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Board credit committee intangibles of banks in the Sub-Saharan Africa

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Abstract

The purpose of this paper is to examine the association between Board Credit Committee Intangibles (BCC) and Credit Risk Management (CR) of the Sub-Saharan African (SSA) banks. The BCC Intangibles measured using the Sveiby's (1997) Intangible Assets Monitor model are the committee independence (RIND), committee chair independence (CIND), committee size (RSIZ), committee financial expertise (RFIX), the frequency of meetings (RMEE) and diligence of the committee members (RDEL). The study adopted financial capital adequacy (FCA), profitability (PRO) and growth rate of GDP as control variables.

Keywords: Credit Committee Intangibles (BCC); Credit Risk Management (CR); financial capital adequacy (FCA).

El comité de crédito de la junta intangible y la gestión del riesgo de los bancos en África Subsahariana

Resumen

El propósito de este documento es examinar la asociación entre los Intangibles (BCC) del Comité de Crédito de la Junta Directiva y la Administración de Riesgo de Crédito (CR) de los bancos del África Subsahariana (SSA). Los intangibles de BCC medidos utilizando el modelo del Monitor de Activos Intangibles de Sveiby's (1997) son la independencia del comité (RIND), la independencia del presidente del comité (CIND), el tamaño del comité (RSIZ), la experiencia financiera del comité (RFIX), la frecuencia de las reuniones (RMEE) y Diligencia de los miembros del comité (RDEL). El estudio adoptó la suficiencia de capital financiero (FCA), la rentabilidad (PRO) y la tasa de crecimiento del PIB como variables de control.

Palabras clave: Comité de crédito intangibles (BCC); Gestión de Riesgo de Crédito (CR); Adecuación del capital financiero (FCA).

1. INTRODUCTION

Arguably, the US financial crisis of 2007–2009, also known as the global financial crisis exposed the inefficiencies of the banking regulations especially those governing credit risk. Many believed that the financial crisis 2007 was even more damning than the great depression of the 1930s (O'Rourke, 2016). During the crisis the world economy was hit by severe system breakdown that resulted from credit exposures of banks primarily due to the activities in the housing market (Alexander, Baptista, & Yan, 2015; Bloom, 2011; Chaudhry, 2015; Greenlaw, Hatzius, Kashyap, & Shin, 2008; Morgan, 2009). The crisis affected the banking system as well as the world economy, bringing about a huge number of individuals losing their employment, houses, and savings to the crisis. Financial/banking system is the driver of the economic wheels of any capitalist economy which represents the engine and propellers in which economic growth and developmental thrive. More so, literature is abounds with studies on the role of banks in the attainment of the overall developmental objectives of any nation (Al-Marri, Ahmed, & Zairi, 2007; Huang & Pan, 2016; Jones, Sakyi-Dawson, Harford, & Sey, 2016; Lin & Li, 2001; Périlleux, Vanroose, & D'Espallier, 2016; Tobin, 1964). Among the major casualties in the crisis, includes; Enron, Parmalat, Bear Stearns,

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Citigroup, Lehman Brothers, Dexia, Transmile, Megan Media and Oilcorp (Becht, Bolton, & Röell, 2011; Hadi Zulkafli & Abdul Samad, 2007). However, this unpleasant event turned out to be a redefining moment of increased attention for the need of a strict code of corporate governance in a financial/banking sector.

The primary responsibilities of the board members are to monitor and control credit exposures of banks through effective policy formulation and direction to avoid the problems of non-performing loans (NPLs). Nevertheless, during the financial crisis majority of the affected financial institutions were primarily found not to have adhered strictly to the standard norms and ethics of credit administration which eventually bankrolled heavy pressure of the non-performing loans on the affected banks' balance sheets. Credit risk is in the offing when a debtor is unable to make good his obligation of paying back his loans. In this instance, banks being creditors perform the traditional role of collecting customers deposits for safekeeping and on lending to those with viable investment ideas stand a risk of not being able to receive back in full the entire amount so disbursed as credit (DeYoung & Rice, 2004; Mishkin, 2007). Kargi (2011), opined that credit creation is the primary revenue generating activity of banks that must be guarded professionally in an efficient manner to avoid unnecessary bankruptcies and liquidations in banking. Thus, banks survive mainly on the net interest margins after deducting the interest expense and other overheads to arrive at their net income. That is the business of banks akin to what manufacturing companies do when they buy raw materials for further processing through value-adding activities. The dangers of NPLs in a bank's balance sheets is its tendency to completely erode the insolvency of a bank and make it unable to carry about its traditional role in a normal financial system. Thus, several boards of directors were culpable in the dereliction to duty and negligence in the discharge of their responsibilities more especially the monitoring of credit risk exposures (the magnitude of losses incurred by the companies during the crisis is evidence by the quantum of the NPLs in the balance sheets of such banks). On the other hand, the management of such banks was also accused of excessive risk-taking without the necessary backing should there be a backlash from the system (Erkens, Hung, & Matos, 2009).

Moreover, some other contributing factors that led to the 2007/2008 financial crisis include the risk management committee itself that was responsible for ensuring effective risk management framework implementation in the affected financial institutions. In most cases, there tend to be inadequate monitoring by the same subcommittees that are responsible for risk management on behalf of the broader board members. This is another symptom of weak corporate governance system in the affected financial institutions (Barney, 2009; Erkens et al., 2009; Mohamad & Sulong, 2010; Solomon, 2007) Again, some other risk management committees depict lack of commitment, and some were found to be negligent in the discharge of their duties (Kashyap, Rajan, & Stein, 2008). Similarly, due to the specialized nature of banking practice, some independent and non-executive directors find it difficult to make the required impact in the committee (Erkens et al., 2009). In the aftermath of the financial crisis, a separate risk management committee, board credit committee was introduced as a way of safeguarding the risks inherent in the credit administration of banks. It is expected that the membership of the committee will include directors with the required skills to monitor and regulate risks inherent in loan administration to ensure all the necessary safeguards are put in place to mitigate the risks. Alternatively, some banks decide to enrich the members of the existing risk management committee and charge it with the responsibility of safeguarding them with all attributable risks.

2. BACKGROUND

Until recently, board audit committee performs the traditional duty of ensuring efficient risk management functions in financial institutions (Kallamu, 2015). However, the events that followed the economic crisis of the 2007/2008 forced regulators all over the world to demand increased action from the board members. One of such demands was to improve vigor in the management of credit risk in the banking industry and also continue to monitor the market (Merton, 1995). Moreover, another reason that led to the establishment for a separate risk management committee is the fact that the audit committee tends to be overwhelmed in the day to day assurance services thereby often relegating the risk monitoring in banks (Bates & Leclerc, 2009). For instance, the Enron audit committee and the entire board, as well as the external auditors, were all found to be negligent and culpable in the discharge of their professional duties of risk management (Li, 2010). As a result of the negligence of the audit committee, the financials of the company were overstated for about four years which prompted other stakeholders to suspect insider dealings.

International best practice and corporate governance guidelines require the establishment of board credit committee which shall be composed of not less than three directors preferably independent and nonexecutive directors (Clarke, 1998). The guideline provided the roles and responsibilities of the BCC among which are setting the policy direction in terms of risk of the financial institution, monitoring and evaluating the adopted risk strategies, ensuring adherence to policies regarding risk tolerance level as well as review of sufficiency or otherwise of risk associated management policies and risk framework in identifying, measuring, monitoring and controlling risk. Furthermore, it is the responsibility of the committee to ensures that the staff that is saddled with the responsibility of risk monitoring are independent of the activity they monitor due to the importance of the job assigned on behalf of the board (Ng et al., 2012). Under Agency theory, it is the responsibility of the board of directors to monitor the activities of a firm including credit risk on behalf of the majority of other shareholders to safeguard their interests (Fama & Jensen, 1983). An agency relationship is defined as a contractual agreement under which one party (the principal) engages another party (the agent) to carry out some service on their behalf (Jensen & Meckling, 1976). The board through its risk committees perform the functions of an agent in ensuring that the policy direction and monitoring of credit risk of banks are attained. The directors bear in mind the ultimate goal of maximization the shareholders' return on investment by safeguarding the assets of the bank via an effective and sound credit risk management (Tao & Hutchinson, 2013). They also provide advisory services to mitigate instances of credit risk exposure by directing the affairs of management while at the same time strategizing to hedge the possible risk of that could crystallize in the future (Walker, 2009).

Moreover, the business of banking is all about the creation of risk assets which is unique and requires particular expertise and isolation from other forms of business risks that are generic, i.e., operational political, product, market, and compliance risks, etc. (Burton, 2008). Thus, to safeguard special nature of bank's business some studies have recommended separation of risk from audit committee (Burton, 2008; Ng et al., 2012) With sound oversight of risk committee in place, the board exert influence on the line managers to ensure that excessive risk-taking that could bring about huge loses to the financial institution are averted (Gordon, 2010). Ntim (2009), suggests that the existence of board committees does not impact on the performance of companies in the South African economy. Meanwhile, Subramaniam et al., (2009) observed that the existence of a separate risk committee is associated with the size of the boards, risk exposures and organizational organogram and the nature of operations of the firm. The position of Tao and Hutchinson (2013) is that where risk committee exists in an organization, there is a higher probability that such companies will report higher performance. Thus, they conclude that size of risk committee is positively associated with performance.

Independence of committee is determined by the presence of independent and non-executive directors in the composition of the committee. The composition of the board committees is usually made up of the executive, non-executive and independent directors regarded as the proxy shareholders in the affairs of the company (Lim, Matolcsy, & Chow, 2007; Shamsher & Annuar, 1993). The agency theory and resource-based theory suggests that there should be more of the non-executive and independent directors in the composition of the board committee (Haniffa & Cooke, 2002). It is therefore expected that the larger the proportion of independent and non-executive directors in a committee, the more likely

that the committee will be able to monitor the firm's financial performance effectively. It is firmly believed that such committees will be more active, function better, and well governed (Davidson, Xie, & Xu, 2004; Menon & Williams, 1994).

Confirming the position of agency theory, Coller and Gregory (1999) believe that audit committee that was hitherto in charge of risk management functions with a higher proportion of independent directors stand a better chance of motivation and free will to supervision and curtailing the excess of the executive management in risk management. Furthermore, Akhtaruddin and Haron (2010) also believe that board committee with more independent directors is much freer to take decisions without much interruption from the executive management. Given the above, the following hypothesis is developed;

H1. There is no significant association between board credit committee independence and credit

Obviously, experience in the field of finance is a vital ingredient the possession of which is required by the members of board committees like audit and credit risk committees (Abdul Rahman & Haneem, 2006). For instance, DeZoort and Salterio (2001) reported that audit committees with requisite financial expertise have the higher chances of fraud and errors detection. Similarly, Felo, Krishnamurthy, and Solieri (2003) study support the view that committees with the high proportion of members with accounting and financial management experts suggest a higher tendency towards the quality presentation of reporting of the firm's financials. The avalanche of finance professionals is undoubted of great value to banks as it enriches the quality of contributions during the deliberations by the committee members. Similarly, the study of Mangena and Pike (2005) reported in the same direction of having many members with financial expertise enrich the level of disclosures in the financial statement of firms. Therefore, the present study develops another hypothesis to test the association between credit committee members financial expertise and credit risk. Thus;

The diligence of board credit committee (BCC) is another active intangibles of good corporate governance which many studies have documented its positive association with the sound management of banks. The diligence of board members in attending the committee meetings as at when due goes a long way in ensuring that results are achieved (Barros, Boubaker, & Caepem, 2013). There are also opposing views in the literature concerning the diligence of board committee and performance of such companies. In one angle, some studies argue that the greater the participation of members in committee meetings, the higher the chances that such organization will be monitored effectively and vice versa (Barros et al., 2013). Conversely, Patelli and Prencipe (2007) believe that suggest that when directors participate in the affairs of a firm regarding too many meetings, there are tendencies that they will become insiders and would want to influence the day to day running of the company. Because of the divergent views and the need to study the association between BCC members diligence and credit risk of banks, the following hypothesis is as a result of this developed;

H6. There is no significant association between board credit committee diligence and credit risk of the sub-Saharan African banks.

3. METHODOLOGY

This section deals with the sample and data source, models development and definition and measurement of variables

3.1 Sample & Data Source

The study extracted its data mainly from Bankscope database limiting its search to only commercial banks in the sub-Saharan Africa (SSA) in countries that operate a functional stock market. This is for ease of data collection and standardized financial information disclosures. Additional financial information of the selected banks was also obtained from the individual banks' websites that met the first condition stated above. In all, forty-three banks (43) in twelve (12) countries met the stated requirements (i.e., Botswana, Cape Verde, Gambia, Ghana, Kenya, Malawi, Namibia, Nigeria, South Africa, Tanzania, Uganda, and Zambia). However, due to incomplete data on some of the selected banks six (6) were subsequently dropped from the population thereby arriving at the total number of population sample to 37 banks. The scope of the study is for a 7-year period (i.e., from 2010 - 2016). Meanwhile, the data on the GDP growth rate was downloaded from world development indicators on World Bank website.

3.2 Definition and Measurement of Variables a.Dependent Variable Board credit committee intangibles and risk management of 1577 banks in the Sub-Saharan Africa

The ratio of non-performing loans (NPLs) as a proportion of either loan stock or total assets has attracted attention by many studies to represent credit risk of banks (Fungáčová & Solanko, 2009). Some though, used total loans to total assets ratio, while others identified loan loss provision to total assets as the measure of credit risk (Eng & Nabar, 2007; Rahman, Ibrahim, & Meera, 2009). Bhayani (2006) believes that the ratio of net NPLs to net advances is the best indicator for estimating credit risk of banks. Kargi (2011), on the other hand, prefer the use of nonperforming loans to loan & advances ratio. The position is similar to that of Kolapo, Ayeni, and Oke (2012). Thus, this study adopts the three most popular methods of measuring credit risk.

b.Independent Variable

In his quest to find a more direct approach of measuring intangibles, Sveiby discovered the Intangible Assets Monitor (IAM) (Rodov & Leliaert, 2002). According to Sveiby (1997) measurement of intangibles is necessary to assist management in its evaluation of its performance and also enable a feedback mechanism. The method also combines the financial and non-financial data for assessment of company's performance by managers and to let its key stakeholders (Shareholders, creditors, and customers, etc.) take informed decisions (Bontis, 2001; Sveiby, 1997). Thus, the independent variables of this study are measured using IAM method and the following are measured according to the literature in the table hereunder; BCC Independence, Chairman Independence, Size, financial expertise, the frequency of meetings and members diligence. The table below is the summary of the operationalization of the variables;

S/ N	Variable	Measurement	References
1	BCC Independ ence	The proportion of independent directors in the BCC.	Akhtaruddin & Haron (2010); Barros et al., (2013); Madi et al., (2014)
2	BCC Chairma n Independ ence	A bank is coded "1" if the chairman of the credit committee is an independent director, and "0" otherwise.	Chobpichien (2008)
3	BCC Size	The total number of the board members in the BCC.	Gan et al., (2013); Madi et al., (2014); Taliyang & Jusop, (2011)
4	BCC Financial Expertis e	The proportion of the committee members with accounting/financial expertise	Akhtaruddin & Haron (2010); Othman, Ishak, Arif, & Aris, (2014)
5	BCC Meetings	The number of meetings held during a particular year.	Azman & Kamaluddin (2012); Madi et al., (2014); Taliyang & Jusop, (2011)
6	BCC Diligenc e	The proportion of the number of sittings by the BCC members by the total expected sittings during the year.	Barros et al., (2013)

Table 4.1 Operationalization of the Independent Variables of the Study

c.Control Variables

The study adopts three control variables in the study. The variables are; financial capital adequacy; profitability; and Gross Domestic Product (GDP) to reduce the influence of other factors that could affect the credit risk management. In the literature, total equity to total asset, the ratio was used to represent financial capital adequacy (Pasiouras 2008; Reda & Isik 2006; and Rao 2005). For profitability, return on equity was used by Alsarhan (2009), and Chan, (2008). Finally, the growth in GDP as a

control variable follows the direction of several published research work that adopted the same pattern, e.g. (Chan, 2008; Sufian, Majid, & Zulkhibri, 2007; Wong, Fong, Wong, & Choi, 2008).

d.Multivariate Regression

Multivariate regression analysis was used to analyze the association between the dependent and independent variables. Specifically, the study was operated based on the following research model:

 $CR_{it} = f (NLA_{it}, NTA_{it}, CLA_{it})$ -------(1)

$$\begin{split} NLA_{it} / NTA_{it} / CLA_{it} &= \beta_{0it} + \beta_1 RIND2_{it} + \beta_2 RCIN2_{it} + \beta_3 RSIZ2_{it} + \\ \beta_4 RFIX2_{it} + \beta_5 RMEE2_{it} + \beta_6 RDEL2_{it} \end{split}$$

 $+ \lambda_1 FCA2_{it} + \lambda_2 PRO2_{it} + \lambda_3 GDP2_{it} + \varepsilon_{it} ------(2)$

Where;

 CR_{it} = Credit Risk for Bank i in period t

 NLA_{it} = Non-performing Loans to Total Loan & Advances for Bank _i in period _t

 NTA_{it} = Non-performing Loans to Total Assets for Bank _i in period _t

 CLA_{it} = Classified Assets to Total Loan and Advances for Bank _i in period _t

 $RIND_{it}$ = Board Risk Committee Independence for Bank _i in period _t

 $RCIN_{it}$ = Board Risk Committee Chairman Independence for Bank _i in period _t

 $RSIZ_{it}$ = Board Risk Committee Size for Bank i in period t

 $RFIX_{it}$ = Board Risk Committee Financial Expertise for Bank _i in period _t

 $RMEE_{it}$ = Board Risk Committee Meetings for Bank i in period t

- $RDEL_{it}$ = Board Risk Committee Diligence for Bank i in period t
- FCA_{it} = Financial Capital for Bank i in period t
- PRO_{it} = Profitability for Bank i in period t
- GDP_{it} = Gross Domestic Product for the Country i in

 $\beta 0_{it}$ = Regression coefficient of the intercept for Bank _i in period _t

 $\beta_{1it} - \beta_{10it} = Regression$ coefficient of the independent Variables for Bank $_i$ in period $_t$

 $\lambda_{1it} - \lambda_{3it}$ = Regression coefficient of the Control Variables for Bank _i in period _t

 ε_{it} = Error term for Bank i in period t

4. RESULTS AND DISCUSSIONS

This section presents the results of the study on the impact of BCC on credit risk of banks in the Sub-Saharan Africa.

4.1 Descriptive Statistics

Descriptive statistics entails all efforts made by this study towards the presentation of raw data in a unique pattern that enables a thorough understanding of all the necessary information on the variables of the study.

Table 4.2 Descriptive Statistics of the Variables of Study								
Variable	Obs.	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis	Joint P- Value
NLA	259	0.044	0.045	0.001	0.366	0.000	0.000	0.000
NTA	259	0.022	0.023	0.001	0.206	0.000	0.000	0.000
CLA	259	0.060	0.063	0.001	0.455	0.000	0.000	0.000
RIND	259	0.350	0.305	0	1	0.000	0.692	0.000
RCIN	259	0.486	0.501	0	1	0.715	-	-
RSIZ	259	5.946	2.305	2	14	0.000	0.957	0.004
RFIX	259	0.512	0.131	0.250	1	0.016	0.550	0.049
RMEE	259	6.162	3.454	2	23	0.000	0.000	0.000
RDEL	259	0.907	0.070	0.580	1	0.000	0.000	0.000
FCA	259	0.128	0.050	-0.121	0.300	0.521	0.000	0.001
PRO	259	0.270	0.276	-1.174	2.414	0.000	0.000	0.000
GDP	259	4.553	2.644	-4.300	14	0.003	0.051	0.004

Table 4.2 Descriptive Statistics of the Variables of Study

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The table above indicates the mean and standard deviation scores of dependent and explanatory variables of the study. The minimum and max scores are also indicated. The first column provides the number of observations which is 259 for the selected sample of the study. The normality test result is also presented in the last three columns. The result indicates that the data is not normally distributed since the joint p-values of the majority of the variables is less than 10. Thus, Spearman correlation is adopted to test the association among the explanatory variables (Choiru & Rijanta, 2019).

	NLA	NTA	CLA	RIND	RCIN	RSIZ	RFIX	RMEE	RDEL	FCA	PRO	GDP	VIF
NLA	1												
NTA	0.86	1											
CLA	0.74	0.68	1										
RIND	0.06	0.14	0.07	1									1.66
RCIN	-0.12	0.01	0.09	0.57	1								1.68
RSIZ	0.14	0.16	0.09	-0.12	0.14	1							1.39
RFIX	-0.26	-0.24	-0.22	-0.19	0.01	-0.10	1						1.14
RMEE	0.06	0.15	0.13	0.02	0.16	0.31	0.08	1					1.12
RDEL	0.00	-0.06	-0.03	0.11	0.14	-0.13	0.04	-0.19	1				1.08
FCA	0.27	0.20	0.21	-0.18	-0.21	0.13	-0.01	0.20	-0.13	1			1.09
PRO	-0.34	-0.37	-0.27	0.06	0.01	-0.47	-0.01	-0.22	0.02	0.05	1		1.22
GDP	0.01	-0.03	-0.03	-0.25	-0.40	-0.21	-0.01	-0.05	-0.08	0.26	0.31	1	1.24

Table 4.3 Spearman Correlation and Variance Inflation Factor of the Variables of Study

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The table 4.3 above presents the correlation coefficients of the association between the dependent variables (NLA, NTA & CLA) and the variables explanatory (committee independence. chairperson independence, size, financial expertise, the frequency of meetings, and committee diligence) The values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative), the absolute value of the correlation coefficient indicates the strength, with more significant values indicating stronger relationships. The test in the table above is required to determine if multicollinearity exist is variance inflation factor (VIF). Where the result of VIF shows a value of more than 10, there is a considered opinion of the presence of multicollinearity problem (Tu, Kellett, Clerehugh, & Gilthorpe, 2005). From the table above, it is evident that multicollinearity does not exist as the highest VIF value is 1.68 in respect of RCIN variable (Mohdbeta & Ali, 2017).

4.2 Multivariate Regression Results

The result of pool Ordinary Least Square (OLS) was subjected to the post-estimation tests of the regression results of multicollinearity test, heteroscedasticity test, normality test of error and Hausman specification tests in order to ensure reliability and validity of the estimation are tested which led to the use of Generalized Least Square (GLS) estimation model. Finally, the results indicate that random effect GLS estimation is appropriate for NTA while fixed effect GLS estimation is preferred for NLA, CLA models;

Variables	NLA FE	NTA_{RE}	CLA _{FE}
Constant	0.1023**	0.3610**	0.2164**
RIND	-0.0074*	- 0.0137***	-0.019***
RCIN	0.02395	0.0071	0.0207
RSIZ	-0.0007	0.0004	0.0075
RFIX	- 0.0979***	- 0.4027***	- 0.1453***
RMEE	0.0026***	0.0008	0.0055***
RDEL	-0.0075	-0.0005	-0.0684
FCA	-0.1935	-0.0064	-0.1172
PRO	-0.0233**	-0.0105**	-0.0354**
GDP	0.0013	0.0002	-0.0004
Observations	259	259	259
Hausman Specification Test p Value	0.0198	0.9509	0.0650
GroupWise Heteroskedasticity	0.0000	-	0.0000
Lagrangian multiplier	-	0.0000	-
OLS R^2	0.2441	0.1522	0.1338
OLS Adj. R ²	0.2168	0.1215	0.1025
OLS F-statistics	8.93***	4.97***	4.27***

Table 4.4: General Least Square (GLS) Regression Results

From the above table, we can interpret statistically that all the three models for each of the dependent variables (NLA, NTA, and LTA) indicate different significant relationships between Intangibles of BCC and credit risk of banks in SSAC. The coefficient of determination (R2) which is an absolute determinant of a relationship in a regression model is 0.2441, 0.1522 and 0.1338 for NLA, NTA and CLA respectively. For

NLA, the model indicates that 24.41% variation of explanatory variables can explain the changes in the dependent variable (NLA). Similarly, 15.22% variability in the explanatory variables explains the changes in the dependent variable NTA. Finally, the changes in the explanatory variables of 13.38% are attributable to the changes in CLA.

The results in Table 4.4 above shows that RIND is inversely associated with the dependent variable NLA, NTA and CLA with standard coefficient of -0.0074, -0.0137 and -0.019 respectively. The result is statistically significant at 10% level of confidence for NLA while for both NTA and CLA the result indicates 1% confidence level. On the other hand, RFIX shows that all the three measurement variables of the dependent variable are statistically significant at 1% confidence level with the standard coefficient of -0.0979, -0.4027, and -0.1453. For the frequency of meetings, the result indicates a positive association between two of the three measures of the dependent variable (NLA and CLA) and RMEE. Finally, its only PRO among the three control variables that indicate a statistically negative association with the all the three measures of the dependent variables at 5% significance level of confidence (Kaithari et al., 2017).

4.3 Test of Hypotheses

Given the findings in the previous section of this paper, the study answers the hypotheses by tabulating the outcome in the table overleaf;

Number	Hypotheses	Sign	Final Decision	
H1	Board Risk Committee Independence & Credit Risk Banks in the Sub-Saharan Africa			
H1a	There is no significant association between Board Risk Committee Independence and non-performing loans to total loan & advances ratio	Significant	Reject	
H1b	There is no significant association between Board Risk Committee Independence and non-performing loans to total assets ratio	no significant association between isk Committee Independence and orming loans to total assets ratio		
H1c	There is no significant association between Board Risk Committee Independence and classified loans to total loan & advances ratio	Significant		
H2	Board Risk Committee Chairman Independence & Credit Risk Banks in the Sub-Saharan Africa			
H2a	There is no significant association between Board Risk Committee Chairman Independence and non-performing loans to total loan & advances ratio	Insignificant	E-11 4-	
H2b	There is no significant association between Board Risk Committee Chairman Independence and non-performing loans to total assets ratio	Insignificant	Reject the null	
H2c	There is no significant association between Board Risk Committee Chairman Independence and classified loans to total loan & advances ratio	Insignificant		
Н3	Board Risk Committee Size & Credit Risk Banks in the Sub-Saharan Africa			
НЗа	There is no significant association between Board Risk Committee Size and non- performing loans to total loan & advances ratio	Insignificant	Fail to	
H3b	There is no significant association between Board Risk Committee Size and non- performing loans to total assets ratio	Insignificant	the null	
НЗс	There is no significant association between Board Risk Committee Size and classified loans to total loan & advances ratio	Insignificant		

Table 4.5: Summary of Hypotheses Testing

H4	Board Risk Committee Financial Expertise & Credit Risk Banks in the Sub- Saharan Africa			
H4a	There is no significant association between Board Risk Committee Financial Expertise and non-performing loans to total loan & advances ratio	Significant	Deiget	
H4b	There is no significant association between Board Risk Committee Financial Expertise and non-performing loans to total assets ratio	Significant	the null	
H4c	There is no significant association between Board Risk Committee Financial Expertise and classified loans to total loan & advances ratio	Significant		
H5	Risk Banks in the Sub-Saharan Africa			
H5a	There is no significant association between Board Risk Committee Meetings and non- performing loans to total loan & advances ratio	Significant		
H5b	There is no significant association between Board Risk Committee Meetings and non- performing loans to total assets ratio	Insignificant	Reject the null	
H5c	There is no significant association between Board Risk Committee Meetings and classified loans to total loan & advances ratio	Significant		
	Roard Pick Committee Diligence & Credit			
H6	Risk Banks in the Sub-Saharan Africa			
Нба	There is no significant association between Board Risk Committee Diligence and non- performing loans to total loan & advances ratio	Insignificant		
H6b	There is no significant association between Board Risk Committee Diligence and non- performing loans to total assets ratio	Insignificant	Reject the null	
Н6с	There is no significant association between Board Risk Committee Diligence and classified loans to total loan & advances ratio	Insignificant		

The study rejects the null hypotheses in 1, 4, & 5 and failed to reject hypotheses 2,3, & 6. Thus, the study finds that BCC independence, financial expertise, and frequency of meetings are statistically associated with the credit risk of banks in the sub-Saharan African countries. While BCC independence and financial expertise of the committee members were found to be negatively associated with credit risk, the frequency of meetings was found to be positively associated with BCC. Conversely, the result also indicates that BCC chair independent, size of the committee and committee diligence are not statistically significant with the credit risk of banks in the sub-Saharan African countries.

5. CONCLUSION

This research work is an attempt to study the impact of Board Credit Committee (BCC) on credit risk of commercial banks in the Sub-Saharan African countries. The result of the association between BCC independence and credit risk of the sub-Saharan African banks supports a previous number studies, e.g. (Coller & Gregory, 1999; J. Li et al., 2007; Vicknair, Hickman, & Carnes, 1993) and is also consistent with Agency Theory. On the independence of the committee chair, the study contradicts the findings of Spangler and Braiotta Jr (1990); and Haniffa and Cooke (2002). Similarly, on the size of the committee impact on BCC, the study supports the view that size doesn't matter (Bedard et al., 2004). This result on the size of committee contradicts the findings of Kyereboah-Coleman and Biekpe (2007) who have examined the association between audit committee size and performance of 103 listed companies in select sub-Saharan countries of Ghana, Nigeria, Kenya and South Africa between

1997-2001 founds a positive correlation between audit committee size and company performance. The position of (Abdul Rahman & Haneem, 2006) that financial expertise of the committee members impact BCC is again vet supported by this study which is also the position of DeZoort and Salterio (2001) that requisite financial knowledge has a higher chance of fraud and errors detection. Furthermore, Olson (1998) findings support the results of this research work that frequency of meetings doesn't impact on credit risk of banks and contravenes the findings of Waterhouse (1993). Barros et al., (2013) posit that the diligence of board members in attending the committee meetings ensures that results are achieved. This position is not supported by the current study as the findings suggest otherwise. The result also indicates that profitability of sub-Saharan African banks is negatively associated with credit risks of the banks. Statistically, the overall regression result in all the three variants of the measurement of credit risk is significant, thus, explaining that there is an association between the explanatory variable and the dependent variable of the study.

The implication of this study is relevant for practitioners as well as academicians. Bank managers and policymakers in the Sub-Saharan African Countries (SSAC) should focus attention on the intangibles of BCC as a whole and more on select variables that have proven statistically to be relevant in impacting credit risk of banks. It is however important as adduced by the study that RIND, RFIX, RMEE, and PRO as integral components of the tested model are important in the effective management of credit risk in the SSAC. In the academic field, the study has opened another page in the area of finance by using secondary financial information data to manage IC. The findings will encourage future studies to test the veracity of the specific features of the BCC on credit risk management in the sub-Saharan African banks and the world.

This research work has few limitations. There is a problem of disclosure of BCC information in some banks with some banks merging the functions of BCC with risk management committee. Moreover, the qualitative impact of the BCC was not considered nor was the impact of the board on the credit risk of banks. It is a known practice that the decision of board committees is subjected to the board for approval as such the final approval on decisions rest with the board and not the committees. Thus, feature studies are encouraged by this study to consider these areas as highlighted for further studies.

REFERENCES

- ABDUL RAHMAN, R., & HANEEM, M. A. F., 2006, **Board, audit** committee, culture and earnings management: Malaysian evidence. Managerial Auditing Journal, Vol.21,No.7, pp.783–804.
- AKHTARUDDIN, M., & HARON, H, 2010, **Board ownership, audit** committees' effectiveness and corporate voluntary disclosures. Asian Review of Accounting, Vol.18,No.1,pp. 68–82.
- AL-MARRI, K., MONEIM M. BAHEEG AHMED, A., & ZAIRI, M., 2007, Excellence in service: an empirical study of the UAE banking sector. International Journal of Quality & Reliability Management, Vol.21,No.2,p p. 164–176.
- CHAN, S. G., 2008, **Bank Efficiency in Selected Developing Countries**. Universiti Utara Malaysia.
- CHAUDHRY, A., 2015, **Fall of the Titans**, a study of the financial behemoths that crumbled in 2008. Massachusetts Institute of Technology.
- CHOBPICHIEN, J., 2008, The Quality Of Board Of Directors, Ownership Structure And Level Of Voluntary Disclosure Of Listed Companies In Thailand [HD2745. C545 2008 f rb].

Universiti Sains Malaysia.

- CHOIRU, A., & RIJANTA, R. 2019. Livelihood changes of fisherman community driven by climate change: a case study in semarang coastal region, central java, Indonesia. Humanities & Social Sciences Reviews. Vol. 7, N° 3: 267-273. India.
- CLARKE, T, 1998, **The contribution of non-executive directors to the** effectiveness of corporate governance. Career Development International, Vol.3,No.3, pp.118–124.
- COLLER, P., & GREGORY, A, 1999, Audit committee activity and agency cost. Journal of Accounting and Public Policy, Vol.18,No.4,pp. 311–332.
- DAVIDSON, W. N., XIE, B., & XU, W, 2004, Market reaction to voluntary announcements of audit committee appointments: The effect of financial expertise. Journal of Accounting and Public
- ERKENS, D., HUNG, M., & MATOS, P, 2009, Corporate governance in the recent financial crisis: Evidence from financial institutions worldwide. SSRN Paper, 1397685.
- FAMA, E. F., & JENSEN, M. C.,1983, Separation of ownership and control. The Journal of Law and Economics, Vol.26,No.2, pp. 301– 325.
- FELO, A. J., KRISHNAMURTHY, S., & SOLIERI, S. A, 2003, Audit committee characteristics and the perceived quality of financial reporting: an empirical analysis.
- FUNGÁČOVÁ, Z., & SOLANKO, L, 2009, **Risk-taking by Russian** banks: Do location, ownership and size matter? Экономический Журнал Высшей Школы Экономики, Vol.3,No.1.
- GAN, K., SALEH, Z., ABESSI, M., & HUANG, C. C, 2013, Intellectual capital disclosure in the context of corporate governance. International Journal of Learning and Intellectual Capital, Vol.10,No.1.
- JONES, H., SAKYI-DAWSON, O., HARFORD, N., & SEY, A, 2016, Linking formal and informal financial intermediaries in Ghana: Conditions for success and implications for RNR development. London, UK: Overseas Development Institute.
- KAITHARI, D., K.M, A., & BABU, V. 2017. Implementation and study on innovative new teaching methods to enhance learning of

mechanical principles module at undergraduate level. Humanities & Social Sciences Reviews. Vol. 5, N° 2: 141-148. <u>https://doi.org/10.18510/hssr.2017.5210</u>. India.

- KALLAMU, B. S. 2015, **Risk Management Committee Attributes and Firm Performance**. International Finance and Banking, 2(2), 1.
- KARAMANOU, I., & VAFEAS, N, 2005, The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis. Journal of Accounting Research, Vol.43.No.3,pp. 453–486.
- KARGI, H. S., 2011, Credit risk and the performance of Nigerian banks. Ahmadu Bello University, Zaria.
- KASHYAP, A., RAJAN, R., & STEIN, J, 2008, **Rethinking capital** regulation. Maintaining Stability in a Changing Financial System, 43171.
- KOLAPO, T. F., AYENI, R. K., & OKE, M. O, 2012, Credit Risk and Commercial Banks' Performance in Nigeria: A Panel Model Approach. Australian Journal of Business and Management Reseach, Vol.2,No.2, pp. 31–38.
- KYEREBOAH-COLEMAN, A., & BIEKPE, N, 2007, On the determinants of board size and its composition: additional evidence from Ghana. Journal of Accounting & Organizational Change, Vol.3,No.1, pp.68–77.
- LI, J., PIKE, R. H., & HANIFFA, R. M, 2007, Intellectual capital disclosure in knowledge rich firms: The impact of market and corporate governance factors.
- LI, Y., 2010, **The case analysis of the scandal of Enron**. International Journal of Business and Management, Vol.5,No.10,P.35.
- LIEBENBERG, A. P., & HOYT, R. E, 2003, The determinants of enterprise risk management: Evidence from the appointment of chief risk officers. Risk Management and Insurance Review, Vol.6,No.1,pp. 37–52.
- MOHDBETA, R., & ALI, K. 2017. The influence of job burnout, perceived organizational support and Islamic religiosity towards innovative work behavior among academics in Malaysian research universities, klang valley. Humanities & Social Sciences Reviews. Vol. 5, N° 2: 71-81. https://doi.org/10.18510/hssr.2017.522. India.

- O'ROURKE, K. H, 2016, I3 The Great Depression of the 1930s and the world economic crisis after 2008. A History of the Global Economy, 110.
- OLSON, J. F. 1998, How to really make audit committees more effective. Bus. Law., 54, 1097.
- PASIOURAS, F., 2008, Estimating the technical and scale efficiency of Greek commercial banks: the analysis in an emerging market. International Review of Financial Analysis, Vol.14,No.3,pp. 283–303.
- REDA, M., & ISIK, I, 2006, Efficiency and productivity change of Egyptian Commercial Banks 1995-2003. In ERF 13th Annual Conference, Kuwait.
- SHAMSHER, M., & ANNUAR, M, 1993, Management Versus Shareholders' Interest: Board Composition, Market Risk and Shareholder Retrurns of Malaysian Listed Firms.
- SOLOMON, J, 2007, Corporate governance and accountability. John Wiley & Sons.
- SPANGLER, W. D., & BRAIOTTA JR, L., 1990, Leadership and corporate audit committee effectiveness. Group & Organization Studies, Vol.15,No.2, pp. 134–157.
- SUBRAMANIAM, N., MCMANUS, L., & ZHANG, J, 2009, Corporate governance, firm characteristics and risk management committee formation in Australian companies. Managerial Auditing Journal, Vol.24,No.4, pp. 316–339.
- SVEIBY, K. E.,1997, **The intangible assets monitor.** Journal of Human Resource Costing & Accounting, Vol.2, No.1, pp.73–97.





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