

# The Board of Directors' Effectiveness on the Performance of Loans in Tanzania

Erick Mwambuli & Mariaclara Mbuya

Institute of Finance Management (IFM), Tanzania

E-mail: ifmmwambuli@gmail.com

Received: July 20, 2022    Accepted: Dec. 2, 2022    Published: Dec. 27, 2022

doi:10.5296/bmh.v10i2.20619    URL: <https://doi.org/10.5296/bmh.v10i2.20619>

## Abstract

The study assessed the board of director's effectiveness on the performance of loans in Tanzania. Four specific objectives guided the study as indicated by independent variables named board member's independency, skills diversity, gender diversity and board meetings while loan performances measured by Non-Performing Loan (NPL) specified as dependent variable. Explanatory research design guided the study whereby the study selected sample of six (6) listed banks by using purposively sampling. The study found and concluded effectiveness of the board of directors is positive affecting performance of loans for listed banks through board member's independency, gender diversity and skills diversity. The effectiveness of the board of directors on loan performance is negatively affected by board meetings. The study findings provide insights from a practical point of view on the board of directors' effectiveness on the performance of loans in developing countries like Tanzania, thus filling the gap in the literature reviews. The study findings serve as guidance to regulators and policymakers on what set of factors to review and incorporate into policy, this will help the banks to achieve the current regulator's requirement of NPL ratio of 5% or below. Apart from the study findings' having wider implications, the study has a few shortcomings for this reason, it would be noteworthy to extend this study to other latitudes incorporating even non-listed banks. This is because compliance of Banking and Financial Institutions (Corporate Governance) Regulations 2021 under BOT is mandatory to all financial institutions in Tanzania both listed and non-listed.

**Keywords:** Dar Es Salaam Stock Exchange, bank of Tanzania, corporate governance, board of directors, non-performing loans

## 1. Introduction

Bank plays a crucial economic function as an intermediary to channel funds from savers and depositors where by Ineffective corporate governance can lead to banks facing problem that can affect their performance and economy as a whole (Masulis & Cong, 2012). In banking sector, the effectiveness of corporate governance is critically needed to maintain higher level of public trust and confidence (Mori & Towo, 2017). Corporate governance affects the efficiency with which resources are allocated where by decisions about investments made by corporations are determined within the framework of their governance structures (Laoworapong et al., 2018). Boards of directors play a fundamental role in strengthening corporate governance by accomplishing the important roles of monitoring and advising on the provision of resources (Talavera et al., 2017). Board of directors is the internal governance mechanism that the bank could use to monitor and control the agency problem (Kim & Rasheed, 2014).

Corporate governance in Tanzania associated with development of capital market to strengthen the mechanism of protecting minority shareholding. Despite the fact that good directives are in place through adaptation of global governance principles and tight Bank of Tanzania (BOT) prudential guidelines, banking sectors assets (loans) has been poorly performing. According to World Bank (2021), Tanzania Bank Non-Performing Loans to Total Gross Loans data was reported at 12.441% in 2017, a record an increase from the previous number of 9.608% for 2016. According to BOT (2020), the ratio of non-performing loans (NPLs) to gross loans in Tanzania decreased to 9.58% in 2019 from 10.51% in 2018 but was above the desirable level. Non-performing loans in Tanzania stood at 9.36% of total loans in March 2020, nearly twice the recommended threshold of 5% despite BOT measures to stabilize the banking industry, including merging small banks with inadequate capital (BOT, 2021).

The business of granting loans is subject to compliance of the respective bank's credit policies & procedures that are approved by the board of directors. The credit policies & procedures in the banks are vital in guiding & governing the loan processes to ensure quality loans are granted by the banks. However, despite the presence of these policies & other approved controls to mitigate credit risk, the NPL ratio in the Tanzanian market has been above the threshold of 5% set by BOT hence calling into question the effectiveness of the board of directors on oversight of the bank's loan performance. To address this research gap in Tanzania, the study investigated the board of directors' effectiveness on loan performance in Tanzania.

The remainder of this paper is organized as follows. Section 2 of the paper study consists of Literature review. Section 3 outlines the research methodology and specifically on target population and sample size, the sample selection criteria, source of data, variable measurement and references, data analysis and model specification. Section 4 consists of presentation and discussion of findings. The final Section 5 consists of conclusion and recommendations based on the research findings.

## 2. Relevant Literature Review and Hypotheses

Our study has included an agency theory whose foundation will provide theoretical arguments on the board of directors' effectiveness on the performance of loans in Tanzania context. The agency theory proposed by Jensen and Meckling (1976), which deals with the separation of ownership and control. Agency relationship is a contract under which one or more persons (the principal) engage another person (the agent) to perform a service on their behalf. If both parties are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal. The agency theory assumes that boards can perform their monitoring role better protecting interests of shareholders and minimizing the conflicts of interest between agents (managers) and principals (shareholders) when they are highly independent. Indeed, board meetings and diversified boards (such as gender or skills diversity) provide better monitoring (Carter et al., 2003).

Theoretically, from agency perspectives a large proportion of outside directors on the board enhances board independence and safeguards owners' resources from management conflicts of interest (Shleifer & Vishny, 1997). According to Kuzucu (2015), independence exists when a board member has never worked for the firm or its auditor and his or her employer does not conduct a substantial amount of business with the company. In order to effectively manage the CEO, a majority independent board of directors, rather than a board of dependent directors, is required. Lickerish-Rovers (2013) indicated that the presence of women might improve team performance, because more diverse teams may consider a greater range of perspectives and therefore reach good decisions. In particular, women directors seem to be severe controllers and provide strong oversight also on risk management, contributing to a more effective and better corporate governance (Mathew et al., 2016).

In a nutshell, board diversity seeks to develop a diverse range of demographic traits and qualities in the boardroom (Adeola & Ikpesu, 2017). The board meeting is a medium set up for deliberations on key issues and matters amongst board members in order to make certain important decisions for the progress and growth of any organization. The diligence of board members is often measured on the board meeting attendance frequency by each of the board members. There is not slated governance law that determines the minimum number of meetings to be attended by a board member as it were to the best of our knowledge. This, therefore, means the control over board members individual diligence is internal and subjective to the chairman of that meeting. Increased meeting frequency promote idea sharing, performance disclosure, and debate to resolve agency problems. Prior research has indicated that frequent meetings improve the board member organization and communication as a part of the governance mechanism (Elamer et al., 2018). Skill diversity prepares the board for some of most pressing challenges that organization face. Knowledge and skills can enhance directors' critical thinking that is essential in discharging their main roles of monitoring, advisory and providing important resources (Tricker, 2012). Some corporate governance studies, such as by Ujunwa (2012) found that board skill could have a positive influence on firm performance.

Basing on agency theory and knowledge gap from empirical studies, the following null

hypotheses tested to attain study objectives:

H1: There is a statistically significant positive relationship between board member's independence and the performance of loans for banks listed at DSE

H2: There is a statistically significant positive relationship between gender diversity and the performance of loans for banks listed at DSE

H3: There is a statistically significant positive relationship between board meetings and the performance of loans for banks listed at DSE

H4: There is a statistically significant positive relationship between skills diversity and the performance of loans for banks listed at DSE

### **3. Research Methodology**

The study employed an explanatory research design. This research design was conducted in order to identify the extent and nature of cause-and-effect relationships between corporate governance attributes and loans quality for listed firms in Tanzania. The study used the quantitative approach through which secondary data were collected from firms' websites, annual reports and audited financial statements to gather both corporate governance and loan quality data.

The population consisted of all twenty-eighty (28) listed companies on the DSE as at 31<sup>st</sup> December 2021. Our study selected a sample of six (6) listed banks to examine the impact of the board of directors' effectiveness on the performance of loans. The six (6) listed banks have been chosen out of the other listed companies from DSE as they deal with the lending business & regulated by BOT as far as NPL ratio is concerned and availability of data for ten (10) from the years 2011–2020.

In our study, the board of director's effectiveness presented by directors Independency, board skills, frequency of board meetings and board gender diversity represents independent variables whereas the dependent variable is Performance of loans. The study will employ NPL as indicator loan performance because it is a standard measure recommended by World Bank due to its cross-cutting implications to the economy and signifies the financial stability of banking institutions.

Table 1. Variables measurements and references

s/no	Variable	Measure	Reference
1	Directors Independency	Number of independent directors in a board	Abiola et al. (2021), Bezawada and Adavelli (2020)
2	Board Meetings	Number of board meeting annually	Yakob and Norraidah (2021).
3	Gender Diversity	Number of female directors	Abobakr and Elgiziry (2017)
4	Skills Diversity	Number of board member with qualifications in accounting and finance	Karkowska and Acedański (2019) Khan <i>et al.</i> (2021) Gupta and Mahakud (2020)
5	Performance of Loans	Ratio of non-performing loans per annum	Birindelli et al. (2020)

Source: Researcher, 2022.

The study analysed data by using E View software version 12, where panel data regression model applied. Our study applied the panel data analysis because it provides more accurate inference of model parameters.

Panel regression model specified as follows:

$$Y (\text{NPL}) = \beta_0 + \beta_1(\text{DI}) + \beta_2 (\text{SD}) + \beta_3 (\text{FM}) + \beta_4 (\text{BD}) + ut \quad (1)$$

Where

DI = Directors Independency

SD = Skills Diversity

FM = Board Meeting

BD = Gender Diversity

NPL = Non-Performing Loans

Ut = Error Term

#### 4. Presentation and Discussion of Results

Board Independency have the largest standard deviation and sum of squared deviation, making it the most volatile variable. Variable with highest mean is board independency, which means on average board of listed banks are independent by 76% on average with maximum of 94% and minimum of 56%. This is due to BOT requiring two thirds of the board members to be non-executive members to promote independence as per the Banking and Financial Institutions (Corporate Governance) Regulations 2021 under section 5(1). This supports the hypothesis that there is a positive relationship between board independence and loan performance. Further from agency perspectives, a large proportion of outside directors on the board enhances board independence and safeguards owners' resources from management conflicts of interest (Shleifer & Vishny, 1997).

Board meetings have a mean of 74% that means board of listed banks in Tanzania meets frequently with maximum of 100% meetings and minimum of 33%, BOT requires a minimum of 1 board meeting per quarter as per the Banking and Financial Institutions (Corporate Governance) Regulations, 2021 under section 35(1). Skills diversity of listed banks for boards in Tanzania has a mean of 39%, this means on average boards dominated by members with accounting, and finance careers by 39% which is very low compared to the demand of the industry in people of that skills with maximum of 88% and minimum of 13%. The BOT only compels the audit committee to have at least 2 members under the Banking and Financial Institutions (Corporate Governance) Regulations 2021 under section 9(2) hence the low number of board members with accounting or financial experience.

Gender diversity has a mean of 27%, this means on average boards in Tanzania listed banks represents women by only 27% with maximum of 50% and minimum of 9% on individual board of banks. BOT does not compel banks in Tanzania to have female board Members, however for institutions that borrow capital from foreign institutions such as World Bank, African Development Bank and other international organizations; are motivated to increase the number of female board members and employees to achieve gender diversity.

Most important loan performances have a mean of 7%, which means on average listed banks in Tanzania contributes about 7% on the level of NPL in the banking industry which is highest than the BOT threshold of 5% with maximum of 20% and Minimum of 1%. BOT has employed various measures such as hindering banks with NPL above 5% from issuing dividends and bonus to employees in order to encourage onboarding of quality loan portfolio hence promoting improvement of NPL in the financial sector. On normality distribution all variables have Jarque Bera P values greater than 0.05 to form normal distributions but with negative skew and positive skewness as well as kurtosis less than 3 for board independency, gender diversity, board meetings and skills diversity while loan performance has kurtosis greater than 3. All these normality distributions indicate the existence of outliers in the variable's distributions.

Table 2. Descriptive statistics

	<b>Loan Performance</b>	<b>Board Independence</b>	<b>Gender Diversity</b>	<b>Board Meetings</b>	<b>Skills Diversity</b>
Mean	0.07	0.76	0.27	0.74	0.39
Median	0.06	0.75	0.25	0.83	0.39
Maximum	0.20	0.94	0.50	1.00	0.88
Minimum	0.01	0.56	0.09	0.33	0.13
Std. Dev.	0.04	0.09	0.08	0.21	0.17
Skewness	1.25	-0.01	1.03	-0.71	0.29
Kurtosis	4.54	2.49	4.97	2.49	2.38
Jarque-Bera	21.66	0.65	20.28	5.74	1.80
Probability	0.00	0.72	0.00	0.06	0.41
Sum	4.05	45.61	15.92	44.17	23.59
Sum Sq. Dev.	0.11	0.45	0.39	2.67	1.76
Observations	60	60	60	60	60

Source: E-Views 12 Data Analysis.

The study was conducted to examine the board of director's effectiveness on the performance of loans. Due to presence of heteroscedasticity and outliers in the normality distributions, the study recommends the use of fixed Effect Weighted least squares (WLS) regression since Hausman specification test p-value is greater than 0.05. WLS is a specialization of generalized least squares in which knowledge of the variance of observations is incorporated into the regression. Findings of the study according to Table 3 indicating Fixed Effect Weighted least squares (WLS) regression is statistically significant on explaining relationships between dependent and independents variables as indicated by R square (62%) and Adjusted R square (55%) which is statistical significance at 0.05 levels. This means adjusted R-square indicates 62% of the variation on the dependent variable (loan Performance) explained by the changes in the independent variables (board member's independency, gender diversity, skills diversity and board meeting).

In contrary, the remaining 38% of changes on the loan performance explained by other factors not included in the model of this study. Mostly important standard error of the regression model is low (0.03) signifying that sample means are closely distributed around the population mean hence good representative of the population. SE of the mean (SEM) measures how far the sample mean (average) of the data is likely to be from the true population mean. The smaller the standard error, the more representative the sample will be of the overall population.



Table 3. Fixed effect weighted regression results

Variable	Coefficients	Std. Error	t-Statistic	Prob.
Board Independency	0.12	0.03	4.00	0.00
Gender Diversity	0.07	0.47	0.15	0.04
Board Meetings	-0.04	0.01	-4.00	0.02
Skills Diversity	0.13	0.04	3.25	0.01
c	-0.03	0.02	-1.50	0.20
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.62	Mean dependent	0.07	
Adjusted R-squared	0.55	S.D. dependent var.	0.04	
S.E. of regression	0.03	Sum squared resid.	0.05	
F-statistic	9.01	Durbin-Watson stat	1.47	
Prob (F-statistic)	0.00			
Unweighted Statistics				
R-Squared	0.51	Mean dependent var.	0.07	
Sum squared resid	0.05	Durbin-Watson stat	1.3	

Source: E-Views 12 Data Analysis.

To examine the board of directors' effectiveness on loan performance in Tanzania; the following hypotheses were tested: There is statistically positive significant relationship between board independency and loan performance ( $B1 = -0.12$ ,  $P\text{-value} \leq 0.05$ ). This supports the hypothesis that there is a positive relationship between board independence and loan performance in Tanzania. This result support an idea that a large proportion of outside directors on the board enhances board independence and safeguards owners' resources from management conflicts of interest Moreover, there is statistically positive significant relationship for both gender diversity and skills diversity and loan performance ( $B2 = -0.07$ ,  $P\text{-value} \leq 0.05$ ) and ( $B4 = 0.13$ ,  $P\text{-value} \leq 0.05$ ) respectively. This supports the hypotheses that there is a positive relationship between diversity (gender and skills) and loan performance in Tanzania. Our results support an idea that having more female directors in the board together with board members having accounting and finance skills can enhance directors' critical thinking that is essential in discharging their main roles of monitoring, advisory and providing important resources Furthermore, there is statistically negative significant relationship between board meetings and loan performance ( $B3 = -0.04$ ,  $P\text{-value} \leq 0.05$ ). This reject the hypothesis that there is a positive relationship between board meetings and loan performance in Tanzania. Our results suggest that board meetings are not an important dimension on loan performance.

## 5. Conclusions and Recommendations

The study was to examine the impact of the board of director's effectiveness on the



performance of loans in Tanzania. Four specific objectives guided the study as indicated by independent variables named board member's independency, skills diversity, gender diversity and board meetings while loan performances measured by NPL specified as dependent variable. The study found and concluded effectiveness of the board of directors is positive affecting performance of loans for listed banks through board member's independency, gender and skills diversity. On the other hand, effectiveness of the board of directors is negative affecting performance of loans for listed banks through board meetings.

Basing on the study findings, the followings recommendation provided by the study: the BOT should set a credit committee composition with members that have accounting or related financial management experience in order to harness maximum contributions from board effectiveness. Currently the Banking and Financial Institutions (Corporate Governance) Regulations 2021 under section 9(2) only requires the audit committee members to have accounting, auditing or related financial management experience while it is not mandatory for the credit committee members who are trusted with approving mandates for credit facilities limits requiring board's approval. The BOT to continue ensuring that the majority of the board members are independent as an increase in independent board members has a positive impact on the performance of the loan, where an increase in independent board members led to decrease in the non-performing loans ratio. This will help the banks to achieve the regulator's requirement of NPL ratio of 5% or below.

Moreover, the boards of the commercial banks in Tanzania to increase the number of board members with a background in accounting and finance, despite the Central Bank only requiring two members of the audit committee to have accounting or related financial management experience. The commercial banks should consider increasing the number of board members with accounting or related financial management experience to improve performance of the loans as the members are vested with approving rights of credit facilities extended to customers. The researchers to use this study as a stepping-stone and to extend the study of board of directors' effectiveness to other latitudes incorporating even non-listed banks.

Apart from the study findings' having wider implications, the study has a few shortcomings. First, while there are multitudes of board aspects and loan performance, this study confined to a 10-year period (2011–2020) and four aspects of boards (board member's independency, skills diversity, gender diversity and board meetings), while Loan performance confined to NPL level. The variables selected, sample size, and time coverage provide sufficient observation to suit panel data analysis and generalization of findings. The most important selection of variables considers those studies conducted in countries related to Tanzania to a certain extent on the board aspects. This study was confined to six (6) listed banks in Tanzania and four aspects only of board attributes, for this reason, it would be noteworthy to extend this study of board of directors' effectiveness to other latitudes incorporating even non-listed banks. This is because compliance of Corporate Governance under BOT is mandatory to all financial institutions in Tanzania both listed and non-listed.

## References

Abiola, K., Uwuigbe, U., Olajide, D., & Faith, O. O. (2021). Corporate governance, risk

management and financial performance of listed deposit money bank in Nigeria. *Cogent Business & Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1888679>

Abobakr, M., & Elgiziry, K. (2017). The Relationship between Board of Directors' Characteristics and Bank Risk-Taking: Evidence from Egyptian Banking Sector. *Journal of Finance and Accounting*, 5(1), 24–33. <https://doi.org/10.11648/j.jfa.20170501.13>

Adeola, O., & Ikpesu, F. (2017). Macroeconomic determinants of non-performing loans in Nigeria: An empirical analysis. *The Journal of Developing Areas*, 51(2), 31–43. <https://doi.org/10.1353/jda.2017.0029>

Bezawada, B., & Adavelli, S. (2020). Corporate Governance, Board Characteristics and Performance of Indian Banks: An Empirical Study. *International Journal of Economics and Financial Issues*, 10, 83–87. <https://doi.org/10.32479/ijefi.9536>

Birindelli, G., Chiappini, H., & Savioli, M. (2020). When do women on board of directors reduce bank risk? *Corporate Governance*, 20(7), 1307–1327. <https://doi.org/10.1108/CG-03-2020-0089>

Elamer, A. (2018). The Corporate Governance–Risk Taking Nexus: Evidence from Insurance Companies. *International Journal of Ethics and Systems*, 34(2). <https://doi.org/10.1108/IJOES-07-2018-0103>

Gupta, N., & Mahakud, J. (2020). CEO characteristics and bank performance: evidence from India. *Managerial Auditing Journal*, 35(8), 1057–1093. <https://doi.org/10.1108/MAJ-03-2019-2224>

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)

Karkowska, R., & Acedański, J. (2019). The effect of corporate board attributes on bank stability. *Portuguese Economic Journal*, 19, 99–137. <https://doi.org/10.1007/s10258-019-00162-3>

Khan, I., Mansi, W., Lin, K.-L., Liu, C.-F., Suanpong, K., & Ruangkanjanases, A. (2021). The Effect of CEO on Bank Efficiency: Evidence from Private Commercial Banks. *Front. Psychol.*, 1–13. <https://doi.org/10.3389/fpsyg.2021.738210>

Khatun, A., & Ghosh, R. (2019). Corporate Governance Practices and Non-Performing Loans of Banking Sector of Bangladesh: A Panel Data Analysis. *International Journal of Accounting and Financial Reporting*, 9(2), 12–28. <https://doi.org/10.5296/ijaf.v9i2.14503>

Kim, K. H., & Rasheed, A. A. (2014). Board heterogeneity, corporate Diversification and firm performance. *Journal of Management Research*, 14(2), 121–139.

Kuzucu, N. (2015). Determinants of Dividend Policy: A Panel Data Analysis for Turkish Listed Firms. *International Journal of Business and Management*, 10(11), 149–160. <https://doi.org/10.5539/ijbm.v10n11p149>

- Laoworapong, M., Supattarakul, S., & Swierczek, F. W. (2018). Corporate Governance, Board Effectiveness, and Performance of Thai Listed Firms. *AU Journal of Management*, 13(1), 25–40.
- Masulis, R., & Cong, F. (2012). The effect of foreign directors on corporate governance. *Journal of Accounting and Economics*, 53(3), 527–554. <https://doi.org/10.1016/j.jacceco.2011.12.003>
- Mathew, S., Ibrahim, S., & Archbold, S. (2016). Boards attributes that increase firm risk—evidence from the UK. *Corporate Governance*, 16(2), 233–258. <https://doi.org/10.1108/CG-09-2015-0122>
- Mijntje, L.-R. (2013). Women on boards and firm performance. *Journal of Management and Governance*, 17(2), 509. <https://doi.org/10.1007/s10997-011-9186-1>
- Mori, N., & Towo, G. (2017). Effects of boards on performance of local and foreign-owned banks in Tanzania. *African Journal of Economic and Management Studies*, 8(2), 160–171. <https://doi.org/10.1108/AJEMS-06-2016-0090>
- Noor, A. Y., & Norraidah, A. H. (2021). Exploring the interaction effects of board meetings on information disclosure and financial performance in public listed companies. *Economies*, 9(4), 1–11. <https://doi.org/10.3390/economies9040139>
- Shleifer, A., & Robert, W. V. (1997). A Survey of Corporate Governance. *Journal of Finance*, 52(2), 737–783. <https://doi.org/10.1111/j.1540-6261.1997.tb04820.x>
- Talavera, O., Yin, S., & Zhang, M. (2017). Age diversity, directors’ personal values, and bank performance. *International Review of Financial Analysis*. <https://doi.org/10.1016/j.irfa.2017.10.007>
- Tricker, B. (2012). *Corporate Governance: Principles, Policies and Practices* (2nd ed.). Oxford University Press, New York.
- Ujunwa, A. (2012). Board Characteristics and the Financial Performance of Nigerian Quoted Firms. *Corporate Governance: The International Journal of Business in Society*, 12, 656–674. <https://doi.org/10.1108/14720701211275587>

Retrieved from <http://www.bot.go.tz>

Retrieved from <http://www.worldbank.org>

## Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).