

Corporate governance characteristics and timeliness of financial reporting of quoted non-financial firms in Nigeria. A Poisson regression method of analysis

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ABSTRACT:

This study investigates the relationship between corporate governance and timeliness of financial reporting of quoted non-financial firms in Nigeria. The study uses secondarily sourced panel data over the period from 2008 to 2023 of 75 firms quoted on the floor of the Nigerian Exchange Group (NXG). The results of the Poisson regression method indicated that board size, board same surname, board financial expertise, institutional ownership, foreign ownership, top5 ownership or ownership concentration, top10 ownership or ownership concentration, founder & family ownership, inter-locking directorship, board national diversity and number of foreign directors are all negatively significant with timely statement. Board independence, board gender diversity, top20 ownership or ownership concentration, board compensation, board tribal diversity, number of board committees, chief executive officer (CEO) experience, CEO reputations, CEO age, CEO tenure are all positively significant with timely statement. Board meetings, board political connections, managerial ownership and CEO with military experience are insignificant. The study concludes with recommendations.

Keywords: *Corporate Governance Characteristics, Timeliness of Financial Reporting, Quoted Non-Financial Firms, Poisson Regression.*

1.0 Introduction

Business organization are expected to prepare and present their financial statements (FS) which are the means use by management to render accountability to shareholders, investors, government, creditors, et cetera who are to make informed decision on the uses of all the resources they provided in an economic, effective and efficient manner (Egbadju et al., 2023; Egbadju & Odey, 2023; Egbadju, 2023a). Ideally, FS summarizes firms' business transactions and other activities in an accurate and transparent manner; in order to meet its main objective of providing financial information that is useful to both existing and potential investors, lenders and other creditors so as to make economic decisions to various users (IASB, 2010; Egbadju, 2023b). Since investors' main objective is wealth maximization, the decision taken by these investors, like predicting accurately future cash flows, will no doubt be strongly influenced by the financial reporting (FR) quality of which timeliness is one. This topic has drawn a lot of attention in the literature since timeliness is one of the key factors that determines the quality of financial reporting. Information must be current for shareholders and other stakeholders, and the longer the period between year-end and disclosure, the less valuable and stale the information becomes.

Timeliness is a key element of the quality of FR and the applicability of its contents. It is an important qualitative characteristic that makes the information more useful. Information should be obtained by decision-makers when it still has the capacity to influence their decisions; otherwise, it might not be very

helpful (IASB, 2018 as cited in Alexeyeva, 2024). Again, Alexeyeva (2024) observed that timeliness is one of the most significant elements that might influence the quality of FR for timeliness lowers the risk of fraud by demonstrating the validity and transparency of FR and describes how ready and efficient a business is to inform stakeholders of its financial and operational performances. According Uford (2017), timeliness of FS has a significant impact on investor decisions since it quickly and effectively influences stock market pricing and valuation performance and operations as well as have a big influence on other investment decisions because investors see a company's delay in issuing its FS as a red flag (Chambers et al., 1984 as cited in Cxelik et al., 2023).

Timeliness in FR means making information quickly accessible to users so that it might favorably impact their choice because information loses its usefulness as it becomes older. That is, if information is not available when it is needed or is made available too late after the events that are being documented have occurred, it is useless for decision-making (El-Sayed, 2022). Timeliness is considered as a constraint on relevant information for financial data may become irrelevant if it is not released on time just as the Statement of Financial Accounting Concepts No. 2 described timeliness as providing information to decision-makers before it becomes ineffective (FASB, 1980 as cited in El-Sayed, 2022). Disseminating relevant information as quickly as possible is essential since it may be used by investors, regulators, managers, decision-makers, professional associations, financial analysts, and academics (Asiriwa et al, 2021). Annual reports must be submitted on schedule in order to guarantee openness, preserve investors' trust, and support well-informed decision-making. No matter how accurate accounting information may be, if it is late on arrival; it will definitely not serve its main purpose (Charles & Uford, 2023). It is, therefore, of great importance that preparers of such statements be sure that accurate information is given in a timely manner so as to guarantee the credibility of the reports. Examining the factors affecting the timeliness of FR is very crucial so that businesses can develop corporate governance guidelines to reduce delays in timely FR and so improve its quality. The timeliness of annual reports, which are essential for giving stakeholders pertinent and timely information, can be greatly impacted by effective corporate governance (CG). For example, Jayanimitta et al. (2020) noted that the World Bank and OECD have identified timeliness of financial reporting as one of the characteristics of an excellent corporate governance. In the same vein, Jayanimitta et al. (2020) hinted that timeliness literature suggests that strong corporate governance procedures and the legislative framework of the nation in which a company operates have an impact on how promptly the company reports its financial information.

CG is the set of policies, procedures, and guidelines that covers almost every area of management and regulate how a company is run, managed or directed. CG is the collection or a set of rules, procedures, and connections that control how businesses are managed and guided in addition to the functions and interactions of a company's owners, board, management, and other stakeholders which encompasses both market and regulatory procedures (OECD, 2023). The OECD's 2024 Guidelines on Corporate Governance of State-Owned Enterprises (SOEs) defines CG as a framework that ensures SOEs are run in the public interest and promote fair and competitive markets such that by implementing the rules, policymakers can improve the institutional, legal, and regulatory frameworks for SOE governance (OECD, 2024).

Ogiriki and Adire (2024) observed that because CG has been a major global subject of concern which resulted in corporate scandals that revealed weaknesses in business practices; the Nigerian Securities and Exchange Commission (SEC) and the Financial Reporting Council (FRC) have established guidelines to enhance CG and ensure timely disclosure of financial data. Although their actions were meant to improve accountability

and reduce the likelihood of financial misreporting by aligning Nigerian procedures with international standards; there is a wide range in the timeliness of Nigerian companies' annual reports due to perceived CG procedural failures. The benefits of FR timeliness as cited by various scholars in Jayanimitta et al. (2020); Asiriwa et al. (2021); Kolawole et al. (2022) and El-Sayed (2022) include: a reduced insider trading; information asymmetry, market inefficiencies, uncertainty around investment decisions, rumors, et cetera. The necessity of timely and high-quality accounting reporting is becoming more and more crucial as Nigerian company organizations are exposed to global financial markets. Companies are therefore expected to comply with the disclosure requirements of foreign investors and to offer timely reporting in their annual financial reports. Despite the above listed benefits in FR timeliness, Kolawole et al. (2022) hinted that in comparison to the 90-day period mandated by the Security Exchange Commission (SEC), the fastest reporting business listed on the Nigerian Exchange Group (NXG) takes an average of 122 days, while some take up to 304 days.

In an effort to force timely reporting of financial information to market participants, the Nigerian Exchange Group (NXG), according to Popoola (2019) reporting for *The Punch*, fined 38 companies N429.5 million for not submitting their annual reports that were due for the 2018 financial year alone. Another Nigerian daily, *The Leadership* (2024), reported that NXG has fined 20 listed companies the sum of N255.53 million for failing to file their financial statements after the regulatory due date in 2023 and 2024. The regularity of late filing in Nigeria is now a serious concern to the regulatory bodies and other stakeholders.

Several studies have been carried out linking CG and timeliness of financial reporting, both in developed economies like Alexeyeva (2024) in Sweden, as well as in developing economies like Yua et al. (2024) in Nigeria; Khuong and Vy (2017) in Vietnam and Aldaoud (2015) in Jordan. Whereas some CG mechanisms have a positive relationship with timeliness, others have a negative relationship or no relationship at all, as the empirical literature section has shown. The main goal of this study is to examine the potential impacts of certain corporate governance characteristics on timeliness of listed non-financial enterprises in Nigeria, as prior research has produced mixed findings. This work differs in a number of ways since it makes use of twenty-five (25) CG traits, none of which have as far as we are aware, been used in a single study before. Unlike this study, none of the previous studies reviewed used the Poisson regression method. Although, Alexeyeva (2024) in Sweden used data from 2006 to 2015 making a total of 8,095 Swedish firms; this study uses more recent data covering 16 years (2008 to 2023) for 75 firms making a 1200 firm-year observations. Therefore, we hypothesized that all of the CG factors considered in this study have no significant relationship with timeliness of the aforementioned non-financial firms in Nigeria. Following this introduction, the rest of the paper is divided into five sections with the literature review in section two, methodology in section three, analysis and discuss of results in section four and the fifth section concludes this paper.

2.0 Review of Related Literature.

2.1 Theoretical Underpinning.

2.1.1 Agency Theory and Timely Financial Reporting.

According to the theory put forth by Jensen and Meckling (1976), an agency relationship is defined as a contract in which one or more individuals, known as the principal(s), hire another individual known as the agent, to carry out a service on their behalf. This gives the agent some degree of decision-making authority

arising from separation of ownership and control. Since both parties may want to maximize their self-interest, it is fair to anticipate that the agent will not always act in the principal's best interests. With respect to this study, the time frame for the release of financial reports is determined by laws or regulations such as stock exchange regulations, capital market laws, and tax laws (Toksöz & Özdemir, 2021). These laws specify when financial reports and audited financial statements must be published for businesses that are subject to statutory audits. Accordingly, agency costs arise from the conflicts of interest between the company's owners and management due to management's inability to meet regulators' deadlines for financial statements submission. In Nigeria, various fines and sanctions have been imposed on defaulting companies for many years now by the Nigerian Securities and Exchange Commission (SEC); the Nigerian Exchange Group (NXG) and the Corporate Affairs Commission (CAC). The fear of these usually forced the owners to incur certain cost to check management's aberrant behaviours. The agency's cost is the total of the principal's monitoring fees, the agent's contracting fees, and any residual losses.

2.2 Empirical Literature

Empirical Literature

Agbaje and Oladutire (n. d.) attempted an empirical study of how corporate governance enhanced the timeliness of financial reporting in Nigeria. The study used secondary panel data over the period from 2011 to 2015 obtained from 20 firms' financial statements making total firm-year observations of 100. The OLS regression results indicated that audit committee size, board size and CEO duality were positively significant with timeliness. Alexeyeva (2024) empirically examined whether board composition has ever impacted the timeliness of financial reporting in Sweden. The study used secondary longitudinal data over the period from 2006 to 2015 making total of 8,095 Swedish firms. The results of the OLS regression revealed that board size, board gender diverse and board independence were positively significant with timeliness. Yua et al. (2024) studied whether there is any relationship between corporate governance mechanism and annual report represented by audit report timeliness in Nigeria. The researchers used annually sourced panel data collected over the period from 2012 to 2022 on multinational firms. The results of the Two-Stage Least Squares (2SLS) regression revealed that audit committee meetings and board meetings had a positive and significant effect on annual reports while CEO gender, board independence and audit committee independence were insignificant. Ogiriki and Adire (2024) undertook a research to determine if there is any relationship between corporate governance and timeliness of annual reports in Nigeria. The researchers used annually sourced longitudinal data collected over the period from 2018 to 2023 on 10 industrial goods firms listed in the Nigerian Exchange Group (NGX). The OLS results revealed that board independence, audit committee size and audit firm size were all insignificant.

Cxelik et al. (2023) carried out a research on the extent to which ownership structure may have had on financial reporting timeliness in Turkey. Annual secondary panel data which covered the period 2008 to 2019 collected from the financial reports of 208 firms listed on the floor of the Borsa Istanbul was used. The generalized methods of moments (GMM) regression results indicated that institutional ownership, board size and board independence were negatively significant but CEO duality, foreign ownership, board diversity, foreign directorship and foreign ownership were insignificant. Kolawole et al. (2022) researched to ascertain the extent to which board attributes and ownership structures have had on financial statement timeliness in Nigeria. Secondary data collected from annual reports of 11 listed firms of consumer goods on the NXG between 2011 and 2020 was used. The OLS regression results showed that board independence and board

diversity positively and significantly influenced timeliness; managerial ownership, foreign ownership, board meeting and board size were insignificant. El-Sayed (2022) carried out a research to determine if there is any nexus between corporate characteristics and timeliness of annual reports in Saudi Arabia. Secondary data collected from annual reports of 67 firms listed on the floor of the Saudi Stock Exchange (Tadawul) during the period 2015 to 2018 was used. The OLS regression results showed that institutional ownership and timeliness are insignificant. Ashibuogwu (2021) embarked on this research to investigate the effect of board attributes on financial statements timeliness in Nigeria. The study used secondarily sourced audited reports of 15 deposit money banks (DMBs) listed on the Nigerian Exchange Group (NXG) over the period 2012 to 2018. The results of the OLS revealed that board size and board diligence were positively significant with timeliness while board independence and board gender diversity were insignificant. Borgi et al. (2021) carried out an empirical investigation to determine the nexus between CEO characteristics and financial statements timeliness in Saudi Arabia. Secondary data collected from annual reports of 119 firms listed on the floor of the Saudi Stock Exchange (Tadawul) during the period 2014 to 2017 was used. The OLS regression results showed that CEO financial expertise, CEO social media and CEO tenure were all positively significant with timeliness. Asiriuwa et al. (2021), in their research, investigated the effect which board attributes has had on timely financial reporting in Nigeria. Secondarily sourced panel data over the period from 2012 to 2018 obtained on 50 firms quoted on the NXG was used. The results of logistics regression method showed that board financial expertise was positively significant with timeliness; board size and board independence were negatively significant while board diligence was insignificant.

Abdullahi et al. (2020) attempted an empirical examination of how governance attributes might have had on timely financial reports in Nigeria. The study used secondarily sourced audited reports of 65 firms listed on the Nigerian Exchange Group (NXG) over the period 2007 to 2017. The OLS results indicated that while managerial ownership and board independence were negatively significant related with timeliness; board size and board diversity were insignificant. Jayanimitta et al. (2020) examined how corporate governance has enhanced the timeliness of earnings in Indonesia. The researchers made use of secondary panel annual data over the period from 2016 and 2018 obtained on 41 firm-year observations in IDX. The results of the logistic regression indicated that CGPI index was not statistically significant with timeliness. Ologun et al. (2020) attempted an empirical examination of how the adoption of International Financial Reporting Standards (IFRS) influenced the relationship between corporate governance and timeliness of financial statements in Nigeria. The study used secondary panel data over the period from 2006 and 2017 obtained from 70 companies listed on the floor of the NXG. The overall OLS results showed that board size, board gender diversity and board independence had a negative and significant relationship with timeliness but board meetings was insignificant. Obazee and Otivbo (2019), in this research, investigated the influence which CEOs' characteristics have had on timely financial statements in Nigeria. Annual secondary panel data obtained from 6 conglomerates firms listed on the Nigerian Exchange Group (NXG) from 2006 to 2015 was used. The OLS results showed that while CEO gender and CEO tenure were negatively and statistically significant with timeliness; CEO ownership and CEO financial expertise were insignificant.

Khuong and Vy (2017) carried out a research to investigate the nexus, if any, that exist between CEO attributes and timely financial reports in Vietnam. Secondarily sourced longitudinal data over the period from 2012 to 2014 obtained on 100 Vietnamese firms listed on the two Stock Exchanges (HNX and HOSE) was used. While CEO age was negatively significant with timeliness; board diversity was significantly positive. Aldaoud (2015) empirically examined the impact of which corporate governance might have had on the timely financial reports in Jordan. The study used secondary panel data over the period from 2009 to

2012 obtained on 114 firms listed on the floor of the Amman Stock Exchange. The OLS results showed that board independence, institutional ownership, board diligence, audit committee meetings and audit opinion were negatively significant with timeliness while board size, CEO duality, board diligence, board expertise, auditor independence and foreign ownership were insignificant. Appah and Emeh (2013) carried out a study to analyze the effect of corporate governance on timely financial statements in Nigeria. Secondly sourced annual data obtained on 35 firms covering the period 2007 to 2011 from the NXG was used. The OLS results showed that board independence, board size, board expertise and board experience were all positively significant with timeliness while CEO duality and board meeting were insignificant. Abdullah (2007) carried out an empirical study to test the impact of board composition and audit committee on timely financial reports in Malaysia. The study made use of secondary data from 1998 to 2000 of firms listed on the Bursa Malaysia. The OLS results showed that board independence and audit committee independence positively significant with timeliness while CEO duality was insignificant.

3.0 Methodology

3.1 Research Design

The study uses the ex-post facto research design, otherwise called the descriptive or correlational research design, to investigate the relationship, if any, between corporate governance characteristics and timeliness of financial reporting of 75 non-financial firms quoted on the floor of the Nigerian Exchange Group (NXG). This study uses secondarily sourced data obtained from their annual reports over the period 2008 to 2023, making a total number of 1,200 firm-year observations.

3.2 Measurement and Definitions of Variables.

Table1

S/N	Variables Names	Definitions	Variable Types	Measurements	Authorities
1	TFRD	Timeliness Financial Reporting Days	Dependent	Number of days between the firms' year end and the auditors reports	Yua et al.(2024); Alexeyeva (2024)
2	BODS	Board size	Independent	Total number of directors on the board	Alexeyeva (2024)
3	BODI	Board independence	Independent	Percentage (%) of independent or non-executive directors on the board	Alexeyeva (2024)
4	BODIV	Board gender diversity	Independent	Proportion (%) of board members that are female.	Alexeyeva (2024);
5	BMET	Board meetings	Independent	Number of times the board meets in a year	Yua et al.(2024)

6	BPC	Board Political Connections	Independent	A dummy variable which equals “1” if the board has member (s) who are politically connected, otherwise “0”	None of the papers reviewed used it.
7	BFE	Board financial expertise	Independent	Proportion (%) of board members with financial expertise	Asiriwa et al.(2021),
8	BSSN	Board Same Surname	Independent	Number of Board members with the same Surname	None of the papers reviewed used it
9	MOWN	Managerial ownership	Independent	Proportion (%) of shares own by managers	Kolawole et al. (2022)
10	FOWN	Foreign ownership	Independent	Proportion (%) of shares own by foreigners	Cxelik et al. (2023)
11	IOWN	Institutional ownership	Independent	Proportion (%) of shares own by institutions	El-Sayed E, I. (2022)
12	T5	Top5 Ownership or Ownership concentration	Independent	Proportion (%) of shares controlled by shareholders having 5% or more	None of the papers reviewed used it
13	T10	Top10 Ownership or Ownership concentration	Independent	Proportion (%) of shares controlled by the biggest 10 shareholders	None of the papers reviewed used it
14	T20	Top20 Ownership or Ownership concentration	Independent	Proportion (%) of shares controlled by the biggest 20 shareholders	None of the papers reviewed used it
15	FF	Founder & family ownership	Independent	Proportion (%) of shares own by founders/or family members on the board.	None of the papers reviewed used it
16	ILD	Inter-locking directorship	Independent	Directors in two or more firms at the same time	
17	BCOMPEN	Board compensation	Independent	Total salaries and bonuses paid to managers	None of the papers reviewed used it
18	BND	Board national diversity	Independent	A dummy variable which takes the value 1, 2, 3, etc for each director from each country represented.	None of the papers reviewed used it
19	BTB	Board tribal diversity	Independent	A dummy variable which takes the value 1, 2, 3, etc for each Nigerian director based on tribe,	None of the papers reviewed used it

				and zero for non-Nigerian directors.	
20	NBC	Number of board committees	Independent	Number of committees put in place by the board	None of the papers reviewed used it
21	NFODIR	Number of foreign directors	Independent	Total number of directors on the board that are non-Nigerian	Cxelik et al. (2023)
22	CEOX	Chief Executive Officer (CEO) Experience	Independent	Total number of firms CEO has worked	Appah and Emeh (2013)
23	CEORE	Chief Executive Officer (CEO) Reputations	Independent	A dummy variable which takes the value '1' if CEO has won an award, otherwise '0'	None of the papers reviewed used it
24	CEOME	Chief Executive Officer (CEO) with military experience	Independent	A dummy variable which takes the value '1' if CEO was an officer in the Army, Navy or Airforce, otherwise '0'	None of the papers reviewed used it
25	CEOAG	Chief Executive Officer (CEO) Age	Independent	Total number of years of CEO	Khuong and Vy (2017)
26	CEOTEN	Chief Executive Officer (CEO) Tenure	Independent	Total number of years CEO has been in that position	Borgi et al.(2021)
27	FAGE	Firm age	Control	Number of years since incorporated	-
28	FSIZE	Firm size	Control	Log of total assets	-
29	LEV	Leverage	Control	Total liabilities/Total Assets	-
30	INVENT	Inventory	Control	Inventory/Total asset	-
31	RISK	Volatility of return on assets	Control	Standard deviation of return on asset	-
32	LOSS	Net loss reported each year	Control	Dummy variable which equals "1" in year a firm makes a net loss, "0" otherwise	-
33	R&D	Research & Development	Control	Research & Development Expenditure/Sales-	-
34	BIG4	Deloitte & Touche; Ernst & Young; PriceWater Cooper and KPMG	Control	Dummy variable which equals "1" in year a firm is audited by one of the four biggest audit firms; "0" otherwise.	-
35	ADV	Advertisement	Control	Advertisement expenses/Total sales	-
36	IDUM	Industry Sector Fixed Effect Dummy	Control	A dummy variable which takes the value '1' for each industry	-

37	YDUM	Year Fixed Effect Dummy	Control	A dummy variable which takes the value '1' for each year	-
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Source: Author's Compilation from the Reviewed Literatures.

3.3 Model Specification

The functional equation of timeliness of financial reporting to test the hypotheses specified is stated as in equation 1.

Model One (without control variables):

$$\text{TFRD} = f(\text{BODS BODI BODIV BMET BPC BSSN BFE MOWN FOWN IOWN T5 T10 T20 FF ILD BCOMPEN BND BTD NBC NFODIR CEOX CEORE CEOME CEOAG CEOTEN})$$

(Eq1)

The functional testable model will be derived as:

$$\text{TFRD} = \beta_0 + \beta_1\text{BODS} + \beta_2\text{BODI} + \beta_3\text{BODIV} + \beta_4\text{BMET} + \beta_5\text{BPC} + \beta_6\text{BSSN} + \beta_7\text{BFE} + \beta_8\text{MOWN} + \beta_9\text{IOWN} + \beta_{10}\text{FOWN} + \beta_{11}\text{T5} + \beta_{12}\text{T10} + \beta_{13}\text{T20} + \beta_{14}\text{FF} + \beta_{15}\text{ILD} + \beta_{16}\text{BCOMPEN} + \beta_{17}\text{BND} + \beta_{18}\text{BTD} + \beta_{19}\text{NBC} + \beta_{20}\text{NFODIR} + \beta_{21}\text{CEOX} + \beta_{22}\text{CEORE} + \beta_{23}\text{CEOME} + \beta_{24}\text{CEOAG} + \beta_{25}\text{CEOTEN} + \varepsilon$$

(Eq2)

Since we are using panel data, the model will be specified in the appropriate form as:

$$\text{TFRD}_{it} = \beta_0 + \beta_1\text{BODS}_{it} + \beta_2\text{BODI}_{it} + \beta_3\text{BODIV}_{it} + \beta_4\text{BMET}_{it} + \beta_5\text{BPC}_{it} + \beta_6\text{BSSN}_{it} + \beta_7\text{BFE}_{it} + \beta_8\text{MOWN}_{it} + \beta_9\text{IOWN}_{it} + \beta_{10}\text{FOWN}_{it} + \beta_{11}\text{T5}_{it} + \beta_{12}\text{T10}_{it} + \beta_{13}\text{T20}_{it} + \beta_{14}\text{FF}_{it} + \beta_{15}\text{ILD}_{it} + \beta_{16}\text{BCOMPEN}_{it} + \beta_{17}\text{BND}_{it} + \beta_{18}\text{BTD}_{it} + \beta_{19}\text{NBC}_{it} + \beta_{20}\text{NFODIR}_{it} + \beta_{21}\text{CEOX}_{it} + \beta_{22}\text{CEORE}_{it} + \beta_{23}\text{CEOME}_{it} + \beta_{24}\text{CEOAG}_{it} + \beta_{25}\text{CEOTEN}_{it} + \varepsilon_{it}$$

(Eq3)

Model Two (with control variables):

By including some control variables into model one we have model two below.

$$\text{TFRD}_{it} = \beta_0 + \beta_1\text{BODS}_{it} + \beta_2\text{BODI}_{it} + \beta_3\text{BODIV}_{it} + \beta_4\text{BMET}_{it} + \beta_5\text{BPC}_{it} + \beta_6\text{BSSN}_{it} + \beta_7\text{BFE}_{it} + \beta_8\text{MOWN}_{it} + \beta_9\text{IOWN}_{it} + \beta_{10}\text{FOWN}_{it} + \beta_{11}\text{T5}_{it} + \beta_{12}\text{T10}_{it} + \beta_{13}\text{T20}_{it} + \beta_{14}\text{FF}_{it} + \beta_{15}\text{ILD}_{it} + \beta_{16}\text{BCOMPEN}_{it} + \beta_{17}\text{BND}_{it} + \beta_{18}\text{BTD}_{it} + \beta_{19}\text{NBC}_{it} + \beta_{20}\text{NFODIR}_{it} + \beta_{21}\text{CEOX}_{it} + \beta_{22}\text{CEORE}_{it} + \beta_{23}\text{CEOME}_{it} + \beta_{24}\text{CEOAG}_{it} + \beta_{25}\text{CEOTEN}_{it} + \beta_{26}\text{FAGE}_{it} + \beta_{27}\text{FSIZE}_{it} + \beta_{28}\text{LEV}_{it} + \beta_{29}\text{INVENT}_{it} + \beta_{30}\text{RISK}_{it} + \beta_{31}\text{LOSS}_{it} + \beta_{32}\text{R\&D}_{it} + \beta_{33}\text{BIG4}_{it} + \beta_{34}\text{ADV}_{it} + \beta_{35}\text{YDUM}_{it} + \beta_{36}\text{IDUM}_{it} + \varepsilon_{it}$$

(Eq4)

This study uses model one for the baseline analysis while model two is used for additional analysis for robustness checks.

3.4 Description of the Estimation Technique Used.

3.4.1 Poisson Regression Method of Data Analysis.

The Poisson distribution is a probability model that may be used to predict the frequency of an occurrence over a given time period. It is mostly employed when working with counts that are non-negative integers and when they indicate how many times an event has occurred over a predetermined period of time or space such as the number of phone calls, goals in a soccer match, car accidents on a certain road, etc., that take place over a given amount of time. The model predicts the link between the independent variables and the distribution mean, which characterizes the expected count. Poisson regression is designed to handle the problems of multicollinearity, heteroscedasticity and autocorrelation and thus superior to some other models. It allows for robustness of regression coefficients so as to obtain an unbiased estimates. It is consistent as a Pseudo-Maximum Likelihood estimator no matter how the data are distributed.

3.4.2. The Poisson regression model.

The Poisson regression model is based on the assumption that the observed outcome variable has a Poisson distribution and is defined by its variance, or mean expected value or parameter (λ) which we will refer to as μ . The Poisson Regression aims to "fit" it to a linear model of input or explanatory variables. Since μ can only take on positive values, the simple linear model cannot be applied. This issue can be resolved with a log transformation of μ which the Poisson model can effectively do. Thus, the Poisson Regression model is:

$$\log_e(\mu_i) = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_k X_{ik}, \quad (1)$$

If we take the exponential of both side of equation 1, we have:

$$\mu_i = \exp(\beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_k X_{ik}). \quad (2)$$

That is, in Poisson regression, we suppose that the Poisson incidence rate μ is determined by a set of k regressor variables (the X 's). The expression relating these quantities is

$$\mu = \exp(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)$$

The regression coefficients $\beta_0, \beta_1, \beta_2, \dots, \beta_k$ are unknown parameters that are estimated from a set of data. Their estimates are labeled $b_0, b_1, \dots, b_k$.

That is, for a given set of values of the regressor variables, the outcome follows the Poisson distribution.

3.4.2. How to Interpret Poisson Regression Results.

One metric used in Poisson regression to measure the impact of an independent variable on a dependent variable is the incidence rate ratio (IRR). That is, the IRR is one statistic used in Poisson regression to assess how an independent variable affects a dependent variable. The IRR is calculated by dividing the expected

number of events by the expected number of events for a unit increase in the explanatory variable. It is computed by exponentiating the Poisson regression coefficient.

Therefore, the Poisson regression coefficient β which is associated with the predictor or an independent variable X is the expected change, on the log scale, in the outcome or dependent Y per unit change in X . So then, holding all other variables constant, an increase in X by 1 unit multiplies the rate of Y by e^β .

The above is interpreted either as:

- “A 1-unit increase in X causes Y to increase by a factor of e^β ”.

OR

- “A 1-unit increase in X multiplies the rate of Y by e^β ”.

3.4.3. The Following Assumptions Should be Considered when using Poisson regression.

- 1) Poisson Dependent Variable: A count of something (such as the number of occurrences occurring) during a given period or space should be the outcome you are attempting to forecast. This count should show a pattern consistent with the Poisson distribution.
- 2) Independence: Each of the observations in your dataset should not be affected by any of the other observations. Put differently, what happens with one observation should not depend on what happens with another.
- 3) Mean = Variance: Poisson regression should yield a mean result that roughly corresponds to the variance. The model might need to be modified if this isn't the case because it doesn't adequately fit the data. In Poisson regression, adding variables to the model might occasionally resolve this issue otherwise you might need to use a different analysis.
- 4) Linearity: The model assumes that the independent variables (x values) and the log of the anticipated count are connected by a straight line. Without this linearity, the model's predictions could be incorrect.

4.0. Method of Data Analysis

Data collected are analyzed using EViews 13 in the following order: univariate data analyses or descriptive statistics; bivariate data analysis or correlation analysis; unit root test; estimation of the models; performance of some additional analysis and diagnostics tests.

4.1 Univariate Data Analyses (Descriptive Statistics)

The statistics in Table 2 below show the mean values of the variables as well as the minimum, maximum, standard deviations and Jarque-Bera Statistics Probability values. All the variables of interest have maximum values which are greater than their respective minimum values. Also, the mean values of BODS, BODI, BMET, BPC, BFE, BTM, NBC, CEOX, CEOAG and CEOTEN are greater than their respective standard deviation values (Mean > SD). This shows that these variables do not have outliers in their data set and so do not have a high gap between the highest and lowest values for the last 16 years meaning

that the average are quite high (Lestari & Setiany, 2023). However, the mean values of BODIV, BSSN, MOWN, FOWN, IOWN, T5, T10, T20, FF, ILD, BCOMPEN, BND, NFODIR, CEORE and CEOME are smaller than their respective standard deviation values((Mean<STD). This show that these variables do have outliers in their data set and so they have a high gap between the highest and lowest values for the last 16 years meaning that the average are quite low (Lestari & Setiany, 2023).

Table 2

Variables	Number of Observations	Mean	Std Deviations	Minimum	Maximum	Probability of Jarque-Bera(
BODS	1200	8.671393	2.418372	0.000000	17.000000	0.000000
BODI	1200	0.726088	0.144986	0.166667	1.250000	0.000000
BODIV	1200	0.104870	0.111204	0.000000	0.666667	0.000000
BMET	1200	4.577346	1.200914	0.000000	10.000000	0.000000
BPC	1200	0.555000	0.497173	0.000000	1.000000	0.000000
BSSN	1200	0.675000	1.124913	0.000000	4.000000	0.000000
BFE	1200	0.708333	0.454719	0.000000	1.000000	0.000000
BCOMP	1200	2023990.	6188078.	0.000000	56750000	0.000000
BND	1200	2.013333	2.739722	1.000000	66.000000	0.000000
BTD	1200	1.456667	1.316396	0.000000	9.000000	0.000000
CEOAG	1200	60.27333	9.126684	2.000000	88.000000	0.000000
CEOME	1200	0.273333	0.573495	0.000000	4.000000	0.000000
CEORE	1200	0.260033	0.451987	0.000000	2.000000	0.000000
CEOTEN	1200	2.752500	1.207943	2.000000	25.000000	0.000000
CEOX	1200	3.817500	0.703282	2.000000	9.000000	0.000000
FF	1200	0.037350	0.180832	0.000000	4.450111	0.000000
FOWN	1200	0.128465	0.318575	0.000000	4.581514	0.000000
MOWN	1200	1.077521	16.04962	0.000000	502.0379	0.000000
IOWN	1200	3.915331	43.93278	0.000000	919.5994	0.000000
ILD	1200	0.725833	0.812126	0.000000	4.000000	0.000000
NBC	1200	3.523372	0.884681	2.000000	8.000000	0.000000
NFODIR	1200	0.169112	0.209458	0.000000	0.833333	0.000000
T5	1200	27.24167	218.0299	0.000000	5285.0000	0.000000
T10	1200	2.775000	29.78787	0.000000	761.0000	0.000000
T20	1200	5.460833	74.64655	0.000000	2301.0000	0.000000

Sources: Authors' Computations using EViews 13 Software

4.2 Bivariate Data Analysis (Variance Inflation Factor)

Variance Inflation Factors (VIFs) is a statistical technique used for the detection of multicollinearity or collinearity among independent variables. A high VIFs reflect the fact there is collinearity among the independent variables meaning the standard errors and the variances of the regression coefficient estimates will increase leading to a very low *t*-statistics (Murray et al, 2012). Table 3 shows the results of the variance inflation factor (VIF) and the corresponding tolerance column. A VIF of any variable less than 10 with its

tolerance level greater than 0.2 is free of multicollinearity for VIF that ranges between 5 to 10 is adjudged to have highly correlated variables (Shrestha, 2020). All the variables have a VIF less than 10 with a tolerance greater than 0.2 with the exceptions of T10 and T20 which are above the thresholds. These variables constitute only about 8% (2/25) of the total variables and thus may not be a cause for multicollinearity. Since there is no one single solution to eliminating multicollinearity in a model; what to consider is to either: do nothing; drop a redundant variable; transform the multicollinear variables or increase the sample size. Belsley et al. (1980) as cited in Murray et al.(2012) was of the opinion that researchers should take caution in treating VIFs threshold of 5 or 10 or 30 when taking decisions to eliminate or reduce collinearity since other factors like sample size which influence regression coefficients variability should also be considered.

Table 3

S/N	Variables	Variance Inflation Factor (VIF)	Tolerance	S/N	Variables	Variance Inflation Factor (VIF)	Tolerance
1	BODS	1.249532	0.8	14	CEOTEN	1.198212	0.83333333
2	BODI	1.188885	0.980392	15	CEOX	1.155172	0.83333333
3	BODIV	1.276498	0.970874	16	FF	1.101096	0.90909091
4	BMET	1.280175	0.775194	17	FOWN	1.251106	0.76923077
5	BPC	1.026082	0.980392	18	MOWN	2.765143	0.35714286
6	BSSN	1.075066	0.934579	19	IOWN	1.321508	0.76923077
7	BFE	1.138064	0.833333	20	ILD	1.449380	0.69444444
8	BCOMP	1.121232	0.892857	21	NBC	1.186818	0.83333333
9	BND	1.136891	0.847458	22	NFODIR	1.407369	0.71428571
10	BTD	1.132463	0.884956	23	T5	3.620151	0.00326797
11	CEOAG	1.054521	0.952381	24	T10	30.47335	0.03289474
12	CEOME	1.198295	0.833333	25	T20	21.97346	0.0456621
13	CEORE	1.355644	0.714286				

Source: Researcher's Computations (2024) Using EViews13 Software.

4.5 Discussion of the Regression Estimation Results and Hypotheses Testing.

Table 4a Dependent Variable: TFRD

Method: ML/QML - Poisson Count (Newton-Raphson / Marquardt steps)

Date: 12/02/24 Time: 14:05

Sample: 2008 2023

Included observations: 1200

Convergence achieved after 4 iterations

Coefficient covariance computed using observed Hessian

Variable	Coefficient	Std. Error	z-Statistic	Prob.
BODS	-0.009102	0.001294	-7.034045	0.0000
BODI	0.065340	0.020878	3.129667	0.0018
BODIV	0.153182	0.027856	5.499161	0.0000
BMET	-0.003899	0.002640	-1.477141	0.1396

BPC	-0.004825	0.005633	-0.856561	0.3917
BSSN	-0.027442	0.002603	-10.54105	0.0000
BFE	-0.123139	0.006350	-19.39132	0.0000
MOWN	-9.84E-05	0.000328	-0.300090	0.7641
IOWN	-0.000294	8.36E-05	-3.523735	0.0004
FOWN	-0.099733	0.010985	-9.079338	0.0000
T5	-0.000289	2.83E-05	-10.22784	0.0000
T10	-0.001718	0.000573	-2.996953	0.0027
T20	0.001102	0.000197	5.604932	0.0000
FF	-0.132588	0.018582	-7.135415	0.0000
ILD	-0.036767	0.004262	-8.626105	0.0000
BCOMPEN	2.29E-09	4.51E-10	5.075063	0.0000
BND	-0.010273	0.001297	-7.922847	0.0000
BTD	0.010869	0.002237	4.858573	0.0000
NBC	0.009923	0.003393	2.924747	0.0034
NFODIR	-0.225644	0.016357	-13.79481	0.0000
CEOX	0.025691	0.004110	6.250275	0.0000
CEORE	0.100389	0.007054	14.23079	0.0000
CEOME	0.001553	0.005124	0.303014	0.7619
CEOAG	0.005881	0.000309	19.04094	0.0000
CEOTEN	0.013815	0.002424	5.699863	0.0000
C	4.388251	0.034146	128.5153	0.0000
R-squared	0.089615	Mean dependent var	112.1724	
Adjusted R-squared	0.069651	S.D. dependent var	51.33868	
S.E. of regression	49.51853	Akaike info criterion	23.29769	
Sum squared resid	2795376.	Schwarz criterion	23.41055	
Log likelihood	-13556.56	Hannan-Quinn criter.	23.34027	
Restr. log likelihood	-14774.02	LR statistic	2434.925	
Avg. log likelihood	-11.62655	Prob(LR statistic)	0.000000	

Source: Researcher's Computations (2024) Using EViews13 Software.

4.5 Discussion of the Regression Estimation Results and Hypotheses Testing.

Table 5 above shows the regression estimation results of the relationship between independent variables (BODS BODI BODIV BMET BPC BSSN BFE MOWN FOWN IOWN T5 T10 T20 FF ILD BCOMPEN BND BTD NBC NFODIR CEOX CEORE CEOME CEOAG CEOTEN) and timeliness of financial reporting (TFRD) of the 75 sampled firms. The Adj R² of 0.069651 indicates that about 7% of systematic variations in financial statement timeliness are accounted for by all the independent variables while the remaining 93% are explained by other factors not captured by the model. The LR statistic (2434.925) and a Prob(LR statistic) of 0.000000 confirm that there is a joint statistical significant of a linear relationship between the variables (dependent and independent). The overall results showed that BODS, BSSN, BFE, IOWN, FOWN, T5, T10, FF, ILD, BND and NFODIR are negatively significant; BODI, BODIV, T20, BCOMPEN, BTD, NBC, CEOX, CEORE, CEOAG and CEOTEN are positively significant while BMET, BPC, MOWN and CEOME are insignificant.

Specifically, the coefficient of BODS $\beta_1 = -0.009102$ which is negatively significant with a t-Statistic of -7.034045 and a p-value of 0.0000. Therefore, $e^\beta = e^{-0.009102} = 0.990939298$ Incidence Rate Ratio (IRR). Thus,

an increase in BODS is associated with a reduction of 0.91% ($0.990939298 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the BODS and TFRD and accept the alternative that BODS has a significant relationship with TFRD. This result is in line with that of Alexeyeva (2024) but contradicts that of Agbaje and Oladutire (n. d.) which was positive.

The coefficient of BSSN $\beta_6 = -0.027442$ which is negatively significant with a t-Statistic of -10.54105 and a p-value of 0.0000. Therefore, $e^\beta = e^{-0.027442} = 0.972931111$ Incidence Rate Ratio (IRR). Thus, an increase in BSSN is associated with a reduction of 2.71% ($0.972931111 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the BSSN and TFRD and accept the alternative that BSSN has a significant relationship with TFRD.

The coefficient of BFE $\beta_7 = -0.123139$ which is negatively significant with a t-Statistic of -19.39132 and a p-value of 0.0000. Therefore, $e^\beta = e^{-0.123139} = 0.884140758$ Incidence Rate Ratio (IRR). Thus, an increase in BFE is associated with a reduction of 11.6% ($0.884140758 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the BFE and TFRD and accept the alternative that BFE has a significant relationship with TFRD.

This result is not in line with any previous study but contradicts that of Asiriwa et al. (2021) which was positive.

The coefficient of IOWN $\beta_9 = -0.000294$ which is negatively significant with a t-Statistic of -3.523735 and a p-value of 0.0004. Therefore, $e^\beta = e^{-0.000294} = 0.999706043$ Incidence Rate Ratio (IRR). Thus, an increase in IOWN is associated with a reduction of 0.0293957% ($0.999706043 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the IOWN and TFRD and accept the alternative that IOWN has a significant relationship with TFRD. This result is in line with that of Cxelik et al. (2023) but contradicts that of El-Sayed (2022) which was insignificant.

The coefficient of FOWN $\beta_{10} = -0.099733$ which is negatively significant with a t-Statistic of -9.079338 and a p-value of 0.0000. Therefore, $e^\beta = e^{-0.099733} = 0.905079042$ Incidence Rate Ratio (IRR). Thus, an increase in FOWN is associated with a reduction of 9.49% ($0.905079042 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction as well as the size or magnitude are aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the FOWN and TFRD and accept the alternative that FOWN has a significant relationship with TFRD. This result is not in line with any previous study but contradicts that of Cxelik et al. (2023) which was insignificant.

T5, T10, FF, ILD, BND and NFODIR which are also negatively significant can be interpreted as above.

The coefficient of BODI $\beta_2 = 0.065340$ which is positively significant with a t-Statistic of 3.129667 and a p-value of 0.0018. Therefore, $e^\beta = e^{0.065340} = 1.06752192$ Incidence Rate Ratio (IRR). Thus, an increase in BODI is associated with an increase of 0.06752192% ($1.06752192 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction is contrary to our expectations but the size or magnitude is aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the BODI and TFRD and accept the alternative that BODI has a significant relationship with TFRD. This result is in line with that of Alexeyeva (2024) but contradicts that of Yua et al.(2024) which was insignificant.

The coefficient of BODIV $\beta_3 = 0.153182$ which is positively significant with a t-Statistic of 5.499161 and a p-value of 0.0000. Therefore, $e^\beta = e^{0.153182} = 1.165537087$ Incidence Rate Ratio (IRR). Thus, an increase in BODIV is associated with an increase of 0.165537087% ($1.165537087 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction is contrary to our expectations but the size or magnitude is aligned with our expectations. We, therefore, reject the null hypothesis of no significant relationship between the BODI and TFRD and accept the alternative that BODI has a significant relationship with TFRD.

This result is in line with that of Alexeyeva (2024) but contradicts that of Cxelik et al. (2023) which was insignificant.

The coefficient of T20 $\beta_{13} = 0.001102$ which is positively significant with a t-Statistic of 5.604932 and a p-value of 0.0000. Therefore, $e^\beta = e^{0.001102} = 1.001102607$ Incidence Rate Ratio (IRR). Thus, an increase in T20 is associated with an increase of 0.11% ($1.001102607 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction is contrary to our expectations but the size or magnitude is aligned with our expectations. We, however, reject the null hypothesis of no significant relationship between the T20 and TFRD and accept the alternative that T20 has a significant relationship with TFRD.

The coefficient of BCOMPEN $\beta_{16} = 2.29E-09$ which is positively significant with a t-Statistic of 5.075063 and a p-value of 0.0000. Therefore, $e^\beta = e^{2.29 \times 10^{-9}} = 1.00000000229$ Incidence Rate Ratio (IRR). Thus, an increase in BCOMPEN is associated with an increase of 0% ($1.00000000229 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction is contrary to our expectations but the size or magnitude is aligned with our expectations. We, however, reject the null hypothesis of no significant relationship between the BCOMPEN and TFRD and accept the alternative that BCOMPEN has a significant relationship with TFRD.

The coefficient of CEOTEN $\beta_{25} = 0.013815$ which is positively significant with a t-Statistic of 5.699863 and a p-value of 0.0000. Therefore, $e^\beta = e^{0.013815} = 1.013910868$ Incidence Rate Ratio (IRR). Thus, an increase in BCOMPEN is associated with an increase of 1.4% ($1.013910868 - 1$) in the timeliness rate or the rate at which management is expected to turn in their audited financial statements. The sign or direction is contrary to our expectations but the size or magnitude is aligned with our expectations. We, however, reject the null hypothesis of no significant relationship between the BCOMPEN and TFRD and accept the alternative that BCOMPEN has a significant relationship with TFRD.

This result is in line with that of Borgi et al.(2021) but contradicts that of Obazee and Otivbo (2019) which was negative.

BTD, NBC, CEOX, CEORE and CEOAG which are also positively significant can be interpreted as above. Finally, none of these variables: BMET, BPC, MOWN and CEOME are significant.

4.8 Additional Tests of Robustness Using Model Two.

Table 5. The Regression Results of the Model Two

Dependent Variable: FRTD

Method: ML/QML - Poisson Count (Newton-Raphson / Marquardt steps)

Date: 12/14/24 Time: 19:02

Sample: 2008 2023

Included observations: 1200

Convergence achieved after 3 iterations

Coefficient covariance computed using observed Hessian

Variable	Coefficient	Std. Error	z-Statistic	Prob.
BODS	-0.010499	0.001461	-7.185697	0.0000
BODI	-0.033930	0.022694	-1.495157	0.1349
BODIV	0.243394	0.030780	7.907417	0.0000
BMET	-0.004645	0.002923	-1.589007	0.1121
BPC	-0.001123	0.005888	-0.190742	0.8487
BSSN	-0.040529	0.002907	-13.94153	0.0000
BFE	-0.138652	0.007068	-19.61553	0.0000
MOWN	-6.46E-05	0.000326	-0.197841	0.8432
IOWN	-0.000321	8.57E-05	-3.744649	0.0002
FOWN	-0.143951	0.011798	-12.20185	0.0000
T5	-0.000274	2.90E-05	-9.453117	0.0000
T10	-0.002162	0.000580	-3.725108	0.0002
T20	0.001256	0.000199	6.327695	0.0000
FF	-0.072163	0.018349	-3.932800	0.0001
ILD	-0.048008	0.004726	-10.15850	0.0000
BCOMPEN	-1.10E-09	4.86E-10	-2.255322	0.0241
BND	-0.006436	0.001332	-4.830527	0.0000
BTD	0.012915	0.002369	5.452418	0.0000
NBC	0.013706	0.003560	3.850286	0.0001
NFODIR	-0.264997	0.017984	-14.73475	0.0000
CEOX	0.035858	0.004428	8.097942	0.0000
CEORE	0.082556	0.007736	10.67109	0.0000
CEOME	-0.063424	0.007261	-8.734775	0.0000
CEOAG	0.004496	0.000327	13.75316	0.0000
CEOTEN	0.020383	0.002437	8.363217	0.0000
ADV	0.007822	0.001071	7.301035	0.0000
BIG4	-0.055382	0.007357	-7.528104	0.0000
FAGE	0.001997	0.000205	9.725102	0.0000
INVENT	-0.002390	0.000582	-4.104197	0.0000
FSIZE	0.036914	0.003504	10.53544	0.0000
LEV	0.000289	4.21E-05	6.860906	0.0000
LOSS	0.043682	0.007600	5.747743	0.0000
RISK	0.191340	0.013160	14.53903	0.0000
R_D	-1.123763	0.154745	-7.262014	0.0000
IDUM	0.007439	0.001309	5.681368	0.0000
YDUM	-0.006480	0.000722	-8.972834	0.0000
C	4.192685	0.043462	96.46766	0.0000

R-squared	0.159752	Mean dependent var	111.1496
Adjusted R-squared	0.131188	S.D. dependent var	50.50083
S.E. of regression	47.07187	Akaike info criterion	21.66129
Sum squared resid	2346491.	Schwarz criterion	21.83006
Log likelihood	-11833.39	Hannan-Quinn criter.	21.72515
Restr. log likelihood	-13625.31	LR statistic	3583.856
Avg. log likelihood	-10.79688	Prob(LR statistic)	0.000000

Source: Researcher's Computations (2024) Using EViews13 Software

Where the results of Model Two was taken into considerations, the regression results indicate that Model Two has the same 21 corporate governance variables statistically significant just like Model One as shown in Table 8 above. This attest to the robustness of the fact that corporate governance attributes considered in this study has helped managers to ensure that financial statements are reported on a timely basis.

5.0 Conclusion and Recommendations

This study investigates the relationship between corporate governance and timeliness of financial reporting of quoted non-financial firms in Nigeria. The study uses secondarily sourced panel data over the period from 2008 to 2023 of 75 firms quoted on the floor of the Nigerian Exchange Group (NXG). The results of the Poisson regression method indicated that board size, board same surname, board financial expertise, institutional ownership, foreign ownership, top5 ownership or ownership concentration, top10 ownership or ownership concentration, founder & family ownership, inter-locking directorship, board national diversity and number of foreign directors are all negatively significant with timely statement. Board independence, board gender diversity, top20 ownership or ownership concentration, board compensation, board tribal diversity, number of board committees, chief executive officer (CEO) experience, CEO reputations, CEO age, CEO tenure are all positively significant with timely statement. Board meetings, board political connections, managerial ownership and CEO with military experience are insignificant.

Based on the results above, the study recommends the followings:

(i) Board independence, board gender diversity, top20 ownership or ownership concentration, board compensation, board tribal diversity, number of board committees, CEO experience, CEO reputations, CEO age, CEO tenure could not help in reducing the time taken to present the firms' reports since they all have a positive relationship with timeliness. Therefore, management should investigate the reasons these variables could not effectively reduce the timing.

(ii) Board size, board same surname, board financial expertise, institutional ownership, foreign ownership, top5 ownership or ownership concentration, top10 ownership or ownership concentration, founder & family ownership, inter-locking directorship, board national diversity and number of foreign directors help in reducing the time taken to present the firms' reports since they all have a negative relationship with timeliness. Therefore, management should maintain the current state of these variables or consider increasing them so as to guarantee their effectiveness in minimizing tax costs to the organization.

References

- Abdullah, S. N. (2007). Board composition, audit committee and timeliness of corporate financial reports in Malaysia, *Corporate Ownership & Control*, 4(2), 33-45
- Abdullahi, M. A., Ntiedo, J., Hassan, I. & Mahmuda, M.(2020). Governance mechanism and financial reporting timeliness of listed firms on the Nigeria stock exchange. *Journal of Entrepreneurship and Business*8(1), 15-27.
- Agbaje, W. H. & Oladutire, O. E. (n. d.). Corporate governance and timeliness of financial reporting. (n. p.), 1-16
- Aldaoud, K. A. M. (2015). (Doctoral thesis, Universiti Utara Malaysi, Malaysia. Open Access).
- Alexeyeva, I. (2024). Does board composition impact the timeliness of financial reporting? Evidence from Swedish privately held companies. *Journal of International Accounting, Auditing and Taxation* 54, 1-14
- Appah, E. & Emeh, Y. (2013). Corporate governance structure and timeliness of financial reports of quoted firms in Nigeria. *European Journal of Business and Management*, 5(32), 34-45
- Ashibuogwu, O.R. (2022). Board characteristics and timeliness of financial reporting. *Accounting and Taxation Review*, 6(1): 89-106
- Asiriwu, O. Adeyemi, S. B., Uwuigbe, O. R. Uwuigbe, U., Ozordi, E., Erin, O. & Omoike, O. (2021). Do board characteristics affect financial reporting timeliness? An empirical analysis. *International Journal of Financial Research*, 12(4), 191-202.
- Borgi, H., Ghardallou, W. & AlZeera, M. (2021). The effect of CEO characteristics on financial reporting timeliness in Saudi Arabia. *Accounting* 7, 1265–1274
- Charles, I. I., & Uford, I. C. (2023). Comparative analysis and evaluation of business and financial performance of Amazon. Com: A three-year period critical review of exceptional success. *European Journal of Business, Economics and Accountancy*, 11(2), 69-92.
- Cxelik, B., Ozer, G. K. & Merter, A. K. (2023). The effect of ownership structure on financial reporting timeliness: An implementation on Borsa Istanbul. *SAGE Open*,1–18
- Egbadju, L. U. & Odey, O. O. (2023). International financial reporting standards (IFRS) adoption and quality of accounting information of selected listed manufacturing firms in Nigeria. *Gusau International Journal of Management and Social Sciences, Federal University, Gusau*, 6(1), 25-41.
- Egbadju, L. U. (2023a). Accounting conservatism and financial performance of quoted non-financial firms in Nigeria. *World Journal of Finance and Investment Research*, 7(4), 75-100.
- Egbadju, L. U. (2023b). Audit committee characteristics and financial restatement of quoted non-financial firms in Nigeria. *IIARD International Journal of Banking and Finance Research*, 9(3), 80-95.
- Egbadju, L. U., Chukwu, G. J. & Elaigwu, B. E. (2023). Accounting conservatism and earnings quality of selected listed manufacturing firms in Nigeria. *Dutse International Journal of Social and Economic Research (DIJSER)*, 9(1), 194-207
- El-Sayed E, I. (2022). Nexus between corporate characteristics and financial reporting timelines: Evidence from the Saudi Stock Exchange. *Journal of Money and Business*, 2(1), 43-56
- IASB(2010) Conceptual framework for financial reporting. Available from: <http://www.ifrs.org/News/Press-Releases/Documents/ConceptualFW2010vb.pdf>
- Jayanimita, N. P. A., Ratnadi, N. M. D., Widanaputra, A. A. G. P. & Ariyanto, D.(2020). The effect of good corporate governance on timeliness of annual financial report publication. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(1), 257-263
- Jensen, M. & Meckling, W. (1976): Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3, 305–360.
- Khuong, N. V. & Vy, N. T. X. (2017). CEO characteristics and timeliness of financial reporting of Vietnamese listed companies. *VNU Journal of Science: Economics and Business*, 33(5E), 100-107
- Kolawole, F., Okechukwu, O. & Agi, J. (2022) Effect of board attributes and ownership structure on financial reporting timeliness of listed consumer goods in Nigeria. *International Journal of Scientific and Management Research*, 5(5), 117-137

- Lestari, F. D. & Setiany, E. (2023). The impact of governance, audit quality, and financial performance on increasing corporate value. *International Journal for Multidisciplinary Research (IJFMR)*, 5(2), 1-17.
- Murray, L., Nguyen, H., Lee, H., Yu-Feng, R., Marta, D. & Smith, D. W. (2012). Variance inflation factors in regression models with dummy variables," Conference on Applied Statistics in Agriculture, 160-177.
- Obazee, U. & Otivbo, A. F. (2019). CEO attributes and timeliness of financial reporting. *Accounting and taxation review* 3(3), 12 - 23.
- OECD (2023). G20/OECD principles of corporate governance 2023, OECD Publishing, Paris, <https://doi.org/10.1787/ed750b30-en>
- OECD (2024). OECD Guidelines on Corporate Governance of State-Owned Enterprises 2024, OECD Publishing, Paris. Retrieved from: https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/06/oecd-guidelines-on-corporate-governance-of-state-owned-enterprises-2024_68fa05cd/18a24f43-en.pdf
- Ogiriki, T. & Adire, D. F. (2024). Corporate governance and timeliness of annual reports of companies in Nigeria. *World Journal of Finance and Investment Research*, 8(4), 89-104
- Ologun, O.V., Isenmila, P.A., Okuns, O.O., & Alade, M.E. (2020). IFRS adoption, corporate governance and timeliness of financial reports among Nigerian listed firms. *Accounting and Taxation Review*, 4(2): 33-56
- Popoola, F. (2019, The Punch). Financial statements: NSE slams N429.5m fines on 38 firms. Retrieved from: https://punchng.com/financial-statements-nse-slams-n429-5m-fines-on-38-firms/#google_vignette
- Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics and Statistics*, 8(2), 39-42.
- The Leadership (2024). NGX fines 20 firms n255.53m for financial statements filing default. Retrieved from: <https://leadership.ng/ngx-fines-20-firms-n255-53m-for-financial-statements-filing-default/>
- Toksöz, T. & Özdemir, F. S. (2021). Factors affecting the timeliness of financial reports: The case of Borsa İstanbul. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 24 (1), 187-196
- Uford, I. C. (2017). *Customer and Employee-based Brand Equity Driving United Bank for Africa's Market Performance* (Doctoral dissertation, University of the Witwatersrand, Faculty of Commerce, Law and Management, School of Economic & Business Sciences).
- Yua, H., Akume, J. T., Ityavyar, D. V. & Ordue, J. A. (2024). Effect of corporate governance mechanism on annual report of listed multinational firms in Nigeria. *International Journal of Economics, Finance & Entrepreneurship (NIRA-IJEFE)*, 9(7), 119-141.