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Sustainability Reporting and Assets Quality of Listed Deposit Money Banks in Ghana, Kenya and Nigeria

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ABSTRACT: *Bank's asset quality deteriorates when banks are exposed to high non-performing loans and associated credit risks. Sustainability reporting deepens the acceptability and understanding of huge opportunities and enhances the corporate competitive advantage of the banks in enhancing banks' assets quality. This study investigated the effect of sustainability reporting on the assets quality of listed deposit money banks (DMBs) in Ghana, Kenya and Nigeria. The study explored secondary data, using a population of 95 listed DMBs, while a sample size of 31 DMBs was purposively selected for a period of 12 years. Data were extracted from the annual financial records of the banks and sustainability reporting checklist in line with the Global Reporting Initiative. The validity and reliability of the data were premised on the statutory audit of the financial statements. Descriptive and inferential (multiple regression) statistics were used to analyze the data at a 5% significant level. The study found that sustainability reporting significantly affected the assets quality of the listed deposit money banks in Ghana, Kenya and Nigeria (Adj $R^2 = 0.47$, Wald-test $(4, 367) = 342.18$, $p < 0.05$). Based on the finding, the study recommended managers of the banks should exhibit high professional competence, and exercise managerial expertise and ethical practices in compliance with sustainability reporting best corporate best practices capable of enhancing the assets quality of the banks.*

KEYWORDS: assets quality, corporate governance, environmental, social, sustainability reporting,

INTRODUCTION

The operational performance of financial institutions can be complicated, as previous research from industrialized economies has demonstrated. The corporate performance of deposit money banks must be analyzed and reviewed to enable the seamless adjustment and elimination of any vulnerabilities in order to provide healthy, robust, and stable financial institutions (Ajili & Bouri, 2018). Sutopo, et al., (2018) assert that the health and sustainability of the banks are significantly impacted by the corporate performance of the banks and their prospects. Analysis of the roadblocks impacting the performance and future prospects of financial institutions is crucial in this regard (Al-Amin et al., 2018). Banks in the United States and in China are not aliens to performance deficiencies and factors impeding performance expectations, as any bank performance models involve the pragmatic application of some kind of risk and return framework (Ari & Koe, 2020).

Deposit money banks in Ghana, Kenya and Nigeria are characterized by institutions operating inefficiencies and dilapidated infrastructures and highly defective systems, where corrupt and unethical practices have been intuitionally entrenched as a way of life (Pobbi et al., 2020). The lack of sustainability reporting in the banking system in the region has heightened criminality and impeded the visibility of the banking corporate performance in deposit money banks (Asuquo et al., 2018). When institutions disregard sustainability reporting, it becomes difficult to appreciate the level of degeneration and possible diagnostic measures to apply and correct anomalies in a continent deprived of adequate industrialization (Azutoru et al., 2017). Banks' assets include loans made to businesses and individuals. The interest banks generate on these assets is a significant component of their revenue and profit, and the danger of loan default is their primary risk. The higher the credit risk, the worse the loan quality (or "asset quality"). When a bank's asset quality deteriorates, it must retain more capital to cover the associated credit risk and record larger provisions to prepare for probable losses (Syder et al., 2020; Sisaye, 2021).

The problem of asset quality has been a critical concern in the midst of the growing and unprecedented non-performing loan profile associated with banks in Ghana. Kanye and Nigeria over the years and incidentally, there seemed no clarity in streamlining procedures to reduce this menace (Ndukwe & Nwakanma, 2018; Obiora et al., 2022). The deepening surge of the absence of deep implementation of information technology and mobile banking technologies is another phase of concern, as the majority of the banks’ failure to full digitalization of the banking services, as many had been opposed to openness, lack transparency and ethical practices capable of gaining recognition and legitimacy of the stakeholders’ visibility, international competitiveness to deepen assets ability to effective earnings. The assets ability of the banks in this region is fast declining as the banks lack the courage and boldness to showcase corporate assets’ ability to withstand international exposure effectively (Ojera et al., 2020; Rahman & Rahman, 2020).

According to Argento et al (2019), the core of business success in Sweden is around balancing multiple risks, including credit risks, operational risks, efficiency risks, and post-expected returns. The case of the corporate version of deposit money banks involves the resolution of complexities centered around issues to ensure the managerial team's flexibility and responsiveness, ability to deliver high-quality output and exceptional customer services, and capability to provide resource performance and achieve efficiency (Ahmad et al., 2021; Ajili, Bouri, 2018). Due to shortcomings in operational excellence and delays in customer services in Ghana and other some other African countries, banks have recently experienced setbacks in corporate performance issues and limitations in speedy and accurate service delivery and product quality, customer intimacy issues, customer satisfaction and retention challenges, and more (Akindehinde et al., 2022; Helfaya & Moussa, 2017).

Pobbi et al. (2020) noted that there is evidence of uncertainties, weak dynamism, volatility and impermanence of the new competitive advantage, as the banking industry generally going through striking changes with the advent of new technologies, accounting software and the increased significance of technological innovations geared toward meeting the global demands (Malovic, et al., 2019). These changes have with them new challenges and problems for the banks to rekindle validating the old traditional models towards generating and creating value for the new order of corporate performances (Al-Amin et al., 2018). The banks that have shown strong and positive character, institutionalizing and implementing sustainability reporting policies have reported huge corporate success, higher corporate performance and effective asset utilization (Najera-Samchez, 2020). Effective sustainability reporting attracts investors' motivation to commit to their collection of investment portfolios with concerned banks in Ghana, Kenya and Nigeria.

Owing to the significance of sustainability reporting towards effective corporate performance, the International Federation of Accountants (IFAC) created a sustainability framework in 2011 to help businesses incorporate sustainability concerns into their operational strategy, operational procedures, and reporting procedures. In order to increase the credibility of sustainability reports, IFAC's sustainability framework's reporting component entails providing audits and assurances on sustainability performance, incorporating sustainability impacts into financial statements, and using narrative reporting to capture sustainability information that isn't included in financial statements (Hossin & Biva, 2020; Adegbie & Adesanmi, 2020). Sustainability reporting provides unique benefits of enhancing understanding of opportunities and risks, enhanced competitive advantages and improved brand image, boosting employee morale and the banks becoming more globally recognized (Syder et al., 2020). Besides, it enhances the ability of the banks with regulatory laws and reduces the risk of sanctions and helps in protecting and preservation of the environment.

In the literature from rich economies, several studies have taken into account sustainability reporting and asset quality but this is not the case in emerging nations. In the chosen nations of Ghana, Kenya, and Nigeria, there is a dearth few empirical research on sustainability reporting and asset quality, leaving a significant vacuum in the literature. Additionally, there have been conflicting results and viewpoints about the degree to which deposit money banks on the African continent comply with sustainability reporting, particularly as it affects asset quality in Ghana, Kenya, and Nigeria in one study. In bridging the gap in the literature, this current study provided a novelty in literature and presented the significance of sustainability reporting affecting assets quality in relation to transparency, accountability and honest dealing on the quality banking services from Ghana, Kenya and Nigeria perspective where sustainability reporting compliance has been problematic and companies do not comply with sustainability reporting.

Consequently, this study investigated the effect of sustainability reporting on the asset quality of listed deposit money banks in Ghana, Kenya, and Nigeria fared in terms of corporate performance after considering the impact of sustainability reporting. There is evidence of prior research that examined sustainability reporting from a local and global perspective, although fewer of these studies have compared sustainability reporting in Ghana, Kenya, and Nigeria. This tends to validate the reason for this study since the function of sustainability reporting in banks is imperatively crucial in enhancing the quality of the banks' assets and impacts effectiveness and corporate performance. In the literature research on the function and importance of sustainability reporting in the listed deposit money banks in Ghana, Kenya, and Nigeria, this study identifies benefits that can help the banks succeed. In addressing the problem of assets quality, this current study hypothesized as follows:

Ho1: Sustainability reporting does not have a significant effect on the assets quality of listed deposit money banks in Ghana, Kenya and Nigeria

The rest of the paper was organized as follows: In the next section 2, the study provides a literature review and theoretical framework, methodology in section 3, data analysis and discussion in section 4 and in section 5, the study presented the conclusion and recommendations.

LITERATURE REVIEW AND THEORETICAL REVIEW

Conceptual Review

Assets Quality

The assets quality indicator is defined as the financial parameters to measure the quality of corporate assets to cover the potential loans, and this reflects on the extent of the earnings abilities of the banks (Gracia-Lacalle & Torres, 2021). Assets quality indicators are the significant ingredient that measures the strength of the banks and are closely connected with capital adequacy since most of the time, solvency risks tend to outflow from the depreciation of assets (Joseph & Ahmed, 2017). In determining the asset quality of the banks, the banks' investment risk factor is essential as aligned with the banks' capital earnings (Ahmad, 2017). According to Akben-Selck (2019), the stability and sustainability of the banks largely depend on the asset's quality as well as the fair market value of the investments of the banks. The efficiency of the banks' investment policies and practices are deeply rooted in the ability of consistent earnings of the banks

Assets quality revealed the determinants of the healthiness and sound state of the banks against possible loss in value of corporate assets as against assets impairments and solvency of the banks. Consequently, the weakening value of assets and those assets that fail impairment tests has spillover and ripple effects on corporate performance as assets written off tend to rib-off on the capital of the banks and expose the earnings ability of the assets and the banks generally. Assets quality indicators have connected the quality of banks' investments, loans advancements, real estate and physical structure of the banks and the actual performance of the assets of the banks and the inability of optimal utilization of assets due to lack of assets quality. The asset quality has been measured based on the extent of the bank's loan profile, non-performing loan capacities and impaired loan profile of the bank's loans (Green & Homroy, 2018).

Sustainability Reporting

According to Whetman (2018), sustainability reporting helps organizations establish strong and robust consumer and stakeholders confidence and enhance the corporate brand, legitimacy and lasting reputations through effective corporate sustainability, responsibility programs and effective risk management. Sustainability reporting is concerned with the opportunity of organizations to organize and communicate to the stakeholders voluntarily or otherwise its corporate performance and the effects on the society in respect of the environment, social and governance (ESG) related issues that are relevant to the stakeholders. Alazzani et al. (2017) documented that sustainability reporting has been debated extensively in the literature and many of these studies had focused on the efforts of corporate governance in establishing strong and effective sustainability reporting in organizations, corporate performance, profitability, corporate ownership structure, firm size, and organizational performance. From the Countries of Ghana, Kenya and Nigeria perspective, the issue of sustainability reporting has not gained substantial attention from financial institutions and banks in particular (Aguguom, 2020; Al-Jaifi, 2020; Amin et al., 2019).

Environmental

Human action had led to growing greenhouse gases, uncoordinated waste disposals and many other unethical issues that have depleted natural resources (Argento et al. 2019; Huang et al., 2020). Kaur and Lodhia (2019) opined that economic sustainability reporting is one such regulatory requirement the banks are expected to disclose under the corporate governance and non-financial disclosures aimed at strengthening the natural capital towards the promotion of environmental sustainability by improving all the stakeholders' welfare, the government, the employees, the lenders, investors as well as the depositors, the communities, and the society at large.

Social

According to Helfaya and Moussa (2017), banks and other institutions within the banking sector or outside the banking sector in response to social sustainability, need to carry out these responsibilities by ensuring equity, and protection of human rights with the overall objective of improving standards of living. They have a tendency to contribute to creating a healthier, fair, equitable and livable environment for all capable of promoting a healthy environment, general people-oriented wellness, safety inclusiveness and stakeholders' satisfaction (Irine & Indah, 2017). Fairness and group decisions are for the general good of all, the creation of opportunities for those who are disadvantaged by circumstances, gender equality and parity, equal distribution of corporate gains among the concerned stakeholders equitably, and contribute appropriately, towards the enhancement of quality education in improving human wellbeing (Jaoouad & Lahsen, 2018).

Corporate Governance

Nizam et al. (2019) documented that corporate governance sustainability reporting considers the transparency and honest financial reporting of the banks as a key element of governance and the composition of the board, whether or not the banks are well constituted with the required executive and non-executive board composition and efforts of the corporate governance in mitigation conflict of interests of the agents of the banks and owners of the banks. Effective and efficient corporate governance enhances and fosters quality sustainability reporting in the banks in deposit money banks in Ghana, Kenya and Nigeria, creates superior economic and sustainable values, and supports the banks achieve their set goals and objectives (Peng & Isa, 2020; Aguguom & Olanipekun, 2021).

Theoretical Underpinning

Signaling Theory

In 1973, Michael Spence created the signaling hypothesis. The Spencer notion of signaling theory is used to explain current market behaviour in the context of the financial markets (Fuadah et al., 2019). The theory contended that a signaling problem is relevant to any capital market dynamics, particularly if information asymmetry and insider trading are common. Furthermore, signaling effects have been widely discussed in literature, according to Dass et al. (2014). While signaling has been linked to agency theory, Ameer and Othman (2012) found that it clarifies cross-sectional disparity in voluntary disclosure levels (Dass et al., 2014). According to the hypothesis, there are signaling effects when announcements of information that may affect how things operate at

Some assumptions of signaling theory have pointed that the signaling theory documented in the literature. According to Fuadah et al. (2019), some of the assumptions include: that managers' choice of the type of information to make public and the reasons behind such actions for the protection of the company and for the benefit of the shareholders. The signaling theory assumes that there is good news as well as bad news, while the managers capitalize on the good news to exploit the ignorant, the managers try hard to hide the bad news being disclosed for the protection of the company and for the managers' self-interest. Privileged information begets insider trading activities as the management and the board make the announcement of good achievements of the company to the public as an instrument of signaling the company's managerial competence and efficient use of corporate resources to attract investors and appreciation of the firm values. In other instances, the signaling theory assumes that some privileged information is intended for corporate gains and strategic investment decisions purposes

Institutional Theory

The institutional theory was propounded by John Mayer and Brian Rowan in 1970, as one of the means to explore how organizations deal with their environment in reaction to societal, state, national and global environment. The institutional theory is concerned with a pragmatic approach to how corporate organization and their management project their products and services to the general public as a social phenomenon rather than economic pressure. According to Lafuente and Vaillant (2019), the institutional theory pointed out that the practices and organizational actions that of the governed through their various agencies and the institutional system had been to achieve political and economic success as well as to gain competitive advantage. Institutional theory emphasizes on the parts of social, political, and economic systems in which governments obtained the support of the masses and companies function and increase wealth creation by gaining societal legitimacy.

The institutional theory suggested that institutions offer the rules of the game and define the available ways to operate by discouraging, compelling or encouraging given behavioural patterns. Li et al. (2015) opined that some prepositions of the Institutional theory have backed the theory and pointed out that institutional theories hold a good promise, for Scholars of organisational communication. It explains in detail how institutions obtain relevance through the prevalence of rules and regulations in order to acquire legitimacy. The advantage is that societies and nations need laws and directions in order to succeed in their firms (Henry et al., 2019). Ashmarina et al. (2016) pointed out that the development of institutional theory in 1970 has enabled organizations to remove unsatisfactory ideas and replaced them with good ideologies. Furthermore, Chang et al. (2018) opined that institutional theory plays an excellent role in a good organizational structure.

Empirical Review

Sustainability Reporting and Assets Quality

Akpan and Uwakmfonabasi (2021) studied corporate sustainability reporting and its influence on asset quality from the perspective of return on investment, using an *expo facto* research design. Secondary data sourced from the financial statements of the companies were used for the study for a period of 6 years covering 2014 to 2020. Robust panel data using least squared regression analysis was equally carried out for the content analysis data analysis of the sustainability indexes. The result of the analysis revealed that corporate sustainability reporting had a positive effect on the return on investment of the selected and sampled companies in Nigeria. This result is in concord with the result derived from Najera-Samchez (2020). The regression analysis revealed that sustainability financial reporting had a positive effect on the corporate performance of the commercial banks used for the study. Meanwhile, the result obtained by Akpan and Uwakmfonabasi (2021) is not in concordance with the result of Osazefua (2020) who revealed that sustainability practice had a negative relationship with performance in Nigeria.

Owolabi et al. (2020) examined the effect of sustainability reporting on the assets quality and the relevance of accounting information of DMBs quoted in Nigeria. The study used an expo facto research design, using a population of 21 banks from which a sample of 13 banks was sampled in the study for a period of 15 years spanning from 2004 to 2018. Data for the study was obtained from the published financial statements of the banks selected for the study and the validity of the data was premised on the external auditors' certification of the published financial statement of the DMBs sample in the study. Descriptive statistics and inferential analysis (multiple regressions) were both used for the data analysis. The study found that sustainability reporting had a positive effect on the relevance of accounting information. In addition, the study revealed that environmental and social risks management, women's economic empowerment, environmental and social footprint, and financial inclusion and reporting jointly had an appositive effect on the quality of accounting information/relevance of DMBs in Nigeria.

The result obtained from Owolabi et al. (2020) is in consonance with the result obtained by Forcadell et al. (2019)). The study found that a positive effect was established between innovation and corporate links in the banks investigated. Though, the result gotten by Owolabi et al. (2020) is not in consonance with the result obtained by Nobanee and Ellllili (2017). The study revealed that the economic, environmental, and social dimensions of sustainability financial reporting had a negative effect on the financial performance of United Arab Emirates (UAE) companies.

Malovics et al. (2019) studied the empirical implication of environmental and social practices on asset quality and corporate performance in Rome. The study employed an *expo facto* research technique, as documented data were obtained from the database in Hungry and Rome. Assets quality and earnings ability were measures of corporate performance of the companies. The study carried out a panel data analysis and the results were mixed. However, the conclusion of the study revealed that environmental and social practices had a positive effect on capital adequacy, assets quality and earnings ability of the companies investigated. The study of Malovics et al. (2019) is similar when compared with the study done by Mukherjee and Sen (2019). The result found that corporate governance had a positive effect on the environmental reporting of the companies used in the study. Contradictory to this report, the result obtained from Adegbie, and Dada (2018) result showed that non-performing loans had a negative impact on the assets of DMBs in Nigeria.

Akben-Selcut (2019) studied corporate sustainability reporting, corporate performance and the quality of total assets of selected banks in Turkey. The study engaged an *expo-facto* research approach in the study and the secondary data was sourced from the listed commercial banks in Turkey. Multiple regression analyses were carried out with mixed results. One of the results found that corporate sustainability had a positive relationship with corporate performance. It further revealed that corporate sustainability had a negative and insignificant influence on corporate performance in the banks in Turkey. Akben-Selcut (2019)'s study is in compliance with the result given by Asuquo et al. (2019). The study concluded that sustainability reporting had a negative and insignificant effect on asset quality and return on assets of the brewery companies selected for the study. This Akben-Selcut (2019)'s study is not in compliance with the study of Mukherjee and Sen (2019). The result found that corporate governance had a positive effect on the environmental reporting of the companies used in the study.

Kaur and Lodhia (2019) considered stakeholders and sustainability reporting on assets quality and corporate financial performance of the companies in Australia. Secondary data was employed for the study, as the secondary data of the financial performance reported was employed for the data analysis. The result of the analysis revealed that sustainability reporting and stakeholders' engagement had a positive significant influence on the assets quality and financial performance of the companies in Australia selected for the study. The study done by Kaur and Lodhia (2019) is consistent with the one done by Ezeokafor and Amahalu (2019). The result of the analysis revealed that sustainability reporting indexes had a positive effect on corporate performance based on a 0.05 per cent level of significance. Whereas the study of Kaur and Lodhia (2019) is not consistent with the study done by Asuquo et al. (2019), the study showed that sustainability reporting had a negative and insignificant effect on and return on assets quality of the brewery companies selected for the study.

Montesinos and Brusca (2019) investigated sustainability reporting of non-financial activities and the performance of some public companies based on given asset quality. The study employed documented data from the data records of the companies' financial performance in terms of environment and sustainability reporting. The result of the study showed that sustainability reporting positively impacted asset quality and the performance of the companies as it gained the legitimacy of its operations from the general public. Montesinos and Brusca (2019)'s result of the study is similar when compared to the result derived by Zabolotny and Wasilewski (2019). The study found that there was a close and positive relationship between sustainability and corporate performance among the companies in Kenya. In opposition to that report, Nobanee and Elllili (2017) had it to say that the economic, environmental, and social dimensions of sustainability financial reporting had a negative effect on the financial performance of United Arab Emirates (UAE) companies.

METHODOLOGY

This study investigated the effect of sustainability reporting on the assets quality of listed deposit money banks (DMBs) in Ghana, Kenya and Nigeria. The study explored secondary data, using a population of 95 listed DMBs, while a sample size of 31 DMBs was purposively selected for a period of 12 years. Data were extracted from the annual financial records of the banks and sustainability reporting checklist in line with the Global Reporting Initiative. The validity and reliability of the data were premised on the statutory audit of the financial statements. Descriptive and inferential (multiple regression) statistics were used to analyze the data at a 5% significant level.

Model Specifications

$Y_{it} = \beta_0 + \beta X_{it} + \mu_{it}$ --- (1)

$AQ_{it} = \beta_0 + \beta_1 LAQ_{it} + \beta_2 ENI_{it} + \beta_3 SI_{it} + \beta_4 CGI_{it} + \varepsilon_{it}$ -- (2)

Where:

AQ = Assets Quality, LAQ = Log of Asset quality, ENI = Environmental Indicators, SI = Social Indicators, CGI = Governance Indicators, β_0 = regression intercept which is constant

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β_1 = the coefficient of the explanatory variables

ε = is the error term of the model

i = Cross-sectional

t = Time-series

DATA, RESULTS & DISCUSSIONS

Table 1: Sustainability Reporting and Assets Quality

Variables	**Dynamic panel-data estimation, two-step system GMM**	
LAQ	Coefficient Standard error T-Stat (Prob)	0.433 0.098 4.42 (0.000)
SI	Coefficient Standard error T-Stat (Prob)	-3.936 2.521 -1.56 (0.119)
ENI	Coefficient Standard error T-Stat (Prob)	0.124 2.369 0.05 (0.958)
CGI	Coefficient Standard error T-Stat (Prob)	1.082 3.413 0.32 (0.751)
CONSTANT	Coefficient Standard error T-Stat (Prob)	491.652 223.840 2.20 (0.028)
Wald test	$chi^2(4)$ = 342.18 (0.000)	
Adjusted R-Squared	0.473	
AR(1) AR(2)	Z = -1.79 (0.073) Z = -0.70 (0.483)	
test of overid. Restrictions	Sargan: $chi^2(252)$ = 379.56 (0.000) Hansen: $chi^2(252)$ = 27.67 (1.000)	
Exogeneity tests: GMM instruments for levels	Hansen: $chi^2(214)$ = 25.54 (1.000) Difference (null H = exogenous): $chi^2(38)$= 2.13 (1.000)	
Exogeneity tests: Individual Instruments	Hansen test excluding group: $chi^2(249)$ = 26.64 (1.000) Difference (null H = exogenous): $chi^2(3)$ = 1.03 (0.793)	
***Source**: Researcher's Work (2023). **Note**: Assets Quality (AQ), lag of Asset Quality (LAQ), Environmental Indicators (ENI), Social Indicators (SI) and Governance Indicators (CGI)*		

Source: Researcher's Computations (2023)

Results

$$AQ_{it} = \beta_0 + \beta_1 AQ_{it-1} + \beta_2 SI_{it} + \beta_3 ENI_{it} + \beta_4 CGI_{it} + \varepsilon_{it}$$

$$CA_{it} = 491.652 + 0.433AQ_{it-1} - 3.936SI_{it} + 0.124ENI_{it} + 1.082CGI_{it}$$

Z-test = 2.20 4.42 -1.56 0.05 0.32

Interpretation of Post Estimation Test

To determine the appropriateness of the parameter estimates for the Model which examined the effect of sustainability reporting on the asset quality of listed deposit money banks in Ghana, Kenya and Nigeria, the post-estimation tests from the System General Method of Moment were used. Ideally, four types of tests are generally considered and they are as follows; first, the serial correlation of the first autoregressive order, with the null hypothesis that there is no serial correlation. Second, the serial correlation test of the second autoregressive order; with the null of serial correlation. Third, the *Hansen test* of over-identifying restrictions with the null that the model specified has valid instrumentation. Lastly, the *Sargan test* that the specified variables are proper instruments, with the null that the model specified are proper instruments.

The serial correlation of autoregressive of order 1 with a statistic value of -1.79 is significant at 10 per cent, this implies that the null of no-serial correlation was rejected and accepts the alternative that there is serial correlation. This is in line with the SGMM that the AR(1) should be significant and that the successive error terms should be correlated. The AR(2) with a statistic of -0.70 with a probability of 48.3 per cent is not significant, thus, the null of serial correlation was rejected and the alternative of no serial correlation was accepted. This is in conformity with the literature that the AR(2) should be serial independent. Thus, the estimated model is devoid of autocorrelation.

The Hansen test and the Sargan test, assess the validity of the model with probability values of (1.000) and (0.000). The Hansen statistics is 27.67 probability is greater than the chosen significance level of 0.05 confirming the validity of the model, The Sargan test of 379.56 with a probability value of 1 per cent is statistically significant. Therefore, based on the Hansen Test, the null hypothesis of the tests state that over-identifying restrictions are valid, meaning that all instruments are valid. The result Hansen proved that all the instruments in the model are valid and suitable for the estimation.

The result of the Difference-in-Hansen tests of exogeneity of instrument subsets for GMM instruments for levels is 2.13 with a probability value of 100 per cent, which is statistically insignificant. This implies that the models are dynamically complete and that the instruments are valid for the estimation. In addition, the Difference-in-Hansen tests statistic of exogeneity of instrument subsets for the individual instruments is 1.03 with a probability value of 1.000 is also statistically insignificant. Thus, the null hypothesis of the Hansen test excluding this group of instruments was not rejected which implies that there is no validity for introducing additional instruments into the models. This also confirmed the exhaustiveness of the instruments in the models.

Interpretation of Results

From the results in Table 1, there is evidence that the lag of asset quality has a positive relationship with asset quality. This implies that increases in the lag of asset quality will lead to an increase in asset quality. Thus, a 1 per cent increase in the lag of asset quality will lead to a 0.433 per cent increase in asset quality. The results also revealed that the lag of asset quality has a significant relationship with the asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria (L.AQ = 0.433, Z-test= 4.42, $p < 0.05$). This implies that the lag of asset quality is a significant factor influencing changes in asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria.

The results also show that social sustainability reporting indicators have a negative relationship with asset quality, thus increases in social sustainability reporting indicators will lead to a fall in asset quality, and a 1 per cent increase in social sustainability reporting will lead to a 3.936 fall in asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria. The results also revealed that the social sustainability reporting indicators have no significant relationship with the asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria (SI = -3.936, Z-test= -1.56, $p > 0.05$). This implies that social sustainability reporting is not a significant factor influencing changes in asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria.

In addition, the results revealed that environmental sustainability reporting indicators have a positive relationship with asset quality, thus, a 1 per cent increase in environmental sustainability reporting will lead to a 0.124 per cent increase in asset quality. This implies that increases in environmental sustainability reporting indicators will lead to an increase in asset quality. Concerning the significance of the estimated parameter, there is evidence that environmental sustainability reporting has no significant relationship with the asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria (ENI = 0.124, Z-test = 0.05, $p > 0.05$). This implies that environmental sustainability reporting is not a significant factor influencing changes in asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria.

The results for corporate governance reporting indicators suggest that there is a positive relationship with asset quality of the selected deposited money banks of Ghana, Kenya, and Nigeria, thus, a 1 per cent increase in corporate governance reporting will lead to a 1.082 per cent increase in asset quality. This implies that increases in corporate governance reporting will lead to an increase in asset quality. Concerning the significance of the estimated coefficient, there is evidence that corporate governance sustainability reporting has no significant relationship with the asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria (CGI = 1.082, Z-test = 0.32, $p > 0.05$). This implies that corporate governance sustainability reporting is not a significant factor influencing changes in asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria.

The Adjusted R^2 which measures the proportion of the changes in the asset quality as a result of changes in lag of asset quality, social sustainability reporting indicators, corporate governance sustainability reporting indicators, and environmental sustainability reporting indicators explains about 47 per cent changes in the asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria, while the remaining 53 per cent were other factors explaining changes in the asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria but where not captured in the model.

The model's overall fit is indicated by the Wald test, which tests the null hypothesis that all coefficients in the model are zero. In this case, the Wald test is significant at the 1% level, indicating that the model as a whole is a good fit for the data. Alternatively, the Wald test statistic of 342.18 with a probability value of 0.000 implies that the lag of asset quality, social sustainability reporting indicators, environmental sustainability reporting indicators, and corporate governance sustainability reporting indicators are joint significant factors influencing changes in asset quality of listed deposit money banks in Ghana, Kenya and Nigeria.

The Adjusted R^2 which measures the proportion of the changes in the asset quality as a result of changes in lag of asset quality, social sustainability reporting indicators, corporate governance sustainability reporting indicators, and environmental sustainability reporting indicators explains about 47 per cent changes in the asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria, while the remaining 53 per cent were other factors explaining changes in the asset quality of the selected deposit money banks in Ghana, Kenya and Nigeria but where not captured in the model.

The model's overall fit is indicated by the Wald test, which tests the null hypothesis that all coefficients in the model are zero. In this case, the Wald test is significant at the 1% level, indicating that the model as a whole is a good fit for the data. Alternatively, the Wald test statistic of 342.18 with a probability value of 0.000 implies that the lag of asset quality, social sustainability reporting indicators, environmental sustainability reporting indicators, and corporate governance sustainability reporting indicators are joint significant factors influencing changes in asset quality of listed deposit money banks in Ghana, Kenya and Nigeria. At a 5 % level of significance, and a degree of difference of 4, 367, the Wald Chi-Square Statistic of 342.18 is statistically significant at 0.05 level, this implies that the null that sustainability reporting has no significant effect on the asset quality of listed deposit money banks in Ghana, Kenya and Nigeria was rejected and that the alternative hypothesis that sustainability reporting has a significant effect on the asset quality of listed deposit money banks in Ghana, Kenya and Nigeria was accepted.

DISCUSSION OF FINDINGS

In model 2, the study investigated the effect of sustainability reporting on asset quality (AQ) of DMBs in countries of Ghana, Kenya and Nigeria. The dynamic panel data analysis revealed mixed results. For instance, while environmental sustainability indicators and corporate governance exhibited positive effects, social sustainability indicators exerted negative effects. But the combined statistics result of all the explanatory variables jointly revealed a positive effect on asset quality. The model, therefore, concluded that sustainability reporting had a positive effect on asset quality in DMBs. The model result is consistent with some documented results in some previous studies by (Aggarwal., 2013; Akpan and Uwakmfonabasi, 2021; Akben-Selcut, 2019; Anekwe, 2019; Asuqou, 2019; Ezekafor & Amahalu, 2019; Forcadell et al., 2019; Jegede et al., 2013; Kim & Oh, 2019; Kaur & Lodhia, 2019; Najera-Samchez, 2020; Lodhia, 2019; Malovics et al., 2019; Mukherjee & Sen, 2019; Montesinos & Brusca, 2019; Okoye & Asika, 2013; Onyekwelu & Ekwe, 2014; Owolabi et al., 2020). However, on the contrary, some other studies found contradictory results (Ghodratollah, 2014; Kipruto 2014; Osazefua, 2020; Nobanee & Ellili, 2017; Okolie & Igaga, 2020).

CONCLUSION AND RECOMMENDATIONS

Conclusion: The study investigated the effect of sustainability reporting on the asset quality of the DMBs in the countries of Ghana, Kenya and Nigeria in respect of adequate information disclosure of non-financial performance of the banks to outsiders, ethical corporate behaviour, quality banking services and fair treatment of their employees. The estimation revealed mixed results, while the Log of earnings quality exerted a positive significant effect, social sustainability indicators had a positive insignificant effect and each of the environmental sustainability indicators and corporate governance had negative insignificant effects. However, the joint statistics revealed that sustainability reporting had a positive significant effect on the earnings ability of DMBs in countries of Ghana, Kenya and Nigeria.

The implication of Findings: The study found no significant relationship between social sustainability reporting indicators and asset quality. This may indicate that banks did not exercise sufficient information disclosure regarding the treatment of employees' welfare and fairness, inability to have extended good corporate responsibility services within the communities where the banks operate, and honesty and accountability regarding the other stakeholders in terms of high-quality banking services, transparency, and accurate financial reporting in reported financial statements of the banks

Recommendations: Based on the findings as reported, the management should understand that more than simply efficiency is needed for banking corporate performance and success and increased bank profitability. A successful bank must be able to offer clients value and service at a price that is competitive while maintaining expenses that produce a respectable return for the owners. Managers of the banks should exhibit high professional competence, and exercise expertise strong honest and ethical practices in compliance with the best corporate best practices capable of meeting internal best practices in creating value and activating earning ability for the owners of the banks and for the other interested stakeholders. Managers of the banks should be mindful of deepening effective strategies, institute effective cultural beliefs to ethical practices to sustainability reporting and adapt to affordable innovations and information technologies to improve the corporate performance of the banks.

Contribution to Knowledge: This study contributed to the body of knowledge by extending the frontiers of sustainability reporting impact on corporate performance from the perspective of asset quality among deposit money banks in Ghana, Kenya and Nigeria, whereas few of the existing studies had concentrated on each of the countries, unlike this current study that considered three countries on Ghana, Kenya and Nigeria in a single study. In addition, the study also provided the significance of sustainability reporting, transparent banking services, compliance with ethical issues, and understanding the implications of non-compliance with sustainability reporting in corporate openness, sustainable assets quality and building resilient deposit money banks.

Limitations and Suggestions for Future Studies: Whereas the study had contributed to the body literature, the study witnessed some limitations. The study was limited to the geographical locations Ghana, Kenya and Nigeria and had some time constraints considering only 2010 to 2021 was selected for the study. Furthermore, the inability to synthesize elaborately using prior studies, as there was a dearth of literature that had specifically considered this topic and the chosen variables in these manners using the selected countries in deposit money banks in a single study. Further studies could be considered by extending the unit of analysis and period, only 31 deposit money banks for a period of 12 years' periods covering 2010-2021 were considered. The study suggests that more years and more banks using more countries be considered in future studies.

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