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CORPORATE GOVERNANCE AND BANKRUPTCY RISK: AN EMPIRICAL ANALYSIS OF NIGERIAN BANKS

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Abstract: This study determined the effect of corporate governance on bankruptcy risk in commercial banks in Nigeria, using audit committee independence, and remuneration committee. Ex Post Facto research design was adopted for the study. A sample of eight deposit money banks was used for the study. Data were obtained from the annual reports and audited accounts of the banks under assessment. Altman's original model for public companies was used to extract data and the formulated hypotheses were tested with regression analysis with aid of E-View 9.0. The analysis and hypotheses tested shows that audit committee independence has no significant effect on bankruptcy risk commercial banks in Nigeria. However, the study revealed that remuneration committee has a positive significant effect on bankruptcy risk commercial banks in Nigeria. Based on the results, the study recommended among others that Since the board of director serves as internal control mechanism in the corporate governance, banks policy makers should provide adequate regulations on the specific number of boards to be working with, hence, audit committee independence is likely to reduce the probability of bankruptcy as they bring wider knowledge and better expertise to the bank.

Keywords: Corporate governance, Audit committee independence, Remuneration committee and Bankruptcy risk

Introduction

sturdy corporate governance (SCG) practice ensures transparency and consistency in monetary statements. Companies can approach outside sources at low prices once they have the self-belief of investors (Tricker & Tricker, 2015). Additionally, the implementation of SCG exercise guarantees using the top-of-the-line enterprise approach to maximize company price and mitigate associated risks inside the destiny (Husson-Traore, 2009; Manzaneque et al., 2016). The collapse of groups as a consequence of the financial crisis of 2008 is proof of the ramifications of weak corporate governance (WCG) implementation (Kumar & Singh, 2013; Mehran et al., 2011; Strouhal et al., 2012). SCG policies shield corporations from the hazard of monetary misery or insolvency, which are amongst the biggest reasons of financial ruin. The position of SCG adoption in mitigating economic distress has been nicely diagnosed in advanced countries. Many researchers have performed empirical research at the impact of true company governance (CG) implementation on the

opportunity of monetary misery. This research has homogenously verified the unfavourable consequences of top CG practice on the chance of misery threat (Bravo-Urquiza & Moreno-Ureba, 2021; Miglani et al., 2015). even though developing international locations respect the significance of CG, the advantages of CG, which have functioned simplest with precise CG adoption, have no longer been a concern. Therefore, CG implementation in transitional economies is lacking (Nurunnabi, 2020).

Furthermore, emerging countries are inherently affected by firms that practice family ownership, so they suffer from high levels of corruption and absenteeism among eminent directors. Consequently, adopting SCG policies in emerging countries is more of a hurdle than in developed countries because firms are hesitant to adopt SCG (McGee, 2009). The advantages of good CG adoption, such as low capital costs, effective management and risk mitigation, are hardly understood in emerging countries (Nurunnabi, 2020).

Financial distress is a broad concept used to describe situations in which firms face financial difficulty. The most common terms used interchangeably for financial distress are 'failure', 'default', 'insolvency', and 'bankruptcy' (Geng, Bose, and Chen, 2015). However, bankruptcy is the extreme and irredeemable outcome of financial distress and as such many financially distressed firms escape bankruptcy due to early reconstruction of operations. There are many definitions of financial distress because different countries have different accounting procedures and rules. It is generally believed that it is a situation where operating cash flow does not exceed negative net assets (Li et al., 2014). Geng et al. (2015) state that some of the methods that have been used for financial distress prediction include discriminant analysis, logit or probit regression model, linear conditional probability models, neural network, decision trees, case-based reasoning, genetic algorithm, rough sets, support vector machine, and others. However, the assumptions underlying the majority of these methods are far from real world situation. Extant research has focused on the discovery of better models for financial distress prediction (Ayoola & Obokoh, 2018).

in the beyond, instability within the Nigerian monetary system and the banking quarter especially turned into blamed on institutional disasters. However, this trend has shifted to generalized failure that's presently sweeping the banking area. Ogunleye (2006) as mentioned in Olaniyi (2007) corroborating this fact categorized the reasons of financial institution failure into institutional, financial and political elements in addition to regulatory and supervisory inadequacies. a number of those generalized failure styles have institutional, economic, political and socio-cultural dimensions. Mainly, factors like mismanagement, useless equipment for debt healing, bad credit score policy and administration, greed, corruption and fraud are a number of the worst culprits (Ifeyinwa, 2012).

The importance and relevance of the Banking industry to any economy is based on its main intermediary role expected to be professionally, morally, legally and statistically played as a central position in the financial system. Farinde (2013) documented that banks act as intermediaries for efficient transfer of resources from surplus to deficit units. For the banks to be able to perform efficiently and contribute meaningfully to the development of the economy, the industry must be safe, sound and stable.

Nowadays, models that can predict the bankruptcy of a company are of interest to various economic entities, such as banks, credit agencies, governments, and financial analysts, not to mention customers and suppliers. Although bankruptcy detection models have been gradually developing since the 1960s (Altman, 1968), the vast majority of them are still based only on accounting and financial variables as explanatory factors. However, despite the increase in the amount of research on corporate governance variables, which covers multiple disciplines, scholarly literature on the topic is still limited and fragmented (Martín-de Castro et al., 2019),

especially with regards to the role and impact of corporate governance on companies' turnarounds. Research tends to instead remain focused on the analysis of the impact of financial variables in predicting corporate defaults.

Studies on the bankruptcy prediction were carried out both locally and internationally using Altman Z score model. In foreign countries; Begum, Sarker and Nahar (2023); Khiem (2022); Handriani et al. (2021) and Safrida et al. (2021) tested the effect of corporate governance on bankruptcy prediction risk. In Nigeria, Okoye and Okoye (2022); Ayoola and Obokoh (2018) investigated the effect of corporate governance on bankruptcy prediction in Nigerian banks.

From the prior studies, majorities of the studies on corporate governance and bankruptcy risk were conducted in foreign countries, the only recent studies carried out in Nigeria was the research carried out by Okoye and Okoye (2022) which data ended in 2020, thereby created a geographical and periodic gap. In addition, none of these previous studies included remuneration committee and risk management committee in their corporate governance variable, thereby created variable gap. The study therefore fills these gaps via determined the effect of corporate governance on bankruptcy risk on Nigerian deposit money banks from 2012 to 2023.

The main objective of this study is to ascertain the effect of corporate governance on bankruptcy risk in commercial banks in Nigeria. The specific objectives are to:

1. Determine the effect of audit committee independence on bankruptcy risk deposit money banks in Nigeria.

2. Ascertain the effect of remuneration committee on bankruptcy risk deposit money banks in Nigeria

Literature Review

Corporate Governance

The set of guidelines and rewards referred to as "CG" are used to direct and regulate a business enterprise's management (Ehiedu, 2022; Adeusi, Akeke, Aribaba & Adebisi, 2017). Ehiedu and Ogbeta, (2014) opined that company governance is an institutional setup that restrains the excesses of commanding managers. Making sure that the enterprise is operated efficaciously and traders earn a fair go back is the middle reason of company governance (Kajola, 2018). If a business enterprise is administered with diligence, openness, accountability, and obligation with the aim of maximizing shareholders' wealth, that corporation is taken into consideration to have complied with the CG rule (Pandy, 2018).

Corporate governance is concerned with how all parties (stakeholders) involved in the firm's success try to guarantee that managers and other insiders are always taking proper actions or implementing procedures that protect the stakeholders' interests. Corporate governance tools assure shareholders of adequate returns on investments. Corporate governance was created to defend the interests of shareholders but has increasingly gained importance for other stakeholders and society (Mohammad, Aly, Dixon, & Startling, 2014).

For corporate governance systems, another key aspect for a company is the presence of internal and external auditors. In this sense, literature has shown that the presence of internal and external audit systems can have a significant impact on changes to a company's financial performance and on its probability of default (Guo et al., 2016 and Cenciarelli et al., 2018, among others). Internal and external auditors can guarantee the quality of the information of the financial reports provided by the company for investors (Bratten et al., 2013), and their role has relevant consequences during a financial crisis (Cenciarelli et al., 2018). In this sense, also the presence of the audit committee can have a significant positive impact in preventing the risk of frauds and irregularities (Beasley et al., 2000). For distressed firms in particular, statutory auditors and external auditors are obliged to judge the ability of the company to operate as a going concern entity for the following 12 months. In this sense,

with the European Union's 2015/848/EU regulation, auditors were required to promptly communicate to the top management of a company the presence of indicators of financial distress. In this field, research has shown auditors' ability to anticipate the emergence of a financial crisis (Bhimani et al., 2009). Therefore, their presence helps a company to prevent triggering this event. Research on this issue is still limited, especially in European countries (Cenciarelli et al., 2018).

Committee of independent board refers to the percentage of impartial administrators inside the board. Primarily based on Clarke (2007), the definition of unbiased director is: "person who has no want or inclination to stay inside the precise grace of management, and who will be able to speak out, inside and outside the boardroom, in the face of management's misdeeds with a purpose to protect the pursuits of shareholder". Independent director has two roles inside the board, monitoring roles and provision of sources roles, in line with their role, their presupposed to growth the tracking effectiveness and aid the corporation with advices (Hillman & Dalziel, 2003).

The RC is evolving to become one of the most prominent issues of the global economy. The RC is recognizing the importance of growth and profitability of a company by focusing on the RC of the company and reporting its' performance, there have been many discoveries of the possible benefits that companies may receive (Chung & Wei, 2017; Mintah, 2015). Many studies show that in firms with better governance, there are less instances of opportunistic behaviour by managers. Better governance, indeed, helps to align the interests of managers and shareholders boosting the corporate financial performance.

Remuneration committee (RC) is very important to any organization, particularly quoted companies. Concerns for corporations to make profit have received several attentions based on the numerous amounts of scholarly works available, directed at improving firms' profitability. For example, Yahaya (2014) examined social disclosure and profitability. Igbal and Kakakhel (2016) examined the role of remuneration committee in financial performance. Also, Agyemang-Mintah (2016) examined the role of RC in firm performance. Yahaya, Kutigi, and Ahmed (2014) examined country-specific characteristics and profitability. Gregory-Smith (2012) examined CEO pay and RC.

Furthermore, Słomka-Gołębiowska (2016) examined the effect of remuneration committee independence on pay among banks in Poland. Yahaya and Awen (2021) related asset structure with profitability. Safari (2015) assessed the role of Remuneration committee in firm dividends in Malaysia. Similarly, Yahaya and Alkasim (2021) examined the influence of sustainability on profitability among listed insurance firms in Nigeria. Cameron (2005) examined the role of remuneration committees in executive pay determination and firm financial performance. Yahaya and Ogwiji (2021) related risk committee traits with profitability among banks in Nigeria. Rahayu, Harymawan, Nasih, and Nowland, (2022) looked at the influence of remuneration committee in firm financial performance and directors' pay. Opeyemi, Popoola and Yahaya, (2020) related firm specific characteristics with profitability among listed consumer goods firms in Nigeria.

Nigerian Corporate Governance codes and reforms in Nigeria have centered upon assisting the executive management and the board of a company to make the right decisions in order to achieve their stakeholders' objectives. So, among the subcommittees noted in the settings, the remuneration committee, as compared to other committees, has received the least attention from researchers to the knowledge of the researcher. For this reason, the researcher conducted this study to fill the gaps in the theoretical framework and to indicate the importance of this committee (Eulaiwi, Al-Hadi, Taylor, Al-Yahyaee, & Evans, 2016).

Bankruptcy Risk

The term "chance" comes from Arabic, and expresses an unexpected event. threat is generally defined as something risky, indefinite that is associated with the direction of phenomenon and disturbs its behavior. Key

definition of threat turned into added by Šoti'c and Raji'c (2015) who stated that "chance is the measure of possibility and the weight of undesired consequences". in line with Cunderlík (2004), danger is the expression of the diploma of uncertainty in various bureaucracy. The risk is described as the state of imperfect know-how when the decision-maker is aware about the numerous feasible consequences of his selection and is able to estimate the degree of opportunity that this or that result happens (Buganová & Hudáková 2012). Businesses have to face certain risks, whether financial, commercial, informational or personal. According to Fetisovová et al. (2004), for each financial decision, it is necessary to consider not only its expected return, but also the risk associated with it. Risk is one of the most important limits that define the scope of financial decision-making (Marini'c 2008). Special attention should be paid to the risk of long-term financial decisions. Risk is the chance to achieve above-average return on investment (Klu'cka 2006). Tranchard (2018) provided the following definition of risk: "Risk is the effect of uncertainty on objectives". Risk is the probability.

Bankruptcy risks show the possibility of losses arising from the failure to achieve financial objectives. The financial risks related to the financial operation of a business may take many different forms: market risks determined by the changes in commodities, stocks and other financial instruments prices, foreign exchange risks, interest rate risks, credit risks, financing risks, liquidity risks, cash flow risk, and bankruptcy risk. These financial risks are not necessarily independent of each other, the interdependence being recognized when managers are designing risk management systems (Woods & Dowd 2008). The importance of these risks will vary from one firm to another, in function of the sector of activity of the firms, the firm size, development of international transactions, etc.

Altman Prediction Models of Bankruptcy

Enterprise failure fashions may be extensively divided into two agencies: quantitative models that are based totally largely on posted financial statistics; and qualitative models, which might be primarily based on an internal assessment of the agency involved. Both kinds attempt to identify characteristics, whether or not economic or non-monetary, which could then be used to distinguish between surviving and failing businesses (Robinson & Maguire, 2001).

a. Qualitative models

This category of model rests on the premise that the use of financial measures as sole indicators of organizational performance is limited. For this reason, qualitative models are based on non-accounting or qualitative variables. One of the most notable of these is the A score model attributed to Argenti (2003), which suggests that the failure process follows a predictable sequence: (i) Defects (ii) Mistakes (iii) Symptoms of failure

b. Quantitative models

Quantitative models identify financial ratios with values which differ markedly between surviving and failing companies, and which can subsequently be used to identify companies which exhibit the features of previously failing companies (Argenti, 2003). Commonly-accepted financial indicators of impending failure include: low profitability related to assets and commitments low equity returns, both dividend and capital poor liquidity high gearing high variability of income.

Edward Altman's Z – Score Model

Most credit score managers use traditional ratio analysis to become aware of destiny failure of companies. Altman (1968) is of the opinion that ratios measuring profitability, liquidity, and solvency are the maximum massive ratios. but, it's far hard to understand that's extra important as different research indicate unique ratios

as indicators of capability problems. as an example, a company may have bad liquidity ratios and may be heading for liquidation. That identical enterprise's top profitability may additionally undermine the potential hazard that is highlighted via the bad liquidity ratios. As a end result, interpretation the usage of conventional ratio analyses can be wrong (Odipo & Sitati, 2008).

Altman set out to mix some of ratios and evolved an insolvency prediction model - the Z-score model. This method was advanced for personal production firms and eliminated all firms with belongings much less than \$1 million. This unique model turned into no longer meant for small, nonmanufacturing, or 255fb4167996c4956836e74441cbd507 corporations, but many credit granters today nevertheless use the unique Z score for all types of customers. two in addition prediction models had been formulated through Altman (from time to time known as model 'A' and model 'B') to the original Z score (Altman, 1968). The formula's approach has been used in a variety of contexts and countries, although it was designed originally for publicly held manufacturing companies with assets of more than \$1 million. Later variations by Altman were designed to be applicable to privately held companies (the Altman Z'-Score) and non-manufacturing companies (the Altman Z''-Score). Altman's 1968 model took the following form -:Z = 1.2A + 1.4B + 3.3C + 0.6D + .999E

Z < 2.675; then the firm is classified as "failed"

Where:

A = Working Capital/Total Assets

- B = Retained Earnings/Total Assets
- C = Earnings before Interest and Taxes/Total Assets
- D = Market Value of Equity/Book Value of Total Debt

E = Sales/Total Assets

Altman's Revised Z-Score Model

Rather than simply inserting a proxy variable into an existing model to calculate the Z-Scores Altman advocated for a complete re-estimation of the model, substituting the book values of equity for the Market value in D. This resulted in a change in the coefficients and in the classification criterion and related cut-off scores. The revised Z score model took the following form:

Z' = 0.717T1 + 0.847T2 + 3.107T3 + 0.420T4 + 0.998T5

Where:

T1 = (Current Assets-Current Liabilities) / Total Assets

T2 = Retained Earnings / Total Assets

T3 = Earnings before Interest and Taxes / Total Assets

T4 = Book Value of Equity / Total Liabilities

T5 = Sales/ Total Assets

Zones of Discrimination:

Z' > 2.9 - "Safe" Zone

1.23 < Z' < 2. 9 - "Grey" Zone

Z' < 1.23 - "Distress" Zone

Financial Ratios in Z score

The Z-score is calculated by multiplying each of several financial ratios by an appropriate coefficient and then summing the results. The ratios rely on working capital, total assets, retained, EBIT, market value of equity, net worth. Working Capital is equal to Current Assets minus Current Liabilities (Milkkete, 2001). Total Assets is

the total of the Assets section of the Balance Sheet. Retained Earnings is found in the Equity section of the Balance Sheet. EBIT (Earnings before Interest and Taxes) includes the income or loss from operations and from any unusual or extraordinary items but not the tax effects of these items. It can be calculated as follows: Find Net Income; add back any income tax expenses and subtract any income tax benefits; then add back any interest expenses. Market Value of Equity is the total value of all shares of common and preferred stock. The dates these values are chosen need not correspond exactly with the dates of the financial statements to which the market value is compared (Milkkete, 2001). Net Worth is also known as Shareholders' Equity. Similarly, Stepanyan (2014) used the model to analyze the US Airline business and found the model to be very useful.

Edward Z score

Working capital to Total Assets

Mehmet and Eda (2009) indicated that working capital is the whole current assets owned by a firm. Akindele and Odusina (2015) defined working capital as basically the portion of assets required by a business in current operation. In its gross form, it is the investment in current assets. The ratio provides information about the short-term financial position of the business that is referred to as the liquidity. The more the working capital there is compared to the total assets the better the liquidity situation. According to Agha (2014) the most important items inside determination of working capital are inventories of the corporations, its accounts receivable and payables.

Empirical Review

Dalia (2023) examined the relationship between corporate governance and intellectual capital. It also investigates the impact of intellectual capital and corporate governance mechanisms on the bankruptcy risk of Egyptian companies listed on the EGX 100 index. Design/methodology/approach- This study depended on a sample of 355 observations of 71 companies listed on the EGX 100 index during 2017-2021. The modified Altman Z Score model was used to measure bankruptcy risk, and the value-added intellectual coefficient (VAIC) model was used to measure intellectual capital. Corporate governance mechanisms, such as board characteristics and audit committee are presented as independent variables. The results also show an insignificant influence of board independence and audit committee size on intellectual capital efficiency. Moreover, this study finds that companies with intellectual capital efficiency are less likely to go bankrupt. Furthermore, the results indicate that board size, independence, and meetings have a significant negative effect on bankruptcy risk. Thus, good corporate governance improves a company's financial health. Khiem (2022) determined the effect of company Governance on the relationship among the macro and micro factors inflicting financial misery in 240 Vietnamese indexed non-financial firms. This paper contributes empirical proof at the essential benefit of strong company governance practices and marginal gain in danger mitigation in improving company governance. the article indicates that Vietnamese firms have to implement sturdy corporate governance to overcome the hazard of economic misery. Handriani et al. (2021) explored the effect of board length, board independence, and institutional ownership on financial misery for a pattern of nine production agencies indexed on the Indonesia stock trade with three hundred observations for the duration of the duration 2010-2018. They determined that institutional ownership and board independence have a tremendous effective impact on averting monetary distress. but board length became found to have a trifling wonderful effect on monetary misery. Safrida et al. (2021) tested the effect of corporate governance on bankruptcy prediction for a sample of 20 companies listed on the Indonesia Stock Exchange for the period 2016-2020. The results demonstrated a significant positive effect of the board of directors, board of commissioners, independent commissioners, and audit committee on the prediction of bankruptcy. The results also revealed a significant negative influence of Institutional ownership and managerial ownership on bankruptcy prediction. Joshua, Efiong, and Imong (2019) examined corporate governance and financial performance of listed deposit money

banks (DMBs) in Nigeria from 2007-2016 and data were obtained from their annual financial reports. Data were presented using tables and analyzed using panel data regression. The corporate governance mechanisms of board size (BSIZE), board composition (BCOM) and audit committee (ACOM) were used as independent variables. The findings of this study revealed that board size had a positive but insignificant relationship with performance. It was also observed that audit committee, board composition and bank size all had positive and significant relationships with return on asset. The study therefore concludes that board composition and audit committee are good predictors of performance as measured by return on assets (ROA). Ahmad and Masoumeh (2016) investigated the relationship between earnings management and quality of earnings for the bankrupt and non-bankrupt firms listed in the Tehran Stock Exchange from 2007 to 2012. The results of estimating unbalanced panel data technique for 55 firms subjected to bankruptcy of Altman's model, and 198 non-bankrupt firms, shows that the bankrupt firms tend to use opportunistic earnings management, and the non-bankrupt choose efficient earnings management. Gnyana (2015) in his research on prediction of financial distress using Altman Z score for selected companies in India concluded that, Z score is one of the popular and effective models and all investors should analyze the Z score of company before investment decision to avoid financial loss due to financial failure. Campa, Del Mar and Miñano (2014) conducted a study on the response to the question whether Spanish companies go bankrupt, compared to their counterparts, during the years prior to the procedure of bankruptcy law tend to manage earnings or not? In the analysis of a sample matched bankrupt companies, it became clear that earnings management of bankrupt companies is more than those in nonbankrupt them. Findings showed that management tools profit operates by industry in which the company and the years of pre-bankruptcy are changed. In Zimbabwe, Ncube (2014) on Altman's Z score for nonmanufacturing firms and financial institutions listed in Zimbabwe stock exchange recommended the use of the model in predicting corporate failure in the financial services and banking sector. From the above, despite Altman's model being old and despite of its limitations, it has remained to be the most globally used model. Arguably that various equations now exists but they all follow the concepts of the original one derived by professor Altman in 1968.

Methodology

Due to the nature of the study, Ex Post Facto research design was adopted. The study analyzed the audited accounts of banks. This involves use of financial accounts of the banks under assessment for the period, 2012-2023 to generate the financial ratios that discriminated the most in prediction of healthy banks using Altman Model.

Population and Sample Size

This population of this study consists of the deposit money banks quoted on the Nigerian Exchange Group. The study covered ten years annual reports and accounts of these banks from 2012 to 2023.

The "purposive sampling technique was applied (Non-random sample). In this method, the sample is chosen based on what the researcher thinks is appropriate for the study. The banks licence with international authorization was chosen which consist a total of eight (8) out of the twenty-two (22) deposit money banks which was inevitably excluded during the data collection process due to incomplete data, hence majority of the other banks are those that either emerged or acquired during the period the study covered without international authorization (See appendix for details).

Source of Data Collection

Data were collected from only secondary sources. This data was obtained from the annual reports and audited accounts of the banks under assessment

Model Specification

The study employed Altman Model given as Zeta "Z" $Z=1.2X_1 + 1.4X_{2+} 3.3X_3 + 0.6X_4 + 1.0 X_5$,

Where:

 X_1

= Working capital to total assets

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- X_2 = Retained earnings to total assets
- $X_3 =$ Earnings before interest and taxes to total asset
- $X_4 =$ Value of equity to total book debt
- $X_5 = Gross earnings to total assets$

The decision rule is that:

(i). For Z<1.81 Bankruptcy region

(ii). For 1.81<Z>2.675 High bankruptcy potential

(iii). For 2.675<Z<2.99 Low bankruptcy potential

(iv). For Z>2.99 Strong (No sign of bankruptcy at all).

The Altman Model will be modified thus to incorporate corporate governance:

 $ATMN_{it} = a_0 + \beta_1 ACI + \beta_2 ACD_{it} + \beta_3 REC_{it} + \beta_4 RMC_{it} + \beta_5 BIND_{it + it urt} \dots (i)$ Where;

ATMN= Altman Prediction Model

ACI= Audit committee Independence

REC = Remuneration committee

Method of Data Analysis

Data were analyzed with descriptive statistics, and the hypotheses will be tested with Pearson correlation, and multiple regression analysis. Since the focus of the study is to examine the effect of asset composition on financial performance, regression analysis becomes appropriate tool for it.

Descriptive statistics employed to summarily describe the mean, median, standard deviation, kurtosis and skewness of the study variables. Inferential statistics will also be utilized with the aid of E-Views 9 using:

- i. Coefficient of correlation: which is a good measure of relationship between two variables that tell us about the strength of relationship and the direction of the relationship as well?
- ii. Regressions analysis: Regression analysis predicts the value the dependent variable based on the value of the independent variable and explains the impact or effect of changes in the values of the variables.

Decision Rule

Accept the alternative hypothesis, if the Probability value (P-value) of the test is less than 0.05 (5%). Otherwise reject.

Data Analysis and Results

Table 1: Descriptive Analysis					
ATMN	ACI	REC			
2.913370	0.377978	85.49554			
3.023000	0.330000	88.70000			
6.598000	1.780000	99.94000			
0.399000	0.100000	61.34000			
1.547708	0.313757	12.04400			
0.121996	2.775521	-0.659108			
2.306899	11.63645	2.372738			
2.069699	404.0422	8.169404			
0.355280	0.000000	0.016828			
268.0300	34.77400	7865.590			
217.9815	8.958382	13200.26			
96	96	96			
	ATMN 2.913370 3.023000 6.598000 0.399000 1.547708 0.121996 2.306899 2.069699 0.355280 268.0300 217.9815 96	ATMN ACI 2.913370 0.377978 3.023000 0.330000 6.598000 1.780000 0.399000 0.100000 1.547708 0.313757 0.121996 2.775521 2.306899 11.63645 2.069699 404.0422 0.355280 0.000000 268.0300 34.77400 217.9815 8.958382 96 96			

Table 1 shows the mean (average) for each of the variables, their maximum values, minimum values, standard deviation and Jarque-Bera (JB) Statistics (normality test). The results in table 1 provided some insight into the nature of the Nigerian banks that were used in this study.

It was observed that on the average over the twelve (12) years periods (2012-2023), the sampled banks in Nigeria were characterized by positive Altman bankruptcy prediction Model (2.770944). In this table, the

Jarque-Bera (JB) which test for normality or the existence of outliers or extreme values among the variables shows that most of the variables are normally distributed at 5% level of significance. This means that any variable with outlier is not likely to distort our conclusion and are therefore reliable for drawing generalization. This also implies that the least square estimate can be used to estimate the pooled regression model.

Correlation Analysis

In examining the association among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in table 2:

Table 2: Correlation Matrix Analysis

	ATMN	ACI	REC
ATMN	1		
ACI	-0.09191	1	
REC	-0.21482	-0.44006	1

The use of correlation matrix in most regression analysis is to check for multi-collinearity and to explore the association between each explanatory variable; ACI, and REC, and the dependent variable (Altman). Finding from the correlation matrix table shows that all our independent variables, (ACI -0.092 and REC -0.215) were observed to be negatively associated with dependent variable. In checking for multi-collinearity, we notice that no two explanatory variables were perfectly correlated. This means that there is no problem of multi-collinearity between the explanatory variables. Multi-collinearity may result to wrong signs or implausible magnitudes in the estimated model coefficients, and the bias of the standard errors of the coefficients.

Test of Hypotheses

Hypotheses One

Ho₁: Audit committee independence has no significant effect on bankruptcy risk deposit money banks in Nigeria.

Table 3: Regression analysis between Altman predicting model and Audit committee independence

Dependent Variable: ATMN Method: Least Squares Date: 10/21/24 Time: 11:47 Sample: 1 103 Included observations: 96

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C ACI	3.045741 -0.546169	0.264154 0.538699	11.53017 -1.013868	0.0000 0.3133
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic	0.111050 0.001300 1.614976 239.9496 -177.4255 1.027928	Mean depe S.D. deper Akaike inf Schwarz c Hannan-Q Durbin-Wa	endent var ndent var To criterion riterion uinn criter. atson stat	2.837883 1.615218 3.817564 3.871677 3.839422 0.556648
Prob(F-statistic)	0.313305			

In table 3, a simple least square regression analysis was conducted to test the relationship between audit committee independence (ACI) and Altman bankruptcy predicting model (ATMN). The R-squared is

coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the table 3, the value of R squared was 0.111, an indication that there was variation of 9% on ATMN due to changes in ACI. This implies that 11% changes in ATMN of the economy could be accounted for by ACI, while 89% was explained by unknown variables that were not included in the model. The probability of the slope coefficients indicates that; P (0.313 >0.05). The co-efficient value of; β_1 = -0.546 implies that ACI is negatively related to ATMN, and this is statistically significant at 5%. The Durbin-Watson Statistic of 0.556648 suggests that the model does not contain serial correlation. The F-statistic of the ATMN regression is equal to 1.027928 and the associated F-statistical probability is equal to

0.313305, so the null hypothesis was rejected and the alternative hypothesis was accepted.

Decision

Since the Prob (F-statistic) of 0.313305 is higher than the critical value of 5% (0.05), then, it would be upheld that audit committee independence has no significant effect on bankruptcy risk deposit money banks in Nigeria, thus, H_0 is preferred over H_I .

Hypothesis Two

Ho2: Remuneration committee has no significant effect on bankruptcy risk deposit money banks in Nigeria

 Table 4: Regression analysis between Altman predicting model and Remuneration committee

Dependent Variable: ATMN Method: Least Squares Date: 10/21/24 Time: 11:55 Sample: 1 103 Included observations: 96

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.741432	1.192578	3.975783	0.0001
REC	-0.022318	0.013847	-1.611698	0.1105
R-squared	0.027459	Mean dependent var		2.837883
Adjusted R-squared	0.016888	S.D. dependent var		1.615218
S.E. of regression	1.601521	Akaike info criterion		3.800832
Sum squared resid	235.9681	Schwarz criterion		3.854945
Log likelihood	-176.6391	Hannan-Quinn criter.		3.822690
F-statistic	2.597571	Durbin-Watson stat		0.573432

In table 4, a simple least square regression analysis was conducted to test the significant effect between remuneration committee (REC) and Altman bankruptcy predicting model (ATMN). The R-squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the table 4, the value of R squared was 0.027, an indication that there was variation of 3% on ATMN due to changes in REC. This implies that only 3% changes in ATMN of the economy could be accounted for by REC, while 97% was explained by unknown variables that were not included in the model. The probability of the slope coefficients indicates that; P (0.111>0.05). The co-efficient value of; β_1 = --0.022318 implies that REC is negatively related to ATMN, and this is not statistically significant at 5%.

The Durbin-Watson Statistic of 0.573432 which is less than 2 suggests that the model does not contain serial correlation. The F-statistic of the ATMN regression is equal to 2.597571 and the associated probability F-statistic is equal to 0.110453, so the null hypothesis was accepted and the alternative hypothesis was rejected. **Decision**

Since the Prob (F-statistic) of 0.110453 is higher than the critical value of 5% (0.05), then, it would be upheld that remuneration committee has no significant effect on bankruptcy risk deposit money banks in Nigeria, thus, H_0 is preferred over H_I .

Discussion of findings

The study examined the effect of corporate governance on bankruptcy risk in deposit money banks in Nigeria. However, audit committee independence, and remuneration committee have no statistically significant effect on bankruptcy risk commercial banks in Nigeria. These results are in line with the study of Boo and Sharma (2008) observe no association between audit committee independence and audit fees indicating that auditors will minimize their effort in the presence of independent audit committee. Jensen and Meckling (1976) argued that the relationship between managerial share ownership and corporate debt is complex. It is argued that managerial share ownership can reduce managerial incentives to consume perquisites, expropriate wealth and to engage in other non-maximizing behavior.

Conclusion and Recommendations

This study investigated the effect of corporate governance on bankruptcy risk in commercial banks in Nigeria, using audit committee independence and remuneration committee. Data were obtained from the annual reports and audited accounts of the banks under assessment. Altman's original model for public companies was used to extract data and the formulated hypotheses were tested with regression analysis with aid of E-View 9.0. The analysis and hypotheses tested shows that audit committee independence has no significant effect on bankruptcy risk commercial banks in Nigeria. However, the remuneration committee study revealed that has a significant effect on bankruptcy risk commercial banks in Nigeria. This study therefore concluded that corporate governance has effect on bankruptcy risk in commercial banks in Nigeria

Based on the results, the study recommended the followings;

- Since the board of director serves as internal control mechanism in the corporate governance, banks policy
 makers should provide adequate regulations on the specific number of boards to be working with, hence,
 audit committee independence is likely to reduce the probability of bankruptcy as they bring wider
 knowledge and better expertise to the bank.
- 2. Remuneration committee should be encouraged hence it creates an avenue for collective deliberates on financial issues that are significant to the banks such as straighten their operations, as well preventing it from going bankruptcy.

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