perfect substitutes from an efficient contracting perspective (Thomas, Thomas & Vincent, 2001; Lee, 2012; Mora & Walker, 2015). However, unconstrained accounting choice is likely to impose costs on financial statements users because preparers are likely to have incentives to convey self-serving information. For example, managers may choose accounting methods in self-interested attempts to increase the stock price prior to the expiration of stock options they hold. On the other hand, the same accounting choices may be motivated by managers’ objective assessment that the current stock price is undervalued (relative to their private information). In practice, it is difficult to distinguish between these two situations, but it is the presence of such mixed motives that makes the study of
accounting choice interesting. Because of these conflicting motives, contracting parties restrict the choices available to decision makers (Lee, 2012). Based on this line of argument, accounting regulators in the United States recently have voiced concerns about GAAP providing too much choice. In quick response the SEC Chairman has indicated enhanced SEC scrutiny of firms that announce major write-offs or participate in other practices consistent with earnings management (Rowland, 2002).

Therefore, regulators must understand the effect of over, under and reversal of discretionary actions and determine the ‘optimal’ level of discretion at financial statements preparation and audit process level. Over time, studies have found it interesting to explore why, for example, GAAP permits distinct choices (e.g., LIFO/FIFO, purchase/pooling) rather than just providing for judgment in areas that are not dichotomous (e.g., revenue recognition). In addition, a theory of accounting discretion must also take into account the incentives and politics of standard setters (Lee, 2012).

Although not all accounting choices involve earnings management, and the term earnings management extends beyond accounting choice, the implications of accounting choice to achieve a goal which is consistent with the idea of earnings management. Some opinion quarters have since suggested the need for the determination of specific accrual and the results of the specific accrual studies might be of a greater use in answering some questions than the implications of aggregate accrual studies. Particularly, investors and standard setters are interested to know which accrual accounts are used to influence the reported numbers more often and which less often. It is clear that if managers were entirely free to “cook” the accounts, the users of financial statements would hardly rely on them in making decisions. They do so because there exists a number of constraints supposed to limit the managerial discretion. The obvious examples are the general legal framework, accounting standards, audit, corporate governance structure and, of course, the ethical standards of those responsible. Clearly, it is the quality and the efficiency of these institutions that set the boundaries of earnings management in practice. Managers are aware of these constraints and the latter together with primary incentives influence the formulation of strategic objectives which direct the affairs of the entity concerned.

Statement of Problem

The published financial statements are key reference points for all investment decisions globally. Significant variables in the financial statements such as after tax profit or income; retained earnings, net asset values, dividend value and dividend per share are used in the determination of investment ratios which influences the decisions of financial statements users (investors). In arriving at these values in the financial statements, management discretions have been brought to play. This exercise of judgment in estimating and determining the value of assets, liabilities, expenses and incomes shown in the published accounts of business enterprises most especially those listed on the stock markets may not have shown the true and realistic value of comprehensive income and the financial positions of the reporting entities. Given that the pre-determined or estimated values, for which discretions have been exercised can best be established only and after the occurrence of the actual event or action at a future date. Given that most often, economic actions and event are not static and may not be pre-determinable with a high degree of exactitude or accuracy. It therefore follows that the over, under and reversals of discretionary action in the pre-determination of accruals cannot be accounted for and there is no known universal and appropriate model accepted for making adjustment to or smoothen these effects in published financial statements.
The effect of discretion may only be adjusted for as either post event or in subsequent reporting period at the financial statement level, while at the financial statements users (investors) level the effect cannot be adjusted for because financial and investment decision have since been made when earnings was first announced. Therefore, since published financial statements are accepted as the major tools used by decision makers in the capital market and capital market performance indices are universally accepted as barometer for measuring the performance of an economy. The crystallization of the true situation in a cumulative sense over time may be responsible for the failures of various business investment decisions including those of the capital markets based on published financial statements. However, Several studies have shown the limitations and inadequacies of accrual models (Dechow & Dichev, 2002; Dopuch, Mashruwala, Seethamraju & Zach, 2005) and also leveled the difficulties involved in determining the integrity of management discretion in public interest (Aman et al. 2006; Heywood, Marquette, Peiffer, & Zuniga, 2017). Yet accruals are the bases of determining the values of figures that makes up both statement of comprehensive income and statements of financial positions in published accounts. The basic question that comes to mind at this point is of what value is published financial statements is to users (investors) if significant information in the statement are seemly distorted or unrealistic and there is no universally accepted model(s) to adjust for these distortions?

**Statement of Hypothesis**

**H₀**: There is no significant relationship between accruals generating process (AGP) and investment decisions.

**Method of Data Analysis**

The data used in this study are obtained from audited annual financial statements of selected firms quoted on the Nigeria Stock Exchange (NSE). A sample of fifty (50) manufacturing and construction companies was used in this study. This sample is purposively selected to represent the different sectors of the Nigerian economy, this was done to ensure representativeness of the studied firms; the study however, covers the period 2000-2015. The E-view statistical package is used to estimate the parameters of the model adopted for the study. The ordinary least square (OLS) method is used this was to enable the causality of the variables to be explored. Over time different OLS models have been developed by various researches in the area of accrual determination and most of these studies have emphasized total accrual models. This total accrual models have been criticized of inadequacies. According to McNichols (2000), the key theme of empirical procedures of determining aggregate accruals studies lack both theories of incentives to manage accruals and our institutional knowledge of how accrual behave. Further, that empirical findings suggest that aggregate accrual models do not consider long term earnings growth that are potentially mis-specified and can result in misleading inferences about earnings management behaviours, and suggested that future progress in earnings management literatures is more likely to come from application of specific accrual and distribution based-test than from aggregate accruals tests.

Based on the forgoing, Jones model being generally accepted and adopted accrual determination model has been adopted and modified for the purpose of this study. Jones (1991) estimated the following regression:
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TAt/TASSt-1 = 1/TASSt-1 + REVt/TASSt-1 + GPPEt/TASSt-1 + E

Where: TAt is the total accruals for period t, REVt is the change in revenues (net sales) from the previous year, GPPEt refers to gross property, plant and equipment at the end of the period and TASSt-1 stands for the total assets at the beginning of the period. Empirically, in many papers TAt is computed as the sum of net current or working capital accruals and depreciation expense. Growth in sales is supposed to be the main determinant of changes in net working capital. The level of gross property plant and equipment (PPE) is included to control for the normal depreciation expense.

All the variables are scaled by lagged total assets to reduce heteroscedasticity. The original Jones Model is estimated by OLS using firm-specific time-series observations. Hence, the estimated parameters are firm-specific. In compliance with results of the study of McNichols (2000) we modified the said model, the dependent variable TA/TASS is retained as a proxy of accrual generating process (AGP) while the independent variables 1/TASS t-1, £sREV t/TASS t-1, GPPE t/TASS t-1 are replaced by DPS, PP and ROI. This is based on the fact that aggregate accrual models do not consider the long term effect of earnings management behaviours. Earnings management effect influences the numbers or values of DPS, PP and ROI at any given time. This position is further corroborated by Rudman and Dowd (2006).

**Model Specification.**

Thus, model TA/TASS or TDA/TASS= DPS + PP + ROI + E

Where

TA/TASS or TDA/TASS is a proxy for AGP
AGP= accrual generating process
TA= total accruals
TDA= total discretionary accruals
TASS= total assets
DPS= dividend per share
PP= price per share
ROI= return on investment

Given that AGP=TA/TASS

AGP= accrual generating process
TA= earnings — CFO (cash flow)
Since earnings= CFO +DA +NDA
Then total accruals TA= CFO +DA + NDA - CFO
Therefore, DA= TA-NDA

Where:
CFO= cash flow from operation
DA = discretionary accruals
NDA= non-discretionary accruals
Hence TDA =total discretionary accruals.
TDA/TASS= discretionary accrual generating process (DAGP)
Therefore,
TDA/TASS= DPS + PP + ROI + E

**Data presentation and analysis**

**Table 1**: Descriptive Statistics on the Variables
Table 1 shows that all the variables are normally distributed; the probabilities of all the Jacque-Bera statistics of the variables show normality in the distribution of the data at the 5% level of significance. This means that the sample is not dominated by firms of any particular extreme type. This implies the absence of outliers that are capable of distorting the results of the study. For instance, the minimum dividend per share is 0.00; maximum is 11.00 with a standard deviation of 2.91 shows that the sample is not dominated by either high or low dividend paying firms.

The same can be seen for share prices, the highest being 290.01, the minimum being 0.50, a mean of 55.22 and a standard deviation of 85.30. Similarly, in terms of profitability, the sample is not dominated by high performing or low performing, the maximum return on investment is 73.00, the minimum is 0.10; the mean is 19.37 and a standard deviation 21.73.

Table 2: Correlation Matrix for the Variables

<table>
<thead>
<tr>
<th></th>
<th>AGP</th>
<th>DPS</th>
<th>PPS</th>
<th>ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGP</td>
<td>1.0000</td>
<td>0.0424</td>
<td>0.1636</td>
<td>0.0397</td>
</tr>
<tr>
<td>DPS</td>
<td></td>
<td>1.0000</td>
<td>0.6826</td>
<td>0.1774</td>
</tr>
<tr>
<td>PPS</td>
<td></td>
<td></td>
<td>1.0000</td>
<td>0.2371</td>
</tr>
<tr>
<td>ROI</td>
<td></td>
<td></td>
<td></td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Source: Computed from Various Annual Reports Using E-Views 8.0

Table 2 shows that the accrual generating process is positively related to dividend per share, return on investment and price per share. The table also shows that no two independent variables are perfectly or nearly perfectly correlated, this shows the absence of the problem of multi-collinearity. Also, the table shows that all the explanatory variables are positively correlated.

Table 3: Regression Results between the Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistics</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPS</td>
<td>12.5933</td>
<td>1.4264</td>
<td>0.1604</td>
</tr>
<tr>
<td>PPS</td>
<td>0.6413</td>
<td>2.1401</td>
<td>0.0376</td>
</tr>
<tr>
<td>ROI</td>
<td>0.0541</td>
<td>0.0721</td>
<td>0.0428</td>
</tr>
<tr>
<td>R-squared</td>
<td></td>
<td></td>
<td>0.1612</td>
</tr>
</tbody>
</table>
Table 3 shows that about 16% of the systematic variations in accrual generating process are explainable by the combined changes in the variables employed in this study (dividend per share, price per share and return on investment). The Durbin-Watson statistic (which can be approximated 2.0) shows that the model is free from autocorrelation problems and so can be used to explain the relationships between the variables. In specific terms, the relationships between accrual generating process and the explanatory variables are discussed hereunder.

**Dividend per Share (DPS):** with a coefficient of 12.593, dividend per share positively impacts the accrual generating process; a probability value of 0.16 implies that impact is not significant at the 5% level of significance. This finding is consistent with the findings of Farinha and Moreira (2007), Lin (2011), and Lee, Walker and Zhu (2010).

**Price per Share (PPS):** with a regression coefficient of 0.6414, price per share is positively related to the accrual generating process; a probability of 0.038 signifies that the impact is significant at the 5% level of significance. This finding conforms to the finding of Oduma (2015) who found that earnings management and stock returns are positively and significantly related. This is also consistent with the finding of Hudart and Louis (2007) who found that managers boost stock price by manipulating earnings before selling stock. Empirical evidence suggests that one of the intentions of earnings management is to influence share prices. It appears however that it is earnings management that influences stock prices and not vice versa.

**Return on investment (ROI):** with a regression coefficient of 0.0541, the study shows that there is a positive relationship between earnings management and return on investment (which is proxy measure for performance). This relationship is shown to be significant (with a probability of 0.0428) for our sample. This finding is consistent with the finding of Tan (2007) who demonstrated that financial reporting has an impact on real investment patterns and efficiency; as such investment patterns depend on market assessment of the fundamentals. This also conforms to the finding by Julio and Yook (2016) who concluded that taken together moderate amount of earnings management helps to improve corporate investment decisions.

**Conclusion**

The results of the study show that accrual generating process is significantly and positively related to the three measures of corporate performance studied in this study. Though empirically the study shows that dividend per share, price per share and return on investment impact accrual generating process, it is theoretically expected that on the contrary it is accrual generating process that should influence these variables. Management’s desire to impress investors and other stakeholders make them to window dress and manage earnings by managing accounting choices so as to improve earnings per share and return on investment so as well to influence stock prices and thus influence potential investors and influence management remuneration packages which are based on these indicators. From the findings of this study we conclude that accrual generating process is related to return on...
Investment and hence also significantly related to stock prices, however, accrual generating process is positively though not significantly related to dividend per share.

**Recommendations**

From the conclusion above the study recommends that:

1. Potential investors should always look beyond accounting numbers when assessing investment opportunities as window dressing might paint rosier pictures for investment opportunities. In assessing management performance efforts should be made not to restrict such assessments to traditional measures (such as return on investment) but should include such methods as balance score card and employee motivation.

2. Market reaction (such as stock price movements) should always be evaluated holistically as such price movements might the spontaneous reactions to disclosed accounting performance indices which might not reflect the financial health and performance of such firms.

3. Professionals (International Federation of Accountants IFA and Accountants in Academics) should develop a set of universally accepted models to be adopted in moderating over and under discretion in published financial statements and establishment of the true value of firms, capital market performance and economic indices.

4. The capital market should develop a platform that will adopt the universal model recommended above to produce and published alternate financial statements for all listed reporting entities (including entities whose stocks are traded in the floor of second tier market) within six months after the reporting entities year end. This, if done, will ensure proper valuation of firms, reasonableness and appropriateness of information therein in the financial statements and engenders informed financial/investment decisions by users of financial statements thereby preventing capital market collapse globally.

5. The corporate affairs commission or registrar of companies should have a platform to adopt the universal model, produce and publish alternate financial statements for all non-listed entities that are law required to make annual returns to the commission so as to ensure proper valuation of firms, reasonableness and appropriateness of information therein in the financial statements thereby protecting other financial statements users from inappropriate financial/investment decisions.

6. Similarly, non-corporate entities whose financial statements are not required by law to be published should as well be subjected to similar process as proposed above in approved centers within the financial systems for smoothening of the effects of over, under and reversal of discretion by both the management and auditors. So as to also protect financial information users from the effect of over, under and reversal of discretion action during or at that level of preparation and audit of financial statements.

**References**


