Corporate Governance Attributes and Segment Reporting of Selected Conglomerates in Nigeria

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Abstract
Consolidated financial statement does not only conceal the performance of individual segments of the group but also hides the risk and opportunities that investors are exposed to by investing in those segments or subsidiaries. A balanced and effective board is a major determinant of financial reporting quality in terms of compliance with International Financial Reporting Standard. This study examined the effect of corporate governance attributes on segment reporting of listed conglomerates firms in Nigeria. Ex post facto research design was adopted for the study and five listed conglomerate firms were purposively selected. Secondary data were extracted from these companies' annual reports and the Nigeria Exchange Group fact book. The data for the study was analyzed using OLS regression technique and the findings revealed that board size, board diligence and board gender diversity have significant positive effect on segment reporting measured by the number of reportable segments. Thus, it was concluded that corporate governance attributes have a significant effect on segment reporting. Based on the above, it was recommended that the size of the board of directors should be large and balanced enough to accommodate members with cognate experience, expertise and equity in the representation of female.

Keywords: *Corporate governance, segment reporting, conglomerate, reportable segments*

1.0 Introduction

Companies being organizations consisting of different stakeholders need to be managed, governed, directed and controlled by people who can balance the interest of these various stakeholders. According to Zinkin (2019) corporate governance is the process and structure used to direct and manage the business and affairs of the company towards promoting business prosperity and corporate accountability with the ultimate objective of realizing long-term shareholder value while considering the interest of other stakeholders. Corporate governance provides a framework of control mechanisms that support the company in achieving its goals, while preventing unwanted conflicts and crises. It aims to determine the ways to reach the most effective strategic decisions of ensuring transparency, accountability, security and balanced economic development for the organization. The Board of Directors is usually at the center of governance; therefore, relationships with other vital stakeholders and management are essential. As a monitoring mechanism of organisations, corporate governance ensures quality of financial information and improve the level of transparency in the financial reporting process (Hassan, Aly & Hussainey, 2020). The Nigeria Code of corporate governance (2018) encourages the board as part of its responsibilities to ensure that the company is in compliance with the laws of the Federal Republic of Nigeria and other applicable regulations such as accounting standards. One of the ways of ensuring financial statement quality and compliance with applicable regulation is the compliance with IFRS 8 disclosure requirements.

IFRS 8 '*Operating Segments'* requires general and entity wide disclosures about each operating segments that has been identified as meeting the definition of an operating segment and also meeting the revenue, assets and profit or loss quantitative thresholds. Therefore, segment information is seen as a means to provide decision useful information and that management approach adopted in this standard would serve as a channel that would ensure the sustenance of free flow of segregated information and thus mitigating information asymmetry that may arise as a result of agency conflicts (Casmir, 2019). The valuation of an international or diversified firm requires information not only about overall firm's activity (such as given in the consolidated financial statements), but also about the operating units or segments of the firm. This is because the performance, risk exposure and potential growth of different segments or geographic lines vary appreciably. Information about segment operating activities helps users of financial statements to conduct valuation and investment analysis, because in the report there is no information for users of financial statement, especially investors to understand in detail the performance of each operating segment in the business entity. Segment information has a number of benefits to the reporting entities and the users of financial statement especially the investors.

Financial information offered to analysts and investors has been significantly impacted by the emergence of economic groups as a result of diversification and internationalization plans. Thus, without the disclosure of disaggregated information by the many segments where enterprises established its activity, consolidated financial statements might aggregate distinct sources of risks and opportunities that would not be visible to users. Due to the growing complexity of analysis, particularly for investors, several groups, primarily composed of financial analysts and market regulators, called for increased financial segment disclosures, particularly through the creation of accounting standards, in the second half of the 20th century. For investors to understand the material facts of each division of the business in real terms, segment reporting disclosure becomes very important (Geltmeyer, 2019). Standard-setters from all over the world have acknowledged the value of segment information for both financial investors and others users of financial reports, which has prompted a number of initiatives to develop and revise financial reporting standards regarding segment disclosures. In response to criticisms that companies were aggregating segments for external reporting purposes, one of the most significant actions taken by the standard setters is moving toward requiring firms to provide segment disclosure in accordance with their internal reporting structure (known as the management approach) (Bugeja et al., 2015).

Board with balanced structure, mechanisms and characteristics are expected to ensure that the disclosure requirements of the IFRS and other relevant laws are strictly followed. Such characteristics include board size, board diligence, board gender diversity, board independence, board tenure and CEO attributes. This study concentrates on the first three attributes. A larger board is always a mix of directors with experience, expertise, knowledge, different academic qualification and background and thus able to provide effective monitoring on financial reporting practices of the firm. Thus, it is expected that the size of the board is one of the significant determinants of effectiveness of operational processes including the information disclosure practices of a firm. By these arguments, it is clear that a sufficient number of members on the board plays an important role in shaping business strategies and quality of their works (Chantachaimongkol & Chen, 2018). Board diligence refers to the activeness and effectiveness of the board in terms of frequency of board meetings which is the ultimate platform to carry out board functions. These functions include reviewing the completed tasks and updating a progress of the project, discussing critical issues and brainstorming to find the proper solution, determining a strategic plan and future direction of the company, informing the members about the changes in an organization, maintaining the connectivity between the leaders and other stakeholders (Chantachaimongkol & Chen, 2018). Board gender diversity is a board mix in terms of both female and male board members. Gender diversity in the board room has the propensity to generate positive externalities. The implementation of policies that support gender equality give a positive signal to stakeholders. Women are anticipated to play a significant role towards actualizing the organizational objectives provided they are involved in the management teams.

Over the past two decades, the concept and practice of corporate governance has gradually become the central focus for academics, managers and policymakers. This can be attributed to the increasing concerns over the rising incidences of corporate fraud as well as fraudulent financial disclosure leading to corporate scandals and the collapse of major firms (Gerged et al., 2018). Recent economic changes, as well as the emergence of high profile financial and economic failures, have reminded management boards, heads of corporate organisations and regulators of the need for efficient corporate governance. Going through previous literature, segment reporting has not really captured the interest of researchers especially in Nigeria as most of the works on segment reporting are done outside Nigeria in countries like spain, Vietnamese, US, Malaysia. Those carried out in Nigeria focused on different parameters. In Nigeria, Obarolo and Akhidime (2020) studied firm specific determinants of segment reporting like firm size, firm age, profitability, leverage; Ibrahim and Jaafar (2013) looked at the voluntary aspect of segment reporting; Udoma and Akpan (2022) studied the effect of segment reporting on cost of capital. Unfortunately, the conglomerate sector of the Nigeria economy seemed to be neglected as none of the studies reviewed focused on this sector. Worst still, it was observed that the outcome of those findings were mixed and unanimous, so this study tried to ascertain the effect of corporate governance mechanism on segment reporting of listed conglomerate firms in Nigeria. This study has contributed to knowledge as it has expanded the literature on segment reporting and is also among the few works to examine the effect of corporate governance attributes on segment reporting in Nigeria. This study would be significant to investors of conglomerate firms as the outcome of this study would enable them to know how effective corporate governance mechanism could affect the disclosure of segment information in the annual reports as required by IFRS 8. The rest part of this study is organized as follows; review of related literature, methodology, data presentation and analysis, discussion of findings and lastly summary and conclusion.

2.0 REVIEW OF RELATED LITERATURE

2.1 Theoretical review

Studies in corporate governance have wide support from many theories such as agency theory, stakeholder theory, upper echelon theory, but this study focused on the support of agency theory.

Agency theory by Jensen and Meckling (1976)

Most of the researches on corporate governance originated from agency theory. Large corporations, particularly publicly listed companies, generally have an organisational framework wherein there is a fundamental separation of ownership and control between principals and agents. In the relationship between them, the owners (principals) hire managers (agents) to run the firm in their best interests, compensating the latter for their efforts, generally in pecuniary form (Jensen & Meckling, 1976). However, there may be a conflict of interest whereby the agent places his interest above the principal's best interest. This could happen when the agent wants to maximise his own interest, thus breaching the contract between the agent and the principal. The principal can protect his interest by establishing monitoring system and putting in place corporate governance mechanism to provide over sight function over the activities of the agent. From the corporate governance perspective, the agency theory is supposed to help the company executives or the corporate board leadership structure to better understand the interests of the shareholders, hence, working in a manner that seeks to safeguard their interests (Filatotchev & Wright, 2010). Financial statement disclosure can be one way of safeguarding the interests of the shareholders by the ensuring compliance with the reporting framework of accounting standards and relevant laws. According to this theory, a large board can be good in monitoring the performance of the firm as disclosure is considered as one of the monitoring mechanism. Disclosure may be the right solution to the agency cost problem. Healy and Palepu (2001) suggested that the solution to solve the agency problem is that manager should disclose any relevant information that can assist the investors in monitoring the manager's action to act on behalf of their interest. The investors can also assess the manager's ability in managing the company's resources in their best interest through corporate disclosures. It has been proposed that people from the internal environment (manager) should disclose information to the external environment (shareholders) in order to solve conflicts, as disclosure from the internal environment can reduce information asymmetry. Agency theory is relevant to this study because the disclosure of separate discrete financial information about reportable segment would reduce information asymmetry and outside stakeholders would be aware of the activities of this major segment rather than hiding under consolidated financial reports.

Corporate governance

According to Organization for Economic Co-operation and Development (OECD), corporate governance deals with the rights and responsibilities of a company's management, its board, shareholders and various stakeholders. How well companies are run affects performance, market confidence and disclosure practices. It is the system by which businesses are directed and controlled (Cadbury report, 1992).The corporate governance structure specifies the distribution of right and responsibilities among different participants in the corporation, such as the board, managers, shareholders, and other stakeholders and spells out the rules and procedures for making decisions on corporate affairs. Solomon and Solomon (2004) define corporate governance as the system of checks and balances, both internal and external to companies, which ensure that companies discharge their accountability to all stakeholders and act in a socially responsible way in all areas of their business activities. Good corporate governance seeks to achieve a set of goals and provides the directors with the right incentives to achieve such goals. Effective corporate governance usually facilitates an efficient monitoring process that helps companies to wisely exploit their own resources and prevents any manipulation, distortions or unfaithful representation that could lead to distorted information disclosure (Al Mubarak & Hamdan, 2016). The adoption of the concept of corporate governance for all business organisations in Nigeria is very imperative especially given the incidence of massive financial scandal and the under- performance of some multinational corporations and conglomerates such as Lever Brothers Nigeria Plc, Cadbury Nigeria Plc, Bank PHB Plc, Oceanic Bank Plc, Intercontinental Bank Plc in Nigeria.Ernst and Young (2022) observed that poor corporate governance has been increasingly acknowledged as the primary cause of financial crisis.

Segment reporting

This is the provision of additional information about a companies' operating segment as a note to the financial statement. IFRS 8 Operating Segments requires particular classes of entities (those that are publicly traded or in the process of being publicly traded) to disclose separate discrete information about their operating segments, products, services, the geographical areas in which they operate, and their major customers. This standard requires an entity to identify its operating segments and afterwards report information if they are reportable segments. An operating segment is a component of an entity that engages in revenue generating business activities, whose operating results are regularly reviewed by Chief operating decision maker, and for which discrete financial information is available (IAS plus, 2018). IFRS 8 notes that not all segments of an entity are necessarily an operating segment. Once an operating segment has been identified, the entity needs to report segment information if the segment meets the asset threshold, revenue threshold and profit or loss threshold (ICAN, 2019).

According to Ernst and Young (2022), segment disclosures provide a useful picture of the risk profile and growth opportunities for a firm. Analysts and institutional investors find this information important for decision-making. Amado, Albuquerque and Rodrigues (2018) also noted that segment reporting (external) is a relevant tool for investors and other stakeholders, as the information is presented in a divisional way, enabling more accurate analysis to be made for decision making. Segment disclosures would assist users of financial statements to have better understanding of the entity's past performance, better assessment of the entity's risks and returns; and make more informed judgments about the entity as a whole.

A reportable segment is an operating segment that have met the definition of operating segment and also meet IFRS 8 quantitative threshold for disclosure. An entity must report separate information about each operating segment that has been identified as meeting the definition of an operating segment also meeting the following quantitative thresholds; Revenue threshold: An operating segment should be reported if the segments total revenue, both internal and external, is 10% or more of the entity's total revenue of all operating segments. Assets threshold; An operating segment should be reported if the segments total assets is 10% or more of all operating segments' total assets. Profit or loss threshold: An operating segment should be reported if the segments profit or loss in absolute amount is 10% or more to the higher of the entity's total profit of all operating segments that reported profit and the entity's total loss of all operating segments that reported loss (IFRS 8).

Board size and segment reporting

Board size is the totality of all the directors be it independent and executive. It comprises of the Chairman, the CEO, the executive and non-executive directors and all other directors by whatever name they may be referred to. According to the Companies and Allied Matters Act (CAMA) 2020 as amended, every registered company must have at least two board of directors. This implies that the number of directors on the board is not fixed or limited as long as its above two. According to Ibrahim and Jaafer (2013), smaller boards have members ranging from 8-10 directors while large boards have about between 12-14 board directors. According to agency theory, a greater board size has the potential of involving diverse expertise in the board; hence they would provide a significant role in influencing the information content of their annual reports. Strengthening this view, it is assumed that the large size of the board is one of the significant determinants to decide the effectiveness of operational processes including the information disclosure behavior of a firm (Chantachaimongkol & Chen, 2018). Elzahar and Hussainey (2012) observe that the higher the board size, the greater the effectiveness in running the firm's affairs and that might improve corporate transparency with regard to segment information and risk disclosure.

Several studies have documented that board size significantly influences the degree of corporate disclosure (Obarolo & Akhidime, 2020; Bufarwa et al,2020; Adamu & Ivashkovskaya 2021; AlHares & Al-Hares, 2020). Most of them suggest that size of a board has a positive correlation with a decision of management to disclose or not disclose information, indicating that firms with a large board size are generally more willing to disclose corporate information to the stakeholders than the others. Based on the above, this study hypothesized that;

H_{01}: Board size has no significant effect on segment reporting of conglomerate firms in Nigeria
Board diligence

Board diligence and segment reporting

Board diligence refers to the effectiveness, activeness and dedication of the board to the companies operational activities. This effectiveness, activeness and dedication are often evidenced in the number or frequency of board meetings. Board of directors are needed to be active to meet their corporate governance objectives, particularly in ensuring credible, reliable, comparable, and transparent financial reports. Boards that meet frequently are more likely to perform their duties effectively and efficiently (Lipton & Lorsch, 2001). This may suggest that the level of board activity is associated with better future operation performance (Vafeas, 2019). Board frequency of meeting and attendance by the board members is an indication of a effective and committed boards, thus capable of providing credible financial information for the users to make informed investment decision. According to (Chantachaimongkol & Chen, 2018), the dedication of directors to operational activities is ordinarily described by the number of directors' attendance at the board meetings. From these particular parameters, agency theory convinces that management ability is strongly related to board effectiveness, meaning that firms with more frequency board meeting usually have stronger internal control systems for safeguarding the interests of shareholders (Chantachaimongkol & Chen, 2018). Empirical literature has documented evidence of the relationship between board diligence and segment reporting. Most of them (AlHares and Al-Hares, 2020; Ali & Nazir, 2018; Pardal & Morais ,2017; Obarolo & Akhidime, 2020) observed that board diligence have positive effect on firms' disclosure practices. Based on the above argument, it was hypothesized that;

H_{02}: Board diligence have a significant effect on segment reporting by conglomerates firms in Nigeria

Board gender diversity

Board gender diversity is a significant aspect of corporate governance and it is defined as the presence of female directors on the board of directors of corporations (Carter et al, 2003). According to Adams and Ferreira (2019), female directors are said to possess higher levels of awareness and demonstrate this type of behavior more easily. Female directorship presence is an active participation of the female representative in the organizations board. There are no any specific requirements for gender diversity in the Nigerian firms listed in the exchange group. Western nations such as the UK can be credited with making significant strides when it comes to the inclusion of women in senior management and leadership positions such as the board of directors, which is contrary to the case in less developed countries (Dhir, 2015). Inclusivity is a valuable component of corporate governance because it provides a wider platform for participation and opinion sharing. Disclosure is majorly seen as strategic function but the presence of diverse opinion is expected to put enough weight on the management to engage in more disclosure (Mishra & Jhunjhunwala, 2013). It is possible to obtain resources as well as connect a company to the outside environment when women equality is actively advocated in the board room. Moreover, agency theory proposes that firms can improve their managerial monitoring and board independence by having a board that is diverse in terms of gender and ethnicity (Elzahar & Hussainey, 2012; Ntim *et al*., 2013). There is a plethora of literature with ambiguous results on the relationship between gender diversity and firms' disclosure practices. On one side, some researches show a positive and direct relationship between corporate governance mechanisms and gender diversity ((Bufarwa *et al*,2020; Ntim *et al*., 2013; Ali & Nazir, 2018). While on the other hand, negative correlation was found between gender diversity and firm performance (Obarolo & Akhidime, 2020; Ali & Nazir, 2018; Pardal & Morais ,2017). Based on the above, it was hypothesized that;

H_{03}: Board gender diversity has no significant effect on segment reporting of conglomerate firms in Nigeria.

Empirical review

There have been some empirical studies on corporate governance and corporate disclosure practices and some of these are discussed below;

Saleh, Aboud and Eliwa (2022) examined the segment reporting information usefulness after the adoption of IFRS 8 in 18 European Union countries. Using a self-constructed segment reporting quality measure and a sample of 884 firm-year observations over the period of 2007 to 2011, they provided evidence that investors and lending institutions find no change in the usefulness of the segment reporting after the adoption of IFRS 8. Saleh et al (2022) segment reporting information usefulness after the adoption of IFRS 8 in European countries whereas the present study focused on corporate governance mechanism and segment reporting in Nigeria.

Samuel, Akpan and Okpo (2022) investigated the effect of segment reporting on cost of capital of selected deposit money banks in Nigeria. The dependent variable of this study was cost of capital which was proxied by cost of debt, while segment reporting being the independent variable was proxied by business segment information, geographical segment information and external customer information. The research design adopted for the study was ex post facto, secondary data was employed, three hypotheses were also tested, and purposive sampling technique was employed. The data for the study was analyzed using ordinary least square technique and the statistical tool used was STATA 16. From the outcome of the analysis, it was found out that business segment information and geographical segment information has significant effect on cost of debt capital of selected banks in Nigeria. These authors focused on segment report and cost of capital of listed deposit money banks while the present study concentrated on corporate governance attributes and segment disclosures of listed conglomerates.

Akpan, Uwakmfonabasi, and Nkpodot (2022) evaluated the moderating effect of audit committee gender diversity on the relationship between social responsibility disclosure and earnings management of selected consumer goods companies in Nigeria. Earnings management was the dependent variable and the independent variable employed in this study was corporate social responsibility measured as social donation disclosure, employee relation disclosure, while audit committee gender diversity was used as the moderating variable. Ex post facto research design was adopted, secondary data were used and three hypotheses were tested. The results showed that audit committee gender diversity significantly moderate the relationship between social donation disclosure and earnings management. Also, the study found that audit committee gender diversity significantly moderates the relationship between customer complaints disclosure and earnings management. Finally, the result showed that audit committee gender diversity significantly moderates the relationship between employee disclosure and earnings management. In line with the findings, the study concluded that that more gender diversified audit committee boards have the capacity to weaken the opportunistic behaviors of such managers. These authors focused on the moderating role of gender diversity whereas the current study focused on corporate governance mechanisms.

Adamu and Ivashkovskaya (2021) examined the influence of corporate governance attributes on the corporate risk disclosure in the emerging countries. Board size, non-executive directors, independent directors, board diversity and CEO-duality were the important board of director's composition that were considered as corporate governance variables for this study. The study focused on South Africa and Nigeria as these countries were among major players in the African emerging market. The sample comprise 42 financial and non-financial firms listed in Nigerian Stock Exchange and Johannesburg Stock Exchange. The data was drawn from 192 annual reports for the year 2014–2018. The analytical tools employed were manual content analysis and regression. The empirical results showed that operational risk disclosure outweighs environmental and strategic risk disclosure. This study considered governance and financial risk disclosure in Nigeria and South Africa while this study focused on Nigeria only.

Tran, Nguyen, and Le (2021) examined the effects of corporate governance on the segment reporting disclosure. The article employed time-series data with 136 observations of the top 100 non-financial Vietnamese enterprises listed on the stock exchange in the period of 2018–2019. The research used two popular theories related to stakeholder and agency to explain the effects of factors on segment reporting disclosure. The results identified two factors that have a positive impact on segment reporting disclosure, namely, the size of the board and the ratio of foreign members to the total number of the board. Accordingly, they recommended that managers of the top 100 Vietnamese listed enterprises should increase the number of board members as well as pay attention to the number of foreign members to contribute to improving the information disclosure on the segment reporting. This study was conducted outside Nigeria and also foreign directorship was used as proxy of corporate governance which was not used in the current study.

Obarolo and Akhidime (2020) assessed the determinants of segment disclosure in Nigerian Companies. Determinants were measured using firm size (FMS), profitability (PROF), financial leverage (FINLEV), industry type (INDST) and company age (COMA). The population of the study consisted of 65 companies listed on the floor of the Nigeria Exchange Group. They employed LOGIT regression analysis framework for data analysis. The result of this study indicated that the variables; firm size (FMS) was a weak factor in firms disclosing their segmental activities but passed the significance test at 10% level, company age (COMA) and industry type (INDST) had a positive significant relationship with Segment Disclosure(SD) given their p-values as 0.0017 and 0.0006 respectively which is 1. This study focused on determinants o segment reporting while the present study focused on the effect o corporate governance on segment reporting.

Bufarwa, Elamer, Ntim and AlHares, A. (2020) investigated the impact of corporate governance mechanisms on financial risk reporting in the UK. The study used a panel data of 50 non-financial firms belonging to ten industrial sectors listed on the London Stock Exchange in the period 2011-2015. Multivariate regression techniques were used to examine the relationships. To alleviate the concern of potential endogeneity, the study used two-stage least squares and fixed effect estimators. The findings of this study revealed that corporate governance has a significant influence on financial risk disclosure. Specifically, the study found that block ownership and board gender diversity have a positive effect on the level of corporate financial risk disclosure. While, there is no significant relationship between board size and corporate financial risk disclosure. This study focused on corporate governance and financial risk disclosure in UK while the present work focused on corporate governance and segment reporting in Nigeria.

AlHares and Al-Hares (2020) evaluated the influence of corporate governance mechanisms (CGM) from 130 banks from 13 Middle East and North Africa (MENA) countries. The goal was to analyze their risk disclosure practices from 2012-2019 and understand the impact of corporate governance (CG) on the level of bank risk disclosure. The current findings reveal a positive association between the level of bank-risk disclosure and the presence of Sharia supervisory board; Sharia supervisory board and ownership structure were the proxies of corporate governance while in this study board size, board diligence and board gender diversity where proxies for corporate governance. They also focused their corporate governance mechanism on banks in Middle East and North Africa, while this study concentrated on conglomerate firms in Nigeria.

SainiI and Kumar (2020) investigated segment disclosure quality and relevance under IFRS and US GAAP. Using a sample of foreign companies cross listed on the U.S. stock exchanges, the study tested for differences in segment financial reporting under the two sets of financial standards and how this information was valued by the market. The study found significant differences in the quality and quantity of segment disclosure made by their sample firms during the fiscal year 2017 under the two sets of accounting standards. They also found that market values the choice of accounting standards as well as the overall quality/quantity of the segment disclosures. Specifically, they decrease in the informativeness of earnings with IFRS as the choice of accounting standards for the sample firms. Additionally, they also found that the predictability and informativeness of earnings was increasing in the quality/quantity of the segment disclosure of the sample firm. This study done in US examined segment disclosure quality and relevance under IFRS and US GAAP whereas the present study focused on corporate governance mechanism and segment reporting.

Ali and Nazir, (2018) examined the relationship between corporate governance mechanisms – board of directors' characteristics (board size, board activity CEO duality, and board independence) and financial disclosure companies in Malaysia from 2010 to 2016. Levene's Test for Equality of Variances Analysis, Pearson Spearman's Rho Correlations Analysis, and Binary Logistic Regression Analysis were used to analyze the collected data. The results showed that the predicted result and the regressed result for board size were negative but not significant. The predicted result for board independence was negative, but the regressed result was positive, however, it was not significant. The predicted result for board activity was positive, and significant. Lastly, the predicted result for CEO duality was positive but not significant. This study studied used binary regression for data analysis where OLS was used to analyze this study.

Pardal and Morais (2018) investigated the recent adoption of IFRS 8 by Spanish listed firms and to give an initial detail of segment disclosures under the new standard. Results shows that operating segments are mainly based on lines of business, but the geographical segments are associated with higher levels of disaggregation due to "country to country" disclosures. Under IFRS 8 a small portion of the sample still remain as single segment firms and a significant part fails to meet the mandatory EntityWide information and not disclose separately as required by IFRS 8. Statistical evidence shows significant relationship between disclosure score of mandatory items and the factors size, profitability, International Listing Status and Main Index. Only size was positively related. This study used firm characteristics against segment reporting, where as the current study used board monitoring mechanism against segment reporting.

Blanco, Juan, Garcia, Jose and Tribo (2015) investigated whether segment disclosure influences cost of capital. According to them, improved segment reporting is expected to decrease cost of capital by reducing estimation risk. They also noted that, in a competitive environment segment disclosure may also generate uncertainties about future prospects and lead to a larger cost of capital. This study focused on the effect of segment reporting on cost of capital whereas the present study concentrated on corporate governance and segment reporting.

Ibrahim and Jaafar (2013) investigated the association between selected corporate governance mechanisms and voluntary compliance to IFRS 8 Operating Segment among Nigerian public-listed companies. Using a sample of 69 companies the result indicated no relationship between audit committee related variables and the level of voluntary compliance. Only one corporate governance attribute; separation of board leadership was found to be associated with voluntary disclosure of IFRS 8. The research outcome provided greater insights into the interactions between corporate governance mechanisms and IFRS 8 compliance and was useful as a starting point for further research in financial reporting particularly in emerging countries such as Nigeria. This study used the variable of audit committee size which was not considered in the present study and also focused of the generality of listed firms while the present study specifically focused on listed conglomerates in Nigeria.

3.0 Methodology

In this study the *ex-post facto* research design was employed. The ex-post facto research design was suitable for this work since the event had already taken place and the data were secondary. This study covered a period of ten years from 2012-2021.The population of this study consisted of all the listed conglomerate firms in Nigeria. As at 2021 financial year, there were 10 conglomerates listed on the floor of the Nigerian Exchange Group (NGX). Five out of these ten conglomerate firms were purposively selected due to accessibility and availability of data. These five companies were UAC, Trancorp, SCOA, John holt and Chellarams plc. The ordinary least square regression technique was used in analyzing the data.

Model specification

The model used for this study was adapted from the model specified by Tran, Nguyen, and Le (2021) which was modified to suit this study. This is given thus;

segment reporting = f(Corporate governance mechanism) (1)

$$OPSG_{it} = \beta_0 + \beta_1 BODS_{it} + \beta_2 BODD_{it} + \beta_3 BOGD_{it} + \beta_4 FSIZ_{it} + \mu_{it}$$

Where:

OPSG	=	Reportable segments
BODS	=	Board size
BODD	=	Board diligence
BOGD	=	board gender diversity
FSIZ	=	firm size (control variable)
β_0	=	Constant
β_1- β_3	=	Slope Coefficient to be determined in the study
μ	=	Stochastic disturbance
i	=	i^{th} conglomerates firms
t	=	time period

Operationalization of the variables

S/N	Variables	Measurement	Sources
	Dependent Variable		
1.	Reportable segment	Measured as the total number of reportable segment of the firms under study in the fiscal year	Tran, Nguyen, and Le (2021)
	Independent Variable		
2.	Board Size	Board size is computed as the total number of all directors of a company	Tran, Nguyen, and Le (2021)
3.	Board Diligence	Board diligence in number is the number of the board meetings held by the board of directors in a year	Tran, Nguyen, and Le (2021)
4.	Board Gender Diversity	Board gender diversity is computed as the ratio of female directors to total directors.	Tran, Nguyen, and Le (2021)
	Control Variable		
5.	Firm Size	Firm size is computed as the natural logarithm of total asset	Tran, Nguyen, and Le (2021)

4.0 Data analysis and discussion of findings

The study investigated the effect of corporate governance mechanism on segment reporting considering board size, board diligence and board gender diversity and employed samples from conglomerate firms listed on the Nigeria Exchange group for the periods 2012- 2021. Furthermore, in identifying the possible corporate governance mechanism that would impact on segment reporting, the following analysis were carried out:

4.1 Data presentation and analysis

Table 4.1: Descriptive Statistics of the effect of corporate governance mechanism on reportable segment

Variable	Obs	Mean	Std.Dev	Mean	max
segr	50	6.86	4.66	0	17
bods	50	7.86	1.81	5	12
bodd	50	4.82	1.92	2	15
bogd	50	6.79	10.23	0	50
fsiz	50	7.51	0.57	6.78	8.53

Source: Author's computation (2023)

Table 4.1 represents the results obtained from the descriptive statistics of the study. From table 4.1, it is observed that the mean of segment reporting as measured by number of reportable segments is 6.86 with a standard deviation of 4.66. This indicates that on the average, the firms under study have at least 7 reportable segments. In the case of the independent variables, table 4.1 shows that board size had a mean of 7.86 with a standard deviation of 1.81. This implies that the average board size of the firms under study was 8 members during the period under study. The table also shows that the mean of board diligence was 4.82 with a standard deviation of 1.92. This implies that on the average the board of directors of the firms under study met at least 5 times in a year. Board gender diversity has a mean of 6.79 with a standard deviation of 10.23. Board gender diversity has a minimum of 0 and maximum of 50. This implies that almost all the companies examined had female representation in the board. For the control variables, the table shows that the mean of firm size was 7.51 with a standard deviation of 0.57.

Correlation analysis

In examining the association among the variables, the researcher employed the Spearman Rank Correlation Coefficient (correlation matrix), and the results are presented in the table below.

Table 4.2: Correlation analysis of the effect of corporate governance mechanism on reportable segment

	OPSG	BODS	BODD	BOGD	FSIZ
OPSG	1.0000				
BODS	0.2298	1.0000			
BODD	0.4757	0.3355	1.0000		
BOGD	0.3060	0.5902	0.3088	1.0000	
FSIZ	0.6628	0.2603	0.5197	0.3519	1.0000

Author's computation (2023)

In the case of the correlation between corporate governance mechanism and segment reporting, table 4.2 shows that there is a positive association between segment reporting and board size

(0.23). It is also observed that there is a positive association between segment reporting and board diligence (0.48). The table shows that there is a positive association between segment reporting and board gender diversity (0.31). For the control variable, table 4.2 shows that there is a positive association between segment reporting and firm size (0.66).

Regression analyses

The researcher employed the OLS regression analysis to analyze the cause-effect relationships between the dependent and independent variables and the summary of the regression analysis is as given in table 4.3

Table 4.3: Summary of regression result of the effect of corporate governance mechanism on segment reporting

Segr	Coef.	Std.Err	t	P>|t|	[95% .Conf	Interval]
bods	.2977303	.1992705	1.49	0.001	-.6993336	.103873
bodd	.5035844	.1809872	2.78	0.002	.1388288	.86834
Bogd	.0297519	.0365867	0.81	0.002	-.1034876	.0439837
fsiz	11.74591	1.057566	11.11	0.000	9.614528	13.8773
_cons	-36.6659	4.699614	-7.80	0.000	-46.13741	-27.1945

FStats: 38.97 (0.0000); R-Squared: 0.8158; VIF: 2.43; Hettest: 2.29 (0.1299)

From table 4.3, it is observed that the R-squared of the OLS pooled regression (0.8158) indicates that about 82% of the systematic variations in segment reporting as measured by number of reportable segments in the pooled consumer goods firms over the period of interest was jointly explained by the independent and control variable in the model. This implies that corporate governance mechanism and control variable account for about 82% variation in segment reporting of listed conglomerates in Nigeria. The unexplained part of segment reporting can be attributed to the exclusion of other independent variables that could impact on segment reporting, but were however, captured in the error term. The F-statistic value of 38.97 and its associated P-value of 0.0000 shows that the OLS regression model on the overall is statistically significant at 1% level, this means that the regression model is valid and can be used for statistical inference.

4.2 Discussion of findings

Board size and segment reporting

In this study, it was found that board size has a significant positive effect on segment reporting of listed conglomerates firms during the period under investigation. This is shown as; board size (Coef. = 0.298, t = -1.49 and P -value = 0.001). This implies that a unit increase in board size can significantly improve the disclosure of reportable segment by listed conglomerate firms in Nigeria. The results support the finding of Tran et al (2021) who maintained that larger boards possess more specialized skills and are better equipped to exercise monitoring financial statement disclosures. Supporting the claim that board monitoring ability increases as the number of directors increases, Pardal and Morais (2018) noted that effective decision making is associated with larger board size. However, the study contradicts with those of Lipton and Lorsh

(2001) who suggested limiting board members to 10 with a preferred size of not more than 9 members.

Board diligence and segment reporting

In the same vein, the study showed that board diligence has a significant positive effect on reportable segment of listed conglomerates firms during the period under investigation. This was shown as; board diligence (Coef. = 0.504, t = 2.78 and P -value = 0.002). The result implies that segment reporting would increase when the number of meetings held by the firms' increases. Board of directors are needed to be active to meet their corporate governance objectives, particularly in ensuring credible, reliable, comparable, and transparent financial reports. Boards that meet frequently are more likely to perform their duties effectively and efficiently (Lipton & Lorsch, 1991). The findings of the study supports the work of Sainil and Kumar (2020), who noted that frequent board meeting remains a veritable tool to be used by the board to ensure compliance to financial disclosures as required by both accounting standards and company laws.

Gender diversity and segment reporting

Finally, the result showed that board gender diversity has a significant positive effect on segment reporting of listed conglomerates firms during the period under investigation. This is shown as; board gender diversity (Coef. = 0.030, t = 0.81 and P -value = 0.002). This implies that the presence of female members on the board of directors significantly improve the number of reportable segment for the firms under study. Diversity on the board of directors is an important corporate governance mechanism that must be considered when appointing new directors in order to provide effective management and oversight of organizations. Board diversity is often cited as an indicator of worldwide firm performance in empirical corporate governance studies. The outcome of this findings support those of Sainil and Kumar (2020) and Pardal and Morais, (2018), who noted significant relationship between board attributes and segment disclosures. This findings however, negates the study of Tran et al., (2021) who found a negative relationship between gender diversity and segment disclosures.

5.0 Conclusion

An effective corporate governance system encourages reliable and faithful external reporting of financial data and a range of other voluntary disclosures. By this information, investors can establish what is going on in the company and will have advantage of detecting early warning sign when the entity has going concern issues. Thus, an effective corporate governance strengthens financial reporting quality by ensuring all the requirements of enabling standards and rules are followed in the preparation and presentation of financial data. Based on the outcome of the study, it was concluded that both board size, board diligence and board gender diversity significantly improve segment reporting of listed conglomerate firms in Nigeria. Thus, it was recommended that; the board should be made up of a good number of members with experience, expertise and sound financial literacy as large size alone without this mix cannot improve segment reporting in the firms under the study. Also, that board of directors should meet at least quarterly in order to meet their objectives particularly in ensuring credible, reliable, comparable, and transparent financial reports. And finally, that board of directors should be made up of equal number of men and women as the presence of women seems to improve the likelihood of segment reporting in this study.

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