International Journal of Accounting, Management and Economic Review. Vol. 2 Issue 1, April (2026). ISSN (p): 2384-7026, ISSN (e): 3141-222X.

THE MODERATING IMPACT OF SUSTAINABILITY ENVIRONMENTAL DISCLOSURE ON RISK MANAGEMENT AND FINANCIAL PERFORMANCE OF LISTED FINANCIAL INSTITUTIONS IN NIGERIA

Dr. Murtala Abdullahi
Department of Accounting
Kaduna State University, Kaduna
murtala.abdullahi@kasu.edu.ng

Dr. Hussaini Bala
hussainumi2013@gmail.com
Department of Accounting
Tishk International University
Erbil, Kurdistan Region, Iraq

Dr. Nasirudeen Abubakar
nasirudeenabubakareandco@gmail.com
Department of Accounting
Kaduna State University, Kaduna

Hauwa'u Suleiman
hwsuleiman2@gmail.com
Department of Accountancy,
Kaduna Polytechnique

Corresponding Author:murtala.abdullahi@kasu.edu.ng
DOI: https://doi.org/10.57233/ijamer.v2i1.39

Article Information: Received: 03/20/2026 Revised: 04/13/2026 Accepted: 04/20/2026

To Cite this Article: Abdullahi, M., Bala, H., Abubakar, N., & Suleiman, H. (2026). The moderating impact of sustainability environmental disclosure on risk management and financial performance of listed financial institutions in Nigeria. *International Journal of Accounting, Management and Economic Research*, 2(1). https://doi.org/10.57233/ijamer.v2i1.39

Abstract

Revenue constraints remain in the Nigerian financial institutions industry, which seems to have continue to obscure the underlying industry problem in the core business and, net interest income continue to decline industry wide as interest expenses again grew. Therefore, this research examines the moderating impact of sustainability environmental disclosure on risk management and financial performance of listed financial institutions in Nigeria for the period of 2007 to 2024 using population and sample size of 50 and 13 financial institutions. Risk management as independent variable of the study is proxied by assets quality risk, interest risk and foreign exchange risk while financial performance as the dependent variable is proxied by return on assets. Secondary data was extracted from the annual reports and accounts of the selected financial institutions which was analyzed using panel corrected standard error regression as technique of analysis. The result shows a negative insignificant and significant relationship between assets quality risk, foreign exchange risk and financial performance of financial institutions in Nigeria. Also, the findings reveals an evidence of positive insignificant and significant relationship between interest risk, sustainability environmental disclosure and financial performance of listed financial institutions in Nigeria. The study concluded that assets quality risk and sustainability environmental disclosure influenced the financial performance of listed financial institutions in Nigeria negatively. The study recommended that, Nigerian financial institutions should continue to put more efforts in generating income from interest on loan and foreign exchange businesses in order to increase their financial performance.

Keywords: Assets quality risk, interest risk, foreign exchange risk, sustainability environmental disclosure, rational expectation Theory

1.0 Introduction

Financial services firms' expectations for growth are supported by annual review of the publically stated strategies of thirty major financial institutions around the world. Controlling sustainability environmental disclosure and risks as well as protecting against internal and external threats remain important, but the greatest emphasis is on improving financial performance through growth optimization (World Bank, 2019). Combined, the growing optimism of financial institutions and the notable shift in strategic focus would seem to suggest that a stronger global financial institution industry may be headed for a period of sustainable double digit Return on Equity (ROEs). It is widely perceived that an increase in central bank interest rates will solve the industry's week revenue growth problems by boosting interest income, but this may just be palliative (World Bank, 2019). Estimates suggest that following three US Federal Reserve rate hike in 2017 and in 2018, net interest income for largest US banks increase by 5% in 2018 and 2019. Similarly, the European Central Bank's recent stress test found that a 200 basis-point rise in interest rates would provide a 10.5% boost in net interest income by 2019 (World Bank, 2019). Vibrant financial institutions in Africa faced similar challenges to financial institutions in advanced and emerging economies, as highlighted in accountant PwC's global banking surveys. These include where to find profitability growth, how to contain costs, especially as technology become key race, and the increasing impact of regulation on financial institutions business models (Claessents, 2017). Africans are coming up with competitive solutions, including technology as an enabler to reach out to the unbanked and cross-border synergies for improving banks financial performance across African region (African Business, 2019).

In addition, cyber risk is the top evolving risk globally; the global financial institutions outlook survey reveals that enhancing cyber security has become the top priority for financial institutions in the coming year (World Bank, 2019). However, as financial institutions leadership teams focus on investing in people and technology to enhance cyber security, they are likely to face an array of new risk problems, such as how to find the right talent when there is a cyber-security skills shortage and how to integrate cyber experts into their organizations (World Bank, 2019). Artificial intelligence and advanced analytics will pay a key role in the prevention of cyber-attacks, reducing conduct risk and improving monitoring to prevent financial crime (Claessens, 2017). Mitigating such external and internal threats is critical to both business continuity and limiting operating losses (World Bank, 2019).

The Nigerian financial institutions industry is affected by both systematic and unsystematic risks which include interest risk that consist of interest which is charged or paid for the use of money in form of loan and it can affect financial performance of financial institutions in Nigeria due to the fluctuation of interest rate in the country (Olufemi, 2011). Assets quality risk involves risk of default on debt that may arise from a customer failure to make require payments as at when due in the Nigerian financial institutions sector and it affects financial performance of financial institutions in Nigeria negatively. On the other hand, foreign exchange risk is the uncertain or fluctuation of foreign currency exchange rate against the Nigerian naira.

Indicators of financial sector development in 2018, show that capacity of the Nigerian financial institutions system to finance the economy declined, with the aggregate credit to gross domestic product ratio at 21.6% in 2018, from the 22.8% in 2017. The ratio of private sector credit to GDP fell to 17.8% in 2018, from 19.6% in 2017. Similarly, the banking system assets/GDP ratio fell to 42.6% at the end of December, 2018, from 45.17% at the end of December, 2017

(CBN, 2018). In addition, performance metrics of all financial institutions were affected by weak demand for lending, fall in treasury bills yield, lower foreign currency translation gains and raising loan impairment charges (Vanguard, 2019).

Similarly, according to Businessday (2019) financial institutions are grappling with a low yield environment as evidenced in dwindling revenue, but some of them recorded profit growth due to reduction in impairment of financial assets, income from fees and commission income. The banks that recorded profit above the industry average of Return on Average Equity (ROAE) of 16.15% in the second quarter of 2019 were GTBank with 32.15%, Access bank with 30.85%, Zenith Bank with 30.47% and UBA with 21.92%, while the remaining banks has ROAE less than the industry average of 16.15% within the second quarter of 2019 financial year. This shows that there is "serious decline in the financial performance of banks in Nigeria.

Moreover, banks in 2017, operated in challenging business environment, which lead some banks to operate at a loss, such as Unity Bank that recorded huge net loss of N14.9b in 2017 accounting year. Similarly, the industry average capital adequacy ratio declined to 10.2% at the end of December, 2017, compared with 14.8% in 2016, and 10.0% and 15% bench marks for banks with the national and international authorization, respectively. Also, assets quality measured by the ratio of nonperforming loans to industry total loans, worsened to 14.8% and was above the CBN' thresholds of 5% and 12.8% in 2016. Based on the reports obtained from regulatory authorities and national dailies about the problems that is occurring in the Nigerian financial institutions about the variables of the study.

Similarly, foreign exchange risk is considered very important in this study because Nigerian financial services firms engaged in business of buying and selling foreign currency and within the period of 2015 to 2021 Nigerian economy witnessed high rate of fluctuation in foreign exchange rate which affected so many businesses in Nigeria. Several literature have been reviewed such as the work of Olufemi (2011), Zarrouk (2014), Claessens (2017), "Kweh, Lu, Nourani and" Ghazali (2018), Tassew and Hailu (2019), Ndyagyenda (2020), Von et al (2023), Natufe and Ikavbo (2023), David and Sola (2023), Kumshe et al (2024), Nyor, Onipe and Eniola (2024), Onyegin, Ibenta and Okaro (2024), Olasehinde, Aribaba and Afolabi (2025) and Godwin and Ogbada (2025) among others. All, these aforementioned studies are on direct relationship and reported mixed results. In order, to address these research gaps, sustainability environmental disclosure was introduced to moderate the relationship between assets quality risk, interest risk, foreign exchange risk variables as proxies of risk management against the financial performance of Nigerian financial institutions. To what extent does environmental sustainability disclosure moderate the relationship between risk management and financial performance of listed financial institutions in Nigeria? The general objective of the study is to examine the moderating impact of sustainability environmental disclosure on risk management and financial performance of listed financial institutions in Nigeria.

2.0 Empirical Review and Theory

Interest Risk and Financial Performance

Ondari, Maina and Roche (2024) examined the relationship between interest risk and financial performance of 39 listed commercial banks in Kenya as at 31st December, 2022 using secondary data. The result of the multiple regression analysis shows a positive significant relationship between interest risk and financial performance of the banks. Al-Slehat (2022) explored the influence of intrest risk on financial performance of 13 listed commercial banks in Jordan for the period of 2011-2018 using multiple regression as tool of analysis of the

secondary data collected for the study. The result reveals evidence of positive significant influence of interest risk on the banks' financial performance. Belinda and Irawati (2024) studied the effect of interest risk on financial performance of 24 listed commercial banks in Indonesia for the period of 2019-2022. Multiple regression was employed as technique of analyzing the secondary data collected for the study and found positive significant effect of interest risk on bank financial performance. Ubul and Kithandi (2025) investigates the effect of interest risk on financial performance of listed commercial banks in Kenya for the period of 2018-2022. The population and sample size of the study are 38 and 10 banks respectively. Multiple regression was adopted for the study as technique of analyzing the secondary data for the study and the result reveals evidence of negative insignificant relationship among the variable s of the study. Ogundele and Nzama (2025) examine the relationship among interest risk and financial performance of the banks in Nigeria for the period of 2012 to 2023 using the population and sample size of 13 and 12 banks. The result of the panel data analysis of the study shows and evidence of positive insignificant relationship among the variable of the study. Onyango and Kalunda (2023) explored the impact of interest risk on financial performance of 16 banks in Kenya for the period of 2011-2019. The result of the panel data analysis reveals evidence of positive significant impact of interest risk on financial performance of the banks.

Foreign Exchange Risk and Financial Performance

Yousef et al. (2024) investigates the relationship between foreign exchange risk and financial performance of 135 banks in Middle East and North African region for the period of 2015-2019. The study used panel data and found negative significant relationship between foreign exchange risk and financial performance. Oluwafolahanmi (2024) studied the effect of foreign exchange risk on financial performance of firms in Rwanda for the period of 2018-2022 using the population and sample size of 50 and 11 firms. The result of the panel data analysis of the study reveals negative insignificant relationship between foreign exchange risk and financial performance of listed firms in Rwanda. Abdullahi, Mutea and Kanyaru (2024) investigates the effect of foreign exchange risk on financial performance of flower firms in Kenya for the period of 2020-2022 using both primary and secondary data. The result of the regression analysis shows a positive significant relationship between foreign exchange risk and financial performance of the firms. Aina and Udo (2025) examines the influence of foreign exchange risk on financial performance of financial services firms in Nigeria, Ghana, Kenya and South Africa using mixed method of research. The result of the data analysis reveals an evidence of positive significant influence of foregn exchange on financial performance of the firms. Oshim and Nze (2024) studied the effect of foreign exchange risk on financial performance of deposit money banks in Nigeria for the period of 2011 to 2020. The study collected secondary data which was analyzed using panel regression and the result reveals negative significant relationship among the variables of the study. Mugi and Okiro (2021) examines the impact of foreign exchange risk on financial performance of 43 commercial banks in Kenya for the period of 2009-2014. Secondary collected for the study was analyzed using multiple regression and found positive significant relationship among the variable of the study.

Assets Quality Risk and Financial Performance

Ayiro, Mackton and Kiganda (2022) explored the influence of assets quality on financial performance of the 13 commercial banks in Kenya for the year 2022. The study utilized secondary data which was analyzed using panel regression and found evidence of negative significant relationship between assets quality and financial performance of the banks. Olweny, Ondigo and Omoro (2026) investigates the impact of assets quality on financial performance of 38 commercial banks in Kenya for the period of 2010-2022. Secondary data was used for

the study which was analyzed using panel regression and found negative significant relationship between assets quality and financial performance. Odongo and Irungu (2023) studied the effect of assets quality on financial performance of 23 banks in South Sudan for the period of 2017-2021. The study adopted multiple regression as tool of analyzing the secondary data collected for the study and found evidence of negative significant relationship between assets quality and financial performance of the banks. Mainoma, Onojah and Gimba (2025) examine the effect of assets quality on financial performance of banks in Nigeria for the period of 2015-2025 using multiple regression as tool of analysis of the data and found evidence of positive significant relationship between assets quality and financial performance of the banks. Quadri et al (2023) examines the impact of assets quality on financial performance of banks in Nigeria for the period of 2014 -2021 using the population and sample size 33 and 20 banks. The adopted panel regression as technique of data analysis and found negative significant relationship between assets quality and financial performance of the banks. Amin et al (2024) studied the effect of assets quality on financial performance of 10 commercial banks in Egypt for the period of 2017-2021. The adopted secondary sources of data and was analyzed using panel regression and found evidence of positive significant relationship between assets quality and financial performance of the banks.

Sustainability Environmental Disclosure and Financial Performance

Okafor et al (2022) explored the effect of sustainability environmental disclosure on financial performance of oil and gas companies in Nigeria for the period of 2010-2018 using the population and sample size of 11 and 9 firms respectively. The study collected secondary data from the annual reports and accounts of the firms which was analyzed using multiple regression and found positive insignificant relationship between sustainability environmental disclosure and financial performance of the firms. Abiodum and Ayobami (2025) studied the relationship between sustainability environment disclosure and financial performance of 43 manufacturing firms in Nigeria for the period of 2017-2023. Secondary data collected for the study was analyzed using panel regression and found positive significant relationship between sustainability environment disclosure and financial performance of the firms. Arshad, Audi and Ali (2025) investigates the influence of sustainability environment disclosure on financial performance of 20 firms in North America and Europe for the period of 2010-2024. The study adopted panel regression as tool of analysis of the secondary data collected for the study and found positive significant impact of sustainability environment disclosure on financial performance of firms. Samuel and Akinyosoye (2025) examine the effect of sustainability environment disclosure on financial performance of 40 manufacturing firms in Nigeria for the period of 2014-2023. Secondary collected for the study was analyzed using multiple regression and the result reveals positive insignificant relationship among the variables of the study. Rachmat, Sumirat and Anny (2024) studied the relationship between sustainability environment disclosure and financial performance of firms in Indonesia using secondary data which was analyzed using multiple regression and found evidence of positive significant relationship between sustainability environment disclosure and financial performance of the firms. Okon, Philip and Okpokpo (2023) examine the influence of sustainability environment disclosure on financial performance of oil and gas firms in Nigeria from 2012-2021. The study collected secondary data from the annual reports and accounts of the firms which was analyzed using panel regression and discovered evidence of positive significant relationship between sustainability environment disclosure and financial performance of the firms.

Rational Expectation Theory

Rational Expectation Theory developed by Muth (1961) was adopted for this study to underpin the relationship between the dependent and independent variables of this study. The theory asserted that people are smarter and more forward-looking than economists had previously believed, when people has expectations, they do so in such a way that is in line with the real structure of the economy. They utilized all available information about present conditions, policy decisions and likely outcomes so their predictions are not systematically wrong. This is what is known as the rational expectations theory. If people really has expectations in this direction, then it becomes much harder for governments to influence the economy through systematic policy. For instance, if the central bank tries to stimulate output by printing more money, rational individuals will anticipate that this will cause inflation. The idea of rational expectations spread into finance and other areas of economics, in financial markets, it provided support for the efficient markets hypothesis. The idea that assets prices incorporate all available information, making it nearly impossible to beat the market consistently.

3.0 Methodology

The study adopted correlational research design in order to measure the relationship between dependent and independent variables of the study. The population of the study consists of 50 financial institutions listed on the Nigerian Exchange Group as at 31st December, 2024 and the sample size of the study were 13 listed financial institutions which was arrived at using random sampling method. The study used secondary data which was extracted from the annual reports and accounts of the selected firm for the period of 2007-2024. Multiple regression was adopted as a statistical tool of analysis of the secondary data collected for the study. Multiple regression regression was considered appropriate for the study because of the multiple nature of the model of the study as well as its ability to measure the causes and effect of the relationship among the variables of the study.

Model Specification

The model of the study is presented below:

$$ROA_{it} = \beta 0_{it} + \beta 1AQR_{it} + \beta 2ITR_{it} + \beta 3FER_{it} + \beta 4SED_{it} + \mu_{it} \quad (1)$$

$$ROA_{it} = \beta 0_{it} + \beta 1AQR_{it} + \beta 2ITR_{it} + \beta 3FER_{it} + \beta 4SED_{it} + \beta 5AQR*SED_{it} + \beta 6ITR*SED_{it} + \beta 7FER*SED_{it} + \mu_{it} \quad (2)$$

Where:
ROA = Return on Assets
AQR = Assets Quality
ITR = Interest Risk
FER = Foreign Exchange Risk
SED = Sustainability Environmental Disclosure
β = Coefficient
it = Firm i at Time t
μ = Error Term

Variable Measurements

Table 1:

Variables Measurement and Definition

Variables	Measurement and Sources	A priori Expectation
Return on Assets	Measured as the proportion of firms' profit before tax to total assets (Ogundele &Nzama, 2025).	
Assets Quality Risk	Measured as the proportion of firms' non-performing loan to total loans and advances (Olweny, Ondigo & Omoro, 2026).	+
Interest Risk	Measured as the proportion firms' interest income to total loans and advances (Ondari, Maina & Roche, 2024).	+
Foreign Exchange Risk	Measured as foreign exchange income divided by the domiciliary deposits (Aina & Udo, 2025).	+
Sustainability Environmental Disclosure	Measured as dummy variable of 1 if firm's sustainability environmental report was disclosed in the financial statement and 0 otherwise (Rachmat, Sumirat & Anny, 2024).	-

Source: Compiled by the Author, 2026**.**

Results and Discussions

Table 2:

Descriptive Statistics

Variables	Obs.	Min.	Max.	Mean	Std. Dev.
ROA	234	-2.251	1.189	0.040	0.214
AQR	234	0.001	0.290	0.082	0.093
ITR	234	0.003	0.371	0.220	0.099
FER	234	0.001	0.423	0.048	0.081
SED	234	0	1	0.337	0.473

Sources: STATA Output, 2026.

From table 2 above financial performance of Nigerian financial institutions has a minimum and maximum values of -2.251 and 1.189 respectively. The mean value of the firms stood at 0.040 with the corresponding standard deviation of 0.214 which signifies lower level of dispersion in the data of this variable. Also, assets quality of the financial institutions in Nigeria shows a minimum and maximum value of 0.001 and 0.290 as well as the average value of 0.082. The standard deviation of the institutions stood at 0.093 which implied lower level of deviation from the mean value. Similarly, Interest risk of the listed financial institutions in Nigeria shows a minimum and maximum value of 0.003 and 0.371 respectively. The average and standard deviation value of the institutions are 0.220 and 0.099, this shows lower level of dispersion of standard deviation from the average value of the institutions. Foreign exchange risk has a minimum and maximum values of 0.001 and 0.423 as well as mean and standard deviation value of 0.048 and 0.081 respectively. This indicates lower level of dispersion in the data of the study. Sustainability environmental disclosure of the financial institutions in Nigeria shows a minimum and maximum value of 0 and 1. The average value of the firms is 0.337 with the corresponding standard deviation of 0.473, which implies lower level of dispersion from the mean value.

Table 3:
Correlation Matrix

Variables	ROA	AQR	ITR	FER	SED
ROA	1				
AQR	0.023	1			
ITR	0.045	0.266	1		
FER	0.202	0.101	-0.021	1	
SED	-0.031	0.038	0.053	0.138	1

Sources: STATA Output, 2026.

From table 3 above, the relationship between return on assets and assets quality risk, return on assets and interest risk, return on assets and foreign exchange risk shows a beta coefficient of 0.023, 0.045 and 0.202 which indicate evidence of positive association among these variables. But, the relationship between sustainability environmental disclosure and return on assets of the financial institutions in Nigeria shows beta coefficient of -0.031 which implies evidence of negative association among them. The association of the independent variables among themselves shows that interest risk and assets quality risk, foreign exchange risk and assets quality risk, sustainability environmental disclosure and assets quality risk, sustainability environmental disclosure and interest risk, sustainability environmental disclosure and foreign exchange risk has a beta coefficient of 0.266, 0.101, 0.038, 0.053 and 0.138, this signifies evidence of positive association among the variables. But, the association of foreign exchange risk and interest risk shows a beta coefficient of -0.021 which indicates negative association among the variables.

Table 4:
Panel Corrected Standard Error Regression

Direct Model				**Indirect Model**		
Variables	**Coeff.**	**Z-Value**	**P-Value**	**Coeff.**	**Z-Value**	**P-Value**
Constant	-0.002***	-0.06	0.950	-0.011	-0.24	0.813
AQR	-0.024	-0.09	0.927	-0.126	-0.35	0.727
ITR	0.123	0.67	0.502	0.229	0.88	0.378
FER	0.564***	3.82	0.000	0.418**	2.01	0.044
SED	-0.028	-0.95	0.342	-0.014***	-0.21	0.002
AQR*SED				0.243	0.47	0.642
ITR*SED				-0.225	-0.63	0.529
FER*SED				0.228**	0.92	0.032
R^2	0.478			0.554		
Wald Chi^2	16.44***		0.002	24.52***		0.000
Hettest	16.83***		0.000	0.41*		0.052
Wooldridge	12.130***		0.000	14.172***		0.000
VIF Mean	1.06					

Sources: STATA Output, 2026. *** p<0.01, ** p<0.05, * p<0.1, Denotes Significance at 1%, 5% & 10%

From table 4 above, the heteroskedasticity test for both the direct and indirect models of the study shows beta coefficient of 16.44 and 0.41 with the corresponding p-values of 0.000 and 0.052 which are significant at 1% and 10% level of significant. This implies the evidence of existence of heteroskedaticity problem in the data of the study. Also, the study conducted autocorrelation test because of the time series characteristics of the data in order to see its existence or otherwise. The autocorrelation test using Wooldrige test shows a beta coefficient of 12.130 and 14.172 for the direct and indirect models with the corresponding p-values of 0.000 for the two models of the study, this signifies the existence of the autocorrelation problem in the data of this study. To correct the heteroskedasticity and autocorrelation problems in the two models of the study, panel corrected standard error model was adopted for the study.

The R^2 value for the two models of the study stood at 0.478 and 0.554, this implies that 48% and 55% of the total variation of the financial performance of Nigerian listed financial institution is explained by the moderating role of sustainability environmental disclosure and risk management while the remaining 52% and 45% was explained by other factors outside the models of the study. The Wald Chi2 value of the two models of the study are 16.44 and 24.52 with the corresponding p-values of 0.000 for each of the two models of the study, which is statistically significant at 1% level of significant. This signifies that the models of the study are well fitted with all the variables of the study. Also, the multicollinearity test shows a variance inflation factor mean value of 1.06 which is less than the threshold of 10, which indicates that there is no any multicollinearity problem in the data of this study.

The relationship between assets quality risk and financial performance of Nigerian financial institutions shows a beta coefficient of -0.126 with the corresponding p-value of 0.727 which is insignificant. This implies that there is evidence of negative insignificant relationship between assets quality risk and financial performance of the financial institutions in Nigeria. This result contradicted the a priori expectation of this research and it is supported by the rational expectation theory developed by (Muth, 1961).

Also, interest risk and financial performance of financial institutions in Nigeria has positive insignificant relationship, this can be confirmed from the computed beta coefficient of 0.229 with the corresponding p-value of 0.378. This signifies that their relationship is statistically insignificant at any level of significant. This result is in line the a priori expectation of the researcher, that asserted the existence of positive relationship among the variables of the study and it is underpinned by the rational expectation theory.In addition, foreign exchange risk has significant positive relationship with the financial performance of the listed financial institutions in Nigeria. This relationship can be confirmed from the beta coefficient of 0.418 and the p-value of 0.044 which is significant at 5% level of significant. This result is in consistence with the a priori expectation of this research which was supported by the rational expectation theory.

Similarly, Sustainability environmental disclosure has negative significant relationship with the financial performance of listed financial institutions in Nigeria. The result is confirmed by the beta coefficient of -0.014 with the p-value of 0.002 which is significant at 1% level of significant. This implies that sustainability reporting is reducing the financial performance of Nigerian financial institutions. This result is in line with this research a priori expectation and is underpinned by the rational expectation theory developed by (Muth, 1961). Moreover, the interaction of sustainability environmental disclosure and assets quality on the relationship with the financial performance of Nigerian financial institutions shows a beta coefficient of 0.243 with the p-value of 0.642 which is statistically insignificant at any level of significant. This signifies that the combined effect of sustainability environmental disclosure and assets quality is increasing the financial performance of Nigeria financial institutions but not at a significant level. This result is in consistence with this research a priori expectation and is supported by the rational expectation theory.

Furthermore, the moderating effect of sustainability environmental disclosure on interest risk and financial performance of listed financial institutions in Nigeria has negative insignificant relationship. This can be confirmed from the computed beta coefficient of -0.225 with p-value of 0.529 which is statistically insignificant. This means the interaction effect of these two

variables is reducing the financial performance of Nigerian financial institutions but not at a significant level. Also, this result is contrary with this research a priori expectation and is underpinned by the rational expectation theory.

Finally, the interaction between sustainability environmental disclosure on foreign exchange risk and financial performance of Nigeria financial institutions has positive significant relationship. This result can be confirmed from the computed beta coefficient of 0.288 with p-value 0.032, this signifies that the joint interaction of sustainability environmental disclosure and foreign exchange risk increase the financial performance of listed financial institutions in Nigeria at 5% level of significant. This result is in consistence with the a priori expectation of this research and is underpinned by the rational expectation theory.

5.0 Conclusion and Recommendations

The study examined the moderating role of sustainability environmental disclosure on risk management and financial performance of listed financial institutions in Nigeria. The study concluded that assets quality risk and sustainability environmental disclosure influenced the financial performance of listed financial institutions in Nigeria negatively. Also, interest risk and foreign exchange risk influenced the financial performance of Nigerian financial institutions positively. The study recommended that, Nigerian financial institutions should continue to put more efforts in generating income from interest on loan and foreign exchange businesses in order to increase their financial performance. Finally, the management of Nigerian financial institutions should put more effort in managing their assets quality risk as well as doing sustainability environmental projects with caution in order to improve their financial performance in Nigeria.

References

Abdullahi, K. N., Motea, F. & Kanyaru, R. (2024). Effect of Foreign Exchange Transaction Risk Management on Financial Performance of Dominant Flower Firms in Timau Meru Country Kenya. *World Journal of Advanced Research and Review, 23(3); 237-250.*

Abiodum, A. J. & Ayobami, A. K. (2025). Effect of Environmental Disclosure on Financial Performance of Manufacturing Companies in Nigeria. *Journal of Business Development and Management Research, 7(7); 163-182.*

African Business (2019). Special Report: Africa's Top 100 Banks 2019. https://africanbusinessmagazine.com/africas-top-100-banks/special-report-africas-top-100-banks-2019/

Aina, G. O. & Udo, O. O. (2025). Foreign Exchange Risk Management and Business Performance: Strategies for Growth in a Volatile Currency Market. *Journal of Accounting and Financial Management, 11(6); 129-145.*

AL-Slehat, Z., A. (2022). Effect of Interest Rate Risk on Financial Performance the Mediating Role of Banking Security Degree: Evidence from the Financial Sector in Jordan. *Business Theory and Practice, 23(1); 165-174.*

Amin, H. B., Elwahab, S. A., Yassin, N. M., Ibrahim, S. M. M., Ismail, M. H., & Eldin, N. W. S. (2024). Asset quality and banks performance: A panel data analysis of commercial banks. Risk Governance and Control: *Financial Markets & Institutions, 14(3), 111-121. https://doi.org/10.22495/rgcv14i3p11*

Arshad, R. Audi, M. & Ali, A. (2025). Environmental Disclosure and Financial Performance: Evidence from Environmentally Sensitive Sectors across Global Markets. *Policy Journal of Social Science Review, 3(8); 383-399.*

Ayiro, R., Mackton, W. & Kiganda, E. (2022). Assets Quality and Financial Performance of Tier IV Commercial Banks in Kenya. *European Journal of Economic and Financial Research, 6(3); 176-187.*

Belenda, R & Irawati, Z. (2024). The Effect of Interest Rate Risk on Financial Performance with the Mediating Variables of Banking Security Level (Study on Commercial Banks that go in BEI). *Journal Lasociale, 5(1); 242-2024.*

Businessday (2019).https://businessday.ng/lead-story/article/fitch-says-cbns-loan-directive-credit-negative-for-banks-2/

Claessens, S. (2017). Global banking: Recent developments and insights from research. *Review of Finance, 1513-1555.*

David, O. T. & Sola, A. T. (2023). Impact of capital adequacy risk on the financial performance of microfinance banks in Nigeria. *International Journal of Research Publication and Reviews, 4(9), 1942-1951.*

Eccles, J & Wigfield, A (1983). Expectancy value theory of achievement motivation: A developmental perspective. *Educational Psychology Review.*

Godwin, A. K. & Ogbada, E. I. (2025). Capital adequacy and financial performance of listed deposit money banks in Nigeria. *IIARD International Journal of Banking and Finance Research, 11(8), 100-116.*

Kumshe, H., M., Bamanga U & Salihu, A. M. (2024). Effect of Risks Management on the Financial Performance of Listed Deposit Money Banks in Nigeria". *Journal of Economics, Management and Trade* 30 (4):27-36. https://doi.org/10.9734/jemt/2024/v30i41202.

Kweh, Q. L., Lu, W., Nourani, M & Ghazali, M. H (2018). Risk management and dynamic network performance: An illustration using dual banking system. *Applied Economics, 1-15*

Mainoma, M. A., Onojah, S. J. & Gimba, J. T. (2025). Effect of Assets Quality Regulations on Financial Performance of Deposit Money Banks in Nigeria. *International Journal of Research and Innovation in Social Science, 9(10); 1-13.*

Mugi, A. N. & Okiro, K. (2021). The Effect of Foreign Exchange Risk Management Practices on the Financial Performance of Commercial Banks in Kenya. *International Research Journal of Economics and Finances, 3(3); 203-214.*

Muth, J. F. (1961). Rational Expectations and the Theory of Price Movements. *Econometrica, 29(3), 315-335.*

Natufe, O. K. & Ikavbo, E. E. (2023). Credit risk management and the financial performance of deposit money banks: Some new evidence. *Journal of Risk and Financial Management, 16, 302.*

Ndyagyenda, C (2020). Credit risk management and financial performance: A case of bank of Africa limited. *Open Journal of Business and Management, 8, 30 - 38.*

Odongo, G. N., Irungu, A. M. (2023). Asset Quality and the Financial Performance of Commercial Banks in South Sudan. *Journal of Finance and Accounting, 3(3), 48-57.*

Ogundele, O.S., &Nzama, L. (2025). Risk Management Practices and Financial Performance: Analysing Credit and Liquidity Risk Management and Disclosures by Nigerian Banks. *Journal of Risk and Financial Management, 18(4), 198. https://doi.org/10.3390/jrfm18040198*

Okafor, G. I., Anichebe A. S, Emeka- Nwokeji N. A., Agubata N. S. (2022). Sustainability Environmental Disclosure and Financial Performance of Oil and Gas Companies in Nigeria. *International Journal of Trend in Scientific Research and Development (ijtsrd), 6(2), 11-31. ww.ijtsrd.com/papers/ijtsrd49135.pdf*

Okon, L. J., Philip, I. B. & Okpokpo, A. S. (2023). Sustainability Reporting and Financial Performance of Oil and Gas Firms in Nigeria. *AKSU Journal of Administration and Corporate Governance, 3(1); 32-44.*

Olasehinde, S., A., Aribaba, F., O. & Afolabi, B. (2025). Capital adequacy ratio and financial performance of fast moving consumer goods companies in Nigeria. *African Banking and Finance Review Journal, 20(4), 82-93.*

Olufemi, A. T (2011). Exchange rate risk exposure of Nigerian listed firms: An empirical examination. *International Business and Research, 4(2), 219-225.*

Oluwafolahanmi, A. G. (2024). The Effect of Foreign Exchange Exposure on the Performance of MNCs in Rwanda. *International Journal of Research and Innovation in Social Science, 8(6); 208-229.*

Olweny, P. O., Ondigo, H. O. & Omoro, N. O. (2026). Effect of Assets Quality and Liquidity on Financial Performance of Commercial Banks in Kenya. *Journal of Finance and Investment Analysis, 15(2); 1-19.*

Ondari R., Kimani. E., M. & Roche C. (2024). Interest Rates Risk and Financial Performance of Commercial Banks in Kenya. *Journal of Finance and Accounting. 8(9); 55-65.* https://doi.org/10.53819/81018102t3106

Onyango, P & Kalunda, E. (2023). Interest Rate Risk and Financial Performance of Investment Banks in Kenya. *Kabarak Journal of Research and Innovation, 13(3); 65-73.*

Onyegin, P. K., Ibenta, S. N. & Okaro, C. S. (2024). Risk management and financial performance of deposit money banks in Nigeria. *African Banking and Finance Review Journal, 9(9), 114-129.*

Oshim J.C. and Nze O.N. (2024) Foreign Exchange Income and Financial Performance of Deposit Money Banks in Nigeria. *European Journal of Accounting, Auditing and Finance Research, 12(2), 34- 50.*DOI: https://doi.org/10.37745/ejaafr.2013/vol12n23450

Quadri, Y.O., Omotosho, I.O., Saheed, D.O., & Adio, B.O. (2023). Board Characteristics, Asset Quality and Financial Performance of Deposit Money Bank. *Copernican Journal of Finance & Accounting, 12(3); 65-78.*

Rachmat, L. M., Sumirat, E., & Anny, Y. N. (2024). The Influence of Sustainability Disclosure on Financial Performance: Study of Indonesian Firms. *International Journal of Current Science Research and Review, 7(3); 1857-1879.*

Samuel, S. O. & Akinyosoye, A. O. (2025). Environmental Accounting Disclosure and Financial Performance of Listed Manufacturing Firms in Nigeria. *International Journal of Research and Innovation in Social Science, 9(6); 4995-5011.*

Shola, F. S., Nyor, T., Onipe, Y. A. & Eniola, A. S. (2024). Risk management and financial performance of deposit money banks in Nigeria. *International Journal of Advanced Multidisciplinary Research and Studies, 4(6), 1018-1027.*

Tassew, A. W & Hailu, A. A (2019). The effect of risk management on financial performance of commercial banks in Ethiopia. *Financial Studies, 1.*

Ubul, R. B. U & Kithandi, A. (2025). Effect of Financial Risk and Financial Performance of Banks Listed in Nairobi Security Exchange, Kenya. *African Journal of Commercial Studies, 6(5); 101-116.*

Vanguard (2023). https://www.vanguardngr.com/2019/07/cbns-new-lending-policy-puts-7-banks-under-pressure/

Von, T., Bismark, A. B., Eric T. M. & Daniel M. (2023). Impact of Risk Management on the Performance of Commercial Banks in Ghana: A Panel Regression Approach. Journal of Risk and Financial Management 16: 322. https:// doi.org/10.3390/jrfm16070322

World Bank (2023). Bank risk management survey.

Yousef, A., N., B., Taha, R., Muhmad, S., N. & Abidin, A., F. Z. (2024). Foreign Exchange Risk and Bank Performance: Evidence from Mena Banks. *International Journal of Business and Society, 25(3); 1054-1071.*

Zarrouk, H (2014). The impact of international financial crisis on the performance of Islamic banks in MEAN countries. *Contemporary Studies in Economic and Financial Analysis, 95, 45-69.*

Funding Statement
This research was funded by the TETFUND Institution Based Research Fund.