Effect of CEO's Gender and Tenure on Financial Distress Likelihood of Listed Nigerian Deposit Money Banks: Moderated by Risk Committee Gender

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Abstract
Over the years, the Nigerian banking sector has experienced monetary and fiscal policies' reformations, in an effort to ensure the growth and survival of banks operations considering their significance to economic development. In spite some of the banks were reported to have been consumed by financial distress. The study therefore examined the moderating role of risk committee gender on the effect of CEO gender and tenure on financial distress likelihood of listed deposit money banks in Nigeria for the periods of fifteen years from 2007-2021. Fourteen listed deposit money banks were considered as the population of this study and census sampling technique was used. Correlational and ex-post facto were employed as research designs. Data were extracted from annual audited financial statement of the sampled banks. Logistic regression technique was used to measure the dependent variable via Multi Discriminant Analysis approach of a modified Althman Z score model. The study revealed that CEO Gender is significantly influencing financial distress positively, while, CEO Tenure has a negative and significant effect on financial distress likelihood of listed deposit money banks in Nigeria. However, the interaction of Risk Committee Gender on the effect of CEO gender, tenure and financial distress likelihood were insignificant as far as the Nigerian listed deposit money banks are concern. The study recommended that, board of the listed deposit money banks must not give priority to female in managing the affairs of banks essentially at the CEO's position, for the fact that female can be very emotional and do not withstand pressure which makes them less critical in their analytical ability for decision making, which may affect the survival tendency of Nigerian listed deposit money banks. In addition to that, the board should encourage the extension of CEO tenure as they stand to gain more exposure with sound knowledge and experience in making meaningful contribution to the growth and survival of the banks.

Keywords: CEO Age, Tenure, Risk Committee Gender, Financial Distress Likelihood

1. Introduction

It is important to note that the growth and the survival of business entities can be ascertained by the extent of their financial well-beings; through the utilization of business resources to generate profit based on the established policies and objective of the organization. On the hand, a distressed organization is the one that cannot be able to finance its day to day debt financial obligations. Although, Egbo (2012) emphasized that financial distress is connected to micro and macro-economic factors as far as business is operation concern. While, Rono (2018) considered corporate financial distress as inability of an organisation to meet up with it's the short and long term financial commitment attributable to the failure of corporate governance mechanism of the business.

Nevertheless, the Chef executive Officer (CEO) as one of corporate governance mechanism play a significant role in designing good policies and objectives for an organization and to further ensure that effective decision are taken in running the affairs of the business which in turn leading to successful operation via favourable return on investment. Hence, there is a relationship between CEO attributes and

financial distress likelihood of business. While, accessing the link between corporate governance mechanism and financial distress, Miglani and Ahmed (2020) conclude that financial distress is a financial turnaround of a business. But, some scholars like Kazemian et al. (2017); Khan et al. (2020); Sunday and Innocent (2021) among others, employed different models and approach in an effort to predict survival likelihood of some business entities. Meanwhile, this study seeks to examine the moderating role of risk committee on the effect of CEO gender and tenure on financial distress likelihood of listed deposit money banks (DMBs) in Nigeria for the period of fifteen years between the periods of 2007-2021.

But, over few decades significant numbers of financial distress cases have been recorded amongst banking industry in Nigeria, despite series of established policies to safeguard and reform the banking sector by Nigerian government through the Central Bank Nigeria (CBN). These comprise of the recapitalization policy initiated by Prof Charles Soludo in 2004 with aim of reviving banking operation in Nigeria. Though, Hambrick (2014) affirmed that recapitalization policies cannot guarantee hundred percent survival tendency and growth of banks. While, Sunusi (2010) revealed numbers of problems connected to the banks operations in Nigeria arisen from none adherence to corporate governance code ethics and related regulatory requirements which have spilled down to the asset and liquidity management among others (Sunusi, 2010).

It is also important to note that financial distress assessment was further conducted by CBN under the leadership of Mal. Sunusi Lamido Sunusi in 2009 with sole aim of examining the banks operations shortly after the world economic meltdown crisis. Where, Nine out of Twenty four banks were found to be overwhelmed by non-performing loan. Meanwhile, the CEOs of the banks were reported to have been disengaged from their services (Vanguard, 2009).

Besides, some of the banks have resorted to merged due to the global financial meltdown shocks, while, some of the banks were acquired such as Africa Bank, Spring Banks Plc and Plantinum Habib bank Plc in an effort to meet up with the requirements of Tier 2 capital based. Accordingly, Punch (2018) and Guardian (2018) reported how Skye bank was taken over by Polaris bank based on the advice of CBN. Similarly, Access and Diamond Banks were seen to be merged. Recently, Premium Time (2022) reported how Titan trust almost acquired or taken over by the Union bank.
In an attempt to examine the financial distress likelihood of various business entities across the globe, some scholars like Beaver (1966), Altman (1983), Andrade (1998), Asquith (1994), Chen (1997), Khan et al. (2020) and Sunday and Innocent (2021) among others, initiated some classical models to determine the financial distress likelihood or tendency of business operations.

Nonetheless, this study employed logistic regression technique to measure financial distress of the listed DMBs being a dependent variable in the parsimonious model of the study. Furthermore, corporate financial distress has remained an unresolved issue in the banking sector particularly amongst the developing countries of the world today, considering the divergence scholars views were discovered from the few studies conducted in connection to relationship between CEOs attributes and financial distress likelihood (Muien, et al., 2022; Chowdhury & Doukas, 2022; Lawrence, et al., 2021; Yao, 2020; Kolias, et al., 2019; Rono, 2018; Zahra, et al., 2018; Gottardo & Moisello, 2017; Boyallian & Ruiz-Verdu, 2017; Bhaiyat & Garrow, 2015). In that regards, this study seeks to examine the moderating role risk committee gender on the effect of CEOs attributes and financial distress likelihood of listed DMBs in Nigeria covering the periods of fifteen years 2007-2021. The independent variables is represented by CEOs attributes and proxied by (CEO gender and tenure) and dependent variable of the study is represented by financial distress and measured by modified Altman's Z score by (Ohlson , 1980), Also, firms size and age are considered as control respectively. The study employed logistics regression technique to enable the researcher predicts

the financial distress of the listed DMBs in Nigeria. This will be achieved by analysing the first model of the study. And to further considered the result of the first model as a measurement of dependent variable of the second model. This contribution is informed by the inconsistences in the outcome of the previous studies as far as CEOs attributes and financial distress likelihood are concern.

This study is anchored on Organizational Life Cycle Theory, which will also serves as a contribution to knowledge. Eventually, the inclusion of the moderator (RMCG) enables the researcher fill the existing gap as explained, whereas the changes in the result of the study shall also contribute to the existing knowledge and literature of accounting and finance. In this regards, the hypothesis of the study are formulated in null form based on the objectives of the study:

H_{01}: CEOs gender has no significant effect on financial distress likelihood of listed DMBs in Nigeria

H_{02}: CEOs tenure has no significant effect on financial distress likelihood of listed DMBs in Nigeria

H_{03}: Risk committee gender has no significant effect on financial distress likelihood of listed DMBs in Nigeria

H_{04}: Risk committee gender has no significant effect on moderating CEOs gender on financial distress likelihood of listed DMBs in Nigeria

H_{05}: Risk committee gender has no significant effect on moderating CEOs tenure on financial distress likelihood of listed DMBs in Nigeria.

The outcome of the study may be considered as basis for further study. Accordingly, it could guide management of the listed DMBs towards making effective decision making. Also, the result may be useful to all relevant financial regulators in Nigeria like CBN, SEC, NDIC among others. Likewise, other financial stakeholders may utilize the outcome for effective policy.

Conclusively, the paper is divided into five parts namely: introduction, literature review, methodology, result discussion, discussion of findings as well the policy implications.

2. Literature Review

The section focused on reviewing concept of the variables of the study (CEO gender, CEO tenure and financial distress likelihood) as well as review of related studies.

Financial Distress

Management is often seen to be responsible for the survival and failure of their business. In that regards, the CEOs monitor and control the organization with the aid of effective management policies towards meeting the needs and objectives of their business stakeholders. Therefore, the concept of financial distress has been widely viewed by various scholars, authorities and experts. Meanwhile, According to Beaver (1966) and Foster (1977), financial distress is situation by which an organization possesses huge amount debt arising from banks overdraft, bonds and unsettled preference dividend of shareholders that ultimately become insolvent. But, Hamza (2021) considered financial distress as a failure of a corporate entity due lack of effective strategic management policies to manage their business resource. However, Parker and Peter (2002) and Noor and Iskandar (2012) considered financial distress as the normal failure of a business organization. While, Fich and Slezak (2008) and Kolias et al (2019) stressed that financial distress refers to winding up of business due to in adequate or poor control and resources management.

But, Dewandono (2018) considered financial distress as risk tendency for defaulting in ordinary business operation. Then, Altunbas et al (2018) and Jingsi Leng et al (2021) termed financial distress as a period for financial crisis in a business operation. According to Miglani and Ahmed (2020) financial distress is a turnaround of business operation due to financial management failure. According to Lawrence et al. (2021)

financial distress means a condition where financial cash inflow of an oganisation felt to cover the business debt obligations. While, Chen and Liang (2022) considered financial distress as a situation where business cannot settle their debt obligations. Therefore, this study defines financial distress as the inability of managers of business entities to settle their total debt obligation as at when due, which would subsequently affect the business operation.

CEOs Gender

Gender is one of the attribute of CEO that plays a vital role in financial management decision making of an organization. Therefore, scholars like Byrnes et al. (1999) and Jianakoplos, and Bernasek (1998) considered female CEOs to be risk averse. Hence, they are conservative in takings any financial risk management decision. Catalyst (2004) declared that presence of female CEO in the top management position of organization influences the organizational performance financially as evident from one of his conducted on 500 groups of fortune companies in UK.

While, Francoeur et al. (2008) affirmed that female executive have a greater influence on the complex business environment. Fondas and Sassalos (2000) argued that female CEOs tendency for business investment is less as compared with the male CEOs. Peni and Vähämaa (2010) expressed that female CEO are often seen to be more conservative particularly in earnings and risk management decision making than male. On the other hand, Zhang and Qu (2016) stressed that the performance of an organization is often influenced by CEO gender. While Alqatamin (2017) refers to gender in capacity of the CEO as a representation of individual sex category in managing affairs of the an orgaisation. Moreover, this study adopted the view of Alqatamin (2017) in measuring CEO gender as far as this study is concern.

CEOs Tenure

Over decade, scholars have a wider view of CEO tenure as one of the characteristics of CEO which serves as an important elements of the corporate governance mechanism of corporate organization. Therefore, Ali and Zhang (2015) deliberated that the longer the CEO tenure the more technically sound the CEO will be come as far as business management decision is concern. While, Hu et al. (2015) emphasized that the longer the CEO serves the more cautious he/she will become towards organization's earnings and risk management. Cheng and Leung (2012) conveyed that the longer the CEO serves in an organisation the more reputable and acceptable his/her services is.

On the hand, Hambrick and Mason (1984) asserts that the longer the service of the CEOs, the more committed they become in their work. Then, Shen and Cannella (2002) discovered that competency of the CEO can be improved or change through motivation not by their serving tenure. Although, Barno (2017) emphasized that the CEO period of engagement has an influence on their ability for better understanding and effective service delivery. However, Herri et al. (2017) considered the number of years spend by an individual in capacity of CEO as a tenure, as an element of corporate governance that has a significant role in determining the direction of an organisations strength. Thus, it is on this basis that the measurement of CEO tenure is made as far as this study is concern. Hence, the study further considered CEOs tenure as one of the important corporate governance attributes that refers to the periods that individual CEOs had served an organization.

Risk Management Committee Gender

Risk Management Committee (RMC) has been one of the important corporate governance mechanisms that management can use considered for monitoring and control of the organisation's resources to ensure survival of the business. Elamer and Benyazid (2018) see RMC as a managerial tool for the effective risk management. But, according to Sufi and Qaisar (2015) RMC is an essential administrative function that deals with implementing policies for risk and control of business operation.

Likewise, it is also necessary to highlight that the responsibility and of Risk Management Committee Gender (RMCG) today, has attracted various scholars views Lamidi et al. (2022), considering the significance role of gender in an administrative system of various corporate organisation. Therefore, the inclusion of females in the RMC of an organization may have significance influence in the survival tendency of an organization. Though, Khlif and Achek (2017) considered female management members to be conservative and risk averse as compared with men. While, Jia (2019) asserts that female are more likely to be skillful as far as risk management of resources is concern. Meanwhile, they are often seen to be more preferred and fit to be risk committee members. In an effort to study risk tolerance based on gender diversity by Yao et al. (2011) it was established that female tend to be are more critical in risk management than men. Consequently, this study considered RMCG as a representation of female in the risk management team of board of corporate organization.

CEO Gender and Financial Distress

Today, the administrative role of CEO gender in relation to financial distress likelihood of business operations have been recognized by various scholars in different context, for example Rono (2018) in his study on CEOs attributes and financial distress in Kenyan's commercial banks during the period of 2016, discovered a positive but insignificant connection between CEO gender and financial distress. Also, in another study conducted on 3,692 SMEs in UK by Dewandono (2018), it was found that CEOs gender have a negative and significant effect on financial distress, using secondary source of data based on Altman Z Score approach with the aid of multivariate regression analysis. Another similar study may be conducted amongst Nigerian financial institutions like bank under different periods with different technique of data analysis.

On the other hand, another study conducted in Nigeria by Lawrence et al (2021) concluded that CEOs gender has a negative effect on financial distress likelihood of 59 listed manufacturing firms. The study was titled CEOs attributes and financial distress likelihood of listed manufacturing firms in Nigeria for the period between 2010 and 2019, considering CEOs gender among the proxies of CEOs attributes as independent variable and financial distress likelihood represented dependent variable. And logistic regression technique was suitable used to enable the researcher analyzed the secondary panel data.

According to a study conducted by Gerasimova (2021), with the aim of examining the effect of CEOs characteristics on financial risk-taking of 121 sampled commercial banks across Asian, American and European region during the periods of 2014 to 2018. The study employed a multiple regression technique based on Ordinary Least Square (OLS). It was discovered that CEO gender has no significant relationship with financial risk of the banks.

Considering the divergence scholars views from the reviewed studies concerning the link between CEO gender and financial distress, there is need to conduct a similar study to moderate the connection between CEO gender and financial distress likelihood in Nigerian context particularly in the banking sector. Using logistics regression technique based on MDA approached.

CEO Tenure and Financial distress

It is important to note that some scholars have examined the relationship between CEO tenure and financial distress in different context. For instance, Prasad et al. (2014) studied the relationship between CEOs compensation on financial crisis of 249 out of 500 listed fortune companies in USA during the period of 2004-2007, in a study titled "CEO compensation: Does financial Crisis matters? ". It was discovered that CEO tenure as one of the independent variable has a significant positive relationship with financial crisis tendency. Both primary and secondary data were considered suitable for the study, using multiple logistic regression techniques to analyse the data. Considering the result of this study, if a similar study will be

conducted under another environment particularly in a financial institution like bank the result would have been different.
Conversely, another study by Darrat et al. (2014) on corporate governance and bankruptcy risk amongst listed Compustat firms from (1996-2006), found a negative correlation between the CEO tenure and risk tendency of bankruptcy. CEOs tenure represented one of the independent variables of the study while, bankruptcy risk tendency represented dependent variable in the study. Ultimately the study encouraged the firms to increase their CEO tenure to ensure survival tendency of their businesses. However, the scope of this study is not sufficient to generalize this finding.
Similarly, in an effort to examine top management team impact on probability of firm's default amongst 642 listed UK firms by Bhaiyat and Garrow (2015), CEO tenure as an explanatory variable was seen to influenced financial distress of the sampled firms negatively. Multivariate analysis technique of regression was considered suitable for the study. But, the study of Kariuki, Namusonge and Orwa (2015), established that financial distress likelihood is significantly influenced by CEO tenure positively. Yet, both studies were conducted outside financial sector. Hence, there is need to have a similar study in financial sector particularly in banking sector with a moderating variable to resolve the divergence views.
Still, Bhabra and Eissa (2017) affirmed that corporate financial distress is influenced by CEO tenure negatively based on their study conducted amongst the sample of 706 from 1850 both private and public US firm between 2013-2015, While examining effect of CEO tenure on financial distress. Then, this study is constraint by its scope which also affects the generalization of finding.
Contrariwise, Rono (2018) discovered a positive relationship between CEO tenure and financial distress likelihood amongst commercial banks in Kenya during the period of 2016. A cross sectional and descriptive design was considered suitable for the research. CEO tenure represented the independent variable and financial distress represented dependent variable of the research and Altman Z score model was used to measure financial distress. Multivariate discriminants analysis technique was used in analyzing the secondary data obtained through audited financial report of the banks. Nevertheless, if a similar research would be conducted in a different environment, using different technique the result would have change.
But, in another related study by Bulten (2022) it was discovered that CEO tenure has no significant influence on risk failure amongst 1060 out of 1275 banks. A multivariate discriminants analyses was employed to analyse the secondary data obtained. But, according to Chowdhury and Doukas (2022) failure tendency of firms is influenced by CEOs tenure positively in their study on "whether CEOs are to be blamed on any corporate failures" between (1980-2016). Therefore, covers 990 US firms. Conversely, Muien et al. (2022) studied the effect CEOs reputation on financial distress of 285 Pakistanis firm between (2006 to 2017). The study used secondary source based on regression analysis techniques and also discovered that CEOs tenure is positively related to and financial distress of the Pakistanis firms. Yet, none of these studies was conducted in Nigeria, during 2013-2022.

Risk Committee Gender and Financial Distress

Risk committee gender is an important element corporate governance attributes that can be linked to survival tendency or likelihood of business, based on some empirical evidences. Yousaf et al. (2020) studied how the diversity in CEO influence risk of business failure or survival based on 42 listed Chinese companies sampled for the study, for the period between (2007 to 2016). A machine learning models is used to measure the risk of distress financially while logic regression was used in examining the relationship between the explanatory and explained variables. It was found that board diversity represented by gender has a connection with corporate financial distress positively and significantly.
Another study was conducted amongst 99 EU's banks by Farag and Mallin (2016) discovered that a negative and significant relationship between female representation in risk committee and financial crisis

vulnerability of Belgium, Finland, Austria, France, Germany, Denmark, Cyprorus, Greece, Italy, Portugal, Ireland, Poland, Spain, Sweden, Netherlands, Switzerland and UK. This signifies that female representation reduces the risk or vulnerability to corporate distress financially. But, Donker and Santen (2009) in a similar study amongst listed Netherlands companies during the period of 1993-2003, found no significant effect between diversity of risk committee and firms. Though, the study employed logistic technique in analyzing data.

But, Jia (2019) discovered that risk committee gender have a negative influence on firms distress financially, following a study conducted amongst 300 non listed firms in Australia between 2007 and 2014. A multiple regression analysis was used to analysed the panel data collected from the annual reports of the selected firms.

Considering the divergence views of the reviewed literatures another similar study may be conducted amongst Nigerian financial institutions like bank with a risk committee gender as a moderating variable under different periods with different technique of data analysis.

Conclusively, the study has been anchored by organizational life cycle theory considering the connection between the theory and all variables that represent the topic of the subject matter.

3. Methodology

Correlational research design was used in line with the objective of the study. The population and the study consist of fourteen (14) listed DMBs in Nigeria as shown in table 1.

Population and Sample Size of the Study

S/N	Study Population (14)	Sample Selected (14)	Date of Listing
1	Access Bank Nig Plc.	Access Bank Nig Plc.	1998
2	Eco Bank of Nig Plc.	Eco Bank of Nig Plc.	2006
3	First City Monument Bank Nigeria Plc	First City Monument Bank Nigeria Plc	2004
4	Fidelity Bank Nig Plc.	Fidelity Bank Nig Plc.	2005
5	First Bank Nig Plc.	First Bank Nig Plc.	1971
6	Guarantee Trust Bank Plc.	Guarantee Trust Bank Plc.	1996
7	Stanbic IBTC.	Stanbic IBTC.	2012
8	Sterling Bank Nig Plc.	Sterling Bank Nig Plc.	1993
9	Union Bank of Nig Plc.	Union Bank of Nig Plc.	1971
10	Unity Bank of Nigeria Plc.	Unity Bank of Nigeria Plc.	1971
11	United Bank for Africa Plc.	United Bank for Africa Plc.	1970
12	Wema Bank Nig Plc.	Wema Bank Nig Plc.	1990
13	Zenith Bank Nig Plc.	Zenith Bank Nig Plc.	2004
14	Jaiz Bank Nig Plc.	Jaiz Bank Nig Plc.	2012

Sources: Mohammed et al, (2023)

Therefore, study considered the entire 14 banks as census sampling technique. Secondary data were extracted from annual audited financial statement of the listed DMBs sample of the study, through Nigerian

group exchange for the year (2012- 2021). The study employed logistic regression technique, based on Multi Discriminant Analysis MDA approach of a modified Althman Z score model to analyze the unbalanced panel with the aid of STATA version 13.

Model Specifications

This study relied on modified Althman Z score model of (Ohlson, 1980a) in determining the dependent variable of the main model of study, which encapsulated the dependent variable of the study that predicted the financial well-being of the banks based on multi discriminant analysis MDA approach. The logistic regression model deals with the binary numbers "0" and "1", where "1" is representing distress and "0" is representing none- distress for measuring the "Z" value of the model. Also, the assumption holds that the "0" and "1" is determined by the prediction of the residual outcome in the model. Although, the prediction refers to the outcome of the probability drawn from the model as; (1- estimated total value of the independent variables). And where the probability is > 0.5 the observation is considered as distressed. Then, if the predicted value of the probability is < 0.5 the observation is considered non-distressed. Hence, the absolute residual value of this model would ultimately be considered as the dependent variable of parsimonious model of the study. Though several other scholars like (Shumway, 2001; Hillegeist, Keating, Cram & Lundstedt, 2004; Dechow, Sloan, & Sweeny, 1995; Soon, Kim & Woodruff, 2012; Collins, Pungaliya & Vin, 2017) have adopted this techniques example in their study.

Therefore, the modified mode is given below as:

$$P_i\, E(y = 1/X1_i, X2_i, X3_i) = \frac{1}{1 + e^{-zi}}$$

Where

P_i= Probability of distressed for firm $_i$ Y = 1 distressed company

E(Y) = cumulative probability function that take value between 0 and 1

e = exponent and

$Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu_i$ ……………………………………(i)

Where:

β_0 = Constant

β_1-β_3 = Coefficients of parameters

X_1 = Retained earnings/total assets;

X_2 = Earnings before interest and taxes/total assets;

X_3 = Equity value/ total debt

μ = error term = discriminant residuals = corporate failure CF

The study employed a multiple regression model as the second model which encapsulated the interaction of a moderating variable on explanatory and explained variables of the study is employed. Having explained how FD will be measured, through the absolute residual value of the first model to determine the dependent variable of the second model.

FDit= β0 + β1CGNit + β2CTNit + β3RCGit + β4CGN*RCGit + β5CTN*RCGit + β6SZit + β7FAGit + μit ……..…….………………………………(ii)

Where:

FD = Financial distress (Dependent variable)

β0 = Constant

β1 –β7 = Coefficient of the parameters

CGN = CEO gender (Independent variable)

CTN = CEO tenure (Independent variable)
RCG = Risk committee gender (Moderating variable)
CGN*RCG = CEO gender as moderated by risk committee gender
CTN*RCG = CEO tenure as moderated by risk committee gender
FSZ = Firm size (Control variable)
FAG = Firm age (Control variable)
μ = error term i = firm t = time

Variable, Definition and Measurement

Table. 2

Variables Definition and Measurement

Variables	*Definitions*	*Measurement*	*Sources*
Dependent Variable			
Financial Distress (FD)	The inability of a firm to finance its debt obligation as at when due	Probability function of 1 and 0 drawn from Working capital ratio, Retained earnings ratio, Earnings b/4 interest & tax ratio and equity to debt ratio based on Logistic Regression Technique	Ohlson (1980a)
Independent Variables			
CEOs Gender (CGN)	The category of the CEOs' sex	Value of 1 if CEO is male and 0 if female	Alqatamin (2017)
CEOs Tenure (CTN)	Number of years spend by an individual in capacity of CEO	Number of years in the work	Herri, Johan , and Handika (2017)
Moderating Variable			
Risk Management Committee Gender (RMCG)	Female concentration in the Board Risk Committee	Number of female directors on the RMC divided by the RMC's Size	Jia (2019b)
Control Variable			

Firm Size (FSZ)	The measure of firm capacity based on its total assets	Natural Logarithm of Total Assets	Opoku, Adu and Anarfi (2013) Rajha and Alslehat (2014)
Firm Age (FAG)	The measure of firm duration based on its date of incorporation	Difference between the year of incorporation and present year of operation.	Opoku, Adu and Anarfi (2013) Rajha and Alslehat (2014)

Sources: Mohammed et al, (2023)

4. Results and Discussion

This focuses on descriptive statistics, correlation matrix result, interpretation of the summarized regression results, policy implications and recommendations based on the findings.

Descriptive Statistics

This describes the character of the data obtained based on the variables of the study. Below is the outcome shown in the descriptive statistics table.

Table .3

Descriptive Statistics of the variable

Variable	Min	Max	Mean	Std. Dev.
FD	-12.9219	5.1728	-0.0209	1.1403
CGN	1	0	0.9121	0.2837
CTN	1	10	3.8487	2.5324
RCG	0	6	0.1798	0.1678
FAG	1	127	44.4634	31.1063
FSZ	0.0127	0.1357	0.0968	0.0218

Source: Mohammed et al, (2023)

Table 2 shows the descriptive statistic for variables of the study comprising of the (financial distress (FD), CEO age (CAG), CEO gender (CGN), risk committee gender (RCG), CEO age moderated by risk committee gender (CAR), CEO gender moderated by risk committee gender (CGR), firm age (FAG) and firm size (FSZ). It is clearly shown that the average value of the financial distress stood at -0.0209 with minimum value -12.9219 and maximum value of 5.1728, while the mean and standard deviation value stood at -0.0209 and 1.1403 respectively. Also, CGN maintained the mean value of 0.9122, which further ranges between the minimum of 0 and 1. This is simply showing that out of the CEOs of all the banks there was no body below the age of 35 and where 1 always represent male gender and 0 represent female gender. The CTN maintained the average value of 3.849 with a minimum maximum value of 1 and 10 respectively. This means that the highest servicing periods by the CEOs as far as listed DMBs in Nigeria is concern is 10

years while the least serving periods is 1 year. On the other hand, the risk committee gender maintained the average value of 0.1798 with a minimum and maximum of 0 and 6 respectively.

Correlation Matrix

This focuses on correlation between dependent variable financial distress (FD) and other variables that comprise of the proxies of the independent variables; CEO age (CAG) and CEO gender (CGN) as well as control variables firms' age (FAG) and firms' size (FSZ).

Table. 4

Correlation Matrix

Variables	1	2	3	4	5	6
1. FD	1					
2. CGN	0.1986					
	0.0043*	1				
3. CTN	0.0834	0.1042				
	0.2343	0.1369	1			
4. RCG	0.0485	-0.1143	0.2095*			
	0.4894	0.1028	0.0026	1		
5. FAG	-0.0822	0.0602	0.1160	0.1531*		
	0.2413	0.3914	0.0978	0.0284	1	
6. FSZ	-0.0621	0.1409*	0.1409*	0.1195	0.0970	
	0.3768	0.0438	0.0357	0.0879	0.1666	1

Source: Mohammed et al, (2023)

Table 3 revealed that the correlations between FD with CGN, CTN and RCG were positively weak at coefficient value of 0.1986, 0.0834 and 0.0485 respectively. Except that the correlation between FD and CGN is significant at 1%. On the other hand, FD maintained negative weak correlations with FAG and FSZ with coefficient value of -0.0822 and -0.0621 respectively. Consequently, the correlations among the independent variables were relatively weak. Therefore, it implies that there is no indication of multicollinearity effect among the explanatory variables of the study.

Table. 5

Summary of Robust Regression Result

Variables	Coefficient	t- values	P-Values	VIF	Tolerance Value

CGN	0.0548	2.06	0.041	1.06	0.9467
CTN	-0.0035	-1.84	0.068	1.08	0.9241
RCG	-0.0100	-0.10	0.918	1.10	0.9091
CGR	0.0231	0.24	0.812		
CGR	0.0089	1.23	0.222		
R2					0.18
Adj R2					0.15
F- Start					6.81
F- Sig					0.000
Hettest Chi 2					0.000
Hausman Chi 2					0.66
Breusch Pagan					1.00

Sources: Mohammed et al, (2023)

The study has been subjected to post regression analysis to ensure the best fit model to be used in used to interpret the result of study on the basis of best linear unbiased estimators "BLUE" for valid inferences. In that regards, heteroskedasticity test conducted revealed Chi2 value of 0.000 that shows that an evidence of an unequal spread of data in the model of the study and it was corrected using robust OLS to ensure "BLUE" as shown in the summary of the result of the study. This was determined through the Hausman specification test conducted that yield Chi 2 Value of 0.65, which suggested for Breusch and Pagan Lagrangian Multiplier Test (L.M-Test) for random effects. And the outcome revealed P- Value of 1.000, hence, OLS regression model was considered suitable for the study. But, following the outcome of the study the research resorted to robust the OLS.

Furthermore, Variance Inflation Factor (VIF) and corresponding Tolerance Value have been displayed on the basis of rule of thumb of VIF and the Tolerance Value. Where the VIF consistently displaying smaller values less than ten (10) and the corresponding tolerance value consistently sowing smaller values less than one (1) which ultimately indicating the absence of multicollinearity effect within independent variables of the study.

Also, cumulative R- Squared of (0.18) as the multiple coefficient of determination which indicate the percentage of total variation in the dependent variable as jointly explained by the all the independent variable, moderating variable and control variables used in the study. This means, that 18% of the variation in dependent variable is determined by the independent variable, moderating variable and control variables jointly. This outcome is validated by the outcome of the F- Stat and F- Sig of (6.81) and (0.000) respectively, which further signified the fitness of the model of the study by 1%.

Hypothesis One (CEO Gender and Financial Distress Likelihood)

CEO gender has shown a positive and significant effect on financial distress likelihood with coefficient value of 0.0548 and P- value of 0.041 respectively. The implies that a change in CEO gender has a significant effect on financial distress likelihood of the listed DMBs in Nigeria positively, essentially any increase in a number of female CEO will lead to increase on financial distress likelihood of the listed DMBs in Nigeria by 5%. Hence, this suggest for not accepting the null hypothesis which states that CEO gender has no significant effect on financial distress likelihood of the listed DMBs in Nigeria. Therefore, the result is in lined with outcome of Rono (2018) but contrary to the work of Dewandono (2018) and Lawrence et al (2021), which also validated the underpinning theory of the study.

Hypothesis Two (CEO Tenure and Financial Distress Likelihood)
From table 4 CEO tenure with negative coefficient value of -0.0035 yield a P- value of 0.068 which is significant at 10%. This signifies that CEO tenure has a negative and significant influence on the financial distress likelihood of the listed DMBs in Nigeria. Hence, this shows that for every one unit increase in the CEO tenure there will be decrease in the financial distress likelihood of the listed DMBs in Nigeria. This is considered as evidence for not accepting the null hypothesis which states that CEO tenure has no significant effect on financial distress likelihood, but to accept the alternate hypothesis. Meanwhile, this result of the study corresponded with the views Darrat et al. (2014) and Bhabra and Eissa (2017) but , opposes the study of Muien et al. (2022) and Chowdhury and Doukas (2022). The result also validated the theory of the study.

Hypothesis Three (Risk Committee Gender and Financial Distress Likelihood)
The result in the table 4 revealed that Risk Committee Gender (RCG) has a negative but insignificant value from its moderating role between CEO financial distress likelihood which maintained a P- value of 0.918 and coefficient value of -0.01. This implies that any change in the number of female within risk committee will make no change in the financial distress likelihood of the listed DMBs in Nigeria. Meanwhile, this outcome provides reason for accepting the null hypothesis which states that risk committee gender has no significant effect on financial distress of listed DMBs in Nigeria. The outcome of the study is in line with the view of Donker and Santen (2009) and against the views of Farag and Mallin (2016) and Jia (2019). But, this outcome disputed the underpinning theory of the study.

Hypothesis Four (Risk Committee Gender Moderating the Effect of CEO Gender and Financial Distress Likelihood)
It is shown from table 4 that CEO gender has shown a positive but insignificant relationship on financial performance distress likelihood with coefficient value of 0.023 and P- value of 0.812 respectively, which suggested that any change in CEO gender will have no effect on financial distress likelihood of the listed DMBs in Nigeria as moderated by risk committee gender. Thus, the result suggested for accepting the null hypothesis which states that risk committee gender has no significant effect in moderating CEOs gender on financial distress of listed DMBs in Nigeria. The outcome of this work is supported by the view of Donker and Santen (2009) and contrary to the view of Farag and Mallin (2016) and Jia (2019). Also, this outcome disputed the underpinning theory of the study.

Hypothesis Five (Risk Committee Gender Moderating the Effect of CEO Tenure and Financial Distress Likelihood)
Considering the table 4, CEO tenure revealed a negative but insignificant relationship on financial performance distress likelihood with coefficient value of 0.009 and P- value of 0.22 respectively. Therefore, this outcome implies that for any change in CEO tenure will have no influence on financial distress likelihood of the listed DMBs in Nigeria as moderated by risk committee gender. So, this outcome suggested for accepting the null hypothesis that emphasized that risk committee gender has no significant effect in moderating CEOs tenure on financial distress of listed DMBs in Nigeria. Based on the findings, it was discovered that the view of Donker and Santen (2009) supported the result of the study and opposed by the view of Farag and Mallin (2016) and Jia (2019). This further disagrees with the theory of the study.

5. Conclusion
The study examined the moderating effect of risk management committee gender on the relationship between CEO attributes and financial distress likelihood of listed DMBs in Nigeria. It was established that CEO Gender (CGN) is significantly influencing financial distress positively, while, CEO Tenure (CTN) has

a negative and significant influence on financial distress likelihood of listed DMBs in Nigeria. But, the interaction of Risk Committee Gender (RCG) on the effect of CEO gender, tenure and financial distress likelihood were insignificant as far as the Nigerian listed DMBs are concern.

Recommendations

The board of the listed DMBs must not give priority to female in managing the affairs of banks essentially at the CEO's position, for the fact that female can be very emotional and do not withstand pressure which makes them less critical in their analytical ability for decision making. And that ultimately affect the survival tendency of the organisation as far as Nigerian listed DMBs are concern. On the other hand, the board should encourage the extension of CEO tenure as they stand to gain more exposure with sound knowledge and experience in making meaningful contribution to the growth and survival of the banks.

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