MARKET IMPLICATIONS OF AUDIT QUALITY IN NIGERIA: EFFECTS ON SHAREHOLDERS' EARNINGS AND STOCK PRICE PREDICTABILITY

Kao Dui Li

Faculty of Corporate Finance, School of Finance and Economics,

Xuefu Road, 301, Jiangsu University, P.R. China

d@ujs.edu.cn

Comfort Mvendaga Adeke

Faculty of Corporate Finance, School of Finance and Economics,

Xuefu Road, 301, Jiangsu University, P.R. China

mccadeken@hotmail.com; 5102170244@stmail.ujs.edu.cn

Osei-Assibey Bonsu Mandella ✉

Faculty of Corporate Finance, School of Finance and Economics,

Xuefu Road, 301, Jiangsu University, P.R. China

thugdibae1@gmail.com; 5102170293@stmail.ujs.edu.cn

Abstract

This study examined the effect of audit quality proxied by auditors' independence (ADI), audit firm size (AFS), auditor tenure (ADT) and Audit Firm Specialization (ADS) on shareholders' earnings (measured as Earnings per Share - EPS) and stock predictability (measured as Market Price of Stock - MPS) of listed manufacturing companies in Nigeria. It also tested the quality and persistence of earnings components and their predictive power on stock performance. To achieve this, the study used eleven (11) manufacturing companies listed companies that had consistently published their audited annual financial reports from 2009 to 2018. Descriptive statistics, correlation analysis and OLS univariate and multiple regression technique were adopted to analyse data obtained, with the ex-post facto research design employed in the

methodology. The following results were obtained from the test of hypotheses: Cash flows and accruals components of earnings are persistent in the Nigerian manufacturing market, with cash flows being more persistent than cash flows. Both cash flows and accruals have significant impact on stock performance, with the persistence of both components being underestimated in the Industry. Auditor's independence, audit firm size and auditor's firm specialization have significant and positive impact on EPS and MPS result of the analyses revealed that auditors' independence and audit firm size have positive and significant effects on reported EPS figure and stock pricing. However, auditors' tenure is found to negatively and significantly affect MPS. The findings have direct implication on earnings management and market performance in the Nigerian Manufacturing Industry.

Keywords: Accruals, cash Flows, Earnings per Share, Market Price, Auditors' Independence, Audit Firm Size, Audit Tenure, Audit Firm Specialization

INTRODUCTION

It is well established in the literature that earnings contain valuable firm specific information provided in the financial statements of firms. Liu, Nissim and Thomas (2012) in their study argue that earnings perform the best and investors rely on reported earnings more than other performance measures. Francis, Schipper and Vincent (2013) also conclude that earnings is the preferred metric in explaining security returns in industries. Graham, Harvey, and Rajgopal (2015) provide survey evidence indicating that chief financial officers believe earnings, to be the key metric considered by outsiders, and thus, managers perceive large market penalties if their firm does not reach quarterly or annual earnings targets. The financial analysts and managers of the companies use mostly earnings numbers instead of equity, sales or any other summary measure when they express expectations about the performance of the firms because outsiders heavily rely on earnings.

A quality earnings figure is relevant in measuring company's performance, and is one that reflects the company's current and future operating performance. Earnings are composed of accruals and cash flows, whose quality is defined by how persistent these components are. Since accruals are measured with high level of subjectivity and errors, they diminish the quality of earnings. The users of the financial statement hardly figure out this discretionary accrual and therefore assume that earnings have quality. Where this occurs, the firm value will be mispriced, due to the misrepresentation in the financial statements. Earnings persistence is the degree to which earnings performance persists into the next periods. Persistent earnings are meant to

improve the ability of earnings to capture value-relevant information and have higher predictive power of future returns. Since most investors in the stock markets are fixated on the earnings metric for valuation purpose, then the association between earnings quality and stock prices needs to be empirically ascertained to shrink future surprises in stock prediction outcome (Okpa, 2018).

Healy and Wahlen (2016) posit that firms intentionally manage earnings in to either mislead shareholders about the entity's performance, or influence outcomes of contracts that rely on accounting reports. Income is often managed so that Earnings per Share (EPS) figures, which is the shareholders' income, reaches the desired levels. Prior literature shows that earnings are manipulated to ensure that EPS meets analysts' forecasts and meet the market earnings expectations. This is done because share price is affected by investors' expectations concerning an entity's future cash flow (i.e., dividend paying) prospects. Since current EPS represents a signal of future cash flows, failing to meet analysts' forecasts of EPS often results in a depressed share price while meeting these forecasts brings about a maintenance or growth in stock price (see Payne and Robb, 2016; Jordan and Clark, 2017).

Earnings are also managed to get to user reference points in earnings per share. Here, the object of manipulation is not to meet analysts' expectations of earnings (EPS), but to achieve perceptive reference points (such as 0s or 5s) in two decimal point (see Das and Zhang, 2017). This type of earnings management takes place when the true EPS value falls only slightly below the user reference points. Discretionary accruals are used to increase income until EPS can be rounded up to desired breakpoints. Although this type of manipulation is often referred to as cosmetic earnings management (CEM), its results are fatal as Thomas (2015) notes that even "small changes in reported earnings (EPS) near user reference points have disproportionately large effects on perceived firm value".

Reasonable as these incentives to manage earnings might appear, it is generally assumed that earnings management is harmful to shareholders because of the implicit decrease in the reliability and transparency of financial reports (Beneish, 2015). Thus, stakeholders who use financial statements consider earnings management to be immoral, whose occurrence should be prevented at all cost, by employing quality audit. A financial statement audited by competent auditors' is a signal to the market that the financial statements, and the EPS figure are more reliable and dependable, relative to those audited by incompetent ones. The market perceives auditors' independence, size, tenure and specialist auditors to be of a higher quality than others, and rewards companies with larger improvements in share earnings, punishing those with decreased share earnings accordingly.

Auditors play crucial roles to capital markets development as they deliver legal guarantee of the authenticity of accounting reports to the users of financial statements. Auditing diminishes the presence of information asymmetry that naturally exist between managers and corporate stakeholders, allowing these outside stakeholders the opportunity to verify and validate published financial statements. The level of effectiveness of the audit process, and its ability to restrict earnings manipulation can vary with the quality of the audit firm. Myers, and Omer (2016) posit that auditors restrict the self-centred decisions of management to distort the financial statements information when the audit quality is high. High quality auditors, relative to low quality auditors, are more disposed and qualified to detecting questionable accounting practices and, when detected, to inhibit their use by the management of the reporting firm.

From the foregoing, it is implied that high-quality audit is effective to deter management intention to perform unethical earnings management, because when such immoral behaviour is detected, their (management) reputation is likely to be marred, which can in turn reduce the value of the firm. It is highlighted in this study, following Rusmin (2017) that audit quality has the capacity to increase the quality of reported earnings (whose components are accruals and cash flows), and stock estimation. Audit quality in this paper will be measured using four proxies: auditors' independence, Audit firm size, auditor's tenure, and audit firm specialization while earnings will be decomposed as accruals and cash flows earnings.

Most of the prior studies on audit quality and earnings management in Nigeria have measured earnings management using the estimated values for Modified discretionary accruals by Dechow et al. (2015). However, if income is often managed so that Earnings per Share (EPS) figures, which is the shareholders' income, reaches the desired levels, it is imperative to measure earnings management by the result of such management, which is EPS. A study that uses EPS figure is undoubtedly desirable as it provides a better understanding of the effect of audit quality on shareholders' earnings, and its attendant effect on stock predictability, which has not.

It is against this background that the present study is set to fill the gaps identified in the audit quality, shareholders' earnings and stock predictability literature by extending its analysis to firms in the Manufacturing Industry.

The objectives of this paper is twofold: first to examine the quality and persistence of earnings, as well as their implications on stock performance; second, to evaluate the implications of audit quality measures on shareholders earnings and market prices of stocks.

The remainder of the paper is organized as: literature review and hypotheses development are contained in the second section, research methodology in the third section, results and discussion in the fourth section, and conclusion in the fifth section.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Earnings Quality, Persistence and Stock Performance (Returns)

Earnings quality refers to the ability of the current earnings to forecast future earnings (Penman 2007). Earnings are of good quality if no earnings reversals are forecasted. With valuation in mind, the investors are interested in future earnings, that is, they buy future earnings using the current ones. Further earnings are said to be of poor quality if the current reported earnings are not good indicators of future ones. Okolie (2006) posit that earnings, though largely ignored by investors and other users of financial information, are vital aspect of evaluating firm's financial health. Simply put, earnings quality is the ability of reported earnings to reflect the true view of the firms' earnings, which also have predictive power on future earnings.

Richardson, Sloan, Soliman and Tuna (2005) define persistence as the degree to which earnings performance persists into the next periods implying that managers have not used their discretion in the reporting processes. The cash component of earnings provides both relevant and reliable information, thus, linking earnings quality to cash components of earnings in terms of persistence. Francis, LaFond, Olsson and Schipper (2013) show that desirable earnings are those that very much resemble cash flows.

The term 'persistence' is widely used interchangeably with sustainable earnings in the literature. Earnings that reflect a steady growth trend are seen desirable (Wild, Subramanyam, Halsey, 2014). Thus, in financial statements analysis unusual, non-operating or non-recurring items reported on the income statement require more attention than others in terms of quality of earnings as these items have negative effect on the sustainability of earnings (i.e. accruals are negatively related with earnings persistence). Penman and Zhang (2002) indicate that earnings before extraordinary on the income statement that viably predict future earnings are regarded as being of quality. Thus, high quality of earnings is sustainable or persistent earnings as often referred in financial analysis. Okpa (2018) indicates that earnings performance attributable mainly to the accrual in the UK, exhibits lower persistence than earnings performance mainly attributable to the cash flow components. The subjectivity and errors inherent in the measurement of accruals create noisy earnings, which do have the power to persist. The greater the measurement noise, the greater the downward bias in the persistent coefficient. Thus, I hypothesize that:

H1: Cash flows and accrual components of current earnings are persistent

Researchers in this case, predict varieties of equity market consequences of earnings persistence. Some predict that more persistent earnings will generate higher market valuations and, increase in persistence will yield optimistic equity market returns. Early research provide

evidence that more persistent earnings have a stronger stock price response and association. Kormendi and Lipe (2017) model returns in stock as a function of expectations of earnings, by representing earnings by a univariate time-series, and showing that the time-series properties of earnings will be an important factor in returns/earnings association. The reason for the use of the models of time-series of earnings is that the stock prices reflect expectations before these earnings are announced. Thus, it seems reasonable to correlate the change in price with unexpected earnings rather than reported earnings. The emphasis on unexpected earnings led to the use of proxies for expected earnings as time series.

Richardson, et al (2005) bring a different perspective to the debate and argue that investors do not understand the lower persistence of less reliable accruals, which leads to incorrect investor forecasts of future earnings and cash flows and to their mispricing of current accounting realizations. Within the forecasting framework, Richardson et al (2005) use an extended decomposition of the change in non-operating assets to identify components that exhibit high versus low reliability in predicting future operating income. After ranking the components of non-operating assets according to their reliability, they find that the magnitude of the accrual anomaly is greater for the less reliable accruals. Persistence of earnings plays an important role in company valuation. Since the investors rely on earnings numbers more than other measures, "price-to-earnings ratio" is agreed to be a fundamental multiple in company valuation. Persistent earnings series, on the other hand, produce healthier price-to-earnings ratios (return/earnings) for valuation purposes (Penman and Zhang 2002).

Thus, we hypothesize:

H2: The persistence of earnings components significantly predicts stock performance

Audit Quality, Shareholders Earnings and Stock Prices

Davidson, Stening and Wai (2015) see audit quality as the accuracy of information reporting by auditors. Wallace (2015) sees it from two perspective: 1) the ability of the auditor to detect noise and bias in reported statement; 1) the patience to painstakingly improve the noisy accounting data. Davidson and Neu (2015) adds that it involves the competence of auditors to detect and eradicate material misstatements and manoeuvrings in reported bottom lines. Seyyed (2015) complements by adding that audit quality must include accurately reporting the errors found in financial statements.

Audit quality is prone to various influences, which are both direct and indirect. Khan (2016) claims that perceptions of audit quality vary amongst various stakeholders based on their level of direct involvement in audits, and their audit quality assessment perspective. It may be perceived from three major perspectives: inputs and outputs. The inputs to audit quality outside

auditing standards, include the auditor's skills and experiences, ethical values and mindset; the audit process (which describes its soundness and methodology); the effectiveness of the tools used; and the adequacy of technical support for high quality audit. On the other hand, the outputs are weights that stakeholders consider important in their audit quality assessments. They include the audit report and auditors' communications regarding governance and matters bordering on qualitative aspects of corporate financial reporting practices, and internal control deficiencies.

Titman and Trueman (2015) and Behn and Choi (2017) suggest that high audit quality has the capacity to improve financial statement information reliability, which will help investors to correctly price the stocks of firms. Schauer (2015) claims that higher audit quality increases the likelihood that reported financial statements reflects more accurately, the financial position and operations of the audited entity. This means that audit quality is embedded in the quality of corporate accounting information disclosed by audited firms.

The accounting literature is yet to provide a universally accepted definition of earnings management (EM). According to Schipper (2015), earnings management involves management disclosure with regards to purposeful interference in the external reporting process, in order to acquire private gain for shareholders and/or managers. To Fields, Lys and Vincent (2015), earnings management result from managers exercise of restricted or/and unrestricted discretion over accounting numbers. This discretion is exercised by managers with a view to maximizing firm value (otherwise known as shareholder's wealth), or maximizing managers interest (referred to as opportunistic earnings management).

Okolie and Izedonmi (2015) defined audit independence as the unbiasedness of auditor in decisions making during an audit. It is regarded as an auditor's objective mental attitude in making decisions throughout the audit process. Independence refers to the attribute of being free from influence, persuasion or prejudice. In the absence of independence, the value of the audit service and process will be greatly impaired, as an auditor's lack of independence increases the likelihood of being perceived as not being objective and trustworthy, implying their inability to report a discovered violation (Sweeney, 2015). Prior studies contend that high fees paid by a company to its external auditor increase the economic bond between the auditor and the client and thus the fees may impair the auditor's independence (Li & Lin, 2015). The impaired independence results in poor audit quality and allows for greater EM (resulting in lower earnings quality and stock estimation).

Prior scholarships submit that high audit fees paid by a firm to external auditor can enhance the economic bonds between them, which may compromise the independence of the auditor (Li and Lin, 2015). This will weaken auditing power, resulting in failed audit quality,

giving room for earnings maneuverings (Okolie and Izedonmi, 2015). Past works have used audit fees as a measure of auditors' independence (Wooten, 2015). Thus, we hypothesize;

H3: Auditors independence has a significant impact on EPS and market price of stocks

De Angelo (2015) submits that the reason larger audit firms perform better audits is because they have greater reputation at stake, than smaller audit firms. They further assert that because larger audit firms have adequate resources at their disposal, they are able to attract more skilled employees, than smaller firms. This makes them perform more quality audit than smaller audit firms. Some have speculated that larger audit firms attract a fee premium because their greater wealth of audit knowledge reduces clients' exposures in litigation, while others have posited that there is really no actual audit quality difference, but perceptional difference flowing from the belief that larger audit firms are well recognized, and have attained the reputation of high quality audit firms. On the whole, the evidence is mixed, but it appears that there is some relationship between audit quality and audit firm size. Based on De Angelo's (2015) reports, many other studies use auditor size (specifically Big8, Big6, Big5 or Big4 Vs non-Big8, non-Big6, non-Big5 or non-Big4) to differentiate audit quality levels (Krishnan, 2015). Thus, we hypothesize that,

H4: Audit firm size has a significant impact on EPS and market price of stocks

Auditor tenure is described as the length of time between auditor and client relationships (Okolie, 2015). A lengthy tenure between the audit firm and her client may weaken the audit strength, and less caution and compromise on the part of the auditor in the face of prevailing familiarity. Moreover, a lengthy engagement may result in less effort on the part of the auditor to signal internal control failures and risk profiles (Okolie, 2015). This is because the extent to which the auditor is objective in the detection of irregularities intensifies in the first years of audit engagement, but begins to wane with time, until it reaches its lowest ebb after many years of audit service (Okolie, 2015).

In recent times, there has been substantial decrease in number of years for auditor tenure in advance countries. In the US, auditor tenure has been reduced from seven to four years. Europe recommend an engagement period of five years. France rotates auditors every four years, and, in Nigeria audit engagement is recommended not be more than three years (Okolie, 2015). For this study, auditor tenure will be proxied as length of auditor-client relationship using a dichotomous variable of "1" if 3 years+ and "0", if otherwise. Thus, we hypothesize:

H5: Auditor Tenure has a significant impact on EPS and market price of stocks

Auditor industry specialization is the attribute of audit quality which is adopted in this study. Industry specialist or specific auditors are familiar with the business operations of the industry of their specialization, and, are also perceived to possess industry relevant experience and comprehension that enables them to audit firms in the industry more efficaciously than auditors who are not industry specialists (Minutti-Meza, 2013; Sarwoko & Agoes, 2014). The positive experiential relation between auditor industry specialization and earnings quality is shown by a vast prior studies, with more current ones contained in Jaggi, Gul and Lau (2012). Thus, we hypothesize:

H6: Audit firm specialization has a significant impact on EPS and market price of stocks

Theoretical Framework

Auditors' theory of inspired confidence and signalling theory provide the theoretical justification of this study in its present volume. The theory of inspired confidence developed by the Limperg Institute in Netherlands in 2015, states that the auditor, who is a confidential agent, gets his broad function in the society from the need for expert and independent examination as well as the need for an expert and independent judgement supported by the examinations. Therefore, auditors are expected to comprehend and grasp that the public continuously expect a low level of audit failures. To achieve market expectations, auditors are required to plan and implement their audit in a fashion that will minimize the probability of undetected material misstatements. The auditor is thus under an obligation to handle his/her work in a manner that does not betray the confidence the public has bestowed on him/her.

The significance of this theory is that auditors' duties and obligations are derived from the confidence that are bestowed by the public on the successful attainment of the audit process, and the guarantee conveyed by the accountant's opinion. Since these confidence conveyed determines the existence and progress of the audit process, a perfidy of these confidence logically means the cessation of the audit process or/and function. Carmichael (2015) in discussing the social significance of the audit in relation to the inspired confidence theory stated that, the value relevance of any audit work is destroyed as soon as the confidence that society bestows on the effectiveness and quality of the audit process and the audit report is misdirected. Therefore, auditors are expected to maintain reasonable quality assurance especially given that an audit failure is effectively a career-ending event.

Signalling theory suggests that companies with good performance use financial information disclosure to send signals to the market. Craven and Marston (2015), show that firms will attempt to accept the same level of disclosure as similar firms operating in the same industry since if a firm does not keep up with the same level of disclosure as others, it may be

perceived by stakeholders that it is hiding bad news or negative information. As the types of financial statements produced have become standardized, potential information differentiation that a company can use to send a signal to the market through its financial statements is reduced. Companies are thus provided an incentive to signal, other than through transparency in their notes to the accounts and other voluntary disclosures, through their choice of auditor. Moreover, even voluntary disclosures that may be used as signals achieve enhanced credibility in the presence of a quality auditor.

Thus, a high quality audit sends a signal to the market that the financial statements are more credible than those audited by lower quality auditors. The market perceives audit firm size and specialist auditors to be of a higher quality than others and rewards (punishes) companies with larger improvements (or falls) in share prices accordingly (Teoh and Wong, 2015; Krishnan & Yang, 2015; Menon and Williams, 2015). It has been shown that the market's perception of the quality of the company's auditor influences that company's share price. As such, directors and management may want to signal to the shareholders that their interest is being well monitored. Therefore, signalling should, theoretically, affect the demand for audit quality over and beyond the monitoring function alone. The positive Signal of transparency and credibility it sends to the market and the assurance it provides to stakeholders about the quality of earnings performance disclosures suggests a positive association between EPS, MPS and audit quality.

Research Methodology

Design

The ex-post facto research design is adopted for this study based on positivist approach. An expost facto research design is used to describe the statistical effect of one variable on another. It is most appropriate for this study because it allows for testing of expected effects between audit quality proxies and shareholders' earnings of listed Manufacturing companies in Nigeria and the making of predictions regarding such effects. The research design is based on positivist approach because positivism lends itself to a more scientific, objective and systematic approach to research, and, also supports the use of quantitative methodology (Saunders, Lewis and Thornhill, 2015).

Population and Sample

The population of the study constitutes all the twenty-one (21) Manufacturing firms quoted on the Nigerian Stock exchange (NSE) in 2019. Eleven (11) firms were selected as the sample of the study using filtering techniques.

Data and Model

Descriptive statistics are used to compute summary statistics for both the dependent and independent variables of the study. Before using multiple regression analysis to analyze the data for the study some robustness tests were carried out to enhance the reliability of findings. Data was collected from published financial statements, and Financial Times.

To test *Hypothesis 1* and 2, two regression models are specified. While Equation (1) models the quality and /or differential persistence of earnings components, Equation (2) models the implication of earnings components persistence on stock prediction.

$$ROA_{t+1} = \beta_0 + \beta_1 CF_t + \beta_2 ACC_t + e_{t+1} \qquad (1)$$

$$RET_{t+1} = \beta_0 + \beta_1 CF_t + \beta_2 ACC_t + e_{t+1} \qquad (2)$$

Where,

ROA denotes operating income after depreciation, RET denotes returns computed from the annual market prices of stocks, ACC denotes total accruals, CF denotes cash flows measured as ROA minus ACC (all items are deflated by total assets).

To test *hypotheses 3 to 6,* two regression equations are specified. Equation (3) models the association between shareholders' earnings (as the dependent variable) and proxies of audit quality (as independent variables). Equation (4) replicates equation (3) after replacing shareholders' earnings with future stock price (i.e. stock predictability). Both models employed control variables such as leverage (LVR) of firms and cash from operating operations (CFO).

$$EPS_t = \beta_0 + \beta_1 ADI_t + \beta_2 AFS_t + \beta_3 ADT_t + \beta_4 ADS_t + \beta_5 LEV_t + \beta_6 FSIZE_t + e_t \qquad (3)$$

$$MPS_{t+1} = \beta_0 + \beta_1 ADI_t + \beta_2 AFS_t + \beta_3 ADT_t + \beta_4 AFS_t + \beta_5 LEV_t + \beta_6 FSIZE_t + e_t \qquad (4)$$

Where;

EPS = Earnings per share and MPS = Market price of shares are the dependent variables.
ADI =Audit Independence; AFS = Audit Firm Size; ADT = Audit Tenure and ADS = Audit Firm Specialization are Audit quality proxies (which are independent variables).
LEV = Leverage of Client and FSIZE = Firm Size are control vectors.

Variables Description and apriority expectations (signs)

Table 1: Research Variables

Variables	Definitions	Expected Sign
Earnings (ROA)	ROA is measured as net Income for the year	Dependent variable
Shareholder's Income (EPS)	EPS is net Income divided by ordinary share in issue. It is a measure of shareholders' wealth	Dependent variable
Market Price per Share (MPS)	MPS is computed from annual Price (i.e. closing price of a share of common stock on December 31). It is a measure of stock predictability.	Dependent variable
Stock Returns (RET)	RET is computed as log (MPS) – Log (MPS(-1)). Where MPS(-1) represents lagged MPS, or last year MPS.	Dependent Variable
Auditors' Independence (ADI)	Auditors' Independence (ADI) is measured as auditors' fees divided by firm revenue. It is a proxy of audit quality	+ve
Audit firm size (AFS)	Audit firm size (AFS) is measured as "1" if the audit firm is in the Big-4 (either PWC, KPMG, E&Y, Delloite), and "0" if otherwise. It is the second proxy of audit quality.	+ve
Auditor tenure (ADT)	Auditor tenure (ADT) is proxied as length of auditor-client relationship using a dummy variable of "1" if 3 years+ and "0", if otherwise. It is the third proxy of audit quality.	-ve
Audit Firm Specialization (ADS)	ADS is measured as "1" if the audit firm is industry specialist familiar with the business operations and industry possess knowledge for effective audit, and "0" if otherwise. It is the final proxy of audit quality.	+ve
Accruals (ACC)	ACC is measured as Current Assets excluding cash and cash equivalent less current liabilities excluding short term debt and tax payable less depreciation. i.e. ACC = (ΔCA- ΔCASH) - (ΔCL - ΔSTD - ΔTP) – DEP. All deflated by total assets.	+ve
Cash Flow (CF)	CF is obtained as ROA - ACC (deflated by total assets)	+ve
Firm Size (FSIZE)	FSIZE is measured as natural log of total assets	+ve
Leverage (LEV)	LEV is measured as total debt divided by total assets.	+ve

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2: Descriptive statistics

	ROA	ACC	CF	EPS	ADI	AFS	ADT	ADS	MPS	FSIZ	LEV
Mean	0.1196	0.2609	0.3845	2.5435	0.0738	0.7042	0.4789	0.7915	251	6.5883	0.201
Median	0.0819	0.0352	0.1262	0.91	0.0037	1.0000	0.0000	1.0000	157	6.3764	0.1042
Maximum	0.7927	0.9345	0.9536	11.85	0.6779	1.0000	1.0000	1.0000	1175	8.6561	2.5274
Minimum	-0.1557	-0.8413	-0.2166	-6.37	0.0006	0.0000	0.0000	0.0000	39	5.4534	0
Std. Dev.	0.182	1.3128	1.3228	3.6774	0.1844	0.4596	0.5031	0.495	218	0.7992	0.391

The empirical predictions developed in this section is derive from the properties of the accrual and cash flow components of earnings, market price of stock (or stock returns), proxies of audit quality and control vectors employed in the study.

To alleviate the effects of spurious outliers, extreme values are limited in the statistical data, with all variables of accruals winsorized at 1% and 99%. The characteristic result for ACC shows that the mean value of ACC is 0.26, which indicates that average accruals of Nigerian Manufacturing firms are around 26% of total assets.

Average cash flows are about 38% of total assets, with maximum cash flows for the period under study amounting to about 95% and minimum cash flows coming up to about -21%. Overall, the cash flows results indicate that cash flows in the assets composition of manufacturing firms is greater than the total accruals in the assets composition.

The table also indicated an average value of 2.54 for EPS, and 0.12 for ROA. The minimum and maximum values of EPS and ROA during the study period are 11.85 and -6.37 for EPS and 0.79 and -0.16 for ROA respectively. These values imply that some sampled companies reported losses while others reported profits during the study period, with the average earning on shares being 214k, and returns on asset being 12%. Similarly, the table shows that auditor independence (ADI) has a mean value of 0.074 during the study period. This value implies that only about seven (7) percent of the sampled companies' during the period of the study were audited by auditors without independence, indicating that about 94 percent of the firms are audited by independent auditors. Overall, the values indicate that most sampled firms have independent auditors, which implies that reported earnings are of quality.

The table further revealed an average value of 0.70 for audit firm size (AFS). The value implies that about seventy (70) percent of the sampled manufacturing companies were audited by the big 4 audit firms in Nigeria (KPMG, PWC, Ernst and Young Delloitte) during the study

period. This shows that the audit market in the sector is dominated by the big 4 audit firms in Nigeria and just a few non- big 4 audit firms audited these manufacturing companies in Nigeria. The descriptive results for audit tenure (ADT) revealed an average value of 0.48. The value implies that about forty-eight (48) percent of the sampled companies had auditors who audited them for more than three (3) years during the study period, while about fifty one (52) percent of the firms changed auditors within three years. Data on audit firm specialization (ADS) reveals an average of 0.79, indicating that about 59 percent of audited firms had auditors who were industry specific auditors, understanding the economic conditions and operations specific to the manufacturing industry. About 21% of the firm-year sample recorded auditors who were not industry specialists.

Correlation Analysis of Variables

This section analyses two correlation tables, first correlation table analyses the relation between accruals (ACC), cash flows (CF), earnings (ROA) and stock returns (RET). The second correlation table analyses the relationship between audit quality proxies with EPS and MPS.

Table 3: Correlations coefficient and (p-values) of accruals,

cash flows, earnings and stock returns

	ROA (F)	RET(F)	ACC	CF
ROA	1.000000			

RET	0.1940	1.000000		
	0.0100	-----		
ACC	0.0217	-0.0366	1.000000	
	0.0304	*0.0452*	-----	
CF	0.062808	0.015723	-0.799832	1.000000
	0.6164	*0.9636*	*0.0040*	-----

Table 3 shows that ACC is significantly correlated with future earnings and future returns, with the correlations among accruals and future earnings being positive, and that of accruals and future returns being negative. This correlation result is expected as it explains the accrual anomaly. The correlation between cash flows and accruals is also negative and statistically significant. The simple relationships evidenced in this study for Nigerian Manufacturing firms are of importance, given that investors are very oriented towards firms yielding high earnings and might fail to realize that earnings are not always accompanied by a strong level of cash flow.

Table 4: Pearson correlation coefficients matrix of audit quality proxies, EPS and MPS

	ADI	ADS	ADT	AFS	EPS	MPS
ADI	1.0000					
ADS	0.0028	1.0000				
ADT	-0.0660	-0.1636	1.0000			
AFS	0.2521	-0.0891	-0.3809	1.0000		
EPS	0.7205***	0.2003***	-0.0836	0.2976***	1.0000	
MPS	0.2409***	0.3819***	-0.2506	0.4173***	0.2395***	1.0000

Table 4 presents correlation values between dependent and independent variables and the correlation among the independent variables themselves. These values are generated from Pearson Correlation output.

Auditor independence is positively correlated with EPS (0.705) of listed manufacturing companies in Nigeria during the study period. The high positive coefficient between auditor independence and EPS of the sampled firms in Nigeria suggests that auditor independence is associated with improved and reliable EPS figure of firms.

The table also revealed a positive correlation coefficient between audit firm specialization and EPS (0.2003) of the sampled manufacturing firms in Nigeria during the period of investigation. The significant positive coefficient between audit firm specialization and EPS of the sampled companies is an indication that auditors who are industry specialists are associated with reliable EPS figure of listed manufacturing companies during the study period. This relationship is not surprising because having knowledge, expertise and experience about the economic condition and the operations of the industry, will lead to more effective industry specific audit, thus, enhancing reliable earnings practices, reporting and disclosure.

The table further revealed a positive correlation coefficient between audit firm size and EPS (0.2976) of the sampled firms in Nigeria during the period of investigation. The significant positive coefficient between audit firm size and EPS of the sampled companies is an indication that audit firm size is associated with reliable EPS figure of quoted manufacturing firms during the study period. This relationship is not surprising because big 4 audit firms have the resources and capacity to perform high quality audit that is capable of producing reliable reported earnings firms.

However, auditor tenure is negatively associated with the EPS figure of sampled firms (-0.0628). The negative relationship between auditor tenure and EPS of Manufacturing companies in Nigeria shows that auditor tenure is associated with decrease in EPS figure credibility. This relationship is expected because lengthy link between the auditor and his client

may threaten unconventionality given developed familiarity. This may lead to less caution and compromise on the part of the auditor. Besides, a lengthy engagement could cause less effort in the part of auditors to signal the failings of internal control and risk profile.

The correlation values between audit quality proxies and market price of stock reveal that Audit independence, audit firm specialization and audit firm size are all positively linked with the value of firms (measured by their market share values). There is however, a negative link between audit tenure and firm value. The relationship described between audit quality proxies, EPS and MPS, further indicate that there is a positive link between EPS and MPS. This indicate that investor's earnings is positively related to their valuation of the sampled manufacturing firms in Nigeria.

Regression Results/Test of Hypothesis

Table 5: Average Slope (coefficient), t-statistics and *P*-value from
annual Cross section regressions of hypotheses 1 - 6

Panel A: OLS Regressions for the quality of earnings components and stock performance (Test Result for Hypothesis 1 and 2)

$$ROA_{it+1} = \beta_0 + \beta_1 CF_t + \beta_2 ACC_{it} + \varepsilon_{it+1}$$
$$RET_{it+1} = \beta_0 + \beta_1 CF_t + \beta_2 ACC_{it} + \varepsilon_{it+1}$$

	Intercept	CF	ACC	R Squared	Eqn
Coefficient	0.039	0.562	0.145	0.67	1
t-statistics		8.234	3.213	3.213	
p-value		*0.000*	*0.000*		
Coefficient	0.096	0.193	0.107	0.02	2
t-statistics		4.028	3.138		
p-value		*0.0045*	*0.000*		

Panel B: OLS Regressions for audit quality effect on EPS and MPS (Test Result for Hypothesis 3-6)

$$EPS_t = \beta_0 + \beta_1 ADI_t + \beta_2 AFS_t + \beta_3 ADT_t + \beta_4 ADS_t + \beta_5 LV_t + \beta_6 FSIZE_t + e_t$$
$$MPS_t = \beta_0 + \beta_1 ADI_t + \beta_2 AFS_t + \beta_3 ADT_t + \beta_4 ADS_t + \beta_5 LV_t + \beta_6 FSIZE_t + e_t$$

	Intercept	ADI	AFS	ADT	ADS	FSIZE	LEV	R Sq.	Enq
Coefficient	0.42	13.78	1.375	0.628	1.196	0.603	0.587	0.56	3
t-statistics		7.989	2.924	0.962	3.692	1.3303	0.741		
p-value		0.0000	0.0387	0.3393	0.0195	0.1881	0.4612		

	Intercept	ADI	AFS	ADT	ADS	FSIZE	LEV	R Sq.	Enq
Coefficient	0.3	14.73	12.098	-5.892	11.166	0.65	-0.25	0.51	4
t-statistics		4.108	2.329	2.119	2.736	1.1206	-0.413		
p-value		0.0001	0.023	0.0449	0.0081	0.2667	0.6804		

Table 5 reports univariate and multivariate regressions results estimated to test the study hypotheses. The intercept, coefficients, t-statistics, p-values and adjusted R squared are highlighted in each result.

Panel A results show that both component sof earnings are persistent. However, cash flow is of more quality, and predict future earnings more than the accrual component. It is regarded as having more persistence (0.56, p-0.000) than the accrual component of current earnings (0.145, p-0.000). The differential spersistence is because Cash flow is less subject to distortion than accrual. Again, both components of earnings significantly predict stock performance. The findings conform with (Sloan, 1996; Richardson et al., 2005; Okpa, 2018).

Panel B results show that that ADI is a positive predictor of firm EPS. Stated differently, the more independent the auditors, the more reliable the EPS reported in the financial statements of manufacturing firms in Nigeria. The effect is found to be about 13.78, implying that audit independence is regarded as audit quality, which allows for greater confidence of the market in the reported accounting numbers of firms. The t-statistics value of 8.436 and p-value of 0.000 less than the 0.05 alpha level shows that the effect is statistically significant. Also, ADI is found to have a significant positive impact on market prices of stocks, with a coefficient of 14.73 (t-statistic= 4.108; p=0.001). Based on the result, audit firm size has significant effect on EPS and MPS of Manufacturing companies in Nigeria.

The regression result shows that AFS has a positive effect on EPS and MPS figures of manufacturing firms listed in the NSE. Stated differently, the larger the audit firm size, the higher the dependence on reported EPS, and the higher the share prices of firms in the manufacturing sector, revealed by a positive coefficient of 1.375 (p=0.03) for EPS and 12.098 (p=0.02) for MPS. This is because large audit firms have more resources to conduct high quality audits, have a large client base which makes them less dependent on any one client that could make them compromise their audit quality and also have more investment in reputation capital which is at stake if they are found to have compromised audit quality than small audit firms. This therefore enhances market confidence on reported EPS figures of manufacturing firms in

Nigeria, boosting the prices of these firms. Based on the result, audit firm size has significant effect on EPS and MPS of manufacturing companies in Nigeria.

The regression result shows that ADT is a positive yet insignificant predictor of the EPS figure of manufacturing firms in Nigeria. However, it has a negative and statistically significant effect on the market prices of shares. Stated differently, the longer the tenure of an audit firm, the less reliable the EPS figure reported in the financial statement, which results in plummeting of share prices. This result implies that long auditor tenure is associated with less MPS figure, as investors can no longer trust the reported earnings of the sampled firms in Nigeria. The result is expected because as the length of auditor- client relationship increases, familiarity with the audited firm may cause compromise, which threatens the reliability of reported EPS, through earnings management, thus, reducing the MPS (coefficient= -5.892, p=0.04). Based on the result, audit firm size has significant effect on MPS of Manufacturing companies in Nigeria.

Audit firm specialization has been found to affect EPS and MPS, with the effect being positive and statistically significant. The effect of ADS on EPS is given by a coefficient of 1.196 (with t-statistics=3.692 and p=0.019), and the effect of ADS on MPS given by a coefficient of (with t-statistics=2.736 and p=0.008). The result is expected because Industry specialist auditors are very much familiar with the operations of the industry of their specialization, and possess industry know-how that enables them to audit companies in the industry. This makes the market rely more on the EPS figure published by the firms, which results in higher market prices. The findings collaborate with the findings of Jaggi, Gul and Lau (2012). Based on the result, audit firm specialization has significant effect on EPS and MPS of Manufacturing companies in Nigeria. Thus, hypotheses 1-6 are upheld in the paper.

CONCLUSION

The study contributes to three main areas in the accounting and finance discipline. First, this study contributes to emerging studies in Audit quality and earnings management. By examining the impact of audit quality measures on shareholder earnings (measured as Earnings per share – EPS), the paper provides a new perspective to the earnings management research as shareholders' income adjustment is the reason for earnings management. By conducting the study in the manufacturing industry, the effect of audit quality on the EPS figure of firms in the industry is analysed, showing the extent to which shareholders view the implications audit quality variables on reported EPS figure.

Second, by analyzing the implications of audit quality on market price per share (MPS), the paper contributes to emerging empirical discussion in the market determinants of stock prices. This paper reveals how the market reward firms with quality audit, and how they punish

firms with lower audit quality. The paper finds that higher audit quality is associated with higher market prices of stocks among manufacturing firms in Nigeria, indicating audit quality predictive power on MPS.

Third, the results of this paper fuels the need for investors and key stakeholders to pursue more future signalling disclosures, that provide information of all components of earnings, in order to understand the quality and persistence of each component, with their implication for future stock prediction. The results show that cash flow is a more positive forecaster of future earnings, than the accrual component, and the market underestimates the quality of both cash flows and accruals in making stock price valuation.

WAY FORWARD

The study used data from Nigeria, limited to firms in the manufacturing industry. It is suggested that future research be conducted on audit quality implications on discretionary accruals and stock price volatility among Nigerian public companies in different industries. This will bolster audit quality and earnings management research, employing both industry specific and market moderating variables.

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