

EARNINGS QUALITY AND MARKET VALUES OF SELECTED LISTED MANUFACTURING COMPANIES IN NIGERIA

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Abstract

The expectation of every accounting information user is value creation derivable from credible and quality earnings capable of adding value to investment decisions. Evidences from prior studies have shown that the magnitude of influence of earnings quality on market values remains quite uncertain and controversial requiring more empirical investigation. Consequently, extending empirical debates in this regards, this study investigated the effect of earning quality on market value of selected manufacturing companies in Nigeria. Expo-facto research design was adopted and the population consisted of 66 manufacturing companies, while 15 of the companies were conveniently selected. Descriptive and inferential analyses were employed in the study. The study found earnings quality having a positive significant effect on market values of selected manufacturing companies in Nigeria ($AdjR^2 = 0.009$; $F\text{-Stat.}_{(4, 160)} = 8.540$; $P\text{-v} = 0.007$), when the controlling variables of firm value and rate of inflation were augmented to the main model, the result further revealed that earnings quality had a positive significant effect on market value, ($AdjR^2 = 0.047$; $F_{(4, 160)} = 9.460$; $P\text{-value} = 0.002$). The study recommended that managers should adopt appropriate capital structure policies that are suitable in balancing the debt and equity financing considered adequate to ensure yearly dividend payout, and ensure efficient performance that will enhance market values. Keywords: Earnings quality, Earnings smoothing, Firm size, Investment decisions, Market value, Rate of inflation

Introduction

Efficient and optimal usage of corporate productive resource reflects on quality of earnings. Investors and financial report user are in high demand of innate earning rather than earning smoothing and discretionary earnings. Evidences from previous studies have shown that effective and resourceful managers pursue high earnings and earnings quality holds the key to stock market performance (Dang, Nguyen & Tran, 2020). According to Aguguom, Salawu and Akintoye (2018), earnings quality is the desire of every investor and it has direct consequence on market values of companies and a reflection of possible value of companies' future quality earnings. The managers' tendency to a deliberate smoothing of the earnings to predetermined goal and aggressive planning and carrying out activities that bring about a rosy and robust earnings could have an impressive effect on the stock prices and this seems to showcase high

stock price as performing credibly (Akinmade, Adedoyin & Bekun, 2020). The prescriptive nature of the accounting principles and standards allow the managers ample room to unethical discretionary accounting practices and convey wrong and misleading earnings information trend to innocent current and potential investors about the performance of the companies that indulge in earning smoothing.

According to Dechow and Schrand (2004), earnings quality is the desire of every investor, every stakeholder desires high degree of the accuracy and honest earnings as a guide in making value adding investments and possible portfolio diversification decisions as a consequence of reported accounting information. It has been observed that during economic turbulences, companies are under pressure earnings smoothing practices, acclaiming same to be quality of earnings in an attempt to control the frustrations by changing the financial information to their desired level (Kirikkaleli, 2020). When the management oversees that the targeted level cannot be managed from the initial planning, they result to some degree discretionary accounting figure. However, earnings manipulation has all the while been suspected to create unprecedented threat to stock market performances and at the same time significantly curtail capabilities to effective price growth and this has rather been engineered pretentiously for firms' progression, assets growth and sustainable performance based on falsehood, having negative consequence on market value of corporate organizations (Kim, Ku, Chang & Song, 2020; Nam, 2019).

Statement of the Problem

Instability of market share prices and none-sustainability of financial performance of corporate organizations characterized the hallmark of deepening concerns of the market value of manufacturing companies in Nigeria. The companies have been under severe pressure to perform, but the complexities and perennial challenges stands major constraints (Dang, Nguyen & Tran, 2020). The underperformance and underutilization of corporate resources were attributed to the problems of infrastructures, inability to dominate market share in the industry, inability to maintain competitive advantage, lack of investors' confidence in the Nigerian capital market and absence of managerial competence culminating to the problem of market value of manufacturing companies listed in Nigeria (Aguguom, Dada & Nwaobia, 2019). In addition, the level of poverty that had adversely affected savings culture of average Nigerians (Nwaolisa, Kasie & Egbunike, 2013); Unfriendly and unstable macroeconomic policies and poor regulatory and legal framework, and lack of transparency among the economic management team. Some studies have made appreciable efforts mitigating the problems of market value, but empirical results have shown diverge in some prior studies (Ahmad & Amiri, 2020; Akintoye, Adegbe & Kwarbai, 2019). While some studies have revealed positive significant effect: Bigus and Hafele (2018); Arar, Al-Sheikh and Hardan (2018), others had reported negative significant effect of earnings quality on market value of corporate organizations (Abdullah, Habibullah & Mohammad, 2016; Amadi & Amadi, 2017).

Extant Literature

Market Value

The market value of companies in all sense of it implies the potential value and intrinsic value potential buyers can comfortably place on the on the company. According to Ali and Desoky (2017), investors in ordinary shares expect returns which are on their own quite

unpredictable because of the working forces of market instability and effects of good or bad news available to participants. Other studies of Akben-Selcuk (2016); Al-Shar and Dongfang (2017) posited that market value represents the present value and future cash flows predictable from the earnings quality of corporate organization. According to Al-Shar and Dongfang (2017), cash inflow is essentially an original factor that shareholders and potential investors consider premium, poor earnings quality suggests that the information about the corporate body profit-to – cash flow as provided in the financial statement to investors are unclear and risk averse investors will be unenthusiastic of the nature of market value of the shares and this is capable of information risk and high skepticism and uncertainty of the market value of the stock. The stock price is often a reflection of company expectations and its market value is capable of affecting corporate value if it can provide enough significant information.

Earnings Quality

Earning of companies was considered as one of the most important factor that is used to assess the performance of company and furthermore, it also help to calculate the value of firm (Francis, LaFond, Olsson & Schipper, 2004). Due to the existence of fundamental limitations in accounting systems, it is most probable that the firm earning that is shown in financial statements may not be compatible with the original earning of firm. Different researchers used firm earnings quality in many different ways. Stability in firm earning can be considered as high quality earnings of firm. It has been further argued that earning quality is the level morality which represents the earning as same required in earning report. The study of Rounaghi and Zadeh (2017) defined earnings quality as the superior income or earnings emanating from efficient usage of entities' productive resources in the hands of competent and resourceful managers. Also, Earnings quality is defined as a concept that reports earnings stability, sustainability and non-fluctuation of earning reported in financial statement (Bialowolski & Weziak-Bialowolska, 2014).

Dang and Van (2020) stated that the definition of earnings quality in literature is still unclear and no consensus on the exact definition and best proxies to measure earnings quality. However, earnings quality of manufacturing companies connotes ability of managers of the companies to minimize information asymmetry and promotion of nondiscretionary earnings, such that consistently and persistently replicating excellent past performance can be leveraged on by investors and analysts to predictive forecast for the future earnings of the companies. Also the process of earnings being closely related to operating profit obtained from operational activities. Bernstein and Siegel (1979) had earlier documented that earnings quality portrays potential earning growth of the company and also the possibilities that the company will attain earnings persistence and economic growth in the future. When these are the case, it portents high demand of concerned corporate stock and then high value of stock market performance, appreciable stock returns and high trade volume activities now and for the future, believing that the present intrinsic and nondiscretionary performance will be sustained for the future.

Earnings Smoothing

Earnings smoothing has been as the process by which companies employ cash inflows and other income or expenses smoothing to reduce earnings variabilities from one accounting period to another, using sound accounting and management rules and principles (Shengzhong, Chan and Xiaojun, 2018). In addition, while the study of Batuo, Mlambo and Asongu (2018)

documented that not all earnings smoothing are unscrupulous and debauched in itself, rather could be a tool in the hand of seasoned professionals to salvage and rescue ailing companies, saving huge investments and jobs of employees. The study of Wang, Vredenburg, Wang, Xiong and Feng (2017) had different opinion, the study stressed that there are no ethical justification for earnings smoothing practices. That managers of different corporate organization are motivated to engage in earning smoothing based on different corporate reasons and these reasons differ across nations, yet one of the rationales common to each one of the managers behind earnings smoothing practice include opportunistic privileges made possible by the prescriptive nature of some accounting principles. For instance, managers have the chances of withholding some items of transaction being recorded or recording them before they are crystalized (Carvalho & Kalatzis, 2018). The managers are privileged to manipulate the timing and recoding of true transaction because of the problem of information asymmetries at the advantage of the managers alone, since users and the general public do not have such information at the disposal of the managers.

Earnings Persistence

According to the study of Khaddaf , Lubis, Amalia and Rahmanta (2014), earnings persistence was defined to reflect when corporate organizations consistently relied on core operating items of earnings, core cash flows and core expenses in preparing financial statements for the use of the general public, reflecting the true corporate operational performance for the period being reported. . In the study, Khaddaf *et al.*, (2014) gave what determines core operating items, to include a situation where corporate earnings are derived from non-discretionary earnings, and every accounting number forming the properties and components of preparing financial statement are none product of artificial items or alterations on a sustainable basis. Earnings persistence is consistency and continuous reliance on core operation by preparers and in reporting financial statement intended for public use (Dechow & Dichev, 2002). Put differently, earnings persistence is the ability of earnings quality to consistently reflect originality of honest earnings and that stakeholder can rely on previous earnings as real earnings and make future predictive and investment decisions. Evidenced from literature have shown that earnings persistence highly desirable by investors and this can be measured by the net income before extraordinary items (Wang, Viredenbury, Wang, Xiong & Feng, 2017) .

Firm Size

Roy (2015) defined firm size as the natural log of the companies' total assets employed within the period under consideration, implying the totality of the assets deployed in the operational activities of a company for a period of time. According to Roy (2015), firm size have impact on earnings, liquidity size in terms of amount and liquidity management, that the lower the capital a company operatives with, the higher possibility of engaging in earnings smoothing and earnings management to cover-up possible inefficiencies. Kelly (2014) posited that expertise and solid managerial competence synonymous with high capital intensive companies, while bigger firms are highly correlated to earnings persistence since bigger manufacturing companies are motivated to high performance and many investors are interested to invest in big sized companies.

Rate of Inflation

Inflation rate is the sustained and persistent increase in the proportion of general level of prices of goods and services over a period of time. A country with a persistently lower inflation rate will experience appreciation in the value of its currency and productivity as an increase in the productivity will as well lead to reduction in cost of production. In the period of inflation, there is continuous fall in the purchasing power of money. International trade among nations is indispensable because apart from the fact that no nation operates in isolation

Underpinning Theory

Accountability Theory:

Accountability theory underlines the choice of this study based on the relevance of credible accounting information as the main driver of informed and credible information flow in aiding investors and managers through an informative stock market free flow of information. Hence a good financial accounting regime is a prerequisite for the existence of an informative stock market. Accountability theory was developed by Diamond and Gorton in 1984 and suggested that a more liquid market is preferred by participants and at the same time leads to a strong monitoring of managers as in (Diamond 1984; Dow & Gorton, 1997). Furthermore, Holmstrom and Tirole (1993) lending credence to accountability theory argued that better accounting information is a panacea to better monitoring and checking of the excesses of managers for proper accountability of stewardship, their actions and performances. Leuz and Verrecchia (2000) stated that transparency and open-mindedness, high accounting quality make managers allocate corporate productive assets more resourcefully because stock markets can predict future cash flows more precisely based on the previous earnings and this can motivate managers to be more efficient. Reliable and credible accounting information can facilitate information flow among investors and managers through informative nature of stock market performances. According to the accountability theory, a good financial accounting regime is a prerequisite for the existence of an informative stock market. Shareholders and the other interested shareholders are desirous of good and reliable accounting information and expect nothing less from the managers who are required to be properly accountable and good stewardship of investors investment entrusted in the hands of the managers (Pollard & Jemiez, 2010; Rainey & Steinbauer, 1999).

According to Block (1999), some of the assumptions of accountability theory involve four basic assumptions: i) Responsibility and sense of answerability must go with every delegated authority, ii) that obedience to laid down rules are properties of responsibilities and those saddled with authorities are naturally expected to adhere to the demands of accountability, and iii) that sanctions are precipitates to compromises and inability of managers to account for stewardship. Hu and Liu (2013) noted that the assumptions of accountability come in consequential order of delegation, compliance and stewardship, followed with appropriate sanction when there are cases of miscarriage procedural order and laid down process to comply with stewardship. When there is no delegation of job functions, or when one is not saddled with responsibility, there will be no need for demanding accountability from such one, but acceptance of duties and responsibilities, is an acceptance of readiness to offer accountability.

Holmstrom and Tirole (1993) supported accountability theory and proposed that transparent and reliable accounting information leads to better, efficient and productive managers. Managers are motivated to produce quality accounting information faster and timely when there is nothing to hide, as art of manipulation required more time and energy. Also, the study of Leuz and Verrecchia (2000) stated that high accounting quality make managers to allocate resources more efficiently because the efficient allocation and utilization of productive resource of the organization are flection of managerial competence and ability to minimize cost centers, investment centers, and operational centers leading to a plausible performances and predictable future cash flows more precisely and can motivate managers more efficiently and accountable to their actions.

Empirical Review

Dang, Nguyen and Tran (2020) carried out an investigation of the effect of earnings quality on firm value of listed companies in Vietnam. The study used Tobin's Q, financial leverage, revenue growth, market to book value as proxies of firm value, earnings management, earnings persistence and timeliness of earnings of the company's profitability form the proxies in measuring earnings quality and controlling variables of firm size, fixed assets investment as well as dividend payout ratio were employed. Data for the study was sourced from financial statements of companies sampled for the study. A total of 3,910 firm-observations were employed for a period of 9 years 2010-2018 and regression analysis using GLS was adopted for the study. The study found mixed results. First, earnings quality had a positive significant effect on firm value; however earnings quality exhibited a negative effect on financial leverage, market value to book value and revenue growth. With the introduction of control variables, the result showed that earnings quality had a negative effect on firm size, rate of investment in non-current assets and dividend payout ratio. In addition, earnings management, earnings persistence and timeliness of earnings had negative effect on stock returns.

This study of Dang, Nguyen and Tran (2020) is consistent with the studies of Kyere and Ausloos both in methodology and variables used. While Kyere and Ausloos (2019) was carried out in United Kingdom, and found mixed results as corporate governance had a negative and nonsignificant effect on Tobin's Q and at the same time corporate governance deeds of managers discretionary activities exhibited a positive nonsignificant effect on return on assets (ROA), reflecting mixed effects of corporate governance on financial performance in the United Kingdom. The study of Dang, Nguyen and Tran (2020) carried out from the capital market of Vietnam revealed similar mixed results.

Consistent with previous studies, Al-Shar and Dongfang (2017) investigated the effect of earnings quality corporate performance of listed companies in Jordan. It measures earnings quality using five earnings quality properties of accruals, earnings persistence, earnings smoothness, earnings surprises and earning predictability are constructs to determine the effect of earnings quality of firms performance. The study employed secondary data obtained Jordan (Amman Stock Exchange for the companies operating from Al-Kindi Pharmaceutical industries Plc for 2012, Jordan Cement Factories for the year, and National Steel industries for the year 2015. Regression of the data from these selected sectors and companies revealed that Al-Kindi Pharmaceutical industries plc ranked high as earning quality index had a strong

significant effect on firm performance, Jordan Cement industries had highest earnings quality index score while National Steel industry had the highest earnings quality index score.

Consistent with the study of Perotti and Wagenhofer (2014) and Dang, Nguyen and Tran (2019) as both used same earnings quality proxies and obtained similar results. Looking at the various categories of findings in each sector and year, it obvious that the study conducted earning quality in line with years and sectors separately, the findings implies that national steel industries in the study of Al-Shar and Dongfang (2017) exhibited a strong earnings quality, showing there was earnings persistent, timeliness and quality accrual.

Abdullah, Habibullah and Mohammad (2016) investigated the relationship between earnings quality and stock returns from the standpoint of the role of some selected companies listed on the Tehran Stock Exchange. Secondary data were obtained from these companies for a period of 10 years 2001-2010, and a sample of 106 companies were selected. The study employed 9 hypotheses as conservatism and non-operational profit with stock were used as proxies to measure stock returns while accruals and index on employed capital fir earnings quality. Multiple regression analyses were carried out by the study. The study then found mixed results; in the first place, it was found that earnings quality had a positive significant effect on stock returns, then that negative significant effect of earning quality with conservatism and non-operational profit.

Unlike the study of Al-Shar and Dongfare (2017), Dang and Van (2020) investigated the effect of earnings quality on stock returns of selected listed companies on Vietnam Stock Exchange. The study sourced data from selected listed companies for a period of 9 years 2010-2018. The study employed panel data regression analysis using profit management, persistence, variability, and value relevance as earnings quality measuring proxies. The regression result of the study revealed that earnings quality properties of persistence, variability, and value relevance had a positive significant effect on stock returns, also that accruals quality when measured form the perspective of accruals quality had a negative effect on stock returns. Furthermore, earnings quality when measured using small scaled enterprises, exhibited a negative significant effect on stock returns and no statistical significant impact. The study concluded that earnings quality had mixed results of statistical significant effect when measure earnings persistent, earnings variability, and earnings value relevance, however, when measured using accruals quality, it revealed that earnings quality had a negative and insignificant on stock returns. Dang and Van (2020) provided the effect of earnings quality on stock returns from two measuring perspective, while accrual quality as a proxy of earnings quality exhibited negative effect, using persistent and value relevance revealed positive effect, and this is inconsistent with the study of Al-Shar & Dongfare, (2017).

Similarly, Cheng, Lee and Yang (2013) employed a time series of profit models and tested the effect of regular cash flows on the earnings level and variability in earnings using descriptive annual earnings into regular and regular or temporary profits of stock returns, using unobservable component models to divide, unlike Lan and Anh (2016) who found that earnings management as a component of earning quality had a significant effect on stock returns of firms listed in Vietnamese capital markets.

Okolie and Izedonmi (2014) examined the effect of audit quality on stock price and market value per share of listed companies on Nigerian Stock Exchange. Secondary data were obtained from the annual financial statements of a selected 57 listed companies on the floor of

Nigerian Stock exchange. Stock price and Market price per share was sourced from CSCS Cash-Craft, while a panel regression analyses was carried out based on the specified models. The study revealed that audit quality as a confirmation of earning quality showed a positive significant influence on market stock price and in order to conform the quality of audit quality a reflection of absence of earnings management, the audit quality revealed a positive effect of audit quality on market price per share of the companies listed sampled in the study.

Consistent with previous study of Palmrose, Riichardson and Scholz (2004), who belief that audit quality has correlation with the companies' cash flows as well as earnings quality in collaborator and similar study, Okolie and Izedonmi had shown that audit quality as well as earnings quality can be used to examine the quality of earnings on stock price and stock market value of companies, this was also consistent with the study of (Zaigham, Wang & Ali, 2019).

Zaigham, Wang and Ali (2019) investigated the relationship between stock price and volume of investments and also effect of changes in investments traded on stock price performance in listed companies and the mediating role of information asymmetry in China. The study considered data obtained from manufacturing companies listed at the Shanghai Stock Exchange. A panel data models was considered using the sourced data for a period of 15 years 2002-2016, using a total of 398 selected companies with 5,970 observations. Using a Random effect results, the findings revealed a mixed results, that there was a statistical significant association between stock price and volume of investment traded, that effect of stock price had a close relationship with expenditure on volume of trade. The study equally reveals that information asymmetry positively controls both investment sensitivity to stock prices based on information signals from the capital markets in Shanghai Stock Exchange in China.

Methodology

The study investigated the effect of earnings quality on market value of selected manufacturing companies in Nigeria. The controlling variable was introduced to the study after initially isolated to harvest the possible result with and without the controlling variables. The population consisted of all the 66 listed manufacturing companies in Nigeria as at 31 December, 2019. While a total of 15 companies were purposively selected for the study. Descriptive statistics and inferential analysis using a dynamic panel setting was employed for the study. In carrying out the analysis of the data extracted from the published financial statements of the selected companies, the study proposed the following tested hypotheses:

Research Hypothesis (H₀₁): *there is no significant relationship between earnings quality and market value of selected listed manufacturing companies in Nigeria.*

Research Hypothesis (H₀₂): *The controlling effect of firm size and rate of inflation has no significant effect on the relationship between earning quality and market value of selected listed manufacturing companies in Nigeria.*

Model Specifications

$$Y_{it} = \beta_0 + \beta_1 XZ_{it} + \varepsilon_{it} \quad (1)$$

Where

Y = Dependent variable: Market Value MKTV =

X = Independent variable: Earnings Quality (EQ)

Proxies: ESMOTH= Earnings Smoothing

EPERS = Earnings Persistence

Z = Controlling Variables

FRMZ = Firm Size

RINF = Rate of Inflation

β_0 = regression intercept which was constant

While

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ = the coefficient of the explanatory variables

ϵ is the error term of the model

i = cross-sectional variable

t = time series variable

Functional Relationship

$$MKTV = f(ESMOTH, EPERS) \text{ -----(2)}$$

Model

$$MKTV_{it} = \beta_0 + \beta_1ESMOTH_{it} + \beta_2EPERS_{it} + \mu_{it} \text{ -----(3)}$$

Where

MKTV = Market Value

ESMOTH= Earnings Smoothing

EPERS = Earnings Persistence

FRMZ = Firm Size

RINF = Rate of Inflation

EQ = Earnings Quality

Data Analysis, Results and Discussion

To establish the objectives one (1) and (2); the estimated results of regression analyses using Earnings Smoothing (ESMOTH), Earnings Persistence (EPERS), Firms Size (FMSZ) and Rate of Inflation (RINF) as independent variable as case maybe are presented in this sub-section. The models have been estimated using Fixed-effects with Driscoll-Kraay standard errors methods.

In choosing the models that appropriately capture effect of earnings quality on market value of selected listed manufacturing companies in Nigeria and investigate the controlling effects of firm size and rate of inflation on the relationship between earning quality and market value of selected listed manufacturing companies in Nigeria, the result of Breusch and Pagan Lagrangian multiplier and Hausman tests carried out in this study is reported in Table 4.4.

Table 1: Hausman and Breusch-Pagan LM Tests: Earnings Quality and Market Value

	Model I	Model 4
B~P Lagrangian M. Test	281.930 [0.000]	4.990 [0.013]
Hausman Test	9.250 [0.010]	51.710 [0.000]

Source: Author’s Computation, 2021, underlying data from annual reports of the selected firms listed on NSE. **Notes:** Probability values in square bracket.

The LM test results in Table 1 are statistically significant at 5% level (P-value < 0.05) signifying that the pooled regression technique cannot be used for this data. As a result, the pooled regression estimators are not sufficient for examining the effect of earnings quality on market value of selected listed manufacturing companies in Nigeria and at the same time considered for evaluating the controlling effects of firm size and rate of inflation has significant effect on the relationship between earning quality and market value of selected listed manufacturing companies in Nigeria. However, the significant values of Hausman tests results at 5% level (P-value < 0.05) confirm fixed effect estimator as the appropriate approach.

Earnings Quality and Market Value

For the effects of earnings quality on market value of selected listed manufacturing companies in Nigeria and at the same time considered for evaluating the controlling effects of firm size and rate of inflation has significant effect on the relationship between earning quality and market value of selected listed manufacturing companies in Nigeria, the results from the fixed regression analysis as lead by LM and Hausman tests results are reported in Table 2.

Table 2: Earnings Quality and Market Value

Main & Augmented Models	
Fixed-effects with Driscoll-Kraay standard errors	
Coef. (Std. Err.) [P> t] (Main model)	Coef. (Std. Err.) [P> t] (Augmented Model)
$MKTV_{it} = \beta_0 + \beta_1 ESMOTH_{it} + \beta_2 EPERS_{it} + \epsilon_{it}$	$MKTV_{it} = \beta_0 + \beta_1 ESMOTH_{it} + \beta_2 EPERS_{it} + \beta_3 FRMZ_{it} + \beta_4 RINF_{it} + \epsilon_{it}$
ESMOTH	-0.2312 (0.2292) [0.337]
EPERS	0.7495 (0.1897) [0.003]***
FRMZ	-0.1000 (0.3206) [0.7620]
RINF	-0.0988 (0.0216) [0.001]***
_cons	14.2658 (0.2271) [0.000]***
F - Statistics	8.540 [0.007]
R – Squared	0.032
Adjusted R - Squared	0.019
Het. Test.	49.520 [0.000]
C. S Independence	5.830 [0.000]
	9.460 [0.002]
	-0.2897 (0.2314) [0.239]
	0.6720 (0.2319) [0.016]**
	17.2233 (5.6567) [0.0120]**
	0.060
	0.047
	52.53 [0.000]
	6.932 [0.000]

Source: Author's Computation, 2021, underlying data from annual reports of the selected firms listed on NSE. **Notes:** Dependent variables [Market Value (*MKTV*)], Independent variables [Earnings Smoothing (*ESMOTH*), Earnings Persistence (*EPERS*), Firms Size (*FMSZ*) and Rate of Inflation (*RINF*)]. *, **, *** represents 10%, 5% and 1% significance levels respectively. Standard Error in Parenthesis, P-value in the square bracket.

$$MKTV_{it} = \beta_0 + \beta_1 ESMOTH_{it} + \beta_2 EPERS_{it} + \varepsilon_{it} \dots \dots \dots \text{Main Model}$$

$$MKTV_{it} = 14.2658 - 0.2312 ESMOTH_{it} + 0.7495 EPERS_{it} + \varepsilon_{it} \dots \dots \dots \text{Main Model}$$

$$MKTV_{it} = \beta_0 + \beta_1 ESMOTH_{it} + \beta_2 EPERS_{it} + \beta_3 FRMZ_{it} + \beta_4 RINF_{it} + \varepsilon_{it} \dots \dots \text{Augmented Model}$$

$$MKTV_{it} = 17.2233 - 0.2897 ESMOTH_{it} + 0.6720 EPERS_{it} - 0.1000 FRMZ_{it} - 0.0988 FIN_{it} + \varepsilon_{it} \dots \dots \text{Augmented Model}$$

Main Model

Based on the result, ($MKTV_{it} = 14.2658 - 0.2312 ESMOTH_{it} + 0.7495 EPERS_{it} + \varepsilon_{it}$), Earnings smoothing (ESMOTH) negatively affects Market value of selected listed manufacturing companies in Nigeria. Considering the probability of the t-statistics (P-value of 0.337) i.e. 33.7% which is higher than 5% level of the chosen level of significant of 5%, implies that ESMOTH insignificantly affect Market value (MKTV). The coefficient of CUSP (-0.2312) means that a Naira increase in ESMOTH would yield 0.2312 Naira decrease in Market value (MKTV) of selected listed manufacturing companies in Nigeria.

Also, Earnings persistence (EPERS) positively affects Market values (MKTV) of selected listed manufacturing companies in Nigeria. Considering that the probability of the t-statistics (P-value of 0.003) is less than 5% level of the chosen level of significant of 5%, this reveals that EPERS significantly affect Market values (MKTV). In addition, the coefficient of EPERS (0.7495) means that a Naira increase in EPERS would result to 0.7495

Naira increase in market value (MKTV) of listed manufacturing companies in Nigeria, In addition, the output from the regression analysis that carried is out when Market Value (MKTV) is regressed on Earnings Smoothing (ESMOTH) and Earnings Persistence (EPERS) shows that the Breusch-Pagan heteroskedasticity test and cross sectional independence test results are significant at 1% level. Consequently, these suggest the applicability of fixed effect regression with Driscoll-Kraay standard errors. Also the F-stat./Wald-Chi² = 8.540 (P-val = 0.007) indicates that the model is statistically significant. Besides, the R-squared of the regression model is 0.032 indicating that earnings quality indicators accounted for about 3.2% of changes in Market Value (MKTV). These values of F-statistics and R-squared (including adjusted R-squared) show the goodness of fit.

Moreover, the coefficient of Earnings Persistence (EPERS) provides an evidence that the variable is a significant determining factor of Market Value (MKTV) since the variable is statistically significant at 1% level {Coef. = 0.7495; P -value = 0.003}. Explicitly, the estimated coefficient of EPERS is positive and statistically significant at 1% level of significance suggesting that EPERS has positive and significant effect on Market Value (MKTV) of the selected firms.

Augmented Model

In Model Augmented, ($MKTV_{it} = 17.2233 - 0.2897 ESMOTH_{it} + 0.6720 EPERS_{it} - 0.1000 FRMZ_{it} - 0.0988 FIN_{it} + \varepsilon_{it}$) Earnings smoothing (ESMOTH) negatively affects Market value of selected listed manufacturing companies in Nigeria. Considering the probability of the t-statistics (P-value of 0.239) which is higher than 5% level of the chosen level of significant of 5%, implies that ESMOTH do not significantly affect Market value (MKTV). The coefficient of ESMOTH (-0.2897) means that a Naira increase in ESMOTH would yield 0.2897 Naira decrease in Market value (MKTV) of selected listed manufacturing companies in Nigeria.

While Earnings persistence (EPERS) negatively affects Market value of selected listed manufacturing companies in Nigeria. Considering the probability of the t-statistics (P-value of 0.016) which is higher than 5% level of the chosen level of significant of 5%, implies that EPERS do not significantly affect Market value (MKTV). The coefficient of ESMOTH (0.6720) means that

a Naira increase in ESMOTH would yield 0.6720 Naira increase in Market value (MKTV) of selected listed manufacturing companies in Nigeria.

In addition, Firm size (FRMZ) negatively affects Market values (MKTV) of selected listed manufacturing companies in Nigeria. Considering that the probability of the t-statistics (P-value of 0.7620) which is higher than 5% level of the chosen level of significant of 5%, this reveals that FRMZ do not significantly affect Market values (MKTV)). Also, the coefficient of FRMZ (-0.1000) means that a Naira change in FRMZ would result to 0.100 Naira decrease in market value (MKTV) of listed manufacturing companies in Nigeria.

Furthermore, the result of regression analysis carried out when Market Value (MKTV) is regressed on Earnings Smoothing (ESMOTH), Earnings Persistence (EPERS), Firms Size (FMSZ) and Rate of Inflation (RINF) as reported in Table 4.5 shows that the Breusch-Pagan heteroskedasticity test and cross sectional independence test results are significant at 1% level. Consequently, these suggest the applicability of Fixed effect regression with Driscoll-Kraay standard errors. Also the F-stat./Wald-Chi2 = 9.460 (P_val = 0.007) indicates that the model is statistically significant. Besides, the R-squared of the regression model is 0.060 indicating that earnings quality indicators and control variables accounted for about 6.0% of changes in Market Value (MKTV). These values of F-statistics and R-squared (including adjusted R-squared) also show the goodness of fit. It is evident that there are some levels of improvements in the R-squared or Adjusted R-squared in the model. This means that, the explanatory powers of the main model has improved after the inclusion of Firms Size (FMSZ) and Rate of Inflation (RINF).

Additionally, the sign of the coefficient of Earnings Smoothing (ESMOTH), Earnings Persistence (EPERS) remain the same and Earnings Persistence (EPERS) is still statistically significant {Coef. = 0.0620; P –value = 0.016}; though at 5% this time around. This still suggests that EPERS has positive and significant effect on Market Value (MKTV) of the selected firms. Also, among the control variables, Rate of Inflation (RINF) has a negative and statistically significant coefficient {Coef. = - 0.0988; P –value = 0.001} which show that the variable is one of the major drivers of Market Value (MKTV) during the period.

Discussion of Findings

The study found that earnings persistence had a positive and significant effect on market value of selected listed manufacturing companies in Nigeria. This is consistent with the results of previous studies of (Vakaskova, Kliestik & Kovascova, 2018; Kyere & Ausloos, 2019; Anokye, 2020; Dang, Nguyen & Tran, 2020). For instance, the study of Dang, Nguyen and Tran (2020) carried out an investigation of the effect of earnings quality on firm value of listed companies in Vietnam and the study found mixed results. First, earnings quality had a positive significant effect on firm value. Also Kyere and Ausloos (2019) investigated the effect of good corporate governance on financial performance of non-financial listed corporate organizations listed on the floor of United Kingdom and found that corporate governance exhibited a positive non-significant effect on return on assets (ROA), reflecting mixed effects of corporate governance on financial performance in the United Kingdom. On the contrary, the results were found to be inconsistent with some other studies who found negative effect, the studies of Nazemi & Abdoli, 2015; Huynh, 2018; Crowford-Brown, 2017).

When the controlling variables of firm size and rate of inflation were introduced (Augmented Model), the result revealed no less better as both exhibited positive but

insignificant effect on market share value of selected listed manufacturing companies in Nigeria. These results are in tandem with the results obtained in the studies of (Anokye, 2020; Arar, Al-Sheikh & Hardan, 2018). Arar, Al-Sheikh and Hardan (2018) investigated the association between earnings management and stock price liquidity of listed service companies in Jordan and the study found that earnings management had a positive and insignificant association with stock price liquidity of the sampled companies in the Jordanian service companies. However, the results were not in tandem with the results obtained by Dang and Van (2020) investigated the effect of earnings quality on stock returns of selected listed companies on Vietnam Stock Exchange and the study reported that earnings quality had a negative and insignificant on stock returns.

Conclusions, Recommendations and Contribution to Knowledge

Conclusion

The study carried out an investigation, the effect of earnings quality on market value), the empirical result reveals mixed individual effects, however, that the explanatory variables of earnings smoothing and earnings persistence based on the ($F\text{-Stat.} = 8.540$; $p\text{-value} = 0.007$), jointly had a positive statistical significant effect on market value of selected listed manufacturing companies in Nigeria. In addition, in an augmented model, controlling variables of effect of firm size and rate of inflation on the relationship between earnings quality and market value), the empirical results equally revealed mixed results of the individual variables in the model. However, the jointly result of the model revealed, based on the ($F\text{-Stat.} = 9.460$; $P\text{-value} = 0.002$), jointly had a positive statistical significant effect on market value of selected listed manufacturing companies in Nigeria.

Recommendations

The market values are reflection of managerial efficiency, optimal resource and assets management and the shareholders are desirous of high quality earnings and in meeting these expectations, manipulation of accounting numbers and discretionary earnings should be avoided by all means possible. The managers should rather adopt appropriate capital structure policy that is suitable in balancing the debt and equity financing considered adequate to ensure yearly dividend payout, adequate returns for the shareholders and ensure active market participation in the industry. The negative effects of earnings smoothing in all models of market value, stock returns and on trade volume activity and also the negative effect of rate of inflation in model one and model six should be thoroughly reconsidered by the management, as possibility of sourcing some raw materials locally to avoid or reduction of importation of raw material should be encouraged because of the forces of inflation and exchange rates.

Contribution to Knowledge

From the perspective of the shareholders and investors, the negative effects of earnings smoothing in this study has shown that while earnings smoothing has tremendous merits, it could also have negative effects. Hence a reliable and timely information of earnings and persistence of cash flow will be of great significant to shareholders and investors who wish to invest in the capital market and also who are desirous of quality accounting information would find this study beneficial in making an informed investment decisions and divestment options. The movement and stock prices of companies equally mean different things to different

investor. Since good understanding share prices, volume traded and reliable signal go along way assisting current and potential investors. It would also assist them to identify the potency of each of the earnings quality properties discussed in this study in monitoring their investments portfolios and the dynamics of share prices.

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