Accruals Management and the Financial Performance of Listed Manufacturing Companies in Nigeria

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ABSTRACT
This research paper investigated the relationship between accruals management and the financial performance of listed manufacturing companies in Nigeria. In order to achieve the aim of the research, six specific objectives and hypothesis were proposed. Accruals management was measured by discretionary accruals (DACC) and non-discretionary accruals (NDAC) while financial performance was measured by return on assets (ROA); net profit margin (NPM); and return on capital employed (ROCE). Data for the research covered a period of 11 years from 2010 to 2020 for 20 listed manufacturing companies - thus comprising 220) firm years. Analytical employed for the purpose of the research included descriptive statistics, Pearson correlation and panel least square (PLS) regression method as well as ADF unit root test. Findings of the research revealed that there is a negative non-significant relationship between discretionary accruals and return on assets; net profit margin; and return on capital employed. And non-significant negative relationship between non-discretionary accruals and return on assets; net profit margin; and return on capital employed. From the findings, it was concluded that both discretionary and non-discretionary accruals do not make meaningful contribution to financial performance. It is further concluded that the ability to control/manage the flow of accruals is very important to corporate organisations. The researcher thus recommended that manufacturing companies take more interest in controlling/managing their accruals. This is because accrual in its uncontrolled/unmanaged form (non-discretionary...
Background to the Study

Research has documented the importance of accruals in the financial performance of business organizations. Dechow, Ge, and Schrand (2010) stated that not only does accruals earnings impact positively on financial performance; it also provides better information about the performance of an organization than its cash counterpart (cash flow). In the same vein Subramanyam (1996) who decomposed total accruals into discretionary and nondiscretionary components revealed that the discretionary component of accruals had information that is priced by the market. He further stated that discretionary accruals help managers to produce a reliable and timelier measure of firm performance. Thus, proper management of accruals provides a means for management to have a more stable and predictable earnings which is crucial for financial planning. Sloan (1996) however disputes this finding by stating that the accrual component of earnings is less 'persistent' than the cash flow components. Discretionary accruals represent accounting based choices and adjustments to cash flows which the organization's management can choose within the flexibility of accounting standards. Accounting standards make allowance for managers to make certain discretionary decisions in financial reporting. This makes a possibility that reported accruals will contain management's intention to massage information made available to stakeholders (Dechow & Skinner 2000).

Managers are motivated to manage earnings include the ease of the practice, the difficulty in tracing or detecting such activities as well as those motivations identified by Watts and Zimmerman (1986) which include the motivation to earn bonus, meet of not to be in breach of debt covenants/agreements, political and taxation motivation, and incentives to boost equity prices. Thus, we can classify earnings management on the basis of motivation to be either individual (management) benefits - such as when they manage earnings to boost returns in order to qualify to earn performance bonuses and when they manipulate earnings to improve market price of the firm's equity for those managers holding equity or stock options. The second is for the benefit of the organization for example, when earnings is smoothed out to give the impression of a more predictable earnings profile which stakeholders with economic or financial interest in the organization prefer or to meet or not be in breach borrowing contracts.

As noted by O'Callaghan, Ashton, and Hodgkinson (2018), the perception of accruals earnings management as either good or bad is predominantly informed by the perception of who stands to benefit when such practices are adopted. If the organization stands to benefit for example, when earnings management is implemented to ease cash flow difficulties and keep the firm going, the perception in this case is that earnings management is not unethical. However, when the practice is harnessed as a means by management for individual benefit, then the perception is that earnings management is unethical. Whatever the perception may be, unfettered earnings management has been blamed for some of the corporate scandals that has been recorded around the world in recent times as evidenced in the
failure of corporate giants like Enron, Tyco, AIG and Lehman Brothers (Hasan, Rahman, & Hossain, 2020).

In the Nigeria, accusing fingers have also been pointed in the direction of earnings management for the failures of corporate organizations like Oceanic Bank, Intercontinental Bank and financial difficulties witnessed in corporations like Cadbury, Eterna oil among others. Thus, an analysis of accruals without recourse to its use as a financial management tool will likely give an incomplete picture. Based on the above, this research is aimed at empirically determining the nature of the relationship between accruals earnings management and the financial performance of manufacturing companies listed on the Nigeria Stock Exchange.

Research Problem

Accruals management when properly implemented can help the business organization get through difficult period. However, it can also be a source of worry for the organization. Accrual management can be an important way for managers to produce the desired earnings numbers thus providing a false picture aimed at misleading stakeholders (Hasan, Rahman & Hossain, 2020). The company does not change its activities, rather opportunistically manipulates and reports income for existing activities in a manner that changes the cashflow profile of the company. Accruals create the opportunity for earnings management because they require managers to make forecasts, estimates, and judgments. The greater the degree of discretion in an accrual, the greater the opportunity for earnings management (Dechow & Schrand, 2004).

Generally, managers prefer the manipulation of accruals over the manipulation of real activities. Consequently, managers are likely to resort to the manipulation of real activities only when there is limited scope left for accrual manipulation. As reported by Ecker, Francis, Olsson, and Schipper(2012), the manipulation of both accruals and real activities has severe consequences on the reliability of earnings for decision making. Managerial manipulation reduces the reliability of accounting numbers, leading to reduced conditional conservatism. The articulation between the income statement and the balance sheet ensures that accruals reflected in earnings also are reflected in net assets. Therefore, an optimistic bias in earnings implies net assets measured and recorded temporarily at values exceeding those based on a neutral application of standards. Generous assumptions of managers about recognition and measurement in one period reduce their ability to make equally generous assumptions in later periods, if managers want to stay within the guidance provided by accounting regulators and professional groups. Therefore, managers’ ability to optimistically bias earnings decreases with the extent to which net assets are already overstated (Hasan, Rahman, &Hossain, 2020).

Previous studies on the subject matter of accruals management tend to focus on its role as a component of earnings management. Thus previous studies concentrate on how accruals based earnings management affect the organization (Tomoyasu, 2015; Saidu, 2017; Ubesie, Ogbu, &Mbah, 2019; Yulius, 2017; Okafor, Ezeagba, &Onyali, 2018; Cohen, &Zarowin, 2008). The few which have focused on accruals have been few and far in-between with none authored by researchers in Nigeria (Amara, 2017; Momente, Reggiani, & Richardson, 2014; Ohlson, 2014). This present research is thus aimed at filling this gap in literature by investigating the relationship between accruals management and the financial performance of listed manufacturing companies in Nigeria.

Aim and Objectives

The research aims to investigate the relationship between accruals management and financial performance of listed manufacturing companies in Nigeria. The specific objectives are to:
Evaluate the relationship between discretionary accruals and net profit margin
Evaluate the relationship between discretionary accruals and return on assets
Evaluate the relationship between discretionary accruals and return on capital employed
Determine the nature of the relationship between non-discretionary accruals and net profit margin
Determine the nature of the relationship between non-discretionary accruals and return on assets
Determine the nature of the relationship between non-discretionary accruals and return on capital employed

Research Hypotheses

Ho1: Discretionary accruals does not significantly relate with net profit margin
Ho2: Discretionary accruals does not significantly relate with return on assets
Ho3: Discretionary accruals does not significantly relate with return in capital employed
Ho4: There is no significant relationship between non-discretionary accruals and net profit margin
Ho5: There is no significant relationship between non-discretionary accruals and return on assets
Ho6: There is no significant relationship between non-discretionary accruals and return on capital employed

Stakeholder Theory

The stakeholder theory emphasizes on the importance of employees, shareholders, suppliers, business partners and contractors and their relationship with the managers. The stakeholder theory was developed by Harrison and Freeman and varies from agency theory that emphasizes that there exists a relationship between managers and shareholders where the managers have the greatest role to play in increasing the wealth of the shareholder. This theory proposes that the actions of managers to affect other parties interested in the organization beyond shareholders. This theory insists on managers being answerable in all aspects to the stakeholders. Harrison and Freeman (1999) argued that a stakeholder is either one person or a group of individuals who have an effect or is affected by the success of a firm’s main goal. So as to effectively attain the main goals of a company, the stakeholder theory ensures that safety of stakeholders is adequate, consensus building is ensured, conflicts are avoided and harmony is emphasized (Donaldson and Davis, 1991).

According to Donaldson and Davis (1995) the stakeholder theory reflects on the decisions of the managers and the interests of the stakeholders and continues to emphasize that none of the interests is supposed to overpower the other. Therefore, the managers are supposed to make sure they also consider other parties’ interests especially those who are affected in one way or another by the activities and operations of the firm (Fatima, 2011). She also argues that the managers should put the interests of the stakeholders first and ensure that the main goal of the company promotes long term value.

Throughout the years, the idea of accruals management as one of the major earnings management techniques has raised genuine worries among financial market controllers, financial administrators, speculators and academic researchers. Moreover, this idea has kept on accepting consideration because of the arrangement of corporate disappointments in both developed and developing economies. This pattern has constantly increased the questions in the stakeholders’ minds on the reliability and dependability of financial report. The significance joined to accounting earnings by stakeholders of any...
given association can't be over accentuated; as the whole destiny of the association and its stakeholders rely upon it. Moreover, accounting as a field additionally has a stake to ensure, attributable to the way that earnings are the last result of the entire accounting process.

Accruals management expresses a wide cluster of accounting systems used by management to accomplish a particular earnings objective. While there exists no single acknowledged meaning of accruals management, accounting literature gives different portrayals of the training. Albrecht (2006) depicted it as a ponder intercession in the outer financial revealing procedure, with the plan of acquiring some private additions. It includes controlling the earnings figures being revealed, using the judgmental discretions as allowed by the proper accounting rules (GAAP), in other to either misdirect the clients into accepting what is really not valid in regard of the earnings' figures, and consequently secure great reaction or to overstate legally binding results which rely upon the unrevealed earnings (Arie, 2005).

**Accruals Management**

As a product of accrual accounting, accruals are divided into discretionary and non-discretionary accruals. Non-discretionary accruals are those recorded as a direct result business transactions without distortion or manipulation by management. On the other hand, discretionary accruals result from management taking advantage flexibilities in accounting standards in recognizing revenue and expenditures. According to Sajjad and Mahmoud, (2015) non-discretionary accruals are out of management controlling and show business factors. In fact, this part reflects the non-manipulated accounting accruals. Discretionary accruals can be defined as the difference between net earnings and cash flow resulted from operational activities of the firm. They are actually the accruals controlled by management. Thus, discretionary accruals are more subjective, and therefore more prone to managerial biases and manipulation.

Accruals earnings management is the most common method adopted by business organizations to manage earnings. Accruals can be defined as the difference between an organization earnings/income and its actual cash flows. Since accruals are an acceptable accounting practice, it is a standard component of an organization's transactions. Consequently, it feature prominently in earnings management activities. For example, a credit sales by an organization is duly recognized as earnings not minding whether or not cash was been received at the time of the transaction or not. This result in the creation of receivables which are cancelled when cash is finally received.

Accounting standards allows discretion for managers when providing financial information to stakeholders. Managers have been known to exploit this discretion by recognizing revenues before they are earned or delaying the recognition of expenses which have been incurred, which results in accruals (McVay, 2006). Accruals earnings management occurs when managers exercise judgement/discretion to adjust reported earnings without any cash flow consequences. Firms can be aggressive with their accounting choices by bringing forward earnings from a future period or by speeding up the recognition of revenues or considerably slowing down the recognition of expenses in the books, thus increasing earnings in the current period. This creates what is called discretionary accruals in the literature. Since accruals reverse over time, earnings will be lowered automatically by the amount of earnings that was brought forward in the previous period (Kothari et al., 2012).

Healy (1985) stated that discretionary accruals present the accounting medium preferred by business organizations when they conduct earnings management activities. While the component of the accrual imposed by the accounting regulator in adjusting a firm's cash flows is the non-discretionary accruals, the component managers can choose within the flexibility of accounting regulations in adjusting a firm's
cash flows is the discretionary accruals. Thus, one may be led to conclude that discretionary accruals are essentially the creation of the manager within the limits of discretion granted him/her by accounting standards.

**Empirical Review**

Olaoye and Akinleye (2020) investigated the relationship between accrual-based earnings, real-based earnings management, and firm's value. The research was based on listed manufacturing companies in Nigeria. Data was collected from the annual reports of sample firms and analyzed using descriptive, panel least square regression technique. Findings revealed that accrual-based earnings management measured by abnormal discretionary accrual earnings had a positive relationship with firm's value captured by the return on equity (ROE). On the other hand, the real activity earnings management measured by abnormal cash flow operation activities was shown to have a negative relationship with return on equity. It was thus concluded that the practice of earnings management constructively benefits the manipulator of accounts.

Anton and Carp (2020) evaluated the effect of discretionary accruals on firm growth while controlling for firm characteristics and macroeconomic environment. Using a large sample of 1105 young and high-growth firms from 15 emerging European countries over the period of 2006 to 2014. It was found that the discretionary accruals negatively influence firm growth. With the implication that discretionary accruals are used as earnings management tools and this practice is more used over the high-growth period spanning 2006 to 2009, with negative effects on future performance. Furthermore, the results of the quantile regression employed in the whole period suggest that the earnings management practices have a negative effect on firm growth.

Al-Shattarat (2020) explored the relationship between company earnings management and the relative value relevance of book value and earnings from 2014 to 2018 for all firms listed on the Saudi Stock Exchange. The results show that earnings management in terms of discretionary accruals influence the value relevance of book value and earnings for the long-term compared to the short-term. The study's finding is expected to shed light on applying the quality of firms' financial reporting in protecting stakeholders’ interests by providing them with credible information free from earnings manipulations.

Ubesie, Ogbu, and Mbah (2019) investigated the effect of accruals earnings management on share price of quoted firms in Nigerian by employing the panel least squares while assuming fixed effects to test the effect of accrual-based earnings management on share prices of 10 sectors purposively sampled for 12 years. Discretionary adjustment accrual was found to be positive and significant which conformed with prior studies that distinguishes earnings management based on discretionary accruals. The findings suggested that discretionary accruals adjustment provides managers in the opportunity to manipulate earnings and hence share prices.

Yulius (2017) provided empirical evidence about the influence of accrual earnings management and real earnings management on firm value. Using a sample of 162 non-financial companies listed in Indonesia Stock Exchange for the period 2012 to 2015. Data was analyzed using multiple regression method. The empirical evidence of the research indicated that accrual earnings management has positive and significantly influence to firm value. While, real earnings management has negative and significantly influence to firm value. Ease in detecting accrual earnings management can make investors to judge whether a company is worth it or not.

Dechow (1994) investigated the circumstances under which accruals are predicted to improve earnings’ ability to measure firm performance, as reflected in stock returns. The importance of accruals is...
hypothesized to increase (i) the shorter the performance measurement interval, (ii) the greater the volatility of the firm’s working capital requirements and investment and financing activities, and (iii) the longer the firm’s operating cycle. Under each of these circumstances, cash flows are predicted to suffer more severely from timing and matching problems that reduce their ability to reflect firm performance. The results of empirical findings are consistent with the predictions as stated above.

**Methodology**

The research design is intended to provide a complete guideline for data collection, analysis and also the opportunity for the researcher to draw inferences about the relationship(s) existing among the variables under investigation. The selection of a specific design depends primarily on both the nature and the extent of the information we intend to obtain (Burns and Burns, 2008). Thus, the ex-post Facto Design is considered to be the right research design for the study. This is because the phenomena under scrutiny has already happened and the variables are obtained and analyzed “as is” and not subject to control or interference from the researcher. This is considering the fact that the phenomena under study (accruals management) has already occurred. Thus, the research will use the method of content analysis to extract the necessary information from the annual financial reports of the manufacturing companies to be sampled. The study population consists of all manufacturing companies listed on the Nigeria Exchange. Available information show that there are presently about fifty five (55) manufacturing companies cutting the several subsector of the manufacturing sector including: consumer and industrial goods, chemical paints, oil and gas, healthcare, natural resources etc.

The sample is selected on the basis of convenience and availability/accessibility of relevant information. Thus, 20 listed manufacturing companies whose audited financial statements are publicly available on their web portal and the Nigeria Exchange (NGX) website were selected as the sample for the research. Data for the research were sourced from secondary sources - primarily from the audited annual report of the companies included in the research sample. Data to be collected will be those on accruals management practices and financial performance of said manufacturing companies for the 2010 to 2020. Thus, we use the method of content analysis to extract the necessary information from the annual financial reports of the companies in our sample. Our population consist of all manufacturing companies quoted on the Nigeria stock exchange. Data for the study consist of those on accruals management (ACCM) which are measured using discretionary accrual (DACC) and non-discretionary accrual (NDAC); firm performance (PERF) which were measured using net profit after Net Profit Marin (NPMG), return on assets (ROA) and return on capital employed (ROCE) while firm size (SIZE) were added in the model as a moderating variable is calculated as the log of total assets of the manufacturing companies.

The modified Jones model is the most prevalent method of detecting accruals based earnings management. In the modified Jones model, this is calculated using the method below.

\[
TACC_t = \Delta CA_t - \Delta Cash_t - \Delta CL_t + \Delta DCL_t - DE_t \quad \ldots \ldots \quad (1)
\]

Where: \(TACC\) = Total accruals; \(\Delta CA_t\) = Change in current assets; \(\Delta Cash_t\) = Change in cash and cash equivalents; \(\Delta CL_t\) = Change in current liabilities; \(\Delta DCL_t\) = Change in debt included in current liabilities; \(DEPt\) = Depreciation and amortization expense. From the Total Accrual (TACC) as shown above, the non-discretionary accrual is calculated thus:

\[
NDAC = \alpha_1 (1/A_{t-1}) + \alpha_2 [(\Delta REV_t - \Delta REC_t)/A_{t-1}] + \alpha_3 (PPE/A_{t-1}) \ldots \ldots (2)
\]

Where: \(\Delta REC_t\) = Net receivables in year \(t\) less net receivables; \(\Delta REV_t\) = Revenues in year \(t\) less
revenues; PPE = Property, Plant & Equipment; Discretionary accruals are then derived as follows;

\[ DACC_t = TACC - NDAC \ldots \ldots \ldots \ldots \ldots \ldots \ldots (3) \]

Data collected for the study were analyzed using the Ordinary Least Square (OLS) regression method. The basic multiple regression model is specified to test for the relationship between the variables of the study. However, if the basic regression model is used for analyses there is the risk of estimates being inaccurate as a result of the problem of non-stationary dataset. The result may lead to a meaningless or spurious regression. In order to forestall this problem, the data will first be tested for the presence of unit root using the Augmented Dickey Fuller (ADF) Test.

Using a multiple regression analysis, this research will adopt the model utilized by Roychowdhury, (2006) which proposed that firm performance is function of earnings management given as:

\[ NPMG = a_0 + \beta_1DACC + \beta_2NDACC + \beta_3SIZE + \mu_t \ldots \ldots (4) \]

\[ ROA = a_0 + \beta_1DACC + \beta_2NDACC + \beta_3SIZE + \mu_t \ldots \ldots \ldots (5) \]

\[ ROCE = a_0 + \beta_1DACC + \beta_2NDACC + \beta_3SIZE + \mu_t \ldots \ldots \ldots (6) \]

Data and Results

Table 4.1 Summary Augmented Dickey-Fuller Unit Root Test Result

<table>
<thead>
<tr>
<th>Variables</th>
<th>Critical Value (5%)</th>
<th>Test Statistic</th>
<th>Probability</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>-2.8746</td>
<td>-5.1378</td>
<td>0.0000</td>
<td>I(0)</td>
</tr>
<tr>
<td>NPM</td>
<td>-2.8746</td>
<td>-5.1035</td>
<td>0.0000</td>
<td>I(0)</td>
</tr>
<tr>
<td>ROCE</td>
<td>-2.8746</td>
<td>-7.0689</td>
<td>0.0000</td>
<td>I(0)</td>
</tr>
<tr>
<td>DACC</td>
<td>-2.8747</td>
<td>-4.1351</td>
<td>0.0011</td>
<td>I(0)</td>
</tr>
<tr>
<td>NDAC</td>
<td>-2.8174</td>
<td>-4.3351</td>
<td>0.0011</td>
<td>I(0)</td>
</tr>
<tr>
<td>SIZE</td>
<td>-2.8746</td>
<td>-3.8552</td>
<td>0.0028</td>
<td>I(0)</td>
</tr>
</tbody>
</table>

From the unit roots test result in table 4.1, it is observes that all variables had order of integration at level I(0). This implies that the dataset is stationary at level and is healthy for regression analysis in its present state. This is as expected considering that the dataset is a panel data compilation most of which were either transformed to natural log like in the case of firm size (SIZE); discretionary accruals (DACC); and non-discretionary accruals (NDAC) – while return on assets on assets (ROA); net profit margin (NPM); and return on capital employed (ROCE) were recomputed compilation which naturally has lower chance of having unit root which is more prevalent in time series than in panel data.

Table 4.2 Pearson Correlation Matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th>NPM</th>
<th>ROCE</th>
<th>DACC</th>
<th>NDAC</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPM</td>
<td>0.7216</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROCE</td>
<td>0.5561</td>
<td>0.4053</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DACC</td>
<td>0.1278</td>
<td>0.1799</td>
<td>0.0193</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDAC</td>
<td>0.0659</td>
<td>0.0929</td>
<td>-0.0355</td>
<td>0.6198</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.0724</td>
<td>0.1422</td>
<td>0.0731</td>
<td>0.6119</td>
<td>0.2591</td>
<td>1.0000</td>
</tr>
</tbody>
</table>
The Pearson correlation result in table 4.2 indicates a positive correlation between discretionary accruals (DACC) and return on assets with a value of 0.1278 which suggests that strength of the relationship between the variables is about 12.78%. Thus, an increase in discretionary is associated with increase in return on assets. Further, return on assets also had a positive correlation with non-discretionary accruals with a value of 0.0659 which suggests that the strength of the relationship between the variables is 6.59% - akin, the implication that increasing in non-discretionary accruals is associated with an increase in return on assets. However, the strength of the correlation is quite weak. Similarly, net profit margin had a positive correlation of 17.99% with discretionary accruals - suggesting that increase in discretionary accruals is associated with increase in return on assets. Non-discretionary accruals had a negative correlation with return on assets with a value of 0.0355 (3.55%) suggesting that increasing non-discretionary accruals is associated with decreasing return on capital employed. Finally, firm size (SIZE) recorded a positive correlation with return on assets (ROA); net profit margin (NPM); and return on capital employed (ROCE) with values of 0.0724 (7.24%); 0.1422 (14.22); and 0.0731 (7.31%) respectively. Thus in all three cases, firm size is associated with increase in financial performance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.0313</td>
<td>0.1127</td>
<td>0.2774</td>
<td>0.7818</td>
</tr>
<tr>
<td>DACC</td>
<td>0.0253</td>
<td>0.0179</td>
<td>1.4139</td>
<td>0.1588</td>
</tr>
<tr>
<td>NDAC</td>
<td>-0.0043</td>
<td>0.0157</td>
<td>-0.2767</td>
<td>0.7823</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.0027</td>
<td>0.0170</td>
<td>-0.1603</td>
<td>0.8728</td>
</tr>
</tbody>
</table>

R-squared: 0.017; F-statistic: 1.225; Prob. (F-stat): 0.302; DWStat: 2.304

Table 4.3 shows the summary panel least squares regression results for the relationship between return on assets (ROA) as the dependent variable and discretionary accruals (DACC); and non-discretionary accruals (NDAC) which relationship is moderated by firm size (SIZE). The results show that there is a positive relationship between return on assets and discretionary accruals. The relationship between the variables had a coefficient of regression value of 0.0253 which suggests that a unit increase in discretionary accruals is predicted to result in 0.0253 unit increase in return on assets and vice versa. However, the relationship between the variables was not statistically significant considering that the probability of t-statistic with a value 0.1588 was higher than the critical probability limit of 0.05. On the other hand, non-discretionary accruals had a negative relationship with return on assets with a coefficient of regression value of -0.0043 which suggests that increase in non-discretionary accruals is predicted to lead to a decrease in return on assets. Like in the case above, the relationship between the variables was not statistically significant as the probability of t-statistic had a value of 0.7823 which is much higher than the 0.05 critical limit. The implication of the above is that neither of discretionary accruals and non-discretionary accruals had a meaningful effect on financial performance in terms of return on assets. It is worthy of note that firm size also had a negative non-significant relationship with return on assets with a coefficient of correlation value of -0.0027 and probability of t-statistic value of 0.8728. Finally, only, 1.67% of the variations in return on assets can be accounted for by variations in discretionary accruals (DACC); non-discretionary accruals (NDAC); and firm size (SIZE).
Table 4.4 Summary Panel Least Squares Regression Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.1385</td>
<td>0.1323</td>
<td>-1.0468</td>
<td>0.2964</td>
</tr>
<tr>
<td>DACC</td>
<td>0.0325</td>
<td>0.0210</td>
<td>1.5451</td>
<td>0.1238</td>
</tr>
<tr>
<td>NDAC</td>
<td>-0.0044</td>
<td>0.0184</td>
<td>-0.2404</td>
<td>0.8102</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.0110</td>
<td>0.0200</td>
<td>0.5489</td>
<td>0.5837</td>
</tr>
</tbody>
</table>

R-squared: 0.034; F-statistic: 2.554; Prob. (F-stat): 0.056; D-W stat: 2.524

Table 4.4 shows the summary panel least squares regression results for the relationship between net profit margin (NPM) as the dependent variable and discretionary accruals (DACC); and non-discretionary accruals (NDAC) which relationship is moderated by firm size (SIZE). The results show that there is a positive relationship between net profit margin and discretionary accruals. The relationship between the variables had a coefficient of regression value of 0.0325 which suggests that a unit increase in discretionary accruals is predicted to result in 0.0325 units increase in net profit margin and vice versa. However, the relationship between the variables was not statistically significant considering that the probability of t-statistic with a value 0.1238 was higher than the critical probability limit of 0.05. On the other hand, non-discretionary accruals had a negative relationship with net profit margin with a coefficient of regression value of -0.0044 which suggests that increase in non-discretionary accruals is predicted to lead to a decrease in net profit margin. The relationship between the variables was also not statistically significant as the probability of t-statistic had a value of 0.8102 which is much higher than the 0.05 critical limit. The implication of the above is that neither of discretionary accruals nor non-discretionary accruals had a meaningful effect on financial performance in terms of net profit margin. Firms size (SIZE) had a positive non-significant relationship with net profit margin with a coefficient of correlation value of 0.0110 and probability of t-statistic value of 0.5837. Finally, only, 3.43% of the variations in net profit margin can be accounted for by variations in discretionary accruals (DACC); non-discretionary accruals (NDAC); and firm size (SIZE).

Table 4.5 Summary Panel Least Squares Regression Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.0304</td>
<td>0.1958</td>
<td>0.1553</td>
<td>0.8767</td>
</tr>
<tr>
<td>DACC</td>
<td>0.0011</td>
<td>0.0311</td>
<td>0.0348</td>
<td>0.9723</td>
</tr>
<tr>
<td>NDAC</td>
<td>-0.0187</td>
<td>0.0273</td>
<td>-0.6842</td>
<td>0.4946</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.0293</td>
<td>0.0296</td>
<td>0.9897</td>
<td>0.3234</td>
</tr>
</tbody>
</table>

R-squared: 0.009; F-statistic: 0.619; Prob. (F-stat): 0.603; D-W stat: 1.687

Table 4.5 shows the summary panel least squares (PLS) regression results for the relationship between return on capital employed (ROCE) as the dependent variable and discretionary accruals (DACC); and non-discretionary accruals (NDAC) which relationship is moderated by firm size (SIZE). The results show that there is a positive relationship between return on capital employed and discretionary accruals. The relationship between the variables had a coefficient of regression value of 0.0011 which suggests that a unit increase in discretionary accruals is predicted to result in 0.0011 units increase in return on capital employed and vice versa. However, the relationship between the variables was not statistically significant considering that the probability of t-statistic with a value 0.9723 was higher than the critical probability limit of 0.05. On the other hand, non-discretionary accruals had a negative relationship with
return on capital employed with a coefficient of regression value of -0.0187 which suggests that increase in non-discretionary accruals is predicted to lead to a decrease in return on capital employed. The relationship between the variables was also not statistically significant as the probability of t-statistic had a value of 0.4946 which is higher than the 0.05 critical limit. The implication of the above is that neither of discretionary accruals nor non-discretionary accruals had a meaningful effect on financial performance in terms of return on capital employed. Firms size (SIZE) had a positive non-significant relationship with return on capital employed with a coefficient of correlation value of 0.0293 and probability of t-statistic value of 0.3234. Finally, less than 1% (0.85%) of the variations in return on capital employed can be accounted for by variations in discretionary accruals (DACC); non-discretionary accruals (NDAC); and firm size (SIZE).

Discussion of Results

From the results of the data analyses, it was found that there was a positive relationship between discretionary accruals (DACC) and financial performance of listed manufacturing companies in Nigeria. This finding cut across all measures of financial performance vis-à-vis; ROA, NPM and ROCE. This finding suggests that increasing discretionary accruals would result in increase in ROA, NPM and ROCE. In all three cases, the relationships were significant with the implication that despite its value enhancing potentials, discretionary is not a major contributory factor in the financial performance of listed manufacturing companies in Nigeria.

In a similar research, Olaoye and Akinleye (2020) investigated relationship between accrual-based earnings, and firm’s value concluded that accrual-based earnings management measured by abnormal discretionary accruals had a positive relationship with firm’s value captured by the ROE. Thus, even though the measure of financial performance differs, the findings of this research is in line with that of Olaoye and Akinleye (2020). However, our findings was contradicted by that of Anton and Carp (2020) whose findings u=suggested that discretionary accruals negatively influence firm growth with the implication that discretionary accruals used as earnings management tool fail to generate the desired outcomes. In other related researches, Al-Shattarat (2020); Ubiesie, Ogbu, and Mbah (2019); and Yulius (2017) all reported positive relationship between discretionary accruals and financial performance.

The findings further reported a negative relationship between non-discretionary accruals (NDAC) and all measures of financial performance vis-à-vis; ROA, NPM and ROCE. In this case, increasing non-discretionary accruals is predicted to lead to a decrease in financial performance of listed manufacturing companies in Nigeria. As with the previous case, the findings were not statistically in each of the three cases thus suggesting that non-discretionary accruals is not an important factor in determining the financial performance of manufacturing companies in Nigeria. Dechow (1994) investigated the circumstances under which accruals are predicted to improve earnings’ ability to measure firm performance. They found that cash flows are predicted to suffer more severely from timing and matching problems that reduce their ability to reflect firm performance.

In all, the impression that is created from the discussion of findings above is that having measure of control over an accruals in the form of discretionary accruals which results in practices such as choice in income/obligations recognition and collection/repayment is to an extent beneficial to corporations. This is because such decisions are made by management with an understanding of the economic realities of the company - and conscious decision to protect the company from certain negative outcomes if action is not taken. However, when it is treated with laxity as in the case non-discretionary accruals, the company many miss a good opportunity to engineer or reengineer the finances of the organisation for better performance in the future. This is clearly illustrated in the consistent negative
relationship between discretionary accruals all measures of financial performance in this research.

Conclusions and Recommendations

Discretionary accruals help to improve the financial performance of manufacturing companies in Nigeria. However, its contribution to financial performance is quite minimal thus leading to the conclusion that the contribution of disceretional accrual does not have meaningful impact on the financial performance. It is further concluded that non-discretionary accrual has a deleterious effect on financial performance - thus predicted to result in lower financial performance if substantially increased. As with the previous case above, the effect to low to sustainably and meaningfully contribute to the financial performance. Finally, the ability to control accruals is very important to corporate organisations. This is obvious for the conclusion scenario above in which the managed portion of accruals (discretionary accruals) is associated with positive financial performance in contrast to the portion not affected by management decision (non-discretionary) which is associated with negative financial performance.

The research thus suggests that it is important that manufacturing companies take more interest in controlling/managing their accruals. This is because accrual in its uncontrolled/unmanaged form (non-discretionary accruals) is clearly shown to be harmful to the organisation. Secondly, not only should action be taken to management accruals, it is important that such decisions are made with a clear achievable objective like building liquidity in organisation, shoring finances or providing incentives to stakeholders.

References


33. Tomoyasu, Y. (2015). Real and accrual-based earnings management to achieve industry-average profitability: empirical evidence from Japan, *Faculty of Business Administration, Tohoku Gakuin University*.

