DO GENDER DIVERSITY AND CEO CULTURE AFFECT SUSTAINABILITY PERFORMANCE IN THE NIGERIAN BANKING INDUSTRY?

Idris Adamu Adamu, Ismaila Yusuf, Ahmed Jinjiri Bala

Faculty of Management Sciences, Federal University Dutsin-Ma, Nigeria
e-mail: adamuidris48@gmail.com (corresponding author)

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Abstract

This study investigates how gender diversity and CEO culture affect sustainability performance in the banking industry. The sample used in the study was drawn from listed banks on the floor of the NGX group. The data were obtained from the Bloomberg Database with 88 firm-year observations (2011 to 2018). The regression estimate is based on a panel data approach. We found that female directors’ and CEOs’ cultures have greater tendencies to enhance sustainability performance proxied by ESG. Thus, the findings provide additional insight into the existing literature on sustainability and diversity initiatives as well as the resource dependency theory. It also adds to the existing literature on sustainability reporting. The findings, moreover, allude to the initiatives of the regulatory authority in the industry that emphasise the need to have a diversified board that includes female directors and other forms of diversity, for example, ethnicity.

Keywords: corporate diversity, gender diversity, CEO culture, sustainability.

I. INTRODUCTION

The interest of researchers, practitioners, and regulators has increased recently regarding the environment. In business, this trend has evolved to focus on sustainability reporting, which reports the environmental, social, and governance activities in an organisation. Hence, sustainability reporting nowadays has become a key issue in overall corporate reporting practices. Today, corporate reporting goes beyond the traditional practice of financial information but incorporates other information that relates to the environment, society, and governance.1 Similarly, sustainability reporting is also viewed as a tool that

affects the strategic decisions of corporations and draws the attention of its stakeholders.\textsuperscript{2} Moreso, efforts are being made by regulators of the accounting profession to provide a framework for sustainability reporting. Along this line,\textsuperscript{3} noted that the International Financial Reporting Standards (IFRS) Foundation proposed the development of a sustainability board with a view to developing sustainability standards that benefit corporate stakeholders. Studies have shown that corporate investors tend to channel their investment into socially responsible firms.\textsuperscript{4} argued that corporate social responsibility (CSR) reporting significantly influences stakeholders in avoiding and sometimes boycotting firms that are not socially responsible.\textsuperscript{5} It has been argued that both the firms’ stakeholders and society greatly benefit from CSR reporting by enhancing the image of the corporation as well as harnessing greater comparative marketing advantages among socially sensitive customers and thereby increasing a firm’s revenue in the long run.

Given the importance of sustainability reporting among the stakeholders of firms, researchers have posited that directors who are representatives of the owners of the company are expected to articulate environmental, social, and governance (hereafter ESG) policies in their deliberations.\textsuperscript{6} Therefore, such reporting has resulted in better ESG reporting on the one hand and enhanced corporate reputation from the stakeholders of the firm on the other hand.\textsuperscript{7}

Evidence concerning how corporate diversity influences ESG reporting is relatively scarce and inconclusive in the existing literature. This is more pressing


in the banking industry because of its instrumental nature in the development of a country, particularly in markets like Nigeria where corporate governance practice is weak. Moreso, unlike the nonfinancial industry, the banking industry has not paid the requisite attention to issues relating to corporate diversity and sustainability performance. Prior studies maintained that gender and culture should complement the existing board diversity measures (for example, independence). Therefore, this study investigates how gender diversity and CEO culture affect sustainability performance in the banking industry. Using eleven (11) NGX listed banks on the main floor of the exchange between 2011 and 2018, we found that female directors and CEOs culture have greater tendencies in enhancing sustainability performance in the Nigerian banking industry. Thus, the study adds value to the existing literature on sustainability reporting.

The paper is organised as follows. A review of empirical studies and hypotheses are situated in Section II. The methodology of the paper is presented in Section III. Discussion of results is provided in section IV while conclusions and inferences are presented in section V.

II. REVIEW OF EMPIRICAL STUDIES AND DEVELOPMENT OF HYPOTHESES

Research on sustainability reporting has continued to attract the attention of scholars and policymakers. As a result of its relevance to business, research on sustainability practices and drivers has flourished. Accordingly, good corporate policies on sustainability allow firms to generate higher revenue.

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8 Oyewumi, Ogunmeru, and Oboh, “Investment in Corporate Social Responsibility.”
11 Issa, Zaid, and Hanaysha, “Exploring the Relationship.”
12 Oyewumi, Ogunmeru, and Oboh, “Investment in Corporate Social Responsibility.”
enhance good governance,\textsuperscript{13} value relevance,\textsuperscript{14} higher return on equity as well as tendency for obtaining international listing \textsuperscript{15} and mitigating agency costs.\textsuperscript{16}

According to stakeholder theory, corporate entities should expand their horizons to cater to other members of the society beyond the traditional stakeholders (owners and employees) of the firm. The theory suggests that a corporate entity is an integral part of a wider societal arrangement to the extent that it affects or is affected by other parties or groups within the community.\textsuperscript{17} Consistent with this view, the theory expresses the nature of the corporate body, the responsibility of its management and likewise how directors on the board should handle the firm such that the key stakeholders will benefit.\textsuperscript{18}

Moreover, the board of directors have a greater role to play in addressing the community’s concerns. As Issa et al. posited, directors provide an avenue for managing the relationships between numerous groups that are party to the firm.\textsuperscript{19} This avenue helps in building mutual relationships via CSR engagement and in turn increases the revenue of the firm.

Nevertheless, the resource dependence theory may be considered far-reaching in explaining board diversity and ESG reporting phenomenon. Ben-Amar et al. posited that statutory board diversity (independent directors) is less likely to result in good governance practices if demographic diversity is neglected.\textsuperscript{20} This issue may be more prevalent in sustainability reporting.\textsuperscript{21} In this regard, demographic diversity, gender diversity for example, and CEO culture could be explained by the resource dependence theory (hereafter


\textsuperscript{14} Kuzey and Uyar, “Determinants of Sustainability.”


\textsuperscript{19} Issa, Zaid, and Hanaysha, “Exploring the Relationship.”


\textsuperscript{21} Ibid.
RDT). This theory posits that corporate boards should encompass members with demographic diversity.\textsuperscript{22} The theory considers the survival of business entities as a function of the existing resources predominantly in the environment in which the firm operates.\textsuperscript{23} The supporters of this theory stress that only directors with varied backgrounds can legitimately link the a with its environment. Furthermore, a board with diverse directors tends to be capable of offering important resources, for instance, advice and counselling that allows the firm to have a comparative advantage over others. Thus, having a strong diverse board may result in precious additional resources, which should lead to superior firm performance.\textsuperscript{24} Thus, RDT suggests that females on boards and in CEO culture are expected to enhance ESG reporting.

II.A. Gender Diversity

Diversity is an important component of board structure. Gender diversity on corporate boards is associated with effectiveness in terms of resource provision.\textsuperscript{25} Gender diversity in the context of this study refers to the presence of female directors on the board of a bank. Prior research has highlighted the significant roles played by female directors on the board on various board policies. For instance, boards with female directors show greater consistency in CSR,\textsuperscript{26} ESG


\textsuperscript{24} Carter et al., “The Gender and Ethnic Diversity.”


reporting, social sustainability, corporate reputation, corporate dividend policy and mitigating good accounting practices. Consistent with the RDT, Issa et al., using data from 2014-2018 for 93 firms listed on various Middle Eastern Stock markets, showed that the presence of female directors on the board has a positive relationship with ESG reporting. The result indicates that with female directors on board, sustainability reporting is greatly enhanced. More recently, from the MENA region reported a significant and positive association between female directors and environmental performance. The finding is also in line with Idris and Tyasari, who found that female directors improve social sustainability reporting in the listed Healthcare firms in Nigeria. These findings corroborate previous evidence that females on boards have higher tendencies to respond to carbon disclosure projects, sustainability reporting in manufacturing firms, and increases voluntary and quality disclosures. However, Husted and Sousa-filho found that the presence of female directors reduces the probability of reporting ESG from Latin American countries. The result may likely be influence with

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27 Issa, Zaid, and Hanaysha, “Exploring the Relationship”
32 Issa, Zaid, and Hanaysha, “Exploring the Relationship”
33 Ibid
37 Husted and Sousa-filho, “Board Structure and Environmental”
women tokenism perspective and therefore, they cannot influence any meaningful process in decision making. Consistent with prior findings and in agreement with the RDT, we hypothesized that:

\[ H_1: \text{Female directors on board are positively related to ESG reporting in the banking industry.} \]

II.B. CEO culture

Cultural factors tend to affect the behavioural pattern, norms, and lifestyles of living individuals. More so, Nazra et al. maintained that cultural values should be recognised as they sturdily impact people’s lifestyles, behaviour, and beliefs. This is because each ethnic group maintain cultural values as well as its religious beliefs. Hence, this may arguably be manifested in corporate entities. AL-Dhamari et al. argued that directors in Malaysian boards are from various ethnic backgrounds, and this has affected how they manage their firms. Hence, the country could be regarded as a multi-cultural society. However, diversification in terms of ethnicity, language, and religion prevails in the Nigerian market. The country is the most populous in Africa with more than 250 ethnic groups but dominated by three (Hausa, Yoruba, and Igbo). Hence, the country could be regarded as a multi-cultural society. However, with the dominance of these three major ethnic groups in the country, the Yorubas have been leading Hausas and Igbos in corporate leadership. Therefore, their beliefs, language, norms, and lifestyles are likely to affect their leadership in corporate entities. According to Oboh and Ajibolade, the cultural aspect of Nigerians is influenced by their ethnic groups. Kabara and Modibbo affirmed that greater ethnic diversity of board members results in commercial benefit to firms in Nigeria.

41 Ibid.
43 AL-Dhamari, Ismail, and Al-Gamrh, “Board Diversity and Corporate”
Thus, increasing attention over the years has been paid to how cultural and ethnic diversity affect firms’ outcomes. These include dividend policy,\(^{47}\) social performance,\(^{48}\) CSR disclosures,\(^{49}\) social reporting,\(^{50}\) firm performance,\(^{51}\) corporate innovation,\(^{52}\) gender diversity,\(^{53}\) corporate governance,\(^{54}\) corporate disclosure,\(^{55}\) earnings management,\(^{56}\) audit delay,\(^{57}\) auditor choice,\(^{58}\) and accounting practices.\(^{59}\)

For example, AL-Dhamari et al. showed that dividend policy of an enterprise is influenced by the cultural background of its directors.\(^{60}\) The study indicated that firms with a higher percentage of Bumiputra directors pay a

\(^{47}\) AL-Dhamari, Ku Ismail, and Al-Gamrh, “Board Diversity and Corporate”


\(^{57}\) Sheidu, Idris, and Shawai, “Audit Committee Characteristics”


\(^{60}\) AL-Dhamari, Ahmed, Ismail, and Al-Gamrh. “Board Diversity and Corporate”
higher dividend when the free cash flow is substantial. 61 reported that ethnic networking has a significant effect on the selection process of an auditor. Internationally, Che Ahmad et al. indicated that culture and corporate social responsibility reporting are inversely related.62 Along this line, Attah-boakye et al. revealed that the norms of a nation and its cultural value affect gender diversity, investment in research and development and innovation.63 Haniffa and Cooke documented that on the boards dominated by Malay directors, corporate social disclosure is being enhanced.64 This result contradicts the recent evidence provided by Kabara and Modibbo that the performance of firms becomes greater where the board is ethnically diversified. 65 We, therefore, argue that since a CEO is also a member of the corporate board, there is a tendency that ESG reporting will be influenced particularly if the CEO belongs to Yoruba ethnic group, which has dominated corporate entities. In agreement with the theory and prior studies, we hypothesized that:

\[ H_2: \] CEOs with Yoruba ethnic backgrounds have a significant impact on ESG reporting in the banking industry.

### III. METHODS AND DATA OF THE STUDY

The sample used in the study was drawn from the listed banks on the floor of the NGX market. The data were obtained from the Bloomberg database with 88 firm-year observations (2011 to 2018).
III.A. Specification of the Model
The data collected was employed to estimate the following model.

\[ \text{SUR}_{it} = \beta_0 + \beta_1 \text{FDM}_{it} + \beta_2 \text{CET}_{it} + \beta_3 \text{BSZ}_{it} + \beta_4 \text{BLH}_{it} + \beta_5 \text{ROA}_{it} + \beta_6 \text{SOB}_{it} + \beta_7 \text{LVG}_{it} + e_{it} \]  

(1)

Where SUR is the dependent variable used in the study, while FDM and CET are the main explanatory variables of interest. Consistent with prior studies, we use board structure and some firm-specific features as control variables in the study. These variables include board size (BSZ), blockholders (BLH), profitability (ROA), Size of the bank (SOB), and leverage (LVG).

IV. EMPIRICAL RESULTS OF THE STUDY
IVA. Summary statistics
Descriptive statistics of the variables used in the study are presented in Table 2 which shows that the mean value of the banks reporting ESG is 22.84. This shows that the reporting of ESG among the sampled banks is low. In this regard, banks may be required to increase their level of disclosures to meet up with the current international standards. The increase may go a long way in attracting potential investors from around the globe.

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Table 1.
Definition of variables and sources

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Definition/measurement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability reporting</td>
<td>The extent of firm environment social and governance disclosures. The score ranges from 0.1 to 100.</td>
<td>Bloomberg</td>
</tr>
<tr>
<td>Female directors on a bank's board (FDM)</td>
<td>The proportion of females sitting on the board</td>
<td>Bloomberg</td>
</tr>
<tr>
<td>CEO ethnicity (CET)</td>
<td>Dummy variable as 1 if a CEO has a background in Yoruba ethnicity otherwise 0.</td>
<td>Annual report</td>
</tr>
<tr>
<td>Board size (BSZ)</td>
<td>Number of directors on the board</td>
<td>Bloomberg</td>
</tr>
<tr>
<td>Blockholder ownership (BLH)</td>
<td>Percentage of shares held by substantial owners in a bank</td>
<td>Annual report</td>
</tr>
<tr>
<td>Profitability (ROA)</td>
<td>Return on assets</td>
<td>Bloomberg</td>
</tr>
<tr>
<td>Size of the bank (SOB)</td>
<td>Logarithms of a bank's total asset</td>
<td>Annual report</td>
</tr>
<tr>
<td>Leverage (LVG)</td>
<td>Total debt to total assets of a bank</td>
<td>Bloomberg</td>
</tr>
</tbody>
</table>

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On average, the ratio of female directors seated on a board is 0.18. This suggests that the boards of the banking industry are highly dominated by male directors. This ratio, however, is higher than those reported in other industries of the NGX market.\(^6^7\) The mean value of the last variable of interest CEO ethnicity is 0.44. This figure shows that 44% of the CEOs of the sampled banks are Yorubas while other tribes account for 55%. Thus, the Yorubas constitute most of the CEOs in the banking industry. One of the possible reasons for this may be the fact that the Yoruba ethnic group embraces western education earlier than other ethnic groups in Nigeria.

Regarding the multicollinearity between the independent variables, we use variance inflation factor (VIF) and correlation matrix. The results of the VIF reveal that they are less than 10 and therefore, within the acceptable range.\(^6^8\) In addition, the correlation matrix indicates that all the variables have a moderate value and hence, are not harmful.\(^6^9\) Therefore, we conclude that multicollinearity will not pose a problem to the regression results.

We use the panel data approach to estimate the data. Consistent with the norm, we estimate fixed effects and random effects. Following a Hausman test, the null hypothesis of the fixed effects model is rejected, and this leads to the acceptance of the random effects model. The result of the Hausman test is depicted in Table 3. In addition, to analyse the efficiency of the random effects model against the OLS pooled regression, we performed Breusch and

\(^{67}\) Idris, Abdulrasheed, and Oyindamola, “The Relationship between Corporate”


Pagan Lagrange Multiplier tests. The result of the test is statistically significant favouring the random effects model. The result is also reported in Table 3.

From Table 3, the relationship between female directors on banks’ boards and sustainability reporting is positive and statistically significant. This result is in support of hypothesis one and in line with the prior studies. The result indicates that sustainability performance (ESG) becomes higher when banks hire more female directors with the requisite expertise. The result is consistent with the RDT that hiring a female director will enhance the link, and legitimacy among others with the society where the firm operates and in turn allows corporations to legitimately carry out their operations.

<table>
<thead>
<tr>
<th>VARS</th>
<th>Exp. Sign</th>
<th>RAN EFF</th>
<th>FIX EFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDM</td>
<td>+</td>
<td>30.18*** (11.31)</td>
<td>34.38*** (12.28)</td>
</tr>
<tr>
<td>CET</td>
<td>+/-</td>
<td>6.554** (2.599)</td>
<td>8.624*** (2.882)</td>
</tr>
<tr>
<td>BSZ</td>
<td>+/-</td>
<td>-0.0066 (0.386)</td>
<td>0.00948 (0.414)</td>
</tr>
<tr>
<td>BLH</td>
<td>+/-</td>
<td>0.082 (0.0816)</td>
<td>0.193 (0.13)</td>
</tr>
<tr>
<td>ROA</td>
<td>+/-</td>
<td>1.038* (0.568)</td>
<td>1.311** (0.594)</td>
</tr>
<tr>
<td>SOB</td>
<td>+/-</td>
<td>24.99*** (4.521)</td>
<td>25.01*** (5.462)</td>
</tr>
<tr>
<td>LVG</td>
<td>+/-</td>
<td>36.78*** (10.94)</td>
<td>36.93*** (11.23)</td>
</tr>
<tr>
<td>CON</td>
<td>+/-</td>
<td>-225.4*** (42.39)</td>
<td>-232.0*** (50.37)</td>
</tr>
<tr>
<td>R²: Overall</td>
<td></td>
<td>32.6%</td>
<td></td>
</tr>
<tr>
<td>R²: Between</td>
<td></td>
<td></td>
<td>8.78%</td>
</tr>
<tr>
<td>Wald Chi²</td>
<td></td>
<td>84.07***</td>
<td></td>
</tr>
<tr>
<td>F-stat</td>
<td></td>
<td></td>
<td>13.15***</td>
</tr>
<tr>
<td>Hausman: Chi2/Prob</td>
<td>11.65/0.1127</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breusch &amp; Pagan LM test</td>
<td>17.43***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBS</td>
<td></td>
<td>88</td>
<td>88</td>
</tr>
</tbody>
</table>

Note please: SUR= Sustainability reporting, FDM = female directors on the banks’ board, CET = CEO ethnicity, BSZ = Board size, BLH = Blockholders ownership, ROA = profitability of the banks, SOB = Size of the bank , LVG = Leverage. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. All the variable measurements are presented in Table 1.

Regarding our second hypothesis, the result in Table 3 shows that CEO ethnicity and sustainability reporting are related positively and statistically significant. The result indicates that a CEO with a Yoruba ethnic background has a significant effect on sustainability reporting in the banking industry. This is likely because the Yoruba ethnic group embraces western education earlier than other ethnic groups in Nigeria. More so, the Yoruba ethnic group may have been more aware of the significance of sustainability reporting. The

result is in consistent with the prior studies\textsuperscript{71} that culture is a vital issue in various corporate outcomes.

Regarding the control variables used in our study, profitability, size of bank, and leverage were found to be important determinants of sustainability performance. The results agree with previous studies\textsuperscript{72} that found profitability, size, and leverage to be positive and statistically significant with sustainability.

IV.B. Robustness check
To confirm our previous findings and address the tendency of endogeneity, we also estimate the model using lagged values of the variables used in the study. The result of the regression for the two variables of interest remains positive and statistically significant. Accordingly, this supports our earlier findings that female directors on the board and CEO ethnicity enhance sustainability reporting performance. The result is presented in Table 4.

<table>
<thead>
<tr>
<th>VARS</th>
<th>Exp. Sign</th>
<th>LAG RAN. EFF</th>
<th>LAG FIX EFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>L.FDM</td>
<td>+</td>
<td>20.17* (11.58)</td>
<td>23.33* (12.66)</td>
</tr>
<tr>
<td>L.CET</td>
<td>+</td>
<td>8.582*** (2.601)</td>
<td>10.63*** (2.889)</td>
</tr>
<tr>
<td>L.BSZ</td>
<td>+/-</td>
<td>0.0975 (0.366)</td>
<td>0.0606 (0.390)</td>
</tr>
<tr>
<td>L.BLUH</td>
<td>+/-</td>
<td>0.0817 (0.0839)</td>
<td>0.179 (0.130)</td>
</tr>
<tr>
<td>L.ROA</td>
<td>+/-</td>
<td>1.282** (0.533)</td>
<td>1.545*** (0.557)</td>
</tr>
<tr>
<td>L.SOBO</td>
<td>+/-</td>
<td>24.75*** (4.743)</td>
<td>24.07*** (5.910)</td>
</tr>
<tr>
<td>L.LVG</td>
<td>+/-</td>
<td>37.89*** (11.03)</td>
<td>37.37*** (11.73)</td>
</tr>
<tr>
<td>CON</td>
<td>+/-</td>
<td>-224.9*** (44.35)</td>
<td>-223.5*** (54.18)</td>
</tr>
<tr>
<td>R\textsuperscript{2}; Overall</td>
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<td>28.01%</td>
<td></td>
</tr>
<tr>
<td>R\textsuperscript{2}; Between</td>
<td></td>
<td>6.78%</td>
<td></td>
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<tr>
<td>Wald Chi\textsuperscript{2}</td>
<td></td>
<td>72.14***</td>
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<td>F-stat</td>
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<td>Hausman: Chi2/Prob</td>
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<tr>
<td>Breusch &amp; Pagan LM test</td>
<td></td>
<td>20.52***</td>
<td></td>
</tr>
<tr>
<td>OBS</td>
<td></td>
<td>77</td>
<td>77</td>
</tr>
</tbody>
</table>

Note please: SUR= Sustainability reporting, FDM = female directors on the banks’ board, CET = CEO ethnicity, BSZ = Board size, BLH = Blockholders’ ownership, ROA = profitability of the banks, SOB = Size of the bank, LVG = Leverage. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. All the variable measurements are presented in Table 1.

\textsuperscript{71} Haniffa and Cooke, “The Impact of Culture”; Adnan, Hay, and Staden, “The Influence of Culture”; Kabara and Modibbo, “Impact of Board Ethnic”

V. CONCLUDING REMARKS

We examined the relationship between board diversity and sustainability performance. Specifically, we tested how gender diversity and CEO culture affect sustainability performance. The evidence demonstrated a positive association. Thus, a higher percentage of female directors and CEOs with Yoruba ethnic background exhibit greater sustainability performance in the banking industry. The results of the study are robust as we control for characteristics of the firms. These characteristics include board size, blockholders, profitability, size of the bank, and the level of the bank’s indebtedness. We also control for the endogeneity issue by estimating the existing model using lagged values of the variables. The findings of the study also support the resource dependence theory that corporate boards should encompass members with various demographic diversity. This allows firms to establish a link with the society in which it operates to improve corporate capability and continuous operation.

This study provides evidence of the relevance of board diversity in the banking industry. Thus, alludes to the initiatives of the regulatory authority in the industry that emphasises the need to have a diversified board that comprises of female directors and other forms of diversity, for example, ethnicity. Furthermore, this study underscores the relevance of CEO culture in sustainability performance in the banking industry. Future study may consider the social, cultural, and other positive aspects of the Yoruba ethnic group on sustainability. Also, future studies may consider banks in Nigeria with 100% Yoruba ethnic board of directors.

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