

## Financial Transparency and the Performance of Listed Manufacturing Firms in Nigeria

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### Abstract

*The study examined the effect of financial transparency on the performance of listed manufacturing firms in Nigeria. To achieve the objective of the study, descriptive research design was adopted. The data were collected through secondary source from annual report and accounts of the selected manufacturing firms in Nigeria the population of the study is made up of 60 listed manufacturing firms while the sample size is 12 selected manufacturing firms in Nigeria using judgmental sampling. The data collected were analyzed using panel data based multiple regression analysis. The result revealed that that Therefore the study concludes that financial transparency has the tendency of affecting the financial performance of listed manufacturing firms in Nigeria. Based on this conclusion, the study recommends that It is prudent for listed manufacturing companies to disclose as much information as possible and also ensure that the information disclosed are transparent so as to minimize the level of information asymmetry and consequently stimulate financial performance. Manufacturing companies can also take the control of financial performance of the company through using high proficiency, experienced and independent managers with the necessary legal power as a potentially powerful mechanism and to be a cause of improvement in their accountability of the company.*

**Keywords:** *Financial transparency, board size, board independence, ownership structure and return on asset.*

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### INTRODUCTION

Transparency and disclosure quality of companies is today's one of the prior concerning issues for people who are related with the capital market from various nations. According to Jahanshad, Heidarpour and Valizadeh (2013), definition, the information of financial transparency is the ability of broad access to relevant and trustworthy information regarding the financial performance and status, governance, investment opportunities, and taking risk in the economy. On one hand, transparency of financial information assures macro stakeholders of receiving trustworthy information consistently regarding the company's value as well as makes the managers and macro stakeholders concerned of not violating their rights; on the other hand, rather than pursuing short

term personal interests it encourages the managers to attempt for the increment of the companies value (Bano, Tahir, Abbas, & Ansari, 2018).

Transparency describes the increased flow of timely and reliable economic, social, and political information about investors' use of loans, creditworthiness of borrowers, monetary and fiscal policy, and the activities of international institutions. Alternatively, a lack of transparency may exist if access to information is denied, if the information given is irrelevant to the issue at hand; or if the information is misrepresented, inaccurate, or untimely. Thus, a working understanding of transparency should encompass such attributes as access, comprehensiveness, relevance, quality, and reliability (Vishwanath & Kaufmann, 2011). According to Arbath and Escolano (2015), transparency is the availability of the firm's specific information to the outside or general public. Furthermore, transparency of a company can be measured based on the three components which are corporate reporting, acquisition, and communication of private information accompanied by information dissemination. On the other hand, corporate transparency can be divided into two prime factors which are financial transparency and governance transparency.

The role of transparency is to ensure that the disclosure of information is clear and appropriate to the time requirements and bring importance to all parties that share interests with the company. Furthermore, the role of transparency in the revival of markets is shown by achieving credibility in the provision of financial information. Transparency provides information and data that reduces uncertainties and increases the ability of financial markets to assess risks (Henriques, 2013).

Additionally, with the firm's transparency, it allows the stakeholders to interpret and respond positively to the disclosed information. Thus, high transparency firms will prevent themselves from getting any interference from the government and they can enjoy the supports from various institutions. Furthermore, with the tangible and intangible resources attained by the firms, it enables the conductivity of CSR to support their activities more effectively and efficiently. In certain situation, customer's trust needed to be confirmed of its role in the relationship between CSR and financial performance (Kajola, 2008; Wu, Liu, Chin, & Zhu, 2018). Thus, accountability and transparency are crucial elements in the study of sustainability. In general, accountability concerns more of the company's responsibility by involving in certain actions and considering the action taken. Meanwhile, the company is entitling of its stakeholder and the general public.

The quality of the corporate performance can be minimized if the manager's discretion is questionable due to the lack of adequate transparency in financial statements. It can be a paramount concerning factor for the decision making of stakeholders. It also can lead to inappropriate resource distribution as well as capitals which are directed to an unknown direction. Thus, the economy may suffer from the crisis. However, the world's capital market opined that transparency always plays a vital role to prevent the corruption and provision of distorted information and it should often do with the aim of carrying out illegal acts.

Several corporate failures and accounting scandals in recent years have made corporate governance a popular issue in both developed and developing countries, but cases like Continental Flight and Rebar Group continue to occur in Taiwan. Chhaochharia and Grinstein (2007) found that firms that are less compliant with the provisions of the Sarbanes-Oxley Act earn positive abnormal returns compared to firms that are more compliant. These emerging events have cast doubt on the effectiveness of promoting corporate governance and have raised questions

concerning whether increasing firms' transparency through corporate governance mechanisms can help to reveal the true value of a firm.

It is against these backdrops that this study intends to examine the effect of financial transparency on the performance of listed manufacturing firms in Nigeria.

The main objective of the study is to examine effect of financial transparency on the performance of listed manufacturing firms in Nigeria. The specific objectives include:

- (i) To examine the effect of board size on return on asset of listed manufacturing firms in Nigeria.
- (ii) To examine the effect of ownership structure on return on asset of listed manufacturing firms in Nigeria.
- (iii) To examine the effect of board independence on return on asset of listed manufacturing firms in Nigeria.

## **2.0 LITERATURE REVIEW**

### **2.1 CONCEPTUAL FRAMEWORK**

#### **2.1.1 Financial transparency**

Bushman, Piotroski and Smith (2003) consider information transparency as a situation that information is broadly available, relative (concerned), dependable, possessing quality, extensive and timely. Following S&P definition, Aksu (2006) considers transparency as timeliness and the quality of financial functions disclosure and form operation. Cheng and Taylor (2016) studied the relationship between corporate governance and share liquidity on the basis of S&P ranking that is based on transparency rate and information disclosure. These researchers found that firms that have less information disclosure face with serious information asymmetry about information. According to Brown et al, the best definition of transparency in commercial area is as qualitative financial statements. Nguyen (2018) believe that information users know everything in every time and they can study each subject based on transparent information. Complete disclosure procedures associated with transparency in financial reporting can create safe conditions and increase confidence about supporting investors' benefits. Researches have also showed that voluntary disclosure has positive effect on firm performance and can affect on maintaining stakeholders and shareholders' benefits. In other words, the lack of information transparency and ambiguity in reporting may lead to suspiciousness and immoral behaviors along reducing firm's value (Madhani 2017).

According to Allawi (2015), one can reach transparency through three ways:

- 1- Improving legal mechanism (or regulatory) related to more disclosure
- 2- Safety designing policies for restricting moral risk through more disclosure
- 3- Establishing legal institutions and policy-making for solving unavoidable problems of financial markets.

#### **2.1.2 Information transparency**

The experience of countries with large and active equity markets shows that disclosure can have a powerful influence on the behaviour of companies and on protecting shareholders. A strong disclosure regime can attract investment and strengthen the capital market, whereas non-transparent practices can result in unethical behaviour and poor allocation of resources. Therefore, the revised OECD principles of corporate governance note that "The corporate

governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company.” Material information is information whose omission or inaccuracy could change the users’ decision. All information should be prepared in accordance with high standards of accounting and financial and non-financial disclosure. In addition, the channel through which information is disseminated should ensure that users have equal, timely and cost-efficient access to that information.

Prior research (Botosan and Stanford, 2005) suggests that a company’s disclosure decision may be affected by the desire to conceal profitability from its competitors, so such companies may choose to withhold or delay disclosure of sensitive information. But, some research argues that managers of larger companies have incentives to reduce audit and reporting delays because they may be monitored more closely by investors, unions, and regulatory agencies, thereby facing greater external pressure to disclose earlier (Abdulla, 2016; Ashton et al., 2017; Ashton et al., 2019). In fact, Taiwan’s information technology industry possesses both large size and fear of leaks of business secrets. Therefore, this study first would like to explore what would affect disclosure transparency through an analysis of companies in Taiwan’s information technology industry.

### **2.1.3 Measurement of information transparency**

As for transparency, it refers to the openness of the firm in disclosing the relevant information to allow the stakeholders to make the correct decisions and to ensure that a threat to the process of sustainability assurance in the management control follows the assurance process (Monte, 2009; Dingwerth & Eichinger, 2010). However, transparency requires a system to quantify it. According to Ali & Shaker (2017), there are four models to measure the transparency of disclosure of accounting information, as is the case in most countries which include: CIFAR index, Dipiaz and Eccles's transparency model, Bushman, Piotroski and Smith's transparency model, and Standard and Poor's model.

In the current study this measurement (Standard & Poor's) has been chosen because it is one of the measurements that has been widely accepted in all the international companies that are interested in measuring transparency from different countries. Therefore, it is suitable for companies listed in the Nigeria Stock Exchange which has measured ownership structure and shareholders' rights, the board directors structure and the transparency of financial and non-financial information, where this measure gave a point for each information and thus becomes the total this information is 80 item (Tamimi, & Sebastianelli, 2017; Ali & Shaker 2017; Aljjawi, & Al-Khafaji, 2018).

Standard & Poor's (S &Ps) Model: Recently S&Ps Institute conducted comprehensive research works with the cooperation of academics in several countries to evaluate the company’s provision quality and transparency information. This institute also evaluate the large companies annually which are listed in international stock exchanges with this index. This model has included 80 criteria in three following areas and each of the areas also has included many of criteria’s and it was basically designed based on the reporting standards of Organization for Economic Cooperation and Development (OECD) states (1) Structure of ownership and rights owners (18 criteria), (2) Financial and non-financial information disclosure (40 criteria), (3) Board direct Structure (22 criteria) (Jahanshad, et al., 2013; Ali & Shaker 2017; AL\_Jumaili, 2016). Referring to previous studies about the subject of transparency concluded that the ownership and

stakeholders right, and financial and non-financial information, and board director has been used as proxies to measure the transparency variable in current study as blew:

**Board of Director:** Previous studies used board of director (BOD) disclosure as one of the transparency to measure the level of performance (Ben Othman, 2012). The outcome revealed that BSPD affect the financial sector in most companies. However, this tool is also effective to observe the board of directors' characteristics and activities. Several prior studies also denoted that firm's performance can be improved and enhanced by limiting the board size. On the other hand, agency theory recommended that the non-executive board directors should provide higher disclosure to several aspects of the organization while the independent board will lead the management to disclose the information by increasing more transparency than the executive members (Outa, & Waweru, 2016; Zaman, Arslan & Siddiqui, 2014).

**Ownership Structure and Stakeholders Rights Disclosure:** The importance of Ownership Structure and stakeholders rights (OWSRD) and its system are focused by the agency theory to enhance the governance. The firm had categorized the ownership into three perspectives which are regarding ownership, ownership concentration and voting procedures and meeting of shareholders (Ben Othman, & Zéghal, 2010; Al-Bassam, Ntim, Opong, & Downs, 2018). In the director ownership, the director will become the shareholder and the information disclosure will be less as they will forbid the management to disclose the information (Zamn, Arslan, & Siddiqui, 2014). Therefore, transparency is crucial as it promote an honest attitude, openness and a commitment to truth as it reflected to CSR. Hence, Gan et al., (2015), concluded that transparency promotes a sense of accountability and responsibility.

**Financial and Nonfinancial Information Disclosure:** According to Zaman, Arslan and Siddiqui (2014), there is a significant relationship between transparency and financial performance with the firm's performance. Outcomes have shown that by practicing a good corporate governance, companies can enhance the organizational value and can create a positive integration between firm's performance and corporate governance. Furthermore, documented information that the disclosure provides in the annual reports often resulted to high profit and leverage. Therefore, transparency can be described as a crucial tool for a company which facilitates the assessment of company's performance by disclosing accurate information and making them available to all firm. In addition, it also provides information about the company to the public (Chao, 2020).

#### **2.1.4 Transparency and financial performance**

A number of prior academic studies have focused on the link between corporate governance and corporate performance. The establishment of such a link is not straightforward. There are some divergences among findings which could be attributable to the fact that different regulations, country legal environment differences, market conditions, government policies, different measures of corporate governance and corporate performance were used in different studies (Zahra & Pearce, 2019).

From a theoretical perspective, Diamond and Verrecchia (2011) argued that revealing public information to reduce information asymmetry can reduce a firm's cost of capital, the major reason being that disclosure of information reduces information asymmetries and therefore attracts increased demand from large investors. This line of argument is in line with the Healy and Palepu (2001) 'increased information intermediation'. Bacon (2013) and Lang and Lundholm (2016) argued that voluntary disclosure lowers the cost of information acquisition for analysts and hence



increases their supply of information. Expanded disclosure enables financial analysts to create valuable new information such as superior forecasts, thereby increasing demand for their services. There are more economic reasons to hypothesize the value-increasing influence of financial disclosure through a lower capital cost. For example, increased disclosure reduces the estimation risk regarding the distributions of returns (Clarkson et al., 2016). Vander and Willekens (2008) found for European Union countries that the level of disclosure is lower for companies with a higher ownership concentration and higher for companies in common law countries. Core (2001) presented a review of the empirical disclosure literature and discussed the relation between disclosure quality, disclosure credibility and management incentives. Yet another similar empirical result is that the level of corporate transparency is highly dependent on the legal regime of the home country (Healy & Palepu, 2001). An alternative explanation for firms disclosing information is that it is the 'socially responsible thing to do' (Gurr, 2018).

## **2.2 THEORETICAL FRAMEWORK**

### **2.2.1 Agency theory**

In Agency theory the central issue of corporate governance is equal to the problem of agents' self-interest behavior in a universal principal-agent relationship everywhere. Where the principal (shareholder) delegates work to the agent (director and manager) who performs that work on behalf of the principal (Jensen and Meckling, 1976). Based on the assumption of individuals maximizing their own utility, the theory asserts that managers as agents will not always act in the best interests of the shareholders and may pursue their own interest at the expense of the shareholders.

Agency theory concerns two problems occurring in the principal-agent relationship. The first is the difficulty or expense involved in the principal monitoring the agent's behavior and routine actions. Secondly are the different preferences concerning interactions between the principal and the agent because of their different attitudes toward risk (Jensen and Meckling, 1976). Those problems lead to a particular type of management cost 'agency cost' incurred as principals/owners attempt to ensure that agents/managers act in principals' interests (Jensen and Meckling, 1976).

The agency theory then focuses on solving the above problems by determining the most efficient contract governing the principal-agent relationship. Agency theory posits that the firm is not a reality, but a legal fiction created by a 'nexus of contracts' of the principal-agent variety (Jensen & Meckling, 1976). Contractual relations are the essence of the firm, not only between shareholders, but also with employees, suppliers, customers, creditors, and other stakeholders. As the agency problem exists for all of the contracts, thus, writing a contract must provide safeguards for both the principal and the agent to align their interests.

### **2.2.2 Stewardship theory**

The stewardship theory takes a different view on the nature of human beings from the agency theory and others (Marris, 1964). While the agency theory is built on the assumption of self-interest human behavior to assert that managers as agents cannot be trusted and should be fully monitored, the stewardship theory criticizes it as a false premise and claims instead that managers are good stewards of the corporation. Based on a traditional legal view of the corporation as a legal entity in which directors have a fiduciary duty to the shareholders, the stewardship theory argues that managers are actually behaving just like stewards to serve the shareholders' interests and diligently work to attain a high level of corporate profit and shareholder returns.

The theory argues that managers are actually behaving just like stewards to serve the shareholders' interests and diligently work to attain a high level of corporate profit and shareholder returns and thus the managers would feel obligated to disclose information to all the stakeholders if the information was to improve corporate performance. Shareholders and potential investors require access to regular, reliable and comparable information in sufficient detail for them to assess the stewardship of management and make informed decisions about the valuation, ownership and voting of shares. Insufficient or unclear information could hamper the ability of markets to function, increase the cost of capital and result in a poor allocation of resources (OECD, 2006).

### **2.3 EMPIRICAL REVIEW**

Burcu, Nevzat & Goksel, A. (2020), carried out a study on relationship between financial transparency and key financial ratios. In order to reach this aim financial transparency and disclosure checklist is established and companies are classified according to their transparency levels. Using a sample of publicly traded companies from BIST 100 (excluding finance sector) for the year 2016, Standard & Poor's (S&P) methodology is applied for assessment of financial transparency and disclosure (T&D) levels based on their annual reports and websites. The results reveal that transparency level has statistical differences among the group means of some key financial ratios. High quality disclosure also means more accountable and transparent companies for investors. The study also evaluates the relationship between the firm-specific T&D scores and financial performance of BIST 100 firms.

Ndungu (2020), examined the relationship between corporate transparency, disclosure and company performance. The empirical research is based on insurance companies in Kenya. The corporate transparency database for this study is created on a yearly basis for the period of 2008 to 2012. In accordance with the attributes defined by Standard & Poor's in the Corporate Governance Forum, transparency and disclosure attributes, which are 105 in total for each company, are extracted from annual reports of the publicly held firms, afterwards converted into percentages in three different subcategories, which are ownership structure & investor relations information disclosure financial information transparency & board management structure information disclosure. This study summarized the attributes to 30 which are not stipulated in the corporate governance guidelines. Transparency attributes consist of 5 years (2008-2012) and 40 companies. The study found that return on assets and financial information disclosure and ownership and investor relationship were positively correlated and that the model used was significant since the significant values were less than 0.01 at 95% confidence levels.

Chao (2020), examined the effect of financial transparency on firm's value. This study uses the indicators released by the Taiwan Securities & Futures Institute to re-score by hand the 262 listed companies in Taiwan's electronics industry as measurements of those companies' information transparency. In addition, we adopt book value per share, modified Tobin's Q, stock price and return on equity as measured variables of firm value to explore the influence of information transparency on firm value. Based on structural equation model (SEM) analysis and path analysis with observed variables (PA-OV), we find that information transparency is positively correlated with firm value, indicating that the more transparent a firm's information, the higher the firm value. We also find that the timeliness of information disclosure is the most important factor in

information transparency and that it has a positive relationship with both stock price and return on equity.

Nyokabi (2019) examined the effect of family ownership structure and board of director's composition on the transparency of financial reporting. From their viewpoint, transparency of financial reporting includes some dimensions such as: quality of earnings according to accruals quality, usefulness of earnings, and the accuracy as well as the amount of earnings management. They studied the correlation of family firm's ownership and the composition of board members, with the transparency of financial reporting. Their findings show that the independence against the dependent of the Board of Directors members affects the improvements of company transparency. Moreover, the independence degree of Board of Directors members positively and significantly associated with the transparency of financial information reporting.

Andrea (2019), examined the effects of financial transparency on SMEs' value. The main purpose of research work is to test hypothesis that there is no significant relationship between financial transparency and SME value improvement as indicated by interest coverage ratio and Tobin Q. Agency theory is a useful framework for designing financial transparency tools. Further the study applied census survey for one hundred twenty-eight SMEs listed in AIM Italia. The time under study was from 2014 to 2018. Out of the 128 listed SMEs targeted, 115 were analyzed forming 90% of the population. Financial transparency index (FTI) was developed as proxy measures of variables. Regression analysis and correlation analysis have been applied to test the hypotheses. Key study variables of SMEs are subject to descriptive statistics. The results suggest a positive and significant relationship between the variables. Greater financial transparency allows SMEs to reduce information asymmetries and optimize their capital structure.

## **2.4 GAP IN LITERATURE**

There are many empirical studies on financial transparency and firm's performance for example Haat et al. (2018) examined the effect of good corporate governance practices on corporate transparency and performance of Malaysian listed companies. The results show that there is a significant negative relation between performance and audit quality. Suchada (2017) carried out a study on the performance effects of transparency and disclosure and board of directors. Hunton, et al. (2016), examined the effect of financial reporting transparency on current earnings increase and on the reduction of earnings management efforts. Most of these studies are foreign studies, there is limited work on the effect of financial transparency on the performance of listed manufacturing firms in Nigeria and that if the gap this study intends to fill.

## **METHODOLOGY**

### **3.1 Research Design**

The study adopted *ex-post facto* research design.

The population of this study is made up of those elements that helped in generating the data that was used in achieving the objectives of the study. As such, the population of the study is made up of all the sixty (60) manufacturing companies listed in Nigeria Exchange Group (NGX, 2022).

The sample size of 12 listed firms were selected from the population based on judgmental sampling which covers a representation of all the 6 sectors that engages in manufacturing. The 12 listed firms is in line with the works of Fuller (1976) as cited in Oduol (2014) supported this when he



posits that where a population is known, at least 10% of it constitutes a researchable sample. For the purpose of this study 20% of the population size was used as the sample size of the study. The firms to be selected must be listed between 2012 and 2022.

The data for this research is secondary data sourced from annual reports and accounts of the selected firms were used for the period of the study (2012 – 2022).

This study employed the panel data regression technique to understand the interaction among the variables and estimating the relevant data. The panel data regression technique is the best linear unbiased estimator; it is used to test various hypotheses on the effect of financial transparency on financial performance of listed manufacturing firms in Nigeria.

### 3.2 Model Specification

Using multiple regression analysis, the model is stated as follows

$$ROA_{it} = \beta_0 + \beta_1 BODSZ_{it} + \beta_2 OWN_{it} + \beta_3 BIND_{it} + u_{it} \dots\dots\dots(i)$$

Where

BODSZ = Board size

OWN = Ownership structure.

BIND = Board independence

ROA = Return on asset

ROE = Return on equity

EPS = Earnings per share

$\beta_0$  = constant slope to be estimated

$\beta_1 - \beta_4$  = intercept to be estimated

U = error term

**Table 3.1 Operationalization of Variables**

Variables	Measurement	Abbreviations
<b>DEPENDENT VARIABLES (Financial Performance)</b>		
Return on Assets	Profit before tax / Total assets	ROA
<b>INDEPENDENT VARIABLE (Financial Transparency)</b>		
Board Size	Total number of directors on the board, It includes executive and non-executive directors.	BODSZ
Ownership structure	Percentage of total shares belonging to the board of directors.	OWN
Board Independence	Proportion of non-executive directors to the total number of directors.	BIND

**Source: Researcher’s Compilation (2023)**

## DATA PRESENTATION AND ANALYSIS

### 4.1 Data Presentation

This section of the chapter presents the data extracted from the financial statement of the 12 listed manufacturing firms in Nigeria (2012-2022).

### 4.2 Data Analysis

This section analyzes the data presented (Appendix 1-6) with the aid of E-View 9 (Econometric View). The analysis of data is presented in the subsequent sections:

#### 4.2.1 Descriptive statistics

Table 4.1 The descriptive statistics for both the dependent and independent variables are presented in table 4.1 below:

	<b>BODSZ</b>	<b>OWN</b>	<b>BIND</b>	<b>ROA</b>	<b>ROE</b>	<b>EPS</b>
Mean	13.23485	1.770674	0.640621	0.033838	0.165902	1.476894
Median	14.00000	1.820727	0.600000	0.018328	0.123223	0.815000
Maximum	19.00000	1.941014	0.916667	0.246678	3.866192	7.430000
Minimum	6.000000	1.405176	0.166667	-0.003022	-0.003035	-0.030000
Std. Dev.	2.993275	0.160735	0.120699	0.044548	0.348259	1.735800
Skewness	-0.044472	-0.779982	0.618425	2.897806	9.376997	1.754136
Kurtosis	2.363092	2.415132	4.593343	11.57133	98.62291	5.638586
Jarque-Bera	2.274599	15.26558	22.37696	588.8126	52224.99	105.9856
Probability	0.320684	0.000484	0.000014	0.000000	0.000000	0.000000
Sum	1747.000	233.7290	84.56191	4.466677	21.89906	194.9500
Sum Sq. Dev.	1173.720	3.384488	1.908438	0.259976	15.88821	394.7030
Observations	132	132	132	132	132	132

**Source: Extracted from appendix 2**

Table 4.1 showed the result of the descriptive or summary statistics of various variables (BODSZ, OWN, BIND, ROA, ROE, EPS). The summary statistics were used to compare the measures of central tendency, the measures of dispersion and the measures of normality of the data set. The measures of central tendency compared the mean and median values of the data set. While the mean considered the average values of the variables the median looked at the middle distribution of the data set. From the result, it could be observed that the mean values of BODSZ, OWN, BIND, ROA, ROE, EPS were respectively, 13.23485, 1.770674, 0.640621, 0.033838, 0.165902, and 1.476894. The measures of dispersion considered how widely spread the dataset was from their mean values. The measures of dispersion considered in this study were the minimum value, the maximum values and the standard deviation. From the E-view output, the dataset for minimum for BODSZ, OWN, BIND, ROA, ROE, EPS ranged respectively from 6.000000, 1.405176, 0.166667, -0.003022, and -0.030000. However, the maximum values are 19.00000, 1.941014, 0.916667, 0.246678, 3.866192 and 7.430000 for BODSZ, OWN, BIND, ROA, ROE, EPS respectively. The standard deviation measures how far the observations are from their sampled averages. From the

summary output of the data set, the standard deviation were 2.993275, 0.160735, 0.120699, 0.044548, 0.348259 and 1.735800 respectively for BODSZ, OWN, BIND, ROA, ROE, EPS.

The normality test measures whether the data set is normally distributed or otherwise. The measures of normality considered by this study were skewness and kurtosis. Skewness measured the degree of asymmetry of the series. The series may be normally skewed, positively skewed or negatively skewed. A skewness value of zero is said to be normal and implies that the distribution is symmetry around its mean; a positive skewed value implies that the distribution has a long right tail, implying that the skewness value is higher than the sampled mean. A negative skewness implies that the distribution has a long left tail with lower values than the sampled mean. From the E-view result, the skewness values of -0.044472, -0.779982, 0.618425, 2.897806, 9.376997 and 1.754136 respectively for BODSZ, OWN, BIND, ROA, ROE, EPS. The result showed that BIND, ROA, ROE, EPS have positive values, implying that they have a long right tail. While BODSZ and OWN have negative values, implying that they have a long left tail.

Kurtosis measures the peakedness or flatness of the data relative to the normal distribution. Kurtosis could be mesokurtic, leptokurtic or platykurtic. A kurtosis value of 3.0000 is mesokurtic, meaning that the distribution is normal. A kurtosis value greater 3.0000 is said to be leptokurtic or positive kurtosis, meaning that it has a peaked curve and produces higher values than the normal. A kurtosis value less 3.0000 is platykurtic or negative kurtosis, meaning that it has a flatted curve and that it produced lower values than the sample mean. From the result obtained in table 4.1 for the dataset, the kurtosis values of 2.363092, 2.415132, 4.593343, 11.57133, 98.62291 and 5.638586 respectively for BODSZ, OWN, BIND, ROA, ROE, EPS. However, BIND, ROA, ROE, EPS were greater than 3.0000 required for a normal distribution. It, therefore, means that they were leptokurtic, meaning that they produced higher value than the normal. While BODSZ, and OWN values were less than 3.0000 meaning that they produced lower value than the normal. The Jarque-Bera (JB) test measures the difference of the skewness and kurtosis of the series with those from the normal distribution. The null hypothesis for the JB statistics is that the series is normally distributed. Given the result in table 4.1 above, the JB values of 2.274599, 15.26558, 22.37696, 588.8126, 52224.99 and 105.9856 respectively for BODSZ, OWN, BIND, ROA, ROE, EPS with the following respective P-value 0.320684, 0.000484, 0.000014, 0.000000, 0.000000 and 0.000000. Therefore, OWN, BIND, ROA, ROE, EPS have P-values less than 0.05 (5 per cent) meant that they did not meet normality assumption. While BODSZ has p-value greater than 0.05 meaning that BODSZ meets normality assumption.

#### **4.2.2 Data validity test**

In order to ensure that the results are robust, several diagnostic tests are conducted to enhance the validity of data and model specified for analyses. As such, data diagnostic test such as; the Unit root test is computed. Before that, the correlation analysis is done.

##### **4.2.2.1 Correlation analysis**

This section of the chapter presents in the table below the result of the correlation analysis between the independent variables to further validate the Tolerance statistic and VIF result.

**Table: 4.2 Correlations**

	BODSZ	OWN	BIND	ROA	ROE	EPS
BODSZ	1.000000					
OWN	-0.024310	1.000000				
BIND	-0.426045	-0.043839	1.000000			
ROA	0.186362	0.238939	-0.094074	1.000000		
ROE	0.128159	0.112031	0.023775	0.096039	1.000000	
EPS	-0.200332	0.187623	0.114030	0.238149	0.131106	1.000000

**Source: E-View Output in appendix 3**

Table 4.2 showed the correlation of the variables employed in this study. This study places specific emphasis on the relationship between financial transparency (board size, ownership structure and board independence) and firm performance (ROA, ROE and EPS).

The relationship between board size and return on asset is ( $r= 0.186362$ ). This implies that there is a positive but weak correlation between board size and return on asset. Ownership structure also have positive but weak correlation to return on asset ( $r= 0.238939$ ). Board independence has negative and very weak correlation with return on asset ( $r= -0.094074$ ).

The relationship between board size and return on equity is ( $r= 0.128159$ ). This implies that there is a positive but weak correlation between board size and return on equity. Ownership structure also have positive but weak correlation to return on equity ( $r= 0.112031$ ). Board independence has positive and very weak correlation with return on equity ( $r= 0.023775$ ).

The relationship between board size and earnings per share is ( $r= -0.200332$ ). This implies that there is a negative and weak correlation between board size and earnings per share. Ownership structure has positive but weak correlation to earnings per share ( $r= 0.187623$ ). Board independence has positive and weak correlation with earnings per share ( $r= 0.114030$ ).

**4.3 REGRESSION OF THE ESTIMATED MODEL SUMMARY**

**Table 4.3:**

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	16.197064	3	0.0010	
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.476406	0.283754	1.678939	0.0958
BODSZ	0.003875	0.001414	2.740709	0.0071
OWN	-0.232271	0.157892	-1.471079	0.1440
BIND	-0.128910	0.037271	-3.458698	0.0008
R-squared	0.393213	Mean dependent var		0.033838
Adjusted R-squared	0.320606	S.D. dependent var		0.044548
S.E. of regression	0.036719	Sum squared resid		0.157750
F-statistic	5.415644	Durbin-Watson stat		1.658388
Prob(F-statistic)	0.000000			

Table 4.3, presents the regression result on the effect of financial transparency (BODSZ, OWN, BIND) on return on asset (ROA). From the model summary table above, the following information can be distilled.

To enable the study chose between the fixed effect model and the random effect model, a Hausman Test is conduct with the comparable results placed in the appendix 1. The result of the Hausman correlation test above shows a cross sectional random probability value of 0.0010 with a Chi-square statistic of 16.197064 which is significant thus informs the study decision to choose the fixed effect model in other to capture other financial transparency techniques not included in this study that might cause variations in the model specified.

The  $R^2$  which measure the level of variation of the dependent variable caused by the independent variables stood at 0.393213. The  $R^2$  otherwise known as the coefficient of determination shows the percentage of the total variation of the dependent variable (ROA) that can be explained by the independent or explanatory variables (BODSZ, OWN, BIND). Thus the  $R^2$  value of approximately 0.393213 indicates that 39.2% of the variation in the ROA of listed manufacturing firms can be explained by a variation in the financial transparency (BODSZ, OWN, BIND) while the remaining 60.8% (i.e.  $100-R^2$ ) could be accounted by other factors not included in this model.

The adjusted  $R^2$  of approximately 0.320606 indicates that if other factors are considered in the model, this result will deviate from it by only 0.07 (i.e.  $0.39 - 0.32$ ). This result shows that there will be a further deviation of the variation caused by the independent factors to be included by 0.07%.

The regression result as presented in table 4.3 above to determine the relationship between BODSZ, OWN & BIND and ROA shows that when all the independent variables are held stationary; the ROA variable is estimated at 0.476406. This simply implies that when all independent variables are held constant, there will be an increase in the ROA of listed manufacturing firms up to the tune of 0.476406% occasioned by factors not incorporated in this study. Thus, a unit increase in BODSZ will lead to an increase in ROA by 0.003875%. For OWN, a unit increase in OWN will lead to a decrease in ROA by 0.232271%. Finally, a unit increase in BIND will lead to a decrease in ROA by 0.128910%.

Finally, the result shows that there is a significant variation of Fisher's statistics (5.415644) with probability value of 0.00000 which means the model as a whole is statistically significant at an autocorrelation level of 1.658388 (Durbin-Watson), which is less than 2.5.

**HO<sub>1</sub>:** Board size has no significant effect on return on asset of listed manufacturing firm in Nigeria. Since the calculated probability value 0.0071 is less than the accepted probability value of 0.05. The null hypothesis is rejected and the alternative hypothesis accepted thus; board size has a significant effect on return on asset of listed manufacturing firm in Nigeria.

**HO<sub>2</sub>:** Ownership structure has no significant effect on return on asset of listed manufacturing firm in Nigeria.

Since the calculated probability value 0.1440 is greater than the accepted probability value of 0.05. The null hypothesis is accepted and the alternative rejected thus; ownership structure has no significant effect on return on asset of listed manufacturing firm in Nigeria.

**HO<sub>3</sub>:** Board independence has no significant effect on return on asset of listed manufacturing firm in Nigeria.



Since the calculated probability value 0.0008 is less than the accepted probability value of 0.05. The null hypothesis is rejected and the alternative accepted thus; board independence has a significant effect on return on asset of listed manufacturing firm in Nigeria.

#### **4.4 DISCUSSION ON FINDINGS**

##### **4.4.1 Effect of board size on return on asset of manufacturing firms in Nigeria.**

The findings from hypothesis one revealed that board size has a significant effect on return on asset of listed manufacturing firm in Nigeria. The result is consistent to the result of Sinan (2018) who examined the effects of board size on the financial performance of commercial banks in Nigeria. The study used the survey research design. The result indicated that board size had significant effects on financial performance (ROA) of commercial banks in Nigeria. Also, the study of Wang (2017); Lehn *et al.*, (2009); Akbar (2015) that larger boards are positively connected with corporate performance. In contrast, other research that evaluated firm performance using a variety of regression models, additional techniques, and indicators discovered that increasing the board size had negative impact on firm performance (Sinan 2018; Andrea, 2019; Abdulla, 2016; Gan, et al., 2015).

#### **5.0 CONCLUSION AND RECOMMENDATION**

##### **5.1 Conclusions**

The study examined the effect of financial transparency on the performance of listed manufacturing firms in Nigeria. Board size, ownership structure and board independence were used to measure financial transparency while return on asset, return on equity and earnings per share were used to measure financial performance. Twelve manufacturing firms were used as the sample size of the study. The data were collected from annual report and accounts of these selected firms. The data collected were analyzed using panel data based multiple regression analysis. The following findings are arrived at through the test of the research hypotheses earlier formulated in this study.

- i. Board size has a significant effect on return on asset of listed manufacturing firm in Nigeria.
- ii. Ownership structure has no significant effect on return on asset of listed manufacturing firm in Nigeria.
- iii. Board independence has a significant effect on return on asset of listed manufacturing firm in Nigeria.

Therefore the study concludes that financial transparency has the tendency of affecting the financial performance of listed manufacturing firms in Nigeria.

##### **5.3 RECOMMENDATIONS**

The following recommendations are made:

- (i) It is prudent for listed manufacturing companies to disclose as much information as possible and also ensure that the information disclosed are transparent so as to minimize the level of information asymmetry and consequently stimulate financial performance.
- (ii) Manufacturing companies can also take the control of financial performance of the company through using high proficiency, experienced and independent managers with the necessary legal power as a potentially powerful mechanism and to be a cause of improvement in their accountability of the company.

- (iii) Lack of transparency of financial information is the main reason for the financial crises in market and companies. Companies can minimize these crises by transparent disclosure of information and increase the investor's confidence level. It is the increase in confidence of investors that can lead to an increase in sales of the companies and thus earning forecast accuracy will increase consequently.

## REFERENCES

- Abdulla, J.Y.A. (2016), 'The timeliness of Bahraini annual reports', *Advances in International Accounting*, 9, 73–88.
- Andrea, R. B. (2019). Corporate Performance, Board Structure and its determinants in the Banking Industry, in EFA 2005 *Moscow meetings*.
- Akbar, A. (2015). The role of corporate governance mechanism in optimizing firm performance: A conceptual model for corporate sector of Pakistan. *Journal of Asian Business Strategy*, 5(6), 109-115.
- Al-Bassam, W. M., Ntim, C. G., Opong, K. K., & Downs, Y. (2018). Corporate boards and ownership structure as antecedents of corporate governance disclosure in Saudi Arabian publicly listed corporations. *Business&Society*, 57(2), 335-377.
- Ali, M. N. & Shaker, A. S. (2017). The effect of accounting observation on the transparency of disclosing accounting information - an applied study in a sample of industrial companies listed in the Iraqi Stock Exchange. *Al-Kout Journal of Economic and Administrative Sciences*. Issue(25) – March.
- Aljajawi, T. M. A. & Al-Khafaji, E. J.A. (2018). Measuring the transparency of financial reporting to Iraqi companies according to the S&P scale. *Iraqi Journal of Administrative Sciences*.(14)
- Allawi, K. M. (2015). The application of the rules of governance in Iraqi companies (analytical and applied study on Iraqi public companies). *Qadisiyah Journal of Administrative and Economic Sciences*, 17 (2), 175-190.
- Arbatlı, E., & Escolano, J. (2015). Fiscal transparency, fiscal performance and credit ratings. *Fiscal Studies*, 36, 2, 237–270
- Ashton, R.H., Graul, P.R. & Newton, J.D. (2019) 'Audit delay and the timeliness of corporate reporting', *Contemporary Accounting Research*, 5, 2, 657–673.
- Ashton, R.H., Willingham, J.J. & Elliott, R.K. (2017) 'An empirical analysis of audit delay', *Journal of Accounting Research*, 25, 2, 275–292.

- Bacon J. (2013). Corporate Boards and Corporate Governance. The Conference Board Inc, report 10-36
- Burcu, K., Nevzat, M. & Goksel, A. (2020). Corporate Governance: Turkish Transparency and Disclosure Survey Pace of Improvement Has Slowed, 33-41.
- Bano, S., Tahir, F., Abbas, S. K., & Ansari, U. A. (2018). Ownership Concentration, Corporate Governance and Firm Performance: Evidence from Pakistan. *Indian Journal of Public Health Research & Development*, 9(10).
- Ben Othman, H. (2012) 'The effect of board structure and process disclosure on corporate performance in the emerging African markets', *Managerial Auditing Journal*, 27, 2, 156–174.
- Botosan, C.A. & Stanford, M. (2005) 'Managers' motives to withhold segment disclosures and the effect of SFAS No131 on analysts' information environment', *The Accounting Review*, 80, 3, 751–771.
- Bushee, B. & Noe, C. (2000) 'Corporate disclosure practices, institutional investors, and stock return volatility', *Journal of Accounting Research*, Vol. 38, No. 3, pp.171–202.
- Bushman R., Piotroski J. & Smith A., (2003). What Determines Corporate, Transparency?, Unpublished paper, University of Chicog, *JournalofAccountingResearch*, 42(2) 207-252.
- Chang, W., & Taylor, S. A. (2016). The effectiveness of customer participation in new product development: A meta-analysis. *JournalofMarketing*, 80(1), 47-64.
- Chhaochharia, V. & Grinstein, Y. (2007) 'Corporate governance and firm value : the impact of the 2002 governance rules', *The Journal of Finance*, 62, 4, 1789–1825.
- Chao, J.D. (2020) 'Understanding the endogeneity between firm value and shareholder rights', *Financial Management*, Winter, 65–76.
- Clarkson, P., Guedes, J., & Thompson, R. (2016). On the Diversification, Observability and Measurement of Estimation Risk. *Journal of Financial and Quantitative Analysis*, 31(1), 69–84.
- Diamond, D. W., & Verrecchia, R. E. (1991). Disclosure, Liquidity, and the Cost of
- Gan, L. K., Shek, J. K., & Mueller, M. A. (2015). Hybrid wind–photovoltaic–diesel–battery system sizing tool development using empirical approach, life-cycle cost and performance analysis: A case study in Scotland. *EnergyConversionandManagement*, 106, 479-494

- Gurr, A. (2018). The Effects of Positive and Negative Environmental Responsibility on Financial Performance
- Haat, C., Rahman, A., & Mahenthiran, S. (2018). Corporate governance, transparency and performance of Malaysian companies. *Managerial Auditing Journal*, 23 8, 744-778
- Healy, P.M. & Palepu, K.G. (2001) 'Information asymmetry, corporate disclosure, and the capital markets: a review of the empirical disclosure literature', *Journal of Accounting and Economics*, 31, 1/2/3, 405–440.
- Henriques, A. (2013). *Corporatetruth:Thelimitstotransparency*. Routledge.
- Hunton, J, R & Mazza, L.(2016). "Financial reporting transparency and earnings management". *The accounting review* 81. 135-157.
- Hunton, J., Libby, R. & Mazza, C. (2006) 'Financial reporting transparency and earnings management', *The Accounting Review*, 81, 1, 135–157.
- Jahanshad, A., Heidarpoor, F., & Valizadeh, Y. (2013). Relationship between Financial Information Transparency and Financial Performance of Listed Companies in Tehran Stock Exchange. *Research Journal of Recent Sciences*, 3(3), 27-32
- Jensen M.C., &Meckling W.H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure, *Journal of Financial Economics*, 3, 305-360.
- Kajola, S. O. (2008). Corporate governance and firm performance: The case of Nigerian listed firms. *Europeanjournalofeconomics,financeandadministrativesciences*, 14(14), 16-28.
- Madhani, P. M. (2017). Role of voluntary disclosure and transparency in financial reporting. *The Accounting World*, 7, 6, 63-66
- Marris, R. (1964). *The Economic Theory of 'Managerial Capitalism*, Macmillan, London.
- Monte, T. (2009). Application of Global Reporting Initiative (GRI) in the sustainability reporting of financial services
- Ndungu, F. O. (2020). The Relationship between Corporate Governance and Financial Performance of Banking industry. *Unpublished MBA Project*, University of Nairobi.
- Nyokabi, E. M., (2019). A Survey of Transparency and Disclosure of Risk Information in Kenyan Banking Industry, *Unpublished MBA Project*, University of Nairobi.

- OECD, (2006), "Corporate Governance in Turkey: A Pilot Study of corporate governance.
- Outa, E. R., & Waweru, N. M. (2016). Corporate governance guidelines compliance and firm financial performance: Kenya listed companies. *Managerial Auditing Journal*, 31(8/9), 891-914.
- Sinan, D.. (2018). The Effects of Board characteristics Information Technology Maturity and Transparency on Company Financial Performance. Graduate Institute of Social Sciences
- Suchada, J. (2017). The Performance Effects of Transparency and Disclosure and Board of Directors. A Case of SET100 Thailand Companies.
- Tamimi, N., & Sebastianelli, R. (2017). Transparency among S&P 500 companies: an analysis of ESG disclosure scores. *Management Decision*, 55(8), 1660-1680.
- Vander, B. H., & Willekens, M. (2008). Disclosure on Corporate Governance in the European Union. *Corporate Governance: An International Review*, 16(2), 101–115.
- Vishwanath, T. & Kaufmann, D. (2011). *The World Bank Observer*, 16, (1), 41-57
- Wang, M (2017). "Disclosure policy, information policy, information asymmetry and liquidity in equity markets". *Contemporary accounting research*, 801- 827.
- Zahra, S. A. & Pearce, J. A. (1989). Boards of Directors and Corporate Financial Performance: A Review and Integrative Model, *Journal of Management* 15(2), 291-334.
- Zaman, R., Arslan, M., & Siddiqui, M. A. (2014). Corporate governance and firm performance: the role of transparency & disclosure in banking sector of Pakistan. *International Letters of Social and Humanistic Sciences*, 43, 152-166.



**APPENDIX 1**

**APPENDIX 4: Panel regression (ROA)**

**HAUSMAN TEST**

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	16.197064	3	0.0010

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
BODSZ	0.003875	0.003117	0.000000	0.1318
OWN	-0.232271	0.056737	0.023689	0.0604
BIND	-0.128910	-0.066586	0.000247	0.0001

Cross-section random effects test equation:

Dependent Variable: ROA

Method: Panel Least Squares

Date: 10/11/23 Time: 16:17

Sample: 2012 2022

Periods included: 11

Cross-sections included: 12

Total panel (balanced) observations: 132

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.476406	0.283754	1.678939	0.0958
BODSZ	0.003875	0.001414	2.740709	0.0071
OWN	-0.232271	0.157892	-1.471079	0.1440
BIND	-0.128910	0.037271	-3.458698	0.0008

**Effects Specification**

Cross-section fixed (dummy variables)

R-squared	0.393213	Mean dependent var	0.033838
Adjusted R-squared	0.320606	S.D. dependent var	0.044548
S.E. of regression	0.036719	Akaike info criterion	-3.664396

Sum squared resid	0.157750	Schwarz criterion	-3.336805
Log likelihood	256.8502	Hannan-Quinn criter.	-3.531278
F-statistic	5.415644	Durbin-Watson stat	1.658388
Prob(F-statistic)	0.000000		

## FIXED EFFECT

Dependent Variable: ROA  
 Method: Panel Least Squares  
 Date: 10/11/23 Time: 16:13  
 Sample: 2012 2022  
 Periods included: 11  
 Cross-sections included: 12  
 Total panel (balanced) observations: 132

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.476406	0.283754	1.678939	0.0958
BODSZ	0.003875	0.001414	2.740709	0.0071
OWN	-0.232271	0.157892	-1.471079	0.1440
BIND	-0.128910	0.037271	-3.458698	0.0008

### Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.393213	Mean dependent var	0.033838
Adjusted R-squared	0.320606	S.D. dependent var	0.044548
S.E. of regression	0.036719	Akaike info criterion	-3.664396
Sum squared resid	0.157750	Schwarz criterion	-3.336805
Log likelihood	256.8502	Hannan-Quinn criter.	-3.531278
F-statistic	5.415644	Durbin-Watson stat	1.658388
Prob(F-statistic)	0.000000		

## RANDOM EFFECT

Dependent Variable: ROA  
 Method: Panel EGLS (Cross-section random effects)  
 Date: 10/11/23 Time: 16:16  
 Sample: 2012 2022  
 Periods included: 11  
 Cross-sections included: 12  
 Total panel (balanced) observations: 132

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.065226	0.071564	-0.911424	0.3638
BODSZ	0.003117	0.001322	2.358907	0.0198
OWN	0.056737	0.035220	1.610954	0.1097
BIND	-0.066586	0.033803	-1.969842	0.0510

Effects Specification

	S.D.	Rho
Cross-section random	0.016488	0.1678
Idiosyncratic random	0.036719	0.8322

Weighted Statistics

R-squared	0.105310	Mean dependent var	0.018864
Adjusted R-squared	0.084341	S.D. dependent var	0.040303
S.E. of regression	0.038566	Sum squared resid	0.190375
F-statistic	5.022108	Durbin-Watson stat	1.308551
Prob(F-statistic)	0.002526		

Unweighted Statistics

R-squared	0.058163	Mean dependent var	0.033838
Sum squared resid	0.244855	Durbin-Watson stat	1.017397