

Board Characteristics and Bank Performance: Evidence from Selected African Countries

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Abstract

The study is aimed at examining board characteristics and bank performance evidence from selected African countries namely Tanzania, South Africa, Egypt, and Nigeria. 26 banks with coverage of 10 years (2011-2020), were covered by the study. The study employed a purposive sampling technique to obtain the 26 banks listed in the Dar es Salam Stock Exchange (DSE), Johannesburg Stock Exchange (JSE), Egypt Stock Exchange (EGX), and Nigeria Stock Exchange (NGX). Four countries were selected to represent the whole of Africa, whereby eastern Africa was represented by Tanzania, western Africa was represented by Nigeria, northern Africa was represented by Egypt and southern Africa was represented by South Africa. The results of the study show that gender diversity was statistically significant and had a negative impact on bank performance; skills diversity and independence diversity were found to be statistically significant and had a positive relationship with bank performance while nationality diversity and age diversity seemed to be statistically insignificant.

Keywords: *Board characteristics, Corporate Governance, Bank Performance, Resource Dependence Theory, Human Capital, and Social Capital Theory*

1.0 INTRODUCTION

Corporate governance is the framework used to direct and control businesses (Yamneesri & Kanthi, 2010). Corporate governance addresses three aspects of the decision-making process in a bank: first, who has the authority to make what decisions; second, whose interests should be prioritized when making a particular decision; and third, whether (and how) contextual factors such as social, political, economic, and legal institutions are influencing the decision-making process and outcomes of these decisions. Corporate governance affects the effectiveness of how effectively resources are distributed (Laoworapong *et al.*, 2018). This suggests that, to the extent that businesses allocate resources in the economy, the efficiency of their distribution depends on how well their corporate governance structure functions (Mertzanis *et al.*, 2019). By performing the crucial tasks of monitoring and providing guidance on resource allocation, boards of directors play a crucial part in improving corporate governance (Talavera *et al.*, 2017). The bank might monitor and regulate the agency issue using the board of directors as its internal governance system (Kim & Rasheed, 2014). Rahman and Islam (2019), assert that board members have the final say in all decision-making processes, including developing business strategies, approving bank loans, enforcing governance structures, and implementing risk management.

Even though empirical works recognized the board as an important aspect of corporate governance, the roles of the board attributes on the performance of the Bank established with contradictory views on empirical reviews. According to Liang *et al.*, (2013), the board's features have a big impact on managerial activities. The study found that while board size has a significant detrimental influence on bank performance, the frequency of board meetings and the proportion of independent directors had beneficial effects. Additionally, the performance of the bank is worse the closer the board's political ties are. Other factors, such as duality, foreign director, old director, and female director have no bearing on the performance of the bank. Female directors (Directors) on corporate boards are favorably correlated with bank value, according to a study by Ullah *et al.*, (2019). The results also show how having Female Chief Executive Officer's (FCEOs) increases a bank's worth. Additional data demonstrate that under NSOE as opposed to SOE, FCEO, and Female Director, influence on bank value is greater. According to Gerged and Agwili (2019), the size of the audit committee, board independence, and board meetings are unable to forecast either the market value or the bank accounting value. As evaluated by TBQ, bank value is positively and significantly correlated with board size and audit committee sessions. Yilmaz and Buyuklu (2016) conclude that factors relating to corporate

governance have an impact on banks' financial performances, whereas shares of independent board members and leverage have an adverse effect.

Mubarak and Hamdan (2016) conbank the independence of the board of directors has an insignificant relationship with market capitalization and that internal directors know more details concerning the company's management and operations compared to independent directors. Conbank board size is positively significant with Z-Score. Non-executive directors and both Z Scores have a substantial negative correlation. Z-Score is adversely significant when the board is female. The Z-Score is unaffected by the qualifications of the board (Abobakr & Elgiziry, 2017). According to Emengini *et al.*, (2017), board independence, board size, and audit size all negatively and insignificantly affect economic value added, which is the market worth of shareholder assets.

According to Nguyen *et al.* (2021), CEO age is inversely connected with bank leverage, while CEO experience, education, and gender are all considerably positively correlated. The financial success of the Bank is positively correlated with foreign directors (Return on Asset and Return on Equity), Bank board size and composition, chief executive status, audit committee, and shareholder manager quality having little to no effect on performance (Assenga, 2021). The independent board members have a favorable impact, according to Mihail *et al.*, (2022). According to Mnzava (2022), both the number and proportion of foreign directors on the board, as shown by return on assets (ROA), return on sales (ROS), and earnings per share (EPS) boost business performance.

The article adds to the existing body of knowledge by examining the impact of board characteristics on bank performance in selected African countries, including variables such as independence diversity, skills diversity, and nationality diversity, which were not previously explored in other studies. While previous studies emphasized the importance of board diversity, they did not consider independence and competence. This study covers the eastern, northern, southern, and western parts of Africa by taking Tanzania, Nigeria, Egypt, and South Africa as representatives. By examining the role of board characteristics in bank performance in African countries, this study contributes to the understanding of the unique challenges and opportunities faced by banks in Africa's fragile and competitive markets.

2.0 CORPORATE GOVERNANCE

2.1 Corporate Governance Globally

The UK Corporate Governance Code (the Code) was first published in the UK in 1992 by the Cadbury Committee. In the definition, corporate governance was

referred to as "the system through which banks are directed and managed." The boards of directors oversee a company's governance. The shareholders oversee selecting the directors and auditors as well as making sure that an appropriate governance structure is in place. The environment in which firms, their shareholders, and other stakeholders operate is changing swiftly even though this is still the case today. For accounting periods beginning on or after January 1, 2019, the most recent version of the UK Corporate Governance Code is 2018. It gave more weight to the interactions between businesses, shareholders, and stakeholders. It also emphasizes the significance of creating a corporate culture that supports honesty and values diversity and is in line with the company's mission and business plan (Financial Reporting Council, 2022).

The international standard for corporate governance is set by the G20/Organization for Economic Co-operation and Development (OECD) countries, each of which has its own set of corporate governance standards. The guidelines assist decision-makers in assessing and enhancing the institutional, legal, and regulatory framework for corporate governance to promote financial stability, sustainable growth, and economic efficiency. The principles, which were initially released in 1999 and supported by G20 leaders in 2015, are currently being reviewed and will be released in 2023. The Sarbanes-Oxley Act of 2002 was also brought into effect in the United States of America (USA) because of numerous corporate financial scandals in the early 2000s. Since then, all publicly traded corporations have been required to develop and implement SEC compliance reporting protocols (Soxlaw.com). Auditor independence, corporate governance, internal control evaluations, and improved financial transparency are additional topics covered by SOX (upguard.com).

2.2 Corporate Governance in Africa

When it comes to understanding the need for strong corporate governance and spreading the idea throughout corporate circles, Egyptian authorities are unquestionably among the region's leaders.

Given the relative level of development of the Egyptian capital markets compared to the rest of the region and the strong political backing given to furthering the corporate governance agenda in the nation, this is not surprising. The Egyptian government has been collaborating with the OECD since 2003 to enhance governance standards in their nation. The long-standing alliance between Egypt and the OECD is strengthened even further by this endeavor. Since 2004, Egypt has also collaborated with the World Bank and the IFC (MENA-OECD, 2010). Additionally, Corporate Governance 2018 in Nigeria was commended to the Minister for issuance following Section 73 of the Act and authorized by the

Council in line with this power (Nigerian Code of Corporate Governance, 2018). The 2018 Nigerian Code of Corporate Governance aims to codify best practices in corporate governance inside Nigerian businesses. The Code also aims to increase the integrity of the business environment and public knowledge of fundamental corporate values and ethical practices (ecgi. global).

In addition, King IV made several additions and modifications to its predecessor, the King III Report on Corporate Governance for South Africa, 2009. It was a step in the right direction for South African corporate governance, which seeks to adopt a more pragmatic strategy for the governing of "organizations." which King IV defines as "a company, retirement fund, non-profit organization, state-owned entity, municipality, municipal entity, trust, voluntary association, and any other juristic person regardless of its manner of incorporation" (Guide Corporate Government in South Africa, 2016).

In addition, Tanzania, like many other African nations, embraced the OECD's Corporate Governance standards to fight corruption as government operations became more open and better equipped to uphold the rule of law. The promotion of integrity and improvement of the investment climate and the growth of the private sector are further justifications for the implementation of corporate governance (Sitta, 2005).

3.0 RELEVANT LITERATURE

3.1 Social Capital Theory

Social capital theory suggests that interactions between people or organizations can build social capital, which can facilitate economic actions. In the context of boards of directors and bank performance, social capital can be created through the networks of relationships between board members. The more varied the demographics of the board members, the greater the potential for social capital to be created, as different networks and sources of information can be accessed (Singh, 2007).

Board performance, in turn, is influenced by human capital, board expertise, and board links, all of which are influenced by social capital. Thus, social capital can indirectly impact bank performance through its influence on board performance. Age diversity can also enhance board effectiveness by diversifying the human capital and potentially bringing different perspectives and experiences to the board. However, the impact of age diversity may depend on the context, and other moderating factors may need to be considered when organizing a board (Lynall, *et al.*, 2003).

Overall, social capital theory highlights the importance of networks and relationships in creating value and achieving goals. In the context of boards and bank performance, social capital can be created through the connections among board members, which can enhance the board's expertise, human capital, and links to external resources. Ultimately, this can lead to improved board and bank performance.

3.2 Empirical Review

3.2.1 Independence Diversity and Bank Performance

The article discusses various studies that explore the impact of board characteristics, such as board size, independence, and diversity, on bank performance. Akileng *et al.*, (2019) describe the two different types of board members, insiders and outsiders, and highlight the significance of independent directors for improved financial performance and stability among banks. Mayur and Saravanan (2017) explore the performance effects of board size, makeup, and meeting frequency on bank performance and find a curvilinear correlation between board size and bank performance. Shukla *et al.* (2020) investigated the effect of board size on accounting returns and asset quality of Indian banks and concluded that larger boards lead to improved performance. Setiyono and Tarazi (2014) analyze how board diversity affects bank risk and performance and find a positive correlation between diversity and performance. Marie *et al.*, (2021) investigated the relationship between internal governance structures and financial stability of Egyptian banks and found that board size, meetings, and gender are positively correlated with financial stability. Abiola *et al.*, (2021) examine corporate governance and risk management in Nigerian banks and conclude that a good corporate governance system improves bank stability and lending profitability.

H1 There is a positive relationship between independence diversity and banks' performance.

3.2.2 Gender Diversity and Bank Performance

According to Ahmad *et al.* (2018), having more female directors on the board can improve the board's oversight position and reduce agency costs that may result from the separation of ownership and management control. Birindelli *et al.*, (2020) found that adding more female directors does not lower bank risk when banks are not sound, but they play a beneficial effect in decreasing risk when banks are stable, up until a critical mass of women is reached. Abobakr and Elgiziry (2017) found that board size is positively significant with the three measures of risks, while non-executive directors are negatively significantly correlated with both insolvency and liquidity risk. Board female is negatively

significant with insolvency and liquidity risk, while it is positively significant with credit risk. Ullah et al. (2019) found that female directors on corporate boards and having female CEOs increase a bank's worth, and their impact is higher under privately owned businesses compared to state-owned enterprises.

H2 There is a positive relationship between gender diversity and banks' performance.

3.2.3 Skills Diversity and Bank Performance

The qualifications and experience of board members play a crucial role in the successful monitoring and regulating functions (Rachmat, 2020). Higher levels of education among bank board members can improve corporate governance standards and enable them to comprehend and interpret sophisticated risk measurement techniques (Berger *et al.*, 2014; Marouan & Dabboussi, 2015). However, a study conducted by the International Conference on Education, Business & Management (2019) found that the ethnic, skill, and qualification diversity of board members did not have a beneficial impact on the stock performance of Indonesian companies. On the other hand, business age and quality audits had a negative and significant impact on stock performance. Another study by Mori (2014) revealed a favorable correlation between directors' ages and their capacity to oversee and supply the board with resources, as well as a beneficial impact of education on board performance. The study did not provide data on the impact of female directors on boards.

H3 There is a positive relationship between skills diversity and bank performance.

3.2.4 National Diversity and Bank Performance

The need for directors with appropriate knowledge and relationships in foreign markets has increased due to the growing internationalization of firms, as well as the belief that foreign directors bring diverse perspectives and ideas to the table. Foreign board members can contribute to a bank's value through their monitoring and advising roles, and having foreign ownership is seen as a sign of "excellent governance." The nationality of the CEO and the number of foreign directors can serve as measures of nationality diversity (Gul & Muhammad, 2019; Boussaada & Labaronne, 2015).

Harjoto *et al.*, (2018) investigated the relationship between the diversity of nationalities and educational backgrounds of directors on corporate boards and the corporate social performance (CSP) of banks. The study used MSCI ESG ratings to calculate the banks' CSP and examined the diversity of nationalities

among the directors based on their citizenship and the countries where they received their degrees. The study found a positive correlation between board diversity in terms of nationality and educational background and CSP in a sample of US banks (Harjoto *et al.*, 2018).

H4 There is a positive relationship between nationality diversity and bank performance.

3.2.5 Age Diversity and Bank Performance

Board age diversity is important in the boardroom as directors may have varying abilities due to age, which may affect the company's performance. Age diversity can result in value creation as it leads to effective monitoring, strategic decision-making, better connections and expertise, an improved knowledge base, and greater creativity in the boardroom. However, the presence of board members with different perspectives and cognitive abilities due to significant age differences may lead to communication issues and divergent viewpoints, which could impede a board's decision-making process and teamwork (Tarchouna *et al.*, 2021; Ali *et al.*, 2014; Talavera *et al.*, 2018; Estelyi & Nisar, 2016; Van Knippenberg *et al.*, 2016).

Arioglu (2021) studied the impact of board age diversity on the financial performance and risk of listed companies in Turkey, a collectivistic and paternalistic culture. The study used Different Stage Least Squares Instrumental Variables models to analyze the impacts and took into account directors' values through propensity score matching to identify potential channels for the impact of age diversity. The results indicate that board age diversity has a positive impact on firm performance and risk, but the study does not suggest that conflicts over values associated with the workplace are the cause of this positive impact.

H5 There is a positive relationship between age diversity and bank performance.

4.0 METHODOLOGY

4.1 Sample Selection and Data Sources

The study anticipated to use a sample size of 50banks with coverage of 10 years, from 2011-2020 but only 26 banks managed to be covered by the study since some of the banks in the preferred countries were not listed in their respective stock exchange. In the following subcategories, the study used a sample of 26 listed commercial banks as a representative: 8 from DSE, 12 from NGX, 2 from JSE and 4 from EGX. The study covered four parts of the African continent, with the eastern part represented by Tanzania, the western part by Nigeria, the northern part by Egypt and the southern part by South Africa. The researcher prefers to

use the Dar es Salaam Stock Exchange (DSE) in Tanzania over the Nairobi Stock Exchange (NSE) in Kenya in this study because, the Tanzanian economy is one of the fastest-growing economies in Africa, with a young and expanding population, which offers significant growth potential for the DSE. Also, the DSE has been attracting increasing foreign investment, which is an indicator of investor confidence in the Tanzanian market.

The study used secondary data since it was time and money efficient, and all the data sources were reliable because annual reports had to be generated in compliance with legal requirements.

Table 1: List of the companies in the sample

S/N	Sector	Country	Date Listed	
1	CRDB	Tanzania	2011	This represents eastern African countries
2	NMB	Tanzania	2012	
3	KCB	Tanzania	2011	
4	Mkombozi Commercial Bank	Tanzania	2011	
5	DCB Commercial Bank	Tanzania	2011	
6	Maendeleo Bank	Tanzania	2009	
7	MUCOBA Bank	Tanzania	2009	
8	Mwalimu Commercial Bank	Tanzania	2009	
9	Guarant Trust Holding	Nigeria	2012	
10	Ecobank	Nigeria	2011	This represent western African countries
11	FBN Holdings Plc	Nigeria	2013	
12	FCMB Group Plc	Nigeria	2014	
13	Unity Bank	Nigeria	2009	
14	Wema Bank	Nigeria	2009	
15	Zenith Bank	Nigeria	2009	
16	Infinity Trust Mortgage Bank	Nigeria	2009	
17	NPF Microfinance Bank			
18	Livingtrust Mortgage Bank	Nigeria		
19	Jaiz Bank	Nigeria		
20	Fidelity Bank	Nigeria	2012	
21	ABSA	South Africa	2017	This represents southern African countries
22	Barclays Africa Group	South Africa	2011	
23	Abu Dhabi Islamic Bank	Egypt	2011	This represents northern African countries
24	Housing & Development Bank	Egypt	2009	
25	Al Baraka Bank	Egypt	2013	
26	Amer Group Holding	Egypt	2012	

Source: African markets (2022)

4.2 Sampling Technique and Criteria for Sample Selection

Twenty-six banks listed on the DSE, JSE, EGX, and NGX were obtained for the study using the purposive sampling technique. Purposive sampling is a type of non-probability sample with the main goal of producing a sample that can be logically assumed to be representative of the population and fall within predetermined criteria set by the study on its general and specific objectives, according to Saunders *et al.*, (2019). Purposive sampling is also known as

judgmental or expert sampling. Because it allows for more flexibility in sample selection and produces a sample that may be reasonably deemed to be representative of the population after validation of some pre-specified parameters, purposeful sampling was used. To be selected as part of the study sample selected banks must meet the following criteria: they must be identified as commercial banks and must also have complete data set for the coverage of 10 years (2011-2020).

4.3 Types of Data and Data Collection Methods

The study employed secondary data collected from audited financial statements of 26 selected enterprises in Tanzania, Egypt, South Africa, and Nigeria over ten years from 2011 to 2020. The study used secondary data since all the sources were legitimate—that is, they produced audited annual reports in line with rules and laws such as the International Financial Reporting Standards (IFRS) and international corporate governance norms. The cost-effectiveness of using secondary data for this investigation in terms of time and money resources is another benefit that is immediately obvious.

4.4 Data Analysis and Models Specifications

The panel data analysis technique was utilized in the study because it produces more precise predictions for individual outcomes by pooling the data than by using the data on the individual in question to do so. Panel data offer the opportunity to learn a person's behavior by monitoring the behavior of others if individual actions are comparable conditional on specific criteria. As a result, it is feasible to gain a more accurate description of a person's behavior by combining observations of the subject with information on other people (Hsiao *et al.*, 1993). Measurement mistakes may cause an econometric model to be under-identified (Aigner *et al.*, 1984). Multiple observations for a single subject or point in time may enable a researcher to apply various transformations to cause distinct and deducible changes in the estimators, hence identifying a model that would not otherwise be known (Birn, 1992). The study model is specified as per model number 1.

$$ROA_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu \dots \dots \dots \text{Model 1}$$

$$Tobin-Q_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu \dots \dots \dots \text{Model 2}$$

Whereby from model number 1

Tobin-Q_i and *ROA* stand for Bank performance and represent dependent variables

X {1, 2, 3, 4, 5} stands for independent variables as here described; *X*₁=Age Diversity; *X*₂ = gender diversity; *X*₃= Independence Diversity; *X*₄=Nationality Diversity; *X*₅ Skills Diversity *μ* = Error Term; *β*₀ =intercept (constant term)

4.5 Econometric Test

4.5.1 Normality Test

The test entails determining whether the population differs from a population with a regularly distributed population. The null hypothesis was disproved, and the population was regarded as non-normal if the P-value is less than 0.05. The findings showed that the residual's p-value was over 0.05, which meant that the study's attempt to reject the null hypothesis failed. The findings showed that the study's failure to reject the null hypothesis which claimed that the data set had a normal distribution was due to the residual's p-value being above 0.05. According to Brooks (2008), the evidence of a normal distribution of the residuals implied that it is possible to estimate panel regression models using the OLS regression methodology.

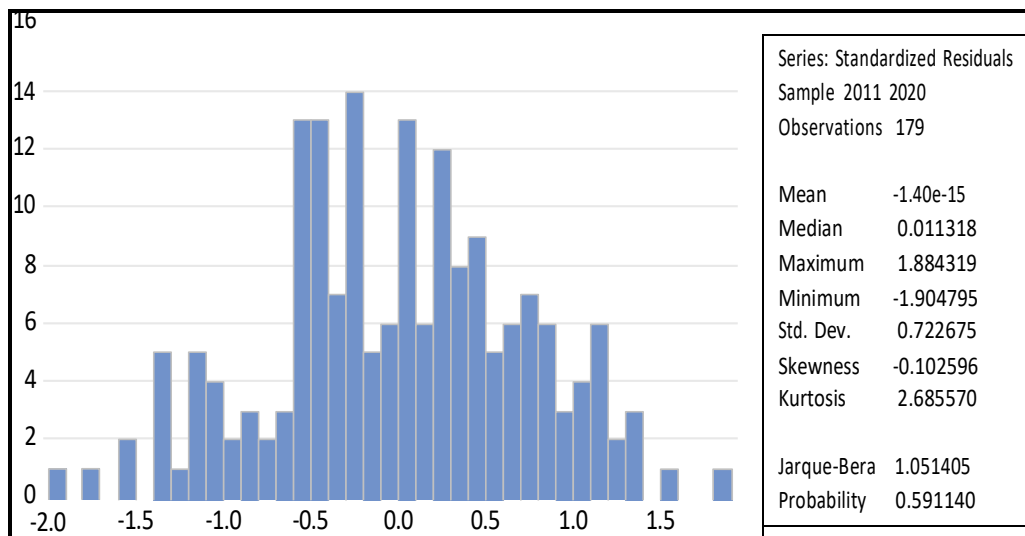


Figure 1 Normality Test

Source: Data Analysis (2022)

4.5.2 Multicollinearity Test

The study used a correlation matrix to look at whether multicollinearity existed. The rule of thumb for pair-wise correlation is a coefficient greater than 0.8, signifying the existence of multicollinearity. According to Studenmund (2016) as indicated by Lotto (2020) an absolute value larger than 0.8 is preferred to be enough to cause multicollinearity for pair-wise correlation. The findings of the study according to Table 2 indicate no existence of a multicollinearity problem since the coefficients of all variables are less than 0.8.

Table 2: Multicollinearity Test

	ROA	Gender	Nationality	Skills	Age	Independence
ROA	1	0.04	0.17	0.41	0.23	0.15
Gender	0.04	1	0.06	0.18	0.06	0.22
Nationality	0.17	0.06	1	0.24	0.22	0.13
Skills	0.41	0.18	0.24	1	0.29	0.65
Age	-0.23	0.65	-0.22	-0.29	1	-0.15
Independence	0.14	0.22	0.13	0.65	0.15	1

Source: Data Analysis (2022)

4.5.3 Hausman specification test

The Hausman specification test tried to ascertain whether there was a meaningful association between the regressors and the unobserved company-specific random effects. If no link is found, the random effect is utilized; if one is, the fixed effect model is the one that should be used (Elhorst, 2003). When fixed effects models are advised, a test is run to see if temporal fixed effects should be included in the study estimation. When the random effect model is deemed appropriate, a panel effects test is conducted on the data (Allison, 2009). The random effect model was appropriate for the data at the usual significance level of 0.05, according to Hausman's null hypothesis (Hausman, 1978). The null hypothesis that a random effect was acceptable for the data was rejected by Table 3's Hausman test result, which had a p-value of 0.015 less than 0.05. As a result, a fixed effect model was favored.

Table 3: Hausman Model Specification Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. df.	Prob.
Cross-section random	1.98	5	0.015

Source: Data Analysis (2022)

5.0 RESULTS AND DISCUSSION

5.1 Descriptive Analysis

Descriptive analysis was conducted whereby Table 4 contains descriptive results for the study variables. To examine ‘the roles of board characteristics on Bank performance: evidence from selected African countries’ the study used mean, standard deviation, skewness, kurtosis, and JarqueBera tests. The study's independent variables were specified as board members’ independence, gender diversity and board meetings while bank performances measured by ROA were specified as the dependent variable. The findings of the study according to Table 4. indicate that there is statistically significant variance within the maximum and minimum values for all variables except for age diversity. This means age diversity shows a small difference between a listed bank and another. Moreover,

Skills followed by Board Independence and ROA have the largest standard deviation hence more volatile variables than others.

The variable with the highest mean is Age diversity which means that the average Board of listed banks consists of board members with an average age of 47 years. Moreover, most of the board is independent consisting of 11 independent directors on average a maximum of 18% and minimum of 7% followed by Skills diversity with a mean of 10 and a maximum of 21 meetings and a minimum of 0 meaning on average Boards are dominated by CEOs with experience of 10 years. Gender Diversity has a mean of 0.3 meaning on average boards in Tanzania listed banks represent women by only 0.3 in CEO positions with a maximum of 1% and minimum of 0% on individual Boards of banks. Most important bank performances have a mean of 2.9, which means on average listed banks in Tanzania contribute about 2.9% to the level of RAO in the listed banks. On normality distribution all variables have JarqueBera 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 independence, gender diversity, board meetings, and skills while loan performance has Kurtosis greater than 3. All these normality distributions indicate the existence of outliers in the variable's distributions.

Table 4: Descriptive Statistics

	ROA	Gender	Nationality	Skills	Independence	Age
Mean	2.90	0.32	0.31	10	11	47
Median	3.01	0.00	0.00	13.	11	48
Maximum	7.00	1.00	1.00	21.	18	57
Minimum	-4.96	0.00	0.00	0.00	7	47
Std. Dev.	1.65	0.47	0.46	6.61	2.57	0.10
Skewness	-1.31	0.76	0.84	-0.24	0.35	-0.21
Kurtosis	2.57	1.58	1.71	1.45	2.59	2.13
Jarque-Bera	298.60	46.65	48.38	28.23	7.03	9.96
Probability	0.428	0.114	0.75	0.42	0.30	0.69
Observations	258	258	258	258	258	258

Source; Data Analysis (2022)

5.2 Correlation Matrix

Simply said, a correlation matrix is a table that shows the correlation coefficients for various variables. The correlation between all potential pairs of values in a table is shown in the matrix. It is an effective tool for finding and displaying trends in the provided data, as well as for summarizing a huge dataset (corporatefinanceinstitute.com, 2022). The value above 0.5 indicates a strong positive correlation while the value above -0.5 indicates a strong negative correlation. In Table 5, the findings show that there is a strong negative

relationship between Tobin-Q and gender as indicated by a correlation value of -0.58, also there is a strong positive relationship between Tobin-Q and Nationality as indicated by a correlation value of 0.80, also there is a strong positive correlation between Tobin-Q and Skills diversity due to a correlation value of 0.68, also a correlation between age diversity and Tobin-Q is poor negative while the correlation between Tobin-Q and independence is strong positive following the correlation value of 0.72.

Table 5: Correlation Matrix

	Tobin-Q	Gender	Nationality	Skills	Age	Independence
Tobin-Q	1**	-0.58*	0.80**	0.68**	-0.41*	0.72**
Gender	-0.58*	1**	0.08**	0.47**	0.33**	0.34**
Nationality	0.80**	0.12**	1**	0.22**	0.16**	0.12**
Skills	0.68**	0.22**	0.35**	1**	0.23**	0.44**
Age	-0.41*	0.34**	-0.29*	-0.06*	1**	-0.05*
Independence	0.72**	0.11**	0.14**	0.47**	0.19**	1**

5.3 Main results

5.3.1 Fixed Effect Regression Results and Discussion

The study was conducted to examine the roles of board characteristics on Bank performance: evidence from selected African countries Tanzania, South Africa, Egypt, and Nigeria. Five specific objectives guided the study as indicated by independent variables named gender, age diversity, nationality diversity, skills, and board independence while the bank's performance is quantified using the dependent variable, Return on Asset (ROA). Since the Hausman specification test P-value is less than 0.05, the study advises using fixed Effect Weighted Least Squares (WLS) regression due to the presence of heteroscedasticity. Results of the study are shown in Table 6, where Fixed Effect Weighted Least Squares (WLS) regression is statistically significant at the 0.05 level for explaining correlations between dependent and independent variables. This is shown by R square (79%) and Adjusted R square (76%). This means R-square indicates that 79% of the variation on the dependent variable (Bank performance) is explained by the changes in the independent variables (Gender, Age diversity, Nationality diversity, Skills, and Board Independence). On the contrary, the remaining 21% of changes in the bank's performance are explained by other factors not included in the model of this study. The most 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.

Table 6: Fixed Effect Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Gender	-0.06	0.11	-0.58	0.00
Nationality	0.18	0.10	1.87	0.07
Skills	0.05	0.02	3.36	0.00
Age Diversity	-0.01	0.01	-0.67	0.51
Board Independence	0.08	0.04	1.87	0.00
C	3.12	0.58	5.42	0.00
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.79	Mean dependent var	4.85	
Adjusted R-squared	0.76	S.D. dependent var	4.75	
SE. of regression	1.02	Sum squared residue	236.59	
F-statistic	27.85	Durbin-Watson stat	1.32	
Prob(F-statistic)	0.00			
Unweighted Statistics				
R-squared	0.63	Mean dependent var	2.90	
Sum squared residue	261	Durbin-Watson stat	1.29	

Source: Data Analysis (2022)

Table 7: Effects of Gender, Nationality, Skills, Age Diversity and Board Independence on Tobin-Q

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Gender	-0.02	0.09	-0.78	0.00
Nationality	0.14	0.13	1.53	0.09
Skills	0.07	0.78	2.33	0.04
Age Diversity	-0.04	0.08	-0.98	0.23
Board Independence	0.06	0.06	2.45	0.00
C	2.45	0.84	3.74	0.00
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.92	Mean dependent var	2.20	
Adjusted R-squared	0.91	S.D. dependent var	2.17	
SE. of regression	0.80	Sum squared residue	153.89	
F-statistic	45.27	Durbin-Watson stat	1.67	
Prob(F-statistic)	0.00			
Unweighted Statistics				
R-squared	0.73	Mean dependent var	2.54	
Sum squared residue	178	Durbin-Watson stat	1.16	

Source: Data Analysis (2022)

5.3.1.1 Independence Diversity and Bank Performance

To assess the roles of independence diversity and bank performance in selected African countries, the following hypothesis was tested by the study; there is a positive relationship between Independence diversity and bank performance in selected African countries. Findings of the study according to Table 6 and Table 7 indicate independence diversity has a positive statistically significant influence on bank performance in selected African countries ($B=0.08$, $P \text{ Value}<0.05$) and ($B=0.06$, $P \text{ Value}<0.05$) respectively, therefore the study accepted the null hypothesis. This implies on average independence diversity leads to an increase in bank performance by 8% and 6% for fixed regression and Tobin-Q regression respectively in selected African countries.

The study is comparable to that done by Setiyono and Tarazi (2014), who investigated how performance and risk were affected by the backgrounds of bank board members using information from Indonesian banks comprising 4200 individual year observations and 21 ethnic groups from 2001 to 2011. The study used the generalized method of Moment's estimator from the dynamic panel system as a suitable estimator that enables testing the impact of female boardroom participation on bank risk. Various factors (including gender, citizenship, age, experience, tenure, ethnicity, nationality, education level, and type) are used in the study to determine the degree of diversity, and it finds a significant impact on bank performance. Except when it comes to ethnicity, diversity is often favorably correlated with performance. It not only lowers performance in and of itself but also raises risk. Although the presence of women and a diverse professional population lowers risk, differences in nationality and ethnicity are linked to higher risk.

Diverse educational backgrounds typically increase income volatility and leverage risk.

5.3.1.2 Gender Diversity and Bank Performance

To assess the role of gender diversity on the bank's performance in selected African countries, the following hypothesis was tested by the study; there is a positive relationship between gender diversity and bank performance. The findings of the study according to Table 6 indicate gender diversity is a negative statistically significant influence on bank performance ($B=-0.06$, $P\text{-Value}<0.05$), therefore the study rejects the null hypothesis. Furthermore, the findings from Table 7 reveal that gender diversity is a negative statistically significant influence on bank performance. This implies on average gender diversity leads to a decrease in bank performance by 6% and 2% for fixed regression and Tobin-Q regression respectively.

In contrast to Birindelli et al. (2020), this study looked at the connection between female directors and bank risk. The question of whether such a link differs between sound and questionable banks and with or without a significant number of female directors is tested. This study does panel data analysis and tests all the model parameters on four different risk indicators using a sample of 215 listed banks from 40 countries over the years 2008-2016 (Common equity ratio, leverage, NPLs ratio, and price volatility). The results demonstrate that adding more female directors does not lower bank risk when banks are not sound. When banks are sound, female directors have a significant and positive role in reducing risk, only until reaching a critical mass of women.

5.3.1.3 Skills Diversity and Bank Performance

To assess the role of Skills Diversity and bank performance in selected African countries, the following hypothesis was tested by the study; there is a positive relationship between skills diversity and bank performance in selected African countries. Findings of the study according to Table 6 and Table 7 indicate skills diversity is positive and statistically significant influences bank performance in selected African countries ($B=0.05$, $P \text{ Value} < 0.05$) and ($B=0.07$, $P \text{ Value} < 0.05$) respectively, therefore the study accepts the null hypothesis. This implies on average Skills Diversity leads to an increase in bank performance by 5% and 7% for fixed regression and Tobin-Q regression respectively.

The study is comparable to that of Mori (2014), who investigated the impact of board members' characteristics (age, gender, and education) on their capacity to fulfill their board tasks in an efficient manner (monitoring and resource provision). The survey of 105 board members representing 63 microfinance institutions from three East African nations served as the basis for the empirical analysis (Kenya, Tanzania, and Uganda). The findings indicate a favorable correlation between directors' ages and their capacity to oversee and supply the board with resources. The study also demonstrates that the level of education of directors has a beneficial impact on boards' performance. However, no data regarding the impact of female directors on boards could be identified. The results suggest that board members should be chosen based on both their personal qualities and their capacity to carry out their duties. The following hypothesis is put forth by this study based on debate and prior research.

5.3.1.4 Nationality Diversity and Bank Performance

To assess the role of Nationality Diversity on bank performance in selected African countries, the following hypothesis was tested by the study. There is a positive relationship between nationality diversity and bank performance. Findings of the study according to Table 6 and Table 7 indicate that nationality diversity is positive and has a statistically insignificant influence on bank

performance in selected African countries ($B=0.18$, $P \text{ Value}>0.05$) and ($B=0.14$, $P \text{ Value}>0.05$) respectively, therefore the study failed to reject the null hypothesis. This implies on average Nationality Diversity does not have any influence on bank performance in selected African countries.

The study contradicts Harjoto *et al.*, (2018), who looked at the association between the corporate social performance of banks and the diversity of nationalities and educational backgrounds of directors serving on corporate boards (CSP). This study examines the diversity of nationalities among the directors based on their citizenship as well as the countries in which they received their undergraduate and graduate degrees. The MSCI ESG ratings are used to calculate the banks' CSP. The study empirically tests the hypotheses using both univariate and multivariate analyses. The study indicated that board diversity in terms of nationality and educational background is positively correlated with CSP using a sample of US banks. The following hypothesis is put forth by this study based on debate and prior research.

5.3.1.5 Age Diversity and Bank Performance

To assess the role of Age diversity and bank performance in selected African countries, the following hypothesis was tested by the study; there is a positive relationship between Age diversity and bank performance in selected African countries. The findings of the study according to Table 6 and Table 7 indicate Age diversity is a negative statistically insignificant influence on bank performance in selected African countries ($B=-0.01$, $P \text{ Value}>0.05$) and ($B=-0.04$, $P \text{ Value}>0.05$) for fixed regression and Tobin-Q regression respectively.

The study differs from that of Arioglu (2021), who used a sample of listed companies from Turkey, a collectivistic and paternalistic culture, to investigate whether board age diversity affects company financial performance and risk and whether diverse work-related values held by directors of different ages are the underlying cause of any effects. Different Stage Least Squares Instrumental Variables models are used to study these impacts. Additionally, directors' values are considered using propensity score matching to study the potential channels through which age diversity may affect corporate performance. The results imply that board age diversity has a favorable impact on firm performance and risk, but they do not imply that intra-group conflicts over values connected to the workplace are the root reasons for this favorable impact. The following hypothesis is put forth by this study based on debate and prior research.

6.0 CONCLUSIONS

The study aimed to investigate the relationship between board characteristics and bank performance in selected African countries. The study found that gender

diversity has a negative impact on bank performance, while nationality and age diversity are not significant factors. Skills diversity and board independence, on the other hand, have a positive influence on bank performance.

The study provides practical implications for regulators and the government to promote corporate governance through gender, age, nationality, skills, and board independence. The study recommends that regulators review corporate governance aspects of gender and age diversity, while listed banks should improve gender and age diversity, as well as nationality diversity, and capitalize on skills diversity and independence to improve bank performance.

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