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The Relationship between the Risk Management Committee and the Chief Risk Officer with the Stability of Nigerian Banks

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ABSTRACT

Bank stability is vital not only to the banking industry, but the overall national economy. If banks are not stable, national economic growth and development would be retarded. However, banks could not be stable in an environment of high risk and prevalence of moral hazards. There is a need for mechanisms that would restrain bank management from actions that could cause instability. This paper examines bank stability and its relationship with the risk management committee (RMC) and the chief risk officer (CRO) and how these could aid the board in ensuring that banks are stable in Nigeria employing data from 2006-2016. With the aid of panel regression, the result shows that though prior literature recognized the importance of the RMC and the CRO, in Nigeria it seems the situation differs. It suggests that the RMC and the CRO could not effectively restrain the excesses of the management. It further shows that weak boards and ineffective committees could have been responsible for the insignificant effects of the RMC and the CRO. Bank stability would be ensured if risk governance is reformed especially improvements in the efficiency of board committees.

Keywords:
Bank stability, risk management committee, chief risk officer, risk governance

1. Introduction

Bank are essential institutions that affect every day live of the citizens. Personal and business payments and settlements are conducted through the banking system. Banks are equally interconnected through their interbank activities and services rendered both locally and abroad resulting in global network of interconnected financial services [1]. Therefore, local and international linkage of banks has made bank stability an imperative given that the disruption of banking system in one country could have both local and international repercussions especially where it affects a global systemically important bank. Also, public confidence in the banking system could be weakened when there is any suspicion of bank fragility. The signal of fragility and instability in the banking system is of concern to financial regulators. This is because the payment

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system, finance for investment and economic growth and development are connected with the sound health of the banking system [2]. If banks are unstable, it indicates poor health and the likelihood of a slowdown in general economic activities. Thus, given that the stability of banks rests heavily on the confidence of the public, financial authorities strive to ensure relative stability in order to sustain public confidence. Such measures to maintain stability would also check the likelihood of potential disruptions to economic activities that would have been associated with bank crisis.

Prior studies aimed at investigating bank stability seem to focus more on bank and macro-economic characteristics [3-7]. While other studies have also been conducted on bank performance, however, far less investigations have been conducted on how the risk management committee (RMC) and the chief risk officer (CRO) could influence bank stability in spite of the reports since the global financial crisis (GFC) stressing the importance of these two mechanisms. In the wake of the global financial crisis, efforts were made o enhance risk management in banks. In its contributions on this, the Basel Committee on Bank Supervision (BCBS) provided a guideline to aid robust risk control and management in banks and emphasized enhanced role for the board and its committees such as the RMC [8-9]. A few studies in this direction have focused more on developed countries especially the US. Different from these previous studies, this paper is concerned with how the RMC and the CRO could influence bank stability in Nigeria which differs markedly from developed nations. This is because the board RMC and the CRO are considered as important pillars of bank risk governance to control excessive risk taking and promote stability.

In order to promote bank stability, there is a need for the supervision of bank management in order to check their opportunistic tendencies which would be detrimental to the interest of bank owners and stakeholders such as depositors. To achieve this, the RMC and a vital role for the CRO are recommended by the BCBS and other national codes as instruments that could likely aid the board in restraining managerial excesses. The RMC is expected to support the board in risk oversight and ensure that decisions that could expose a bank to high risk and potential fragility are well reviewed. Thus, the RMC is charged with important roles in risk management and control by ensuring the establishment of appropriate systems to monitor and review decisions on risk appetite at all levels [10]. Specifically, these duties cover: setting the risk appetite in conjunction with management; from time to time review the risk management structure to ascertain that measures put in place could enable a bank to fulfil its mandate; oversight of risk management system; constant communication with the board on risk management; monitor the CRO and give direction to the office; oversee the overall exposure to risk in order to check excessive risk taking and making recommendations to the board on policy changes to ensure dynamic risk management [10]. Kallamu *et al.*, [11] contends that business organisations such as banks need to provide measures to assess, control and act promptly on all issues involving risk. He further adds that studies on how bank risk could be controlled by the RMC are limited despite the importance of the committee in bank risk management.

In this study, the RMC is considered as an important organ of the board for the control of risk in banks. To ensure the effective performance of the committee, The BCBS recommends the establishment of a committee that has an optimal size and composed of accounting, banking or financial experts, and independent directors, diversity of membership and which holds regular meetings to ensure that committee matters are well attended to. It also provides for the position of a CRO who is to coordinate risk management policies and implementation. In the wake of the GFC of 2007-2008, it was found that several international systemically important banks failed to give adequate recognition to the roles and status of the chief risk officer (CRO) [12]. Reports indicate that several large banks seemed to have neglected to give prominence to the office and the advice of the CRO. For instance, though the Lehman Brothers had a CRO, the warnings given by the office to the bank management were not only ignored but the CRO was removed from office. The subsequent fragility, insolvency and failure of the bank contributed to the rapid spread of the global financial crisis [13]. Thus, to reduce the occurrence of wide spread instability, international standard providers such as the BCBS and national codes recognized the CRO as an important organ in the control and management of risk in banks. Both empirical studies and official reports have identified the failure of banks to give recognition to the role of the CRO as one of the factors that contributed to the global financial crises [12]. The BCBS principles for the enhancement of bank corporate governance also provides for a CRO with executive status whose report to the board is not subjected to review and is entitled to a degree of independence to prevent interference especially from the CEO.

2. Importance of the Risk Management Committee (RMC) and the Chief Risk Officer (CRO)

The RMC and the CRO are considered as important pillars of strong risk governance [12]. While the RMC has overall responsibility for risk control and supervision at board level, the CRO is recognized as the officer responsible for the overall risk policy and strategy in a bank. The office is also vested with risk planning and ensuring that all relevant sections of a bank adhere to the approved risk policy [14]. In carrying out these duties, it is expected that the CRO would have much impact on risk reduction and aid the stability of a bank. A CRO needs to be in tune with the market and should be able to see ahead of others and provide counsels that would guide a bank in taking decisions especially on major policy issues connected with risk management. Further emphasis on the role of the CRO could be found in [15-17] and other official reports. Thus, the RMC and the CRO's roles have become recognized globally and are now enshrined in the codes of governance issued by national bank regulators [18-20].

Prior studies pointed to the importance of the CRO. For instance, Scherbina *et al*., [14], Aebi *et al*., [21], International Monetary Fund [22] and Lingel *et al*., [23] identified the CRO and the RMC as important mechanisms in bank risk governance. They indicate that the presence of the CRO suggests the likely establishment of a strong risk governance. Similarly, Ellul *et al*., [12] also considered that when a CRO reports to the board, risk governance would be strengthened. These studies document that during the 2007-2008 GFC, banks where CROs report to the board without review by the CEO experienced better performance and were found to be more table.

This study is aimed at investigating the impact of the reporting line of the CRO and the independent RMC on bank stability. Most studies focused on the corporate governance of banks and bank performance with less attention to risk governance despite the fact that governance of risk is at the heart of bank risk management [10]. This paper is different in that it is one of the few conducted on the roles of the CRO especially from the perspective of a developing country such as Nigeria which differs from the developed countries in its governance structure, legal system and enforcement mechanisms. This could provide a different perspective on the effectiveness of the CRO and the board RMC in a bank and thereby inform policy makers on how to approach risk management in a developing country. The study placed emphasis on the CRO as a key risk officer with significant responsibilities for overall risk control and management [21,12]. The study follows previous researches by employing Z-Score as a measure of bank stability [24,22]. The higher the Z-Score, the higher the stability of a bank.

This paper contributes to the study of bank risk governance by providing evidence to show that the CRO is an important element in risk governance. While prior studies have examined the relationship between bank performance and corporate governance, there is very little research on the role of the CRO and the risk management committee in bank stability. The paper contributes to the literature by providing evidence that the CRO and the reporting line is an important determinant of bank stability which demands further investigation especially in a developing nation such as Nigeria where there seems to be less studies in this direction. It provides insight into how the CRO and the RMC could be functioning in a country with low enforcement and weak legal environment. It also gives evidence on the functioning of the RMC in a country with weak corporate governance environment.

3. Instability in the Nigerian Banking System

The Nigerian banking system has been exposed to circles of instability over the past four decades. Following the deregulation of the economy in the mid-1980s, banking business that was previously conducted on a conservative basis became opened to intense competition. This arose from the sudden rise in the number of banks from less than 50 in 1986 to 120 in 1991 [25]. The establishment of new banking institutions without a conducive governance, managerial and regulatory environment laid the foundation for instability in the banking system. While seven banks were distressed in 1989, by 1995, the number had risen to 60. The trend continued in 2000. In 2004, a bank consolidation programme was put in place by the Central Bank of Nigeria (CBN) due to the low capital base of about 79 banks; though the number of banks later dropped to 25 due mainly to mergers. However, given the poor underlying health of many of the banks that merged, the consolidation only had short-lived success.

Further, in 2009, the banking system was thrown into a major crisis when eight out of 25 banks were found to be in poor health with some near insolvency [26]. The Central Bank of Nigeria attributed the instability to several factors one of which is poor board governance which includes inefficient risk governance. In 2016, the banking system has not fully recovered when the signal of instability was detected again. [27] documents the poor financial health of one of the systemically important banks leading to a decision by the central bank to remove and replace the board and the management. The bank under reference was fully taken over by the CBN in 2018 due to continuing capital deterioration arising from high exposure to risks. Thus, instability is a bane of the Nigerian banking system.

The paper is organized into the following sections: section one covers the introduction while section two is on the importance of the risk management committee (RMC) and the chief risk officer (CRO) while three addresses instability of banks in Nigeria. Section four covers the literature review, five contains methodology and hypotheses while six and seven cover discussions and conclusion respectively.

4. Literature Review

Along with the CRO, the board of directors and its committees are considered as the mechanism for the protection of banks and pillars of stability, but in Nigeria, Ojeka *et al*., [28] contends that governance failure is prevalent in bank boards. The boards were reported to be either misled, manipulated or incompetent which enabled the executives to have their ways in the manipulation of the boards to engage in moral hazards and exposure of their banks into excessive risks. Sanusi [26] notes that board committees also failed in their duties either due to incompetence or neglect. The risk officers in the banks also seem not to have been able to exert the influence demanded by their offices. Thus, there is a need to investigate what roles the board committees and the CROs have played in risk management and bank stability.

Risk management and control are germane to the stability of the banking system. To ensure that risk is well managed in banks, the board of directors through its risk governance structure oversees the management and ensures that decisions that could lead to excessive risks are moderated. In carrying out this task, some of the duties are delegated to the RMC and the CRO. The RMC is a board committee charged with the task of handling decisions on risk, examine policies and vetting management decisions on risk taking. The CRO on the other hand is the officer charged with the responsibility to oversee enterprise-wide risk management. The duties also include the implementation of risk policies and advising the board and management for efficient risk management decisions. Therefore, the RMC and the CRO are valuable devices designed to support the board, ensure optimal risk management and promote stability in the banking system.

Choi [10] notes that the risk governance structure in banks is an important mechanism for effective risk management. To ensure that bank risk governance is well implemented, the establishment of a RMC and the appointment of a CRO is vital. The RMC is noted as an aid to the board in ensuring proper risk assessment and the establishment of a system that would enhance efficient risk monitoring and control. Aebi *et al*., [21] argues that the establishment of an independent RMC is an important governance device to aid board risk control and ensure stability in banks. Mongiardino *et al*., [29] acknowledges the importance of a RMC in bank risk governance. They document that in the 20 largest US banks prior to 2008, only 12 had RMC before the crisis of 2007 while other banks relied on the AC for their risk management. The absence of a RMC seems to have played some roles in the instability that engulfed the large banks during the 2008 GFC. Ellul et al., [12] and Lingel *et al*., [23] found that the establishment of a RMC has a significant and positive relationship on the stability of banks. They further document that banks with a strong RMC and CRO which reports to the board represent a strong risk governance and they performed better during the GFC.

These prior studies however failed to provide insight into the nature of risk governance in a developing nation like Nigeria. For instance, Ellul *et al*., [12], Aebi *et al*., [21] and Lingel *et al*., [23] concentrated on data from developed economies which differ from the banking system of developing economies. Also, Ellul *et al*., [12] combined all risk governance variables into a single index thus making it challenging to identify the impact of each in the results. While the result indicates the presence of strong risk governance, the role play by each variable is difficult to identify. Further, Lingel *et al*., [23] adopted the same approach with [12] thus subjecting their studies to the same observations. Scherbina *et al*., [14] also did not focus on the banking systems similar to Nigeria while the method of analysis employed called synthetic key performance indicator (SKPI) differs from the regression employed in this study. Different from these studies, this research is exploring an environment of a developing financial and banking system.

5. Methodology and Hypothesis

5.1 Data Collection

The study covers 22 banks out of 25 that operated in Nigeria between 2006 and 2016. Three banks that were not included in the data have been bought by other banks and their data are no longer publicly available. The commercial banks are the dominant financial institutions in Nigeria and control the largest capitalization on the stock exchange. The period of 2006-2016 was chosen because the code of governance for banks came into effect in 2006. Year 2016 is the nearest year for which full data could be obtained.

5.2 Variable Definition

The dependent variable in this study is bank stability measured by Z-Score which is the distance of a bank from insolvency or failure [24,30]. The nearer to zero the Z-Score for a bank, the nearer to insolvency. Banks with negative scores have entered insolvency. Thus, the higher the Z-Score for a bank, the more stable. Z-Score is computed as ROA (return on assets) plus CARR (capital requirement ratio) which is the ratio of equity capital to total assets and divided by the standard deviation of ROA. This standard deviation is calculated over the 2006-2016 period. Z-Score is adopted because it has been applied extensively by the World Bank and it differs from the Altman model which has no provision for bank stability. RMC meeting is measured by the number of meetings help per year by the committee. The proportion of female members on the RMC is the measure for female in the committee which is found by dividing the number of females by the membership of the committee.

The total number of committee members is used to measure the size while committee independence is measured by dividing the number of independent members by total membership. Similar approach was employed for the expertise of the committee which is the proportion of financial or accounting experts on the RMC. The reporting line of the CRO is proxied by the executive status and board membership of the CRO. A CRO that is not on the executive and not a board member would not likely have direct access to report to the board. Bank size is measured by taking the log of the total assets for each year.

Table 1
The variables and their measurements

BANKSTB (Dependent variable)	Z-Score= (ROA + CARR)/sdROA Where ROA is the return on assets; CARR= ratio of equity capital to assets sdROA= standard deviation of ROA.
RMCMEET	Number of committee meetings in a year
RMCFEM	Number of females on RMC / Total committee
RMCSZ	Number of members on the RMC
RMCIND	Number of independent members/ total committee
RMCEXP	Number of experts / total number of committee
CRORPL	Binary. 1 if CRO is on board which is assumed to give direct board reporting; 0 if CRO reports to the CEO
BANKSZ	Log of total assets

5.3 Hypotheses Development
5.3.1 RMC meeting and bank stability

Committee meetings are recognized as avenues to evaluate issues, discuss and provide guidance to the management. Through meetings, committees have the opportunity to confer, exchange ideas, set and review strategies [31]. Meetings are recognized as the measure for the diligence of members and the extent to which their inputs has influenced decisions and the direction of a bank. Frequent meetings are expected to contribute to improved value given that it provides a means to interact and share ideas. It also ensures constant monitoring and oversight. Therefore, if the RMC members meet frequently, it ought to provide opportunity for risk evaluation and review, thereby bringing about the risk reduction policies that could promote bank stability. Thus, RMC meetings are expected to contribute towards better risk management and bank stability. It is thus hypothesized that:

There is a positive relationship between the RMC and bank stability.

5.3.2 RMC size and bank stability

Vafeas [32] contends that the size of a board committee could be an important factor in the ability of members to carry out their duties. This is because a large group is likely to contain a diversity of members which could generate more resource vital for effectiveness. It is further argued that in a RMC, size could matter due to diversity which could bring in more qualified and competent members that could enhance bank stability. However, another divergent view consider the likelihood that a large size could pose the challenge of coordination, and the difficulty of getting everyone to reach a consensus on issues [33,34]. Ng *et al*., [35] report that the size of the RMC could promote bank stability. In their study on Malaysian insurance industry, they found a negative relationship between RMC size and risk which suggests the potential to aid stability. Similar finding is in [36]. Therefore, it is hypothesized that:
There is a positive relationship between the size of the risk management committee and bank stability.

5.3.3 RMC gender diversity

The resource dependence theory provides support for the argument on the diversity of board committees especially the inclusion of more female members and the benefits that could be derived from the diverse members [37]. While a strand of the literature consider diversity as capable of creating challenges and generate strive [38], there seems to be an agreement that more diversity such as increase in female representation has the potential to enhance board and committee capacity and improve oversight [39]. Thus, inclusion of more female members on the risk management committee could be vital to risk control and bank stability. Ittner *et al*., [40] found a negative and significant relationship between risk and female representation which signifies that more females on board committees such as the RMC could enhance monitoring effectiveness. Further, the female gender is reported to be risk averse and would prefer less risk than their male counterparts [41,42]. It is thus hypothesized that;
There is a positive and significant relationship between the female gender on the RMC and bank stability.

5.3.4 RMC independence and bank stability

Battaglia *et al*., [43] identify a strong risk governance as composing of independent members. Such committee is regarded as one of the pillars of effective risk governance in banks. An independent RMC is one that has a mix of both independent and executive board members and the independent members have no financial ties to the bank in which they serve [35]. It is considered likely that the independent members could be more effective and objective and thus capable of restraining managerial excesses that could weakened a bank and contribute stability. Prior studies found that an independent RMC could contribute to risk reduction through more effective risk supervision and monitoring. Pathan [44] find a negative relationship between an independent risk management committee and various classes of risks. Similarly, Ng *et al*., [35] also found that an independent RMC is negatively associated with bank risk behaviour. Therefore, an independent RMC is expected to play more assertive roles in the risk management of a bank and ensure stability. Therefore it is hypothesized as follows;
There is a positive relationship between the RMC independence and bank stability.

5.3.5 RMC expertise and stability

Financial experts are considered as assets that could fill the knowledge and competence gap in board committees such as the RMC. The experts would have obtained training in finance, accounting and likely to also have industry financial knowledge [45,46]. A bank is therefore expected to benefit from the input of financial experts in order to ensure effective board oversight [9,46]. In previous studies, financial experts have been found to contribute to better monitoring and supervision of management [46,47]. Francis *et al*., [48] also reports that financial experts have positive impact on bank performance which is an indication that they could promote stability. In some large global banks before the financial crisis, the inadequacy of financial expertise on the risk management committees contributed to the rapid deterioration of banks and decent into fragility [29]. It is thus hypothesized that:
There is a positive relationship between the financial expertise of the RMC and bank stability.

5.3.6 Chief Risk Officer's (CRO) reporting line and bank stability

The agency theory supports the enhancement of bank stability through the application of good governance and effective risk management. One of the key instruments of strong risk control and management is the chief risk officer (CRO). The presence of the CRO is expected to provide a bank with expertise and professional advice on risk exposure, define the risk appetite and design appropriate policy and strategy to ensure that risk is well managed. To achieve this, the CRO is expected to have a measure of independence from the CEO which would require that reports from the CRO could reach the board without interference by the CEO. Prior studies indicate that banks where the CRO has some measure of independence by reporting to the board instead of the CEO performed better during the 2007-2008 global financial crisis [12]. This because the CEO could prevent the CRO from presenting reports critical of management decisions. Therefore, a CRO that reports to the board is expected to promote better risk management and enhance banking system stability. It is therefore hypothesized that:

H1: There is a positive relationship between the CRO that reports to the board and bank stability.

The following model is adopted to test the hypotheses:

$$\text{Z-Score}_{it} = RMCMEET_{it} + RMCFEM_{it} + RMCSZ_{it} + RMCIND_{it} + RMCEXPT_{it} + CRORPL_{it} + BANKSZ_{it}$$

Where

RMCMEET	risk management committee meetings
RMCFEM	proportion of females on the committee
RMCSZ	total number serving committee members
RMC IND	percentage of independent members on the rmc
RMCEXP	the proportion of the experts on the rmc
CRORPL	the reporting line of the CRO either to the board or to the CEO
BANKSZ	Log of total assets (control)

5.3.6 Test for heteroskedasticity and auto-correlation

Wald test was conducted to determine if the data is free from the problem of heteroskedasticity. The significant probability of the test at 0.000 suggests that there is a problem of heteroskedasticity. The result of the Wooldridge test for autocorrelation also showed a significant probability which suggests the presence of auto-correlation [49]. In order to correct for these, the literature suggests the implementation of the Robust Standard error in Stata [50; 24]. This paper employed the robust standard error for the purpose of solving these two problems.

5.3.7 Descriptive statistics

Table 2 presents the descriptive statistics of the variables in this paper. Z-Score is adopted as the measurement for bank stability and it denotes the distance to insolvency for a bank. The higher the score from zero, the lower the probability of default. Thus, banks with Z-Scores closer to zero have higher likelihood of insolvency than banks with higher scores. In this study, average Z-Score is 8.32 in the period of 2006-2016. The maximum score is 47.44 while the minimum is -7.39. The maximum of 47.44 suggests that the bank with this score is relatively more stable and farther from insolvency than the bank with the minimum score of -7.39 which is below zero. The score suggests a signal of an unstable bank.

Table 2
Descriptive Statistics of Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
BANKSTB	203	8.3262	9.6195	-7.3904	47.44219
RMCMEET	203	3.9901	0.8083	1	8
RMCFEM	203	0.1608	0.1479	0	1.2
RMCSZ	203	6.3300	1.8812	3	13
RMCIND	203	0.5553	.17111	.07875	1
RMCEXP	203	0.5110	.15341	.02833	0.85714
CRORPL	203	0.6108	.48876	0	1
BANKSZ	203	8.8185	0.3954	8.0253	9.6720

The mean RMCSZ is six which indicates that on the average, there are six members on the RMC. This is above the mean size of three reported in the investigation of Chinese and Indian banks by Battaglia *et al*., [51] and the study of Aebi *et al*., [21]. On the average, the RMC meets about four times a year given the mean score of 3.99. Also, the average percentage of independent committee members is about 60% (0.555) while the mean for experts on the committee is also 60%.

6. Empirical Results and Discussions

The result of the hausman test shows a probability of 0.1748. An insignificant result in this test shows that the fixed effect model is not appropriate for this analysis. The random effect model is thus selected [52].

Table 3 presents the RE robust standard error model for the regression on the relationship between the risk management committee and bank stability. The result of the regression shows that the RMCMEET has a significant but negative association with bank stability ($z = -2.12$; $p = 0.034$). A coefficient of -0.76661 shows that one unit increase in RMCMEET could decrease bank stability by 0.7661. The RMCFEM with a positive coefficient of 1.626649 suggests the likelihood of an increase in bank stability with a unit increase in RMCFEM. With respect to RMCSZ, the relationship is positive with a coefficient of 0.132374. This indicates that the RMCSZ has the potential of increasing bank stability with any additional unit increase. A positive coefficient of 2.4347 for RMCIND suggests a positive relationship with bank stability. It further shows the likelihood that a unit increase in this variable could increase bank stability by 2.4347. On the other hand, RMCEXP has a negative relationship with bank stability and the potential of decreasing stability by 2.9587 with any additional increase in the variable. Also, The CRORPL has a negative association with stability and a possible decrease in bank stability by 0.3614 if the variable is increased by one unit.

Table 3
The Random Effect Model on the relationship between the Risk Management Committee, the Chief Risk Officer and Bank Stability.

Variable	Expected sign	Beta Coefficient	z-statistics	p-value
RMCMEET	+	-0.76661	-2.12	0.034
RMCFEM	+	1.626649	0.79	0.429
RMCSZ	+	0.132374	1.07	0.286
RMCIND	+	2.434756	1.18	0.239
RMCEXP	+	-2.958760	-1.18	0.239
CRORPL	+	-0.361410	-0.48	0.634
BANKSZ	+	-2.65068	-2.37	0.018
R2 = 0.1018				
Wald Chi2 = 41.10				
Adj R2=0.07				

The result of the RMCMEET indicates that this variable has a significant but negative relationship with bank stability and it is contrary to hypothesis 1. It reveals that RMCMEET could have a decreasing impact on bank stability. A likely reason for this could be that the executive gained control of meetings especially through the use of agenda to dictate the direction of meetings. The result seems to align with the managerial power theory which postulates that the executive could use information flow to manipulate the monitoring effectiveness of the board [53]. It contradicts the findings of Battaglia *et al.*, [51] which reports that regular meetings of the RMC could improve bank performance and thereby promote stability. It is equally not consistent with Aebi [21] which reports in their sampled North American banks that dedicated RMC which held regular meetings during the GFC of 2008 contributed to better performance of their banks and aided stability at a time of global crisis. It however agrees with Brick *et al.*, [54] which find that the frequency of committee meetings may not enhance the value and stability of a bank. This could be associated with the practice in Nigeria whereby CEOs sit on board committees and actively participate in all deliberations [28]. The effectiveness of the meetings of the RMC could be blunted when the CEO is on the committee as members may likely be reluctant to criticize any policy or managerial decision that has the potential to cause problem for the bank. It is also likely that some members have less competence to serve effectively whereby their presence may not be productive and could indeed be counter-productive especially in situations where selection to the board is influenced by the executive and mostly the CEO. Though frequent meetings are vital for productive engagement of members, such meetings may not enhance stability in banks when discussions are not robust and objective [29] but subservient to the whims of the executive.

The insignificant results produced by other variables likely indicate the inefficient state of board committees in Nigerian banks. This perhaps may account for why the board and its risk governance structure in banks have been unable to effectively supervise bank risk management. The outcome of this study seems to corroborate the position of Sanusi [26] on the inability of bank boards in Nigeria to provide the right leadership for bank stability. It could be inferred that where the board is ineffective, its committees also may not be different.

7. Conclusions

The regression results reveal that the risk management committee and the CRO which are important pillars of bank risk governance seem to be ineffective in Nigeria. The negative relationship of RMCMEET suggests that the meetings of the committee have not been productive and that important decisions which could promote bank stability have not been reached in such meetings. Aebi *et al*., [21] suggest that while regular meetings are important, the meetings need to be proactive and discussions dedicated towards addressing important issues affecting bank stability. In situations where the agenda for meetings are set by the executive to frustrate critical review of managerial actions, or where members gather to discuss issues that are only tangential to the stability of their banks, the committee meetings would not only be ineffective, but could contribute to instability. The committee would thus benefit from internal self-reforms that create an atmosphere where the executive would not control meetings through agenda setting. The deliberations in meetings ought to objectively review all important decisions that could have significant impact on the future of a bank and take decisions that would promote stability.

With respect to the RMCIND, the result suggests that the independent members on the committee seem to be unable to bring their experience and reputation to bear on the decisions of the RMC. It may be necessary to evaluate the process of selecting independent members especially the possibility of whittling down the influence of the CEO in order to ensure the selection of truly independent members who would not be intimidated or influenced easily by the executive. Indeed, independent members that would make impact on bank stability would need to be detached from the executive.

The negative though insignificant effect of the RMCEXP shows that the experts have not been playing their roles effectively. It suggests that either the experts are connected to the executive and thus align with them to take decisions that favour management but not supportive of bank stability. It may also be that the experts parade expertise without competence. The pedigree of those to be selected as experts ought to be a criteria in order to ensure the selection of qualified individuals with the experience, competence and knowledge of the operations of banks. They should also be able to demonstrate sufficient ability to understand the complexities of financial reports so as to avoid executive manipulation.

The negative and insignificant impact of the CRORPL shows that CROs in Nigerian banks seem not to be exerting the influence necessary to ensure their contribution to bank stability. The CROs may be in office but they may not possess the independence and clout that would give them strong voice. It is likely the CEOs are dominant and interfering with the reports of the CROs. Indeed where a CRO owes his elevation to the CEO, challenging the CEO could be an unlikely action. Indeed, the likelihood of CROs playing active roles in Nigerian banks could be low given that the boards are unable to effectively check their CEOs and that the board members would need first to secure their independence and free the board from executive dominance.

The result further shows that board committees seem not to be working well in Nigerian banks which suggests an ineffective governance system. This is likely to have been aided by the low level of the enforcement of rules, poor legal system and weak regulatory capacity in Nigeria. [56] argues that the implementation of good governance is hindered in Nigeria by poor law enforcement, managerial abuse of minority owners' rights, inefficient boards due to lack of dedicated directors and failure to abide by regulatory provisions. Thus, to bring about the required improvements in risk governance at board level, there is a need for the reforms in enforcement and regulatory oversight. Board independence also requires strengthening in order to rescue the board from managerial control.

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