

**EFFECT OF BOARD NATIONALITY AND GENDER DIVERSITY ON RISK
DISCLOSURE OF QUOTED INDUSTRIAL GOODS COMPANIES IN NIGERIA**

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Abstract

Past accounting scandals, the 2007/2008 global financial crisis and the recent collapse of giant companies across the globe have triggered the need for vibrant risk management and high quality of risk reporting through sound corporate governance. Corporate governance codes have recognized the need to improve corporate risk disclosure and provide guidance for such disclosures. Understanding the drivers for firms to disclose risk-related information may assist regulators and standards setters in promoting both the spread and the improvement of such disclosures through the issuance of corporate governance codes and reporting. This study responds to recent calls for more research on this subject by empirically examining the effect of board of nationality and gender diversity of industrial goods firms listed on the Nigerian Exchange Group. This study adopts Ex post facto research design. The population of the study comprised of all the 13 listed industrial goods firms. However, filters were employed to arrive at an adjusted population of 11 companies. Data were extracted from the published financial statements of manufacturing companies, covering a period of ten (10) years from 2013 to 2022. Risk disclosure is measured using a checklist of 22 items. The study employs multiple regression technique as the technique of analysis with aid of STATA version 16 as a tool for analysis. The results indicate that board nationality has a positive and statistically significant effect ($p=0.004$) on the extent of risk disclosure. On the other hand, the probability for the variable board gender diversity is not statistically significant. This study recommends that the Nigerian industrial goods sector compose boards with diversities especially foreign directors who can bring their experiences to bear in making decisions in respect to risk information disclosures.

Keywords: Risk Disclosure, Board Nationality, Board Gender Diversity, Nigeria

Introduction

The global financial crises that started in 2007 as well as the most recent collapse of companies like Enron, WorldCom, and other giant companies across the globe have rekindled the debate about the importance of including risk information in financial reports. This is attributed to the needs of stakeholders for valuable relevant information about companies' activities in order to accurately assess their financial position. As a response to these global events, regulatory institutions had to

reassess the foundations of companies' regulations (Beltratti & Stulz, 2012; Elkelish & Hassan, 2014). The quality of risk disclosure allows outside investors to analyze the company's current risks and judge future prospects to have a clear picture of the risks that the company may face. Companies on the other hand also benefit from risk disclosure by decreasing the possibility of financial failure and the cost of external finance.

Risk disclosure (RD) is the dissemination of any quantitative or qualitative information about uncertainties or risks facing the firm (Elbannan & Elbannan, 2015; Linsley & Shrives, 2006). Risk disclosure quality is the quality of risk information that is disclosed by firms in terms of relative quantity (adjusted by type of sub-industry and firm size), depths (the potential impact of risk disclosed on firm's future performance), the coverage within every type of risk, and the outlook profile of firm's risk management. Examples of these risks include financial risks (such as interest rates, exchange rates, and liquidity risks); regulatory risks (such as tariff and trade policies, tax policy reforms, minimum wage laws and financial regulations); operational risks (such as customer dissatisfaction or product or service failure); integrity risks (such as illegal acts and earnings management); and strategic risks such as competitors and industry-related risks) (Linsley & Shrives, 2006).

Ostensibly, several factors within the corporate governance (CG) literature influence the ability of companies to report on non-financial information such as risk in their financial statements. This is because sound CG can protect stakeholders' interests by introducing and strengthening business regulations that enhance accountability, integrity, and transparency. Ultimately, this can rationalize the decision-making process as well as mitigate the agency problem between the management and the shareholders. One of the tools used in achieving corporate governance objectives is the board of directors. The Board of Directors is one of the most powerful CG mechanisms to oversee a firm's progress, enhance the quality of disclosure by monitoring and controlling the management's activities, and increase a company's alignment with its stakeholders (Ira, 2017). This implies the importance of directors in encouraging rather than mandating risk disclosure.

Consistently, research works have found that the effectiveness of CG within RD depends on the composition of the board of directors. In particular, there is a need for diversity within the board to mitigate the complexity of interests involved in the company's CG; as the board of directors is responsible for safeguarding the public interest to guarantee protection to stakeholders and to ensure transparency and compliance with existing laws. Some other studies have argued that greater disclosure by the board of directors signaled a greater ability to manage risk. Thus, the board of directors may use RD to signal their company's good performance and to increase its legitimacy.

Again, the need for greater board diversity has never been stronger than right now. The wide acceptance of this need in the world of corporate governance is highlighted, not by the fact that it is a hot topic, but by the interrelationship between positive business performance and workforce diversity (Ira, 2017). Gender is currently the most debated diversity topic as academics are interested in exploring the roles of gender diversity in the boardroom in various outlooks, especially in their involvement in disclosure practices. Corporate boards which include women as directors demonstrate that they value diversity of both thought and experience. The manufacturing industry in Nigeria follows the corporate governance regulation of developed economies on gender equality on boards. However, the consequences of the switch are still not clear (Abdullah, 2015).

Studies argue that women directors are effective in attracting and retaining female employees and linking companies with resources (Hillman, 2007). Thiruvadi and Huang (2011) found the appointment of female directors in U.S. companies to enhance market returns compared to males. Other studies observed that females in emerging capital market boards negatively relate to earnings misstatement (Abdullah et al., 2013). On the contrary, Lee and James (2007) found a negative market response to the appointment of women directors on board. In Nigeria, the SEC code of corporate governance is not specific on the appointment of women on board. Nevertheless, the expectation is that board gender diversity is more likely to put pressure on directors to engage in greater risk disclosure.

Also, board diversity concerning nationalities has the capability of improving the information quality of financial reports. This is because foreign directors have a unique understanding and knowledge of outside markets' strategies that a firm wants. Thus, such knowledge may contribute additional value to the intended expansion of the company (Dewayanto et al., 2017). Additionally, foreign directors have been evidenced to enhance the board's independence (Carter et al., 2003). According to Miletkov et al. (2017), foreign directors are expected to be related to firms having a limited number of qualified local directors, and these include firms in countries that are characterized by a smaller population, low level of education, and lower capital market development. International boards are considered an effective mechanism to transfer governance across countries. Companies are also introduced to corporate governance characteristics and board of directors' practices of foreign companies through their foreign directors' experiences (Iliev & Roth, 2018).

From literature, a plethora of studies considered the influence of board diversity and risk disclosure quality. However, majority of the studies on the phenomenon have been conducted principally in developed climes and are characterized by inconsistent and mixed findings due to ontological, methodological, and behavioral complexities. Furthermore, findings from advanced economies cannot be relied upon to make informed decisions due to problems of external validity hence, the need for current study in an emerging economy like Nigeria. Also, In Nigeria, a common phenomenon with these studies (Adamu et al., 2015; Adekunle & Asaolu, 2013; Mohammed et al., 2017; Muhktar, 2017) is that they focused on the banking sector and limited their scope to financial risk disclosure without consideration to other aspects of risk information disclosure and other sectors of the economy.

Also, studies show that, despite the advantages of a multi-gender board, it also contributed to increasing conflict among directors due to their different roles and backgrounds (Boone & Hendriks, 2009; Mannix & Neale, 2005). This is aligned with the study conducted by Ray (2005) who found that one of the factors that contributed to conflict among multi-gender directors is due to varied ideology and background. The same study also found that there is a higher possibility for the multi-gender board to choose a safe harbor decision to reduce conflict among them. Specifically, there is a paucity of research works in Nigeria that focused on the effect of board diversity on risk disclosure quality. This study will fill the gap in this research area. This study, therefore, hypothesized that board nationality diversity and board gender diversity have no significant effect on risk disclosure of quoted industrial goods companies in Nigeria.

Literature Review

Board Nationality Diversity

Foreign members have a unique understanding and knowledge of outside markets' strategies that a firm wants. Thus, such knowledge may contribute additional value to the intended expansion of the company (Dewayanto et al., 2017). Additionally, foreign directors have been evidenced to enhance the board's independence (Carter, Simkins, & Simpson, 2003). According to Miletkov et al. (2017), foreign directors are expected to be related to firms having a limited number of qualified local directors, and these include firms in countries that are characterized by a smaller population, low level of education, and lower capital market development. International boards are considered an effective mechanism to transfer governance across countries. Companies are also introduced to corporate governance characteristics and board of directors' practices of foreign companies through their foreign directors' experiences (Iliev & Roth, 2018).

When the company appoints foreign members to its board, this conveys a good impression to foreign investors as a guarantee of good corporate governance practices (Abdullah et al., 2016). Based on the agency theory, foreign directors have a role in monitoring management effectively by exploiting their positions as representatives on behalf of foreign investors to militate against manager's interests. Foreign directors offer a mechanism to halt the negative impact of managers (Dewayanto, 2017). In addition, resource dependence theory views foreign members of a board as strategic resources, who facilitate the access to available external input. Hence, resource dependence theory favors skilled foreign directors to provide a good connection with the external environments (Ujunwa, 2012). Furthermore, as foreign directors have a broad range of international connections with foreign stakeholders, they are expected to provide a higher level of transparency and disclosure (Ibrahim & Hanefah, 2016). Therefore, based on agency theory, resource dependence theory, and the discussion above, the expectation is that the presence of foreign directors is positively related to the level of risk disclosure.

Board Gender Diversity

Generally, board gender diversity is referred to as the presence of women on corporate boards (Julizaerma & Sori, 2012). Having a gender mix in the boardroom is expected to bring some balanced decisions because women think differently from men. Gender mix in this context means the presence of female directors on corporate boards. Recruitment of more women into corporate boards is likely to bring about diversity of opinions and perspectives to board discussion including deliberations on risk disclosure issues. In addition, women are more sensitive to risk issues and are more risk averse than men (Maestriperi et al., 2009).

It has been posited that the presence of a multi-gender director on the board plays an essential role in influencing company transparency. One of the positive impacts of multi-gender boards especially in a large company is, that they will encourage quality disclosure while in small companies, this type of board will encourage the collection of internal information among users (Gul, 2011). It is also documented that, the presence of female directors on board will enhance the quality of a board meeting which will affect the disclosure decision by the company (Al-Shaer & Zaman, 2016). Besides, it also revealed that an issue that is not discussed among all-male directors was openly discussed in the multi-gender board (Clarke, 2005; Huse & Solberg, 2006). Joy (2008) also studied that, in a multi-gender board, the communication between boards and users is rather effective, allowing for greater information exchange between the two parties.

Risk Disclosure

The meaning of risk has been evolving over time. In pre-modern society, the risk was related to the act of nature and perceived as uncontrollable. However, following the industrial revolution and the invention of probabilities and mathematical methodology, the perception of risk has changed. In an introduction to factor analysis of risk information, Jones (2006) defines risk as the probable frequency and probable magnitude of future loss. This definition includes three concepts; the probability of risk, the frequency and magnitude of risk, and the universality of risk. The following definition is applicable regardless of the nature and the context of risk.

Then the risk, referring to the modernist view, in contrast with the pre-modern era, includes both the positive and negative outcomes of events (Linsley & Shrives, 2006). That is why it can be defined as any opportunity or prospect, or of any hazard, danger, harm, threat or exposure, that has already impacted upon the company or may impact upon the company in the future or of the management of any such opportunity, prospect, hazard, harm, or threat or exposure (Linsley & Shrives, 2006). In other words, the risk is when we take a chance at something that either can turn out better for us or could result in a negative outcome. Therefore, risk can be a downside risk or a volatility risk.

In addition, the concept of risk was related to business strategies, objectives, and economic performance. As such, risk is referred to as follows: “uncertain future events which could influence the achievement of the organization’s strategic, operational and financial objectives. The dimensions of risk also include the impact on an organization’s reputation, even loss of legitimacy from activities deemed unacceptable to the community (IFAC, 1999). In the same view, King II defined risk as uncertain future events that could influence the achievement of a company’s objectives (King Committee, 2002).

Consequently, different definitions have emerged in the literature. The most popular definition is that mentioned by IFRS as risk is as uncertain as the amount of benefit. The term includes both potential for gain and exposure to loss”. This definition was also suggested by professional reports like ICAEW (1997), CICA (2002) and IASB (2005). This definition of risk will be further incorporated into the risk disclosure the definition followed in our study. After defining risk, we can relate risk disclosure to the dissemination of any information that can make the reader able to know about any opportunity or prospect, or of any hazard, danger, harm, threat, or exposure, that has already impacted upon the company or may impact upon the company in the future or of the management of any such opportunity, prospect, hazard, harm, threat or exposure (Linsley & Shrives, 2006). Also, Beretta and Bozzolan (2004) defined risk disclosures as a communication of information concerning firms’ strategies, characteristics, operations, and other external factors that have the potential to affect expected results.

Empirical Review

Board Nationality diversity, Gender diversity, and Risk Disclosure

Nauman et al. (2020) examined whether the diversity of the members of the board of directors, encompassing gender, nationality, education, and experience, moderates the relationship between the corporate governance and investment decisions of listed companies of the Pakistan Stock Exchange. Panel data analysis statistical method was used to gauge the cause-and-effect

relationship among the variables. Moreover, it explored whether board independence and chief executive officer (CEO) duality have a significant positive impact on investment decisions. The study further found that experience diversity strongly moderates the relationship between board independence and board size with investment decisions in the opposite direction. Education diversity moderates the relationship between board size and investment decisions in the same direction. Foreign directors' presence on the board also significantly moderates the relationship between board independence and investment decisions. However, this study had an ontological gap as it was conducted in a different jurisdiction that can not be seen to apply to Nigeria.

Alshirah et al. (2019) investigated the role of foreign directors in enhancing the level of risk disclosure in the annual reports of Jordanian listed companies. The content analysis method was used to measure the level of risk disclosure by computing the number of risk-related sentences in annual reports. To achieve the study's objective, the random effect model has been applied to a sample of 376 firm-year observations of Jordanian non-financial companies for the period of 2014-2017. The findings are in line with the argument of agency theory and resource dependence theory, which posits that existence of foreign members on the board contributes to increasing the level of risk disclosure.

In the same vein, Miletkov et al. (2017) also found a positive association between firm performances in countries having lower-quality legal environments and meanwhile, they have directors hailed from a country having relatively greater quality legal environments than those of the host country. Added to the above studies, Tsang et al. (2019) found that foreign institutional investors improve corporate disclosure more than local investors, particularly when foreign institutional investors come from nations having high disclosure requirements and investor protection.

Munturi (2019) determines the relationships between corporate governance variables and the extent of risk disclosures among listed companies in Kenya. The study aims to empirically examine the relationship between corporate governance variables and risk disclosures in 48 listed non-financial companies in Kenya. Content analysis of annual reports for the period 2010-2016 was used to measure the level of risk disclosures and compute the risk disclosure index for each company studied. The relationships between variables were analysed using panel data analysis. The findings show that the percentage of non-executive directors, ownership dispersion, percentage of foreign ownership, and women on boards affected significantly the level of risk disclosures in the studied companies. This presents a timing difference as well as a problem of external validity.

Kaifah et al. (2019) accessed the relationship between corporate governance characteristics and risk disclosure practice. The corporate governance characteristics examined include board independence, board size, board gender, auditor independence, and auditor tenure. A total of 721 companies are expected to be analyzed based on the Bursa Malaysia list from 2008 to 2017. To determine the level of risk disclosure, this study employs content analysis. Descriptive statistics and multiple regression were used in this study to examine this relationship. The study found that There is a positive relationship between multi-gender boards and risk disclosure practices in Malaysian listed companies. the study finds that there is a positive relationship between a higher proportion of independent directors on board and risk disclosure practice in Malaysian listed companies. This current study focuses on risk disclosure quality and will be conducted in the Nigerian Manufacturing sector.

Fun and Hashim (2019) explore the impact of corporate risk disclosure on business performance with board gender diversity as a moderator. The study uses secondary data gathered from year 2016 annual reports. Random sampling is chosen to collect data from 130 publicly listed companies on Main Board of Bursa Malaysia. Structural equation modeling is applied. The results demonstrate that corporate risk disclosure does influence business performance significantly and positively which is consistent with prior studies. However, the moderating effect is found to be insignificant although the relationship between corporate risk disclosure and business performance is slightly strengthened with the existence of females on board. This study used data for a single year while the current study covers ten years period.

Agency Theory

Agency theory has its roots in economic theory, the philosophy was expounded by Alchian and Demsetz (1972) and further developed by Jensen and Meckling (1976). Jensen and Meckling (1976) described the agency theory as an agreement between two parties the principal and agent; where the former entrusts the control of his firm to the latter, including the making decisions. Where both factions are maximising value, it will be presumed that the agent may not have the interest of the principal in mind. The principal may, however, reduce the deviations of the agent's interest by granting incentives and instituting monitoring controls; this strategy will, in turn, reduce the unethical activities of the agent. The check of agency issues in the decision-making procedure is essential when the managers in charge who start and actualize vital decisions are not the significant residual claimants and, in this way, do not enjoy an outstanding share of financial impacts of their choices. Without efficient control methods, such decision managers will probably take activities that veer off from the benefits of residual claimants. Each decision agent can be engaged with the administration of a few decisions and the control of others. However, separation in this context implies that each agent does not exert sole administration and control rights over similar decisions (Fama & Jensen, 1983). As indicated by Agency theory, the agent endeavour to accomplish his objectives to the detriment of the principals'. Generally, Managers are propelled by their interests and advantages, and they work to boost their individual benefits as opposed to thinking about investors' interests and creating shareholders' wealth.

Also, agency theory suggests that more diversified boards are more independent and better able to perform their monitoring function (Abdullah, 2014; Adams & Ferreira, 2009; Carter et al., 2003; Van der Walt & Ingley, 2003). Females, foreigners, and ethnic minorities, as sub-groups, are more coordinated and effective in their monitoring role (Adams & Ferrira, 2009; Gul et al., 2011; Gyapong et al., 2016), and thus the appointment of women, foreign and different ethnic directors reduce the extent of agency conflict (Ntim et al., 2012; Xiao & Zahoo, 2014) and enhances firm value (Estélyi & Nisar, 2016; Ntim, 2015). Corporate board diversity enhances the decision-making process by adding various ideas, skills, backgrounds, perspectives and business knowledge (Baranchuk & Dybvig, 2009; Luckerath-Rovers, 2013), increasing the board's ability to deal with different opportunities and challenges in the organisational external environment (Ntim, 2015).

On the other hand, agency theory argues that qualified women directors tend to hold multiple directorships (Sealy et al., 2008). This 'director busyness' has a negative impact on their ability to provide their monitoring and advisory roles, increasing agency problems and thereby reducing firm value (Falato & Kadyrzhanova, 2014; Faleye et al., 2011; Field et al., 2013). Women and ethnic minorities may lack the necessary level of skills, qualifications, and experience required for

directorship (Terjesen et al., 2009). Women, compared to men, may have lower levels of investment in education and work experience (Tharenou et al., 1994). Thus, the monitoring and advisory roles of the board will be affected negatively by the appointment of women and ethnic minorities, and consequently, the firm value will decrease (Gyapong, 2016).

Methodology

This study adopts an Ex post facto research design. Using Ex post facto research design helped in examining possible causes and effect relationships by first identifying some existing phenomena and analyzing data to establish possible causal factors. The population of the study comprised all the 13 listed industrial goods firms on the Nigerian Stock Exchange (NSE) as of 31st December 2022. However, filters were employed to arrive at an adjusted population of 11 companies that made up the sample. In concordance with the research methodology framework being stated as quantitative, the data to be used in this study were collected from secondary sources only. Specifically, data will be extracted from the published financial statements of industrial goods companies, covering a period of ten (10) years from 2013 to 2023. The study employs multiple regression techniques as the technique of analysis with the aid of STATA version 16 as a tool for analysis. The data for the study is panel in nature and to check for endogeneity, the study used the Hausman specification test. Additional diagnostics tests adopted in this study include the test for Multicollinearity using the Variance Inflation Factor (VIF) and the Breusch-Pagan test for heteroscedasticity, to check for the fitness of the model and reliability of findings. The study used board nationality diversity and board gender diversity as predictor variables and the study controlled for firm size.

To test the study hypotheses, the study estimates the following multiple regression model:

$$RD = f(BN, BGD, FZ) \quad (1)$$

However, the model is econometrically stated as:

$$RD = \alpha + \beta_1 BN_{it} + \beta_2 BGD_{it} + \beta_3 FZ_{it} + \mu_{it} \quad (2)$$

Where: RD = Risk Disclosure, BGD= Board Gender Diversity, BN= Board Nationality, FZ= Firm Size, α = constant, it = firm i in time t , μ = error term, $\beta_1, - \beta_3$ = coefficients

Table 1: Measurement of Variables

Variables	Type	Measurement	Source
Risk Disclosure	Dependent	The extent of disclosure of selected risk items in the financial statements	Alini and Allini (2016); Ashfaq, Zhang, Munaim, and Razzaq (2016)
Board Gender Diversity	Independent	Proportion of women on the board to the total board size.	Muturi (2019); Carmona, Fuentes and Ruiz (2016)
Board Nationality	Independent	Number of foreign directors on the board	Muturi (2019); Carmona, Fuentes and Ruiz (2016)
Firm Size	Control Variable	Natural Log of Total Assets	

Source: Author's Compilation, 2023

A checklist was used as a basis to perform the content analysis of the annual corporate reports for establishing risk disclosure. The nature and scope of the information disclosed on each item were assessed according to the weighted index developed by Van Staden and Hooks (2007). This index is based on a five-point scale [0 - not disclosed; 1 – minimum coverage, that is, anecdotal or briefly mentioned; 2 – descriptive; 3 – quantitative (defined in monetary terms or physical quantities); 4 – complete or exhaustive]. Thus, each corporate governance report was assessed and coded by applying the following scoring system: the items that received a value ranging from 0 (not disclosed information about the item) to 4 (complete or exhaustive information about the item). From this analysis, a weighted index, called Risk Disclosure Index (RDI) was calculated by dividing the total observed disclosure by the expected disclosure of 22 items.

Results and Discussions

Correlation Matrix

The Pearson correlation analysis matrix shows the relationship between the explanatory and the explained variable and also the relationship among all pairs of independent variables themselves. This section shows the correlation between the dependent variable risk disclosure and independent variables board nationality and board gender diversity as well as control variables firm size.

Table 2: Correlation Matrix

	RD	BN	BGD	FZ
RD	1.0000			
BN	0.486	1.0000		
BGD	0.210	-0.238	1.0000	
FZ	0.068	-0,001	0.109	1.000

Source: STATA, 2023

Table 2 presents the correlation matrix for the variables used in the study. The results of the Pearson correlation analysis indicate that the extent of risk disclosure is positively correlated to board nationality, with a correlation coefficient of 0.486, contrary to the first hypothesis of the study. Accordingly, the results also show that the other independent variable board gender diversity and control variable firm size are statistically correlated to the extent of risk disclosure, at variance with the hypotheses.

Regression Diagnostics

The two robustness tests conducted in this study are multicollinearity and heteroskedasticity tests. These tests are important to regression estimation to satisfy the assumptions of the Ordinary Least Square (OLS) of homoskedasticity and the absence of exact correlations among the independent variables in the model.

Table 3: Tolerance and Variance Inflation Factors

Variable	VIF	1/VIF
BN	1.05	0.911500
BGD	1.07	0.932226
FZ	1.03	0.939652
Mean VIF	1.05	

Source: STATA, 2023.

From Table 3, the VIF and TV are found to be consistently smaller than 10 and above 0.10 respectively indicating the absence of multicollinearity as suggested by Neter et al. (1996), Tobachnick and Fidell (1996) and Cassey and Anderson (1999).

The low mean VIF is also a pointer to the mild correlation among the regressors. This shows the appropriateness and fitness of the explanatory variables used in the model.

Table 4: Heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.286784	Prob. F(4,124)	0.2420
Obs*R-squared	8.484123	Prob. Chi-Square(4)	0.2423
Scaled explained SS	15.02818	Prob. Chi-Square(4)	0.0046

Source: STATA Output, 2023

The Breusch-Pagan or Cook-Weisberg test was used to test for the existence of heteroskedasticity showing chi2 0.2867 and p-value 0.2420. The null hypothesis in this test assumes that the variance of the residuals is constant. If the p-value is significant at 5%, then there is substantial evidence to reject the null hypothesis indicating the presence of heteroskedasticity.

Table 5: Hausman Specification Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	1.20417	4	0.7440

Source: STATA, 2023

The Hausman Specification test was conducted to ascertain between the fixed and random effect models which is more appropriate for interpretation. The result of the Hausman Test revealed that the value of chi2 is 1.20417 and a corresponding prob>chi 0.7440. The significant value as reported by the probability of chi2 favours the random effect model.

Table 6: Summary of Random Effect Regression Result

	Coef.	t	P> t
BN	0.1607	3.00	0.004
BGD	-17.8495	0.03	0.987
FZ	0.2368	0.61	0.546
R-squared	0.4815		
Adj R-squared	0.4239		
F-Statistics	5.17		
Prob > F	0.0001		

Source: STATA Output, 2023.

Table 6 reports the results of random effect regression analysis testing the relationship between the risk disclosure and selected board diversities. According to Table 6, the F-statistic is 5.17 (p=0.0001) and this result supports that the estimated model is statistically significant, while the adjusted R-squared of 0.4239 indicates that the independent variables explain 42.39% of the variability of the extent of risk disclosure.

The results indicate that board nationality has a positive and statistically significant effect ($p=0.004$) on the extent of risk disclosure. This result provides supporting evidence for the first hypothesis and implies that firms with diverse nationalities are likely to disclose more information on risk than firms without foreign board members. This result is consistent with the findings of previous studies of Muhktar (2017); and Mohammed et al. (2017).

On the other hand, the probability for the variable board gender diversity is not statistically significant. These results suggest that the presence of female directors on the board is unrelated to the level of risk disclosures of the sampled companies. These findings are in line with the results of the studies conducted by Nauman, Qaisar, and Mahmood (2020), who found a non-significant relationship between the proportion of female directors and risk disclosure. The non-significant relationship between these variables can be explained by the fact that the majority of the boards of the sampled firms were mainly dominated by their male counterparts members for the period covered in the study.

The control variable firm size was said to have an insignificant effect on risk disclosure. This implies that the size of the assets of the companies does not influence their risk disclosure behaviour.

Conclusion and Recommendations

Conclusions

As noted by previous studies, corporate governance codes have recognized the need to improve corporate risk disclosure and provide guidance for such disclosures. Understanding the drivers for firms to disclose risk-related information may assist regulators and standards setters in promoting both the spread and the improvement of such disclosures through the issuance of corporate governance codes and reporting. This study responds to recent calls for more research on this subject by empirically examining the effect of board nationality and gender diversity of industrial goods firms listed on the Nigerian Stock Exchange from 2012 to 2023. The dependent variable of the study, risk disclosure, is measured by a checklist of items measured on a five-point Likert scale. On the other hand, in the light of previous literature, two board diversities are considered independent variables that may have a relationship with the extent of risk disclosures of companies, namely, board nationality and board gender diversity.

The findings of the study reveal that board nationality has a statistically significant and positive relationship with the extent of risk disclosure, hence only the first hypothesis of the study is rejected. This finding supports the assertion that board diversity with respect to nationalities has the capability of improving information quality of financial reports. This is because foreign directors have a unique understanding and knowledge of outside markets' strategies that a firm wants. Thus, such knowledge may contribute additional value to the intended expansion of the company.

On the other hand, the regression analysis indicates that board gender diversity is unrelated to the extent of environmental disclosure. The low degree of gender diversity on the boards of the sampled firms for the period covered in the study could explain the statistically non-significant relationship between this variable and risk disclosure.

Recommendations

The following recommendations were forwarded:

In a turbulent corporate environment, risk is unavoidable, and reducing information asymmetry and improving transparency may be made easier with the help of efficient risk mitigation means. According to this study, the Nigerian industrial goods sector should form diverse boards to increase transparency and lessen information lopsidedness. Additionally, foreign directors who possess relevant experiences are encouraged to serve on these boards to contribute to the process of making decisions regarding risk information disclosures.

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