FIRM CHARACTERISTICS AND FINANCIAL REPORTING QUALITY OF LISTED MANUFACTURING FIRMS IN NIGERIA

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Abstract

Published accounting information in financial statements are required to provide various users - shareholders, employees, suppliers, creditors, financial analysts, stockbrokers and government agencies – with timely and reliable information useful for making prudent, effective and efficient decisions. The widespread failure in the financial information quality has created the need to improve the financial information quality and to strengthen the control of managers by setting up good firms structures. This paper investigates firms’ characteristics from perspective of structure, monitoring and performance elements and the quality of financial reporting measured by modified model of Dechew and Dechev (2002) of listed manufacturing firms in Nigeria. The study adopted correlational research design with pooled balanced panel data of 24 firms served as sample of the study using multiple regression as a tool of analysis. The result reveals that larger and more leveraged firms in Nigerian manufacturing sector are less likely to manage earnings and increase in sales as well as institutional investors serve as a monitoring tool of preventing managers from opportunistic behaviour in managing earnings. In addition, profitability and independent directors are positively associated with earnings quality while liquidity is inversely related with quality of financial reporting despite significant at 1% level of significance. In sum, firm characteristics of listed manufacturing firms in Nigeria have impacted significantly on their financial reporting quality. Therefore, it is recommended among others that the shareholders of Nigerian listed manufacturing firms should ensure all the seven firm characteristics used in this study keep on improving to decrease manipulative accounting and increase the quality of financial reporting.

Keywords: Firm Characteristics, Financial Reporting Quality & Nigerian Listed Manufacturing Firms
1.1 Introduction

Accounting information is relevant to the extent that it is capable of influencing a decision maker by helping him/her to form predictions about the outcomes of present events or to confirm or correct prior expectations (Bushman, Chen, Engel and Smith, 2004). In order for information to be relevant, it must be timely, and it must have predictive value or feedback value or both (Bello, 2009). Financial statements should always provide reliable information to assist users in decision making. The statement should contain relevant, reliable, comparable and understandable information (Kamaruzaman, et al 2009). Reliability has to do with the quality of financial information which is reasonably free from error and bias and faithfully represents what it is intended to stand for. However, Johnson (2005) argues that an annual report can never be completely free from bias, since economic phenomena presented in annual reports are frequently measured under conditions of uncertainty. Many estimates and assumptions are included in the report.

Although complete lack of bias cannot be achieved, a certain level of accuracy is necessary for financial reporting information to be decision useful (IASB, 2008). Therefore, it is important to examine the arguments provided for the different estimates and assumptions made in the annual report (Jonas and Blanchet, 2000). If valid arguments are provided for the assumptions and estimates made, they are likely to represent the economic phenomena without bias. Accounting information is reliable to the extent that users can depend on it to judge the economic conditions or events that it purports to represent. Reliability has the qualities of neutrality, representational, faithfulness and verifiability. Verifiability on the other hand means the ability through consensus among measurers to ensure that the information is correct or that the chosen method of measurement has been used without error or bias. It has three key aspects namely; consensus among observers, assurance of correspondence to economic events, and direct and indirect verification (Johnson, 2005).

For financial statement to be understood clearly, the presentation should not be misleading or ambiguous. Users should be able to understand the information presented without undue effort (IASB, 2008). The quality of financial reporting has always been an issue of interest among regulatory bodies, shareholders, researchers and the accounting profession itself. This is due to the fact that financial reporting has been a principal means of communicating financial information to outside users (Johnson, Khurana and Reynolds, 2002) and the use of financial report itself in assessing the economic performance and condition of a business in the quest to monitor management’s actions and assists in making economic decisions (Warren and Reeve, 2004).

There are several underlying firm characteristics that differ systematically across firms. Previous research has shown that firms engaging in earnings management activity are often small in size (Kinney and McDaniel, 1989), less profitable (Defond and Jiambalvo, 1991), lower growth rate, and have higher leverage than their industry average (Callen et al., 2002). These studies hypothesize that the degree of earnings management will depend on the firm’s operating performance. When operating performance is unusually high, managers tend to decrease earnings. When operating performance is poor, managers tend to increase earnings, however, if operating performance is extremely poor, some firms may decrease income further which is so called ‘taking bath’ strategy. This study investigates whether financial reporting quality represented by earnings quality of listed manufacturing firms in Nigeria is likely to be influenced by their structure, monitoring and performance characteristics. Based on previous studies, availability of data and its relevance to the socio-economic environment of Nigeria, seven independent variables are selected as proxies for firm’s characteristics. These variables are: firm size, leverage, board composition, institutional shareholding, profitability, liquidity and firm growth.

Financial information quality in Nigeria remains weak compared to many advanced jurisdictions. This resulted in hampering of the growth of efficient equity markets. A common complaint among investors in Nigeria is that financial information on company performance is either unavailable or, if provided, lacks reliability (Shehu, 2011). Analysts following in Nigerian market are far fewer than in the developed ones. The regulatory scrutiny level of Nigerian market thus is argued to be lower than that of developed markets (Chan et al. 2002). Also, the Nigerian settings in terms of accounting standards, institutional structure, and corporate governance are expected to be different from those in the developed countries in terms of advancement and compliance. Given all these presumptions, it is not clear that the evidence from Nigerian firms especially manufacturing firms in respect of financial information quality is consistent with those in the developed or other developing nations.
Ramsay, 2003), and, therefore, a comprehensive study anchoring firms characteristics and financial reporting quality is necessary which will be of interest to investors. Rational investors make investment decisions that are primarily based on the expectation of firms’ future performance. Managers manage earnings and, in effect manage expectation of future earnings prospects, regardless of whether earnings management is beneficial or harmful to investors. The main objective of this study is to examine the impact of firms’ characteristics on the quality of financial reporting of listed manufacturing firms in Nigeria. It is therefore posited that firm structure variables (firm size and leverage), firm monitoring variables (board composition and institutional shareholding) and firm performance variables (profitability, liquidity and firm growth) have no significant impact on the financial reporting quality of listed manufacturing firms in Nigeria. This study will be of interest to investors since the level of pervasiveness of earnings management and associated firms’ characteristics can help investor assess the overall quality of financial reporting.

The motivation for this study hinged on a number of reasons. Nigeria is the largest market in Africa by the virtue of her size. She also plays significant and dominant roles in the economics and politics of the region, both in the ECOWAS and the African Union. Furthermore, there is gap in our knowledge of financial reporting practices from this region of the global economy. Improvements in our insight on this issue are crucial for a more transparent global market where cross listing and cross border activities is growing. The importance is more clearly highlighted in the case of internationalisation of standards and the impact of accounting standard differences on value relevance of the information in the financial statements for different users. The level of research interest in this area directly reflects the effect that the adequacy of financial reporting quality has on decisions making by the various users of financial statements of listed manufacturing firms in Nigeria. Therefore, the findings of this study is expected to have particular positive implications of coming up with policies and standards that will control manipulative accounting by regulators responsible for ensuring high quality financial reporting such as Financial Reporting Council of Nigeria, Nigerian Securities and Exchange Commission and Corporate affairs Commission. In addition, the financial analysts, stock market stakeholders and shareholders and management of Nigerian manufacturing firms stand to benefit tremendously from the outcome of this research.

The remaining parts of the paper covers four sections- section two contains theory and evidence where arguments are presented and previous literatures are reviewed, methodology is discussed in section three. In addition, results, policy implications and conclusion are presented in section four and five respectively.

2.1 Theory and Evidence

In the Nigerian context, comprehensive study of Nigerian listed firms has been conducted by World Bank Group. It is observed that the Nigerian financial reporting practices are deficient (World Bank, 2004). Apart from that study by the World Bank, financial information reporting practices by Nigerian firms have been empirically investigated by Wallace Naser and Mora (1994), Okike (2000), Adeyemi (2006) and Ofogbu and Okoye (2006). Their findings are quite similar that the Nigerian corporate reporting practices are weak. Although, all of them used level of disclosure to represent financial reporting quality, none of the studies use any of the earnings management models, which is central to quality of information in financial reports. The major limitation of their methodological approach is that, the disclosure index is often determined by totaling several items that can be weighted or unweighted. Despite the absence of one dominant practice, the weights are assigned judgmentally without scientific or statistical basis. This study therefore sets to fill this obvious gap by using of modified Dechow and Dechev model of earnings quality as used by McNicholas (2002) and Francis et al (2005) as a proxy of financial reporting quality.

In sum, three divergent views are debated globally in respect to firm characteristics and quality of financial reporting (Wallace et al. 1994 and Chen and Jaggi 2007). First, some are of the view that structure characteristics of firm play a prominent role in preventing managers from manipulating accounting numbers than other measures such as monitoring or performance variables. Second, others are of the opinion that monitoring mechanisms (independent directors and institutional shareholders) control better the opportunistic behaviour of management in preparing financial statements. The last view is of those that believe performance variables surpass both structure and monitoring elements in checkmating the unethical accounting activities by managers which reduces the quality of
financial reporting. Thus, the three divergent views is still not resolved and to the best of our knowledge no study in Nigeria attempted to resolve the controversy especially in Nigerian manufacturing firms. In view of this, the study investigates the effect of firm characteristics on the financial reporting quality of listed manufacturing firms in Nigeria.

Wallace and Naser (1995) investigate the multivariate impact of selected firm characteristics on corporate annual reports. Eighty firms listed on the Stock Exchange of Hong Kong are utilized for the study with annual year end 1991. Eleven variables are used as explanatory variables which are broken down into three categories as in Wallace et al (1994). Some variables are transformed using natural logarithmic conversion to reduce their skewness and outliers in the data. The finding reveals that the disclosure indexes vary positively with asset size which is in line with the results of Cerf (1961), Singhvi and Desai (1971), Firth (1979), McNally et al. (1982). The scope of business operations is also significantly positive. Profit margin is significantly negative suggesting that firms with higher profit margins tend to provide less detailed information in their financial statements. Also, conglomerate status appears significantly negative, suggesting that HK firms that are not conglomerates tend to provide less detail in their annual reports. In addition, market capitalizations, liquidity ratios, earnings return on equity and outside shareholders’ interests are less useful in explaining variation in disclosure indexes. The limitation of this study is restricting to mandatory items only and ignoring voluntary disclosure items.

Karim et al (1998) investigated 146 firms in Bangladesh using 91 voluntary disclosure items and found that the firms disclose an average of only 26 percent of the 91 voluntary information items. On the other hand Ali et al (2004) and Akhtaruddin (2005) investigates the extent of mandatory disclosure by 94 listed firms both on the Dhaka Stock Exchange (DSE) and the Chittagong Stock Exchange (CSE) respectively. Both of them examine the relationship between company specific characteristics; age, size, status, profitability and mandatory disclosure of the sample firms except the later included auditors type and liquidity his explanatory variables. The two studies found that all the attributes are positively significant to the information quality.

Ademipine and Peace, (2011) examines the association between corporate governance, company attributes and voluntary disclosures among Nigerian listed companies. In order to examine this association, two disclosure indexes were built using a sample of 50 listed companies in Nigeria. The first index contains twenty items which are mandatory according to a number of selected IFRSs but which are voluntary in Nigeria for the year 2008. The second index contains sixty voluntary accounting and non-accounting items. The study uses univariate, multivariate and cross-section models to explore the relationship between each disclosure index and corporate attributes. The corporate attributes are the independent variables comprising corporate governance and company characteristics. The results of the regression analysis reveal that only board size has a significant positive relationship with the extent of voluntary disclosures on the sample companies. The Board composition, leverage, company size, profitability, and auditor type have statistically positive and insignificant impact on disclosures. The effect of Board ownership is positive for IFRS disclosures but negative and insignificant for Non-IFRS disclosures while sector is negative for both disclosures but has a significant effect on Non-IFRS disclosures. The limitations encountered in this study include the insufficient weighting of scores for disclosure criteria in the sense that companies were awarded 1 for disclosure of an item and 0 for non-disclosure without considering the depth of the disclosure of such item in the annual report. Also, the inability to access annual reports covering longer periods rather than just a year inhibits the generalization of the findings to an extent.

positive relationship may be attributed to three basic reasons. First, the cost of accumulating detailed information is less for large firms; second, management of larger firms is likely to realize the possible benefits of disclosure; and lastly, smaller firms, as against the larger firms feel that full disclosure can endanger their competitive positions.

One of the most important factors influencing the integrity of the financial accounting process involves the board of directors, whose responsibility is to provide independent oversight of management performance and to hold management accountable to shareholders for its actions (DeFond and Jiambalvo, 1994; Dichev and Skinner, 2002). Prior research examining the association between the corporate governance mechanisms concerning the board of directors (e.g. independence of board or board size, expertise of directors or board members, and stock ownership of board members) and the extent of earnings manipulation finds inconclusive results. While the empirical results concerning board attributes are mixed due to different research designs and empirical settings, a general belief is that boards are more effective in their monitoring of management when there is a strong base of independent directors on the board (Beasley, 1996; Peasnell et al., 2000; Klein, 2002; Xie et al., 2003).

Institutional and block holder investors also serve a monitoring role in mitigating opportunistic behaviour of managers (Edwards and Hubbard, 2000). Empirical research supports this idea (Brickley, Lease, and Smith, 1988; Hartzell and Starks, 2003; Holderness, 2003; Jiambalvo, Rajgopal, and Venkatachalam, 2002; McConnell and Servaes, 1990). Given their large financial stake, institutional investors have incentives, resources, and the ability to monitor a firm’s stakeholder policy. Recent research also indicates that the existence of stronger shareholders may improve internal control, and thus may be an effective monitoring device for improving financial reporting quality. To the extent that an appropriate power-sharing relationship between shareholders and managers reduces the moral hazard problems that lower overall firm value and allow shareholders to effectively monitor the financial reporting practice.

Firms' profitability has also been argued to have an influence on the quality of financial reporting. Alsaeed (2006) argued that a profitable firm may feel proud of its achievements and therefore would wish to disclose more information to the public in order to promote positive impressions of its performance. However, even though a study by Haniffa and Cooke (2002) did find a significant positive relationship between return on equity (ROE) with voluntary disclosure, a study by Alsaeed (2006) on the other hand, had found insignificant relationships. Besides that, the level of profit has also been argued to have an influence on the manipulation of accounting accruals because managers may manage earnings to increase their bonus rewards (Yang and Krishnan, 2005). However, Yang and Krishnan (2005) and Rahman and Ali (2006) did not find any significant relationships between the level of net income and discretionary accruals. This inconsistency and insignificance in the results is probably due to the use of current profitability, instead of changes in profits. Therefore, studies by Klein (2002b) and Davidson, Stewart and Kent (2005) have argued that the changes in profit influence the manipulation of accounting accruals. Both studies have found support for this argument. Their studies indicate a significant positive relationship between changes in net income and accruals in financial accounts. Several studies suggest that small profits are not evidence of earnings management. Dechow, Richardson, and Tuna (2003), in a large-sample study, find no relation between realizations of small profits and increases in discretionary accruals. Beaver, McNichols, and Nelson (2007) suggest that asymmetric taxes, rather than opportunistic choices, can explain the kink. Durtschi and Easton (2005) suggest that the kink is due to statistical and sample bias issues.

Economic theory suggests that voluntary disclosures and increased information quality reduce information asymmetries (either between the firm and market participants or between informed and uninformed investors). This reduction in information asymmetries increases the firm’s liquidity (Glosten and Milgrom, 1985; Amihud and Mendelson, 1986; Diamond and Verrecchia, 1991; Kim and Verrecchia, 1994; Easley and O’Hara, 2004). Early empirical work by Amihud and Mendelson (1986) reports that firms that provide more public information can reduce the adverse selection component of the bid-ask spread, and thus potentially reduce their cost of equity capital. Overall, the empirical evidence suggests that disclosures and accounting information of higher quality are related to improved liquidity. Thus, it is unclear whether the association between disclosures and liquidity is attributable to voluntary or mandatory disclosures, or some interaction of the two.
There is a debate over whether growth, the unobservable construct, or accruals as a measure of growth, affects earnings persistence. The bottom line is that high growth firms have less sustainable earnings (Nissim and Penman, 2000). This finding is not surprising. Earnings summarize performance of the firm’s earnings process during the reporting period. If the fundamental process changes (i.e., grows), so will earnings, and properties of earnings like persistence and smoothness will be adversely affected. Studies like Penman and Zhang (2002) provide more contextual evidence about how the accounting system affects the degree to which growth matters. In addition to the impact of growth on the fundamental element of earnings properties, growth also is associated with greater measurement error and more manipulation opportunities (Richardson et al., 2005).

Researchers have, however, examined growth as a determinant of the external indicators of quality. Doyle et al., (2007a) and Ashbaugh-Skaife et al. (2007) find that young growth firms disclose more internal control weaknesses. Lee et al. (2006), however, do not find evidence supporting the association between restated amounts and growth. Research in finance shows that firm’s characteristics (such as growth, company size, efficiency) can predict the future stock price. Johnson and Soenen (2003) analyzed 478 firms in USA during 1982-1998 and concluded that big sized and profitable firms with high level advertising expenditure have better performance in terms of those three measurements.

Finally, the contribution of this study to the literature consist among others that larger and more leveraged Nigerian listed manufacturing firms reports most reliable accounting information in their financial statement. In addition, the monitoring variables of corporate governance (independent directors and institutional shareholders) plays a prominent role in preventing managers of Nigerian listed manufacturing firms from opportunistic behaviour in preparing financial reports. Again, the most profitable and fast growing Nigerian manufacturing firms reports the most reliable, faithful and verifiable accounting numbers in their financial statement. While, liquidity is inversely related with quality of financial information of listed manufacturing firms in Nigeria.

2.1.2 Theoretical Framework and Model Build Up

Given that firms’ financial statement is required by law (CAMA 2004) certain quality can be compromised by the management to achieve a given desired results. Thus, to measure the quality we hypothesized that financial reporting quality is a function of firm characteristics. The firm characteristics are those incentive variables that relatively sticky at firms’ level across time. However, in this study firm characteristics are categorized into structure and performance variables of a firm. These categories are base on (Chen and Jaggi, 2000), Lang and Lundholm (1993) and Wallace et al (1994).

The first two characteristics are firms’ structure variables while the next two are monitoring Variables and the remaining three are the performance variables. The financial reporting quality is posited to be function of structure variables. This can be presented as follows:

\[ FRQ = F (FSIZE, LEV) \] .......... (i)

The firm structure variables are characteristics which could have an effect on quality of financial reports as explained by the opportunist theory. By definition, opportunistic earnings management is a term that is used to refer to self-interested managerial reporting behavior that is undesirable from a shareholder’s perspective. A widely held belief in the literature is that earnings management is primarily opportunistic and it hampers earnings quality. Indeed, many studies have used discretionary accrual measures of earnings quality as negative proxies of earnings quality (Myers et al., 2003; Defond et al. 2004; Schipper and Vincent, 2003). If earnings management were primarily opportunistic, it is reasonable to posit that such behavior would adversely affect bothrelevance and reliability. In this case, constraining earnings management behavior via effective internal reporting controls and auditing should benefit shareholders. To the extent that opportunistic earnings management impairs predictive ability, less of it should arguably increase the predictive ability of earnings components.

Firm size has been found to exhibit negative association with earnings quality since larger firms choose their accounting methods in response to their managerial decision needs. High leverage indicates that debt holders would
exercise control over firm’s management and reporting and hence managers of highly levered firms could follow practices to present higher than actual income or manipulate financial statements to please debt holders (Watts and Zimmerman, 1986). Balsam et. al., (1995) provide substantial evidence on the association between leverage as represented by debt structure and different measures of earnings quality. In addition, the firm monitoring variables (Board composition and institutional shareholding) are hypothesised to be function of financial reporting quality because they are believed to be capable of checkmating manipulative accounting activities by management. This can be presented mathematically below:

\[ FRQ = F(BC, IS) \] ....................................... (ii)

A study on firm’s characteristics as determinants of earnings quality document that larger independent board membership and larger institutional shareholding are associated with lesser earnings management (Farber, 2005). Corporate monitoring by institutional investors can constrain managers’ behaviour. Large institutional investors have the opportunity, resources, and ability to monitor, discipline and influence managers. Corporate monitoring by institutional investors can force managers to focus more on corporate performance and less on opportunistic or self-serving behaviour. If institutional ownership enhances monitoring, it might be associated with lower use of discretionary accruals.

Furthermore, the firm performance variables which could have an impact on the quality of financial reports as explained by efficiency contracting theory associates managers to exercising accounting discretion in an efficient manner such that in the long run firm value is maximized. Financial reporting quality is posited to be function of Performance characteristics. This is also presented mathematically below:

\[ FRQ = F(PROF, LIQ, GROWTH) \] .................... (iii)

Theoretically firms that exhibit loss characteristics are expected to engage in accounting tactics such as window dressing to present a better picture of their earnings that indicate poor earnings quality. Keating and Zimmerman (1999) have associated weak firm performance with poor earnings quality. De Angelo et.al., (1994) suggest that only sustained poor firm performance limits firm’s opportunities and hence firms might indulge in earnings management that can be inferred as poor earnings quality. Nissim and Penman (2001) found that high growth firms have lower earnings persistence and thus lower quality of earnings. Ashbaugh- Skaife et. al., (2007) found negative relationship between growth and proxy measures of earnings quality.

Three theoretical explanations have been advocated in literature to establish the relationship between earnings quality and firm characteristics. Bowen, Rajagopal and Venkatachalam (2008) find that the efficient contracting theory associates managers to exercising accounting discretion in an efficient manner such that in the long run firm value is maximized. The opportunist theory, assumes that managers have a short-term self interest as an incentive to form poor firm structure to manage earnings for their own benefit (Klein (2002). While the agency theory advocates that the independent of directors and institutional shareholding have a positive association with good earnings quality. The efficient contracting theory suggests a positive association between accounting discretion and long term firm performance and quality of financial information. Therefore, in this study the opportunist theory is selected to link structure variables with financial reporting quality and agency theory to frame monitoring variables with financial reporting quality, while the financial reporting quality and performance variables will be anchored on efficiency contracting theory. However, the structure variables, monitoring variables and performance variables forms firm characteristics that represent the explanatory variables of the study.

Consequently, since financial reporting is hypothesized to be function of firm characteristics in equation one, two and that of equation three, therefore, financial reporting quality can be said to be a function of structure variables, monitoring variables and performance variables. This is mathematically represented below:

\[ FRQ = F(FSIZE, LEV, BS, IS, PROF, LIQ, GROWTH) \] ..............(iv)
Finally, the equation four forms the basis of arriving at the model of the study using balanced panel data of multiple regression. This equation is represented as follows:

\[ FRQ_i = \beta_0 + \beta_1 FSIZE_i + \beta_2 LEV_i + \beta_3 BCOMP_i + \beta_4 IS_i + \beta_5 PROF_i + \beta_6 LIQ_i + \beta_7 GROWTH_i + \varepsilon_i \]

Where: \( FRQ \) = Financial Reporting Quality, \( \beta_0 \) = Intercept, \( \beta_{1,7} \) = Coefficient of the independent variables, \( FSIZE \) = Firm Size, \( LEV \) = Leverage, \( BCOMP \) = Board Composition, \( IS \) = Institutional Shareholding, \( PROF \) = Profitability, \( LIQ \) = Liquidity, \( GROWTH \) = Growth, \( \varepsilon \) = error term, \( i \) = firm and \( t \) = year

### 3.1 Methodology and Robustness tests

For this study correlational research design is used to describe the statistical association between two or more variables. It is therefore, most appropriate for this study because it allows for testing of expected relationships between and among variables and the making of predictions regarding these relationships. The population of the study comprises of all 39 listed manufacturing firms in the Nigerian Stock Exchange as at 31st December 2010 which are classified into 4 subsectors namely the foods and beverages (16) firms, Building Materials (7) firms, chemicals and paints (8) firms and Conglomerates (8) firms. In view of the nature of the model used in the study, a filter is employed to eliminate some of the firms that have no complete records of all the data needed for measuring the variables of the study within the period (2006-2010). Consequently, 12 firms are eliminated leaving 27 firms. The second filter eliminates all firms that have disappeared from the trading schedule of NSE as at 31st December, 2010 on the basis of this filter, 3 firms are eliminated. The remaining 24 firms that met both criteria are used as the sample of the study. The study used longitudinal balanced panel data from secondary sources only because it is a quantitative with positivism paradigm and the core of the data needed for analysis were adequately and conveniently extracted from the audited financial reports of the selected firms within the period of the study. Multiple regression is adopted to examine the model of the study. Longitudinal panel data is used to account for individual heterogeneity of the sample companies with the utilization of two steps regression in determining the quality of financial reports of the Nigerian listed manufacturing firms adopting modified Dechow and Dichev’s (2002) model. Thus, residuals of \( \Delta WC_i = \beta_0 + \beta_1 CFO_{i-1} + \beta_2 CFO_i + \beta_3 CFO_{i+1} + \beta_4 REV_i + \beta_5 PPE_i + \varepsilon \)

The residuals for the modified DD model after inserting the sampled firms’ data represent financial reports quality in the second regression model specified for the study. However, the residual determines the accrual quality, the larger the residuals, the lower the quality of accruals vice versa as in McNichols (2002). The results of robustness tests (multicollinearity, heteroscedasticity, cross-sectional dependence, test of serial correlation, Hausman specification and histogram test of residuals) conducted in order to improve the validity of all statistical inferences for the study reveal favourable but not reported for brevity.

### 4.1 Result and Discussion

This section presents the regression result of the dependent variable (FRQ) and the independent variables of the study (firm size, leverage board composition, institutional shareholding, profitability, liquidity and firm growth). It follows with analysis of the association between dependent variable and each independent variable individually and cumulatively.

The summary of the regression result obtained from the model of the study \( FRQ = \beta_0 + \beta_1 FSIZE + \beta_2 LEV + \beta_3 BCOMP + \beta_4 IS + \beta_5 PROF + \beta_6 LIQ + \beta_7 GROWTH + \varepsilon \) is presented in Table 1 below:

**Table 1: Regression Results**

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Beta Coefficients</th>
<th>t-values</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Size</td>
<td>0.002 **</td>
<td>1.91</td>
<td>0.050</td>
</tr>
</tbody>
</table>
Leverage & 0.006** & 0.35 & 0.030 \\
Board Comp. & 0.090* & 3.02 & 0.003 \\
Inst. Shareholding & 0.008** & 0.22 & 0.026 \\
Profitability & 0.003* & 3.37 & 0.001 \\
Liquidity & -0.005* & -1.29 & 0.000 \\
Firm Growth & 0.001* & 0.51 & 0.012 \\

| Source: STATA Output Result** Significant at 5% and * Significant at 1% |

Our expectation is that large firms have stronger desires and are more likely to manipulate earnings to keep consistent earnings growth trend and meet or beat earnings expectations. The result in respect of firm size and financial reporting quality shows that firm size is significant at 5% in explaining earnings quality of Nigerian manufacturing firms (see table 1). This implies that the large Nigerian manufacturing firms report more reliable and qualitative information in their financial statements than the small ones. This result may be as a result of large firms usually have strong internal control systems and governance mechanisms, can access high quality services from large audit firms, and care its reputations. These factors may discourage earnings management and therefore improves earnings quality. Recent accounting scandals raise serious concerns in credibility of financial reporting. Another reasonable explanation is that it would be easier for large-sized firms to report positive changes in earnings than positive earnings, while small-sized firms may not have the same capacity as large-sized counterparts in reporting positive earnings. This finding is consistent with those of Wallace et al. (1994), Hassainet al. (1995), Raffournier (1995), Wallace and Naser (1995), Inchausti (1997), Marston and Robson (1997), Patton and Zelenka (1997), Owusu-Ansah (1998), Oyelere et al. (2000), Denis et al. (2009), Dwiet (2009), Nedalet al. (2010), Adelopo (2010) and Cristina (2010), although there are a number of notable exceptions, such as Lau (1992), Malone et al. (1993), Ahmed and Nicholls (1994); and Ahmed (1996), Entwistle (1999), Tower et al. (1999), Naser et al. (2002), Glaum and Street (2003), Akhtaruddin (2005), Ahmad and Mansor (2009) and Kamaruzamanet al. (2009).

Again, the regression result reveals that leverage has significant effect at 5% level on earnings quality of Nigerian listed manufacturing firms with a positive coefficient. This implies that the more leveraged the manufacturing firms are the higher quality their earnings will be. However, more leverage firms improve the quality of information obtainable from their financial statements. However, as leverage represents firm’s capital structure, a high leverage suggests that the firm uses debt financing aggressively. The fund can be used to support long term growth for the firm so it can earn profit. This suggests that the firm’s debt level has not yet reached the level of financial distress. The important of testing effect of leverage on the quality of earnings is of two faults. First, it is a measure for testing the information content of the balance sheet, which is widely used by investors, creditors and analyst to evaluate a firm and second, leverage as a proxy for financial risk of a firm, has supported the preposition that a firm’s share price is conditioned by its financial leverage (Kim et al., 1992). Therefore, a high leverage firm is more likely to endure manipulations of financial statements’ contents in other to manage the firm’s exposure to accounting covenants and noise in the earnings stream. Results regarding financial leverage have been divided into two categories through the literature. The first category of studies that find significant relationship between leverage and earnings quality include Naser and Al-Khatib (2000), Bujaki and McEconomy (2002), Camfferman and Cooke (2002), Ferguson, Lam and Lee(2002), Klein (2002b), Naseret al. (2002), Eng and Mak (2003), Hassabelnabyet al. (2003), Principe (2004), Al-Shammari (2005), Davidson et al. (2005), Alsaeed (2006), Rahman and Ali (2006), Barakoet al. (2006), Hassan et al. (2006), Abdelsalam and Weetman (2007), Barako (2007), Dwiet al. (2009), Kamaruzamanet al. (2009), Adelopo (2010) and Cristina (2010). However, the second category that finds no significant positive relationship between leverage and earnings quality are Wallace and Naser (1995), Meek et al(1995), Raffournier (1995), Inchausti (1997), Owusu-Ansah (1998), Ali et al(2004), Collett and Hrasky (2005), Yang and Krishnan (2005), Mangenaet al. (2007) and Nedalet al. (2010). Our results are in line with the first group as we found a significant relationship between the degree of leverage and the level of earnings quality.
In addition, the regression result reveals that independent directors as measured by the proportion of independent or non-executive directors on the board are positively related and statistically significant at 1% level of significant with financial reporting quality. This implies that the independent directors are free from managerial influence and capable of monitoring them efficiently which improve the quality of financial information conveyed to the users of financial statement in the Nigerian manufacturing firms. Thus, the increase of the percentage of independent directors in the board has a positive role in determining the quality of earnings of Nigerian manufacturing firms. This may be as a result of outside members do not play a direct role in the management of the company, their existence may provide an effective monitoring tool to the board and hence produces high quality of financial reports. The finding is however consistent with prior studies by Beasley (1996), Dechowet. al (1996), Dechow, Sloan and Sweeney (1996), Peasnellet al. (2000), Klein (2002a), Klein (2002b), Xia. et al. (2003), Bushman et al. (2004), Jagg and Leung (2005), Karamanou and Vafeas (2005), Ahmad and Mansor (2009), Davi and Aishah (2009), Denis et al (2009), Cristina (2010), Dimitropoulos and Asteriou (2010) and Nedalet al (2010). Contrarily, studies by Abdullah et al (2004), Vafeas (2005), Abdulrahman and Ali (2006), Ahmed et al (2006), Bradbury et al (2006), Jaggjet al. (2007),Piot and Janin (2007) and Petra (2007) fail to find any significant evidence between independence of Directors on board and earnings management.

Furthermore, looking at the relation between institutional shareholding and financial reporting quality, a positive relation emerged and it has been supported statistically at 5% level of significant. This significant association indicates that institutional investors are one of the major considerations in managers’ aggressive earnings management strategy. This result is not surprising. In Nigeria, most institutional owners are social security institution (government pension funds) and financial firms. There is no existence of developed mutual funds or investment companies. As a result, institutional investors in Nigeria should be effective in constraining managerial behaviour of earnings management through abusive accounting and income manipulations. Consistent with the argument that institutional investors in Nigeria are short-term oriented and create incentives for managers of their portfolio firms to manage earnings aggressively, these institutional investors focus excessively on current earnings performance (Adelepo 2010). The result of influential effect of institutional investors on earnings quality found in this study is consistent with the findings of Jiambalvo, et al (2002), AbdulWahabet al. (2003), Wan and Ibrahim (2003),Davi and Aishah (2009) andNedalet al (2010) and contrary to those of Abdullah (1999), Koh and Hsu (2003), Ajinkyait al. (2005), Chung et al. (2005) and Ahmad and Mansor (2009).


The regression result in respect of association between liquidity and earnings quality shows that liquidity is inversely related with earnings quality but significant at 1% level of significance. This result reveals that the higher the investment in short-term liquid asset the lower the financial reporting quality. It can also be argued that an optimal level of liquidity is not advantageous since managers would be tempted to have access to the excess liquid and exercise discretionally behaviour. Therefore, the risk arises only when excess liquidity is maintained by the firms. This suggests that there will be a limited association between financial reporting quality and liquidity. Since excess liquidity is the source of important agency problems as found by Jensen (1986) and management opportunistic behaviour or discretion (earnings management, manipulative accounting or abusive accounting) is part and parcel of agency problem. Therefore, excess liquidity will be expected to negatively affect earnings quality. The

Our regression result reveals that firm growth measured by sales volume is positively and statistically significant at 1% level in determining the quality of financial reporting of Nigerian manufacturing firms. This implies that firm growth is significantly affecting the quality of accounting information. Managers in Nigerian manufacturing firms with higher sales growth have more incentives to manage their income. Sales growth may affect the propensities of firms to manage earnings. The firms with high growth may not necessarily manipulate earnings to report positive earnings or change in earnings, while those with low growth rates may have to bias up earnings or change in earnings through earnings management. The high growth firms, however, may manipulate earnings once they form a consecutive earnings or sales growth trend. Myers and Skinner (2000) note, for example, that their sample firms have higher sales growth rates than the firms in the control group. So it becomes necessary to control sales growth to isolate the effect of firm size. Our finding is in agreement with those of Amihud and Mendelson (1986), Oyelere et al (2000), Cristina (2010), Adelopo (2010) and not in line with the finding of Nedalet al (2010).

The cumulative correlation between dependent variable and all the independent variables is 0.76 (see table 1) indicating that the relationship between financial reporting quality and firm characteristics used in this study is 76% which is positively, strongly and statistically significant. This implies that for any changes in firm characteristics of Nigerian listed manufacturing firms, their financial reporting quality will be directly affected. The cumulative $R^2$ (0.58) which is the multiple coefficient of determination gives the proportion or percentage of the total variation in the dependent variable explained by the explanatory variables jointly. Hence, it signifies 58% of total variation in financial reporting quality of Nigerian listed manufacturing firms is caused by their total assets, level of leverage, proportion of independent directors, proportions of shares held by institutions, profitability, liquidity and changes in sales. This indicates that the model is fit and the explanatory variable are properly selected, combined and used. The Durbin-Watson tests of first order auto-correlation indicate that errors are uncorrelated to each other indicating absence of serial correlation within the period of the study.

The findings have several theoretical, practical and regulatory implications. These implications represent the contributions of the study which are expected to benefit the existing body of knowledge within the accounting research, regulators and providers of accounting services. Our findings have important policy implications since they suggest the need to encourage applying corporate governance principles by institutions and individual block-holders to provide effective monitoring of earnings management in Nigerian listed firms, especially those with a large size. These firms operate in the business environment of individual ownership domination and control, where managers have greater motivation and opportunity to manage earnings to maximize their private benefits. This suggests that similar efforts in other sectors especially financial institutions would be rewarding in controlling the management of reported earnings, to enhance the reliability and transparency of reported earnings in order to promote economic efficiency.

Furthermore, the effect of directors’ independence on financial reporting quality of firms as showed by empirical evidence may find here a plausible explanation. This has significant policy implications for the composition of the board of directors. First of all, as already mentioned, parties that have long-term relationships with the firm as a going concern are natural candidates. As such, grey or affiliated directors; employees, block-holders to mention but a few may be highly valuable and their very position allows cognitive advantages over purely independent directors. In sum, our analysis points to the attractiveness of pluralistic board appointments, composed of independent members, corporate executives, affiliated members such as employees representatives and other parties with specific knowledge of the firms’ business will go a long way in improving the capacity and capability of monitoring management to decline from earnings management discretion or opportunistic behaviour to benefit themselves at the detriment of the firm.
Finally, our findings shed more light on firm characteristics and earnings quality studies in the sense that earnings management practices are not attributed to few firms; rather it is a widespread phenomenon in Nigeria. As the central question for standard setters is to enhance the credibility of financial reporting, our evidence on a widespread earnings management practices in respect to firm size, leverage, independent directors, institutional shareholding, profitability, liquidity and growth may give a warning. To ensure that abusive earnings management is not encouraged, standard setter may consider adjust policy for disclosure or request additional disclosures from firms in associating discretionary activities. Further, investors may caution in defining high quality earnings firm. Firm characteristics may help them to predict potential earnings management firms.

5.1 Conclusion and Recommendation

Conclusively, the study has provided both empirical as well as statistical evidence on the utility of seven firm characteristics; firm size, leverage, independent directors, institutional shareholding, profitability, liquidity and growth in explaining and predicting financial reporting quality of the Nigerian listed manufacturing firms. Thus, firm characteristics are influencing financial reporting quality of Nigerian manufacturing firms. It is therefore recommended that all the firm characteristics used in this study except liquidity should be encouraged by the regulating agencies of government (Securities and Exchange Commission & Corporate Affairs Commission) and all other stakeholders in the Nigerian manufacturing sector because of the role that the firm characteristics play in constraining managers to act opportunistically in preparing financial statements.

References


