DOES EARNINGS MANAGEMENT AFFECT THE VALUE-RELEVANCE OF EARNINGS PER SHARE OF CORPORATE FINANCIAL REPORTS?

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ABSTRACT

This paper investigates the effect of earnings management on earnings per share of listed Nigerian manufacturing companies’ reports. A ten year period (2005-2014) and 50 companies were used. Ordinary Least Squares (OLS), Ex-Post Facto descriptive design and regression analysis were adopted in the study. Discretionary accruals serve as the explanatory variable for the study and a proxy for earnings management while the dependent variable is earnings per share (EPS). Leverage (LEV) and size of the firm (SIZE) served as control variables. The study’s findings show a negative but insignificant correlation between EPS and earnings management of the financial reports of listed Nigerian companies for the study period (2005 to 2014). This implies that the increase in earnings management activities by managers leads to a decrease in the value relevance of earnings per share in the financial reports of Nigerian companies and vice versa. Arising from the findings, the study recommends that, earnings management should be minimized, as it tends to mask the reported earnings of companies. Regulatory bodies in the country should, therefore, enact policies that will curtail managers’ opportunistic behaviours.

Keywords: Earnings Management, Earnings per Share, Discretionary Accruals, Value-Relevance

1.0 INTRODUCTION

Relevance and reliability of financial reports are key characteristics of accounting information that is being used in making valuable decisions about companies. Financial
reports are said to be relevant if they have the ability to influence the users of financial reports by assisting them to form predictions and or confirm past evaluations. Corporate financial reports are viewed to be reliable if they faithfully represent without bias the transactions or events they purport to represent.

The corporate fraud of Enron, WorldCom, Tyco, Merck, Savannah Bank, Cadbury Nigeria Plc., African Petroleum, Nampak, African International Bank, Fin bank and Spring Bank, Intercontinental Bank Plc., Wema Bank, AfriBank Plc and Bank PHB. (Okolie, 2014, Okolie & Agboma, 2008) and so forth calls into questioning, the reliability of reported earnings. Since those who make use of accounting information need relevant and reliable information to make critical decisions, it is therefore important for them to be sure that this information can be wholly relied upon. The problem here, however, is that no one is sure about the value relevance of the reported earnings per share by listed manufacturing companies. It is in this light that the researchers deem it fit to investigate if earnings management significantly affect the value - relevance of earnings per share of Nigerian corporate financial reports.

2.0 CONCEPTUAL CLARIFICATIONS

2.1 Earnings

Earnings refer to net income. It can be described as the paramount measure of a firm’s value as seen by the stock market which prizes both fasts as well as stable earnings growth. Earnings to Rahman, Moniruzzaman & Sharif, (2013) means a company’s profits represented by the bottom line of the income statement and a summary item in the financial statements. Generally, strong earnings numbers increase a company’s stock price and vice versa. Users of financial reports are thus interested in reported earnings number in order to make informed decisions. All things have been equal, prospective investors are ever ready to invest in firms with good earnings figure. Dechow, Ge and Schrand (2010) argued that high-quality earnings supplies more relevant information on the financial performance of firms, to serve as a basis for investment decisions. Investors always keep an eye on a company’s earnings because they (earnings) determine stock prices. Since a company’s stock is measured by the current value of its earnings in the future, investors and analysts do determine how attractive a particular stock is via earnings (Rahman, Moniruzzaman & Sharif, 2013). It can, therefore, be reduced that earnings are important indicators of a company’s wellbeing. To Martinez (2008:2), “one of the essential products of accounting for various users of financial information is earnings.” The earnings data is more reliable when management is not influencing them via recognition of one-off items or change in accounting methods to achieve short-term earnings result (Bellovary, Giacomino, & Akers, 2005).

2.2 Earnings Per Share

EPS also is known as net income per share is a market value measure. It is the amount of income earned per unit of the share of a company’s outstanding common stock (Wild, 2000). Profit, in viewed by investors and shareholders as the returns on shares, as measured by earnings per share that is achievable at the end of each accounting period. However, earnings per share is not only used by investors to assess a company's activities for a given period but...
also the outlook for its profits. Therefore, investors view earnings per share as an indicator of both the recent profits of the company and its future prospect (Alaa, 2018). This study uses EPS as a proxy for value-relevance because it is a measure of a company’s profitability per unit of shareholder’s ownership thus a key driver of share prices. EPS is computed as Net Income after Tax to Shares Outstanding.

2.3 Earnings Management

Earnings management connotes the use of accounting techniques to present financial reports in a way and manner that may paint an overly positive picture of a company’s business activities and financial position other than what it is. It arises when managers make use of their judgement to alter financial reports either to mislead some stakeholders about the underlying economic performance of the company or even to influence contractual outcomes that depend on reported accounting numbers (Healy & Wahlen, 1999). Two types of earnings management can be deduced from the definition of earnings management by Healy and Whalen (1999) viz: Accounting Earnings Management and Real Earnings Management. Earnings management via accruals or accounting decisions is termed “Accounting Earnings Management” while, earnings management through real activities or real business decisions is known as “Real Earnings Management”.

According to Gaa (2007) earnings management simply means altering a company’s financial reports in order to affect the behaviour of others. In the same light, earnings management refers to reasonable and legal management decision making and reporting geared towards achieving a stable and predictable financial result (Rahman, Moniruzzaman & Sharif, 2013). Mulford and Comiskey (2002) define earnings management as a user manipulation of a company’s accounting results (profit) to achieve specific goals and objectives.

Schipper (1989) on other hand refers to “earnings management”, as “disclosure management” that connotes a purposeful intervention in the external financial reporting process of a company with a motive of obtaining some private gain (as opposed to, merely facilitating the neutral operation of the financial reporting process). To Ahadiat and Hefzi (2012) earnings management is the wilful manipulation of corporate financial data with the aim of achieving specific objectives. This objective may include among others contracting, regulatory and market incentives (Spear, 2007). Market incentives may be motivated by the desire to manage earnings before the initial public offerings and management buyouts, or to manage earnings in order to meet the expectations of financial analysts or smooth earnings. Contracting incentives may be carried out with the aim of avoiding violation of lending covenants that require certain accounting numbers, as well as managing earnings to optimize earnings-based management compensations.

2.4 Value-Relevance of Accounting Information

Value-relevance is the ability of the information contained in the financial statement of a company to capture and summarize firm value. It is measured as the statistical association between stock market returns and financial statement information. Value-relevance can also be perceived as the ability of a financial statement to explain the market numbers (Narasimhan and Srinivasan, 2010).

2.5 Empirical Studies

Chinedu and Francis (2015) investigated whether earnings management has any effect of on earnings per share (EPS) and book value per share (BVPS) of listed manufacturing companies in Nigeria. The study used EPS and BVPS as dependent variables and discretionary accruals as a proxy for earnings management. Using a 5-year period (2009 to 2013), Jones (1991) Model and a sample of 15 (6 conglomerates and 9 consumer goods) manufacturing companies. The study found that earnings management significantly affects the earnings per share and book value per share of listed manufacturing companies in Nigeria. This means that, for firms with high discretionary accruals, earnings management is positively correlated with their EPS and BVPS. The study recommends the establishment and implementation of policies and practices that can curtail earnings management in Nigerian firms.

Tariverdi, Moradzadehfard and Rostami (2012) investigated the effect of earnings management on the quality of financial reports using 70 companies listed in Tehran Stock Exchange for ten years (2001 to 2010). Regression model and U Mann Whitney test were used for the analysis. Findings of the study show that earnings management has a significant and negative relationship with accuracy of predicting future operating cash flows through components of operating earnings, implying that, earnings management reduces the quality of financial reporting. Company size has a significant and positive relationship with the accuracy of predicting future operating cash flows through operating earnings, which implies that, the bigger the company size, the higher the quality of financial reporting. The study, however, found that earnings management has no effect on the accounting profits of the studied firms.

Gee (2009) investigates the value relevance of earnings and book value in security prices from 1982 to 2001 in the Korea Stock Exchange using 7,928 firm-year observation. The study examined whether accounting earnings and book value have a nonlinear relationship to equity value by using an option-style model of equity to test the hypothesis. Simple linear regression was used for the analysis. The result shows that the value relevance of accounting earnings differs between loss firms and profit firms. It also shows that Korean firms acknowledge accounting earnings and a book value of equity valuation differently. An option style valuation model can explain the nonlinear relationship between equity value and accounting earnings book value. The contribution of Gee’s study is that it shows the existence of a non-linear relationship between book value and equity value in the Korean stock market and the empirical result shows the adoption of a new equity valuation model.
that explicitly recognized the option that firms have to commit their resources to the alternative use available to them.

Burgstahler and Eames (2006) compared small negative, zero, and small positive earnings surprises and obtain evidence of upward earnings management and downward forecast management in association with a zero and small positive earnings surprises. They see earnings management as encompassing both actions that increase current earnings without decreasing future earnings and actions that increase current earnings at the cost of future earnings. Recognizing that both forms contribute to altering current reported earnings, they refer to the former as business management and the latter as reporting management and used the term earnings management to encompass the combination of both business management and reporting management. The study used cash flow from operations as a proxy for business management while discretionary accruals gotten from the Jones’ (1991) model were used as a proxy for reporting management. Data for the study were obtained from the Zacks Investment Research database for the period 1986 to 2000. Non-financial firms from the US market and 2,850 firm-year observations were used. The study indicated upward earnings management and downward forecast management. This result portrays that both ‘real’ operating actions reflected in cash from operations, and actions of a ‘bookkeeping’ nature, reflected in discretionary accruals, contribute to earnings management to achieve no earnings surprises. This implies that distributions of annual earnings surprises contain an unusually high frequency of zero and little positive surprises and an unusually low frequency of small negative surprises. The study documented evidence that both the cash flow and discretionary accruals components of earnings were managed.

Also, Myers and Skinner (1999) examine whether managers of firms with a long series of consecutive increase in quarterly EPS practice earnings management, either by smoothing earnings to help sustain their firm’s earnings strings ex-ante or by managing earnings upwards to try and achieve earning increase ex-post. The study used seventy-nine (79) firms. Findings of the study show that managers of firms with long strings of increase in quarterly EPS have strong incentives to maintain these strings.

3.0 MEASUREMENT OF VARIABLES

<table>
<thead>
<tr>
<th>S/NO</th>
<th>ABBREVIATION</th>
<th>VARIABLE</th>
<th>TYPE OF VARIABLE</th>
<th>MEASUREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EPS</td>
<td>Earnings Per Share</td>
<td>Dependent</td>
<td>Net Income/Shares Outstanding</td>
</tr>
<tr>
<td>2</td>
<td>DACC</td>
<td>Discretionary Accruals</td>
<td>Independent</td>
<td>Total Accruals minus Non- Discretionary Accruals.</td>
</tr>
<tr>
<td>3</td>
<td>SIZE</td>
<td>Firm Size</td>
<td>Control</td>
<td>Natural logarithm of Firm Total Assets.</td>
</tr>
<tr>
<td>4</td>
<td>LEV</td>
<td>Leverage</td>
<td>Control</td>
<td>Total Long Term Debts/Total Assets.</td>
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</table>
Model Specification and Statement of Hypothesis

\[ \text{EPS}_t = \alpha + \beta_1 \text{DACC}_t + \beta_2 \text{SIZE}_t + \beta_3 \text{LEV}_t + e_t \]

\( \text{EPS} \) = Earnings per share

\( \text{DACC} \) = Discretionary accruals

\( \text{SIZE} \) = Firm size

\( \text{LEV} \) = Firm leverage

\( \alpha \) = constant

\( \text{DACC}_t = \text{TAC}_t - \text{NDA}_t \)

Where:

\( \text{DACC}_t \) = Discretionary Accruals in year \( t \)

\( \text{TAC}_t \) = Total Accruals in year \( t \)

\( \text{NDA}_t \) = Non-Discretionary Accruals in year \( t \)

While Non-Discretionary Accruals (NDA\(_t\)) can be computed as:

\[ \beta_1/ \text{A}_{t-1} + \beta_2 (\Delta \text{REV}_t - \Delta \text{REC}_t)/ \text{A}_{t-1} + \beta_3 \text{PPE}_t/ \text{A}_{t-1} + e \]

Where:

\( \text{NDA}_t \) = Non-Discretionary Accruals in year \( t \) scaled by lagged total assets

\( \text{A}_{t-1} \) = Total Assets at the end of year \( t-1 \)

\( \Delta \text{REV}_t \) = Change in Revenue scaled by lagged total assets in year \( t \)

\( \Delta \text{REC}_t \) = Change in Total Receivables scaled by lagged total assets in year \( t \)

\( \text{PPE}_t \) = Gross Property, Plant and Equipment in year \( t \)

\( \beta_1, \beta_2, \beta_3 \) = coefficients of variables 1, 2 and 3

\( e_i \) = random variable

\( \text{HO} \): Earnings Management does not significantly affect the earnings per share of Nigerian corporate financial reports.

Reject the null hypothesis if the p-value is less than 0.05 or accept the null hypothesis if the p-value is greater than 0.05.

Table 1: Coefficients of Variables

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The regression analysis result of the correlation between EPS and earnings management as shown in Table 1, provide statistical evidence that DACC, SIZE and LEV accounted for 18, 61 and 11 percent respectively, to the overall value for EPS. DACC and LEV made no significant contributions to the overall value for EPS. This is evidenced by the significant values for DACC and LEV which are 0.146 and 0.348 respectively. With the significance value of 0.00, SIZE made a significant impact on EPS.

Furthermore, as shown in Table 1, the t value for the hypothesis shows that there is a negative (-1.479) correlation between earnings management and EPS. This negative correlation implies that, as earnings management increases, the value-relevance for EPS of Nigerian corporate financial reports for the ten years under investigation decreases.

Also, Table 1 depicts the correlation coefficients for the hypothesis. The t-value for DACC shows a negative (-1.479) and insignificant (0.146) correlation between earnings management and EPS. Since the criteria set for rejecting the null hypothesis require that the significance value of the regression output between earnings management and the predictor variables should be greater than the p-value of 0.05, the null hypothesis is hereby upheld (0.146 is greater than 0.05). Earnings management, therefore, has no significant effect on the EPS of the financial reports of listed Nigerian companies for the period (2005-2014).

### Table 2: Model Summary for the Hypothesis

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
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<tr>
<td>1</td>
<td>.596</td>
<td>.355</td>
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<td>2.437</td>
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### Dependent Variable: EPS

Source: SPSS Regression Output

The study Model has EPS as the dependent variable, as shown in Table 2 above. The model summary shows that the R value is 0.596 and R2 is 0.355. The R value of 60 percent indicates a high correlation between DACC and EPS. The R2 value of 36 percent however means that the independent variables jointly explain 36 percent of the variation in the EPS (value-relevance) of Nigerian corporate financial reports for the period (2005 to 2014) and 64
percent represents the variables that are not part of this model.

4.0 DISCUSSION OF FINDINGS

Findings from the empirical review support the assertion that managers manipulate earnings per share either upward or downward. This is so because management can exercise its discretion within allowable accounting practices to distort earnings per share as an accurate reflection of economic performance. Some of the manufacturing companies listed on the Nigerian stock exchange engaged in income decreasing earnings management while others engaged in income increasing earnings management. Yoon and Miller (2002) argued that managers may decrease reported earnings when operating performance is unusually high and increase reported earnings when operating performance is unusually low. Healy and Wahlen (1999) stated that practically the opportunistic behaviour of the management may lead either to reducing their profits in order to have a tax reduction and evasion or increases in order to push up their incentives or modify their financial position in the financial market, this means that managers are able to choose methods and make estimations that do not reflect the true financial position of the company but provide a more positive image.

The empirical result of the hypothesis indicated that: there is a negative but insignificant correlation between earnings management and EPS. The negative correlation implies that as earnings management activities of managers’ increases; it leads to a decrease in the value-relevance of earnings per share of Nigerian corporate financial reports and vice versa. The effect is however not significant, implying that the earnings management activities of managers of companies in Nigeria does not significantly affect their EPS for the period 2005 to 2014. This is evidenced from the result of the hypothesis which gives a significant value of 0.146, a correlation coefficient (R) value of 60 percent and coefficient of determination (R2) value of 36 percent. The weak correlation between the dependent variable (value-relevance) and the independent variables is in line with the results obtained by Chinedu and Francis (2015) who documented R and R2 values of 56 percent and 33 percent respectively. Whereas Chinedu and Francis (2015) reported a positive significant correlation. This study however reported a negative insignificant correlation between EPS and earnings management. The differences in the research findings could be because of the research methodology adopted by the researchers. The researchers used only fifteen manufacturing (15) companies listed on the NSE for a period of five years. There are evidences in extant literature that earnings management affects negatively the value-relevance of financial reports. Hayn (1995) documented a weaker information content of earnings for those firms reporting negative earnings in financial statements than those reporting positive earnings in financial statements.

This result is also in agreement with the findings of Das and Zhang (2002) who reported that earnings per share (EPS) are frequently rounded to the nearest cent. Their work provides evidence that firms manipulate earnings so that they can round-up and report one more cent of EPS. Specifically, they examined the digit immediately right of the decimal in the calculated earnings per share number expressed in cents. Furthermore, their findings show that firms are more likely to round-up when managers ex-ante expect rounding-up to meet analysts’ forecasts, report positive profits, or sustain recent performance. Their investigation provides evidence that working capital accruals are used to round-up EPS. The result of Das and Zhang (2002) is similar with the work of Thomas (1989) who indicated evidences
consistent with the widely documented cognitive behaviour where for instance $40 is perceived to be significantly larger than $39.95, and conversely, $39.95 is perceived to be significantly smaller than $40, hence managers can round up earnings figures when they make profit so as to meet the benchmark or other set targets. The findings of the hypothesis is however inconsistent with the result of Sholihah (2013) who indicated a positive significant relationship between earnings management and earnings.

The result also indicate an insignificant correlation between earnings management and LEV, in line with the findings of Zarjo and Rezaei (2014).

Earnings figure is widely used as a key performance indicator of business success and as a result it is on the top of the list of managerial goals. Graham, Harvey and Rajagopal (2005) view EPS as the key metric upon which the market focuses their attention. They argued that it is so because: the EPS metric receives the broadest coverage by the media; investors need a simple benchmark to evaluate a firm’s performance which reduces the costs of information processing due to the availability of abundant information; analysts can make a better prediction of future value because they can base their assumptions on the EPS number; and analysts evaluate a firm’s progress based on whether a company hits the consensus EPS (Graham, Harvey & Rajagopal, 2005).

Breton and Taffler (1995) stated that the objective of accounting manipulation is to alter the two bases of wealth transfer: the earnings per share and the debt/equity ratio, the underlying wealth transfers occur between managers and shareholders, and that between shareholders/managers and debt holders. This could also be the case of managers of firms in Nigeria.

5.0 CONCLUSIONS

The study was set out to investigate whether earnings management affects the value-relevance of earnings per share of listed Nigerian corporate financial reports. Findings of the study show an insignificant but negative relationship between earnings management and EPS of listed manufacturing companies’ financial reports for the period 2005 to 2014.

Managers of companies who engage in earnings management do so in order to give the impression that their companies are faring well. The essence of accounting information via published financial reports is critical in the decision making the process of users of this information. When these information are manipulated by managers, it tends to mislead the users of accounting information in their decision making process. Earnings management activities of managers should therefore be minimized, since it is believed to reduce the usefulness and reliability of current earnings for forecasting future earnings and hence increases the information uncertainty of reported earnings, which is injurious to the value-relevance of financial reports.
REFERENCES


