



The Mediating Role of ESG on the Interaction between Green Banking and Financial Performance of Commercial Banks in Kenya

Executive Summary

In the banking sector lies unforeseeable risks due to unforeseeable challenges which are economic and environmental in nature. Climate and nature related risks remain one of the exogenous risks currently challenging stability of the financial system through physical risk, liability risk and transition risk. To mitigate for and adapt to climate and nature related risks, banks are adopting green banking practices and embracing ESG (Environmental Social and Governance) criteria in their products and processes.

Responsiveness about interdependencies enables financial systems to be more resilient and remain competitive. Following various debates, international conventions, and training, banks in Kenya have continued to incorporate ESG in decision making. Institutionalization of global concepts of sustainable development through adoption of Sustainability Development Goals (SDGs) has helped banks cope with scope 1, scope 2 and scope 3 emissions. Green banking practices are aimed at mitigation and adaptation to climate risk thus minimizing potential financial losses. This policy brief is based on the study's main argument that ESG mediates the interaction between green banking and financial performance of commercial banks in Kenya. Critical policy issues that arise from this argument can be summarized as follows: - Should ESG be incorporated as a mediator for green banking? What role should the regulator play in enforcing reporting on green banking practices? What further guidance is required for banks to report on their green banking practices and green portfolios? How can banks identify their short term, long-term and medium-term attendant costs? In light of this argument, this study sought to investigate the mediating role of ESG on the interaction between green banking and financial performance of commercial banks in Kenya. The findings of this study indicate that ESG mediates green banking and green banking positively and significantly enhances a firm's profitability. This paper encourages commercial banks to build capacity, embrace ESG criteria in assessment of their portfolios and come up with risk models that identify benefits realizable in the short term, medium term and long term. Banks should have auditable reporting green banking and ESG framework. This paper recommends that regulator should develop prudential guidelines on green banking and ESG reporting in order to breed uniformity in action, implementation, timelines and reporting. Minimum percentage of green portfolio for each bank graduated in the short-term medium term and long term. The governments should develop laws and regulations that encourage commercial banks to provide finance for climate and nature related solutions in order to enable pathways towards net zero and climate risk resilient economies.

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1. Methodology and Approach

Mediation analysis is a statistical method used to understand how one variable causes a change in another variable through an intermediate variable, known as a mediator.

Mediation analysis is applied when evaluating the role of a certain variable (mediator) affecting an independent variable (X) to influence its effect on a dependent variable (Y). The mediator variable is defined as a variable causally located between the independent variable (X) and the dependent variable (Y) the dependent variable is financial performance measured by ROA and NPL the independent variable is green banking practices and the mediator is ESG. Regression models were estimated using panel data drawn from commercial banks in Kenya. The data was for a period of 13 years from year 2012 to year 2023. PLS SEM was used for estimation. Bootstrap method was deemed appropriate as it computes standard errors that are robust.

2. Results and Discussions

The regression models designated Return on Assets (ROA) and Non-Performing Loans (NPL) as the dependent variables and evaluated both the direct path and indirect path.

Table 1: Results

Model	RE	FE	RE	FE	FE	RE	RE	RE
Dependent Variable	ROA	ROA	ESG	ROA	Log of NPL	Log of NPL	ESG	Log of NPL
Independent variables	Model 21	Model 22	Model 23	Model 24	Model 31	Model 32	Model 33	Model 34
Per_GBI	0.1229*** (0.010)	0.00 (0.005)	0.5616*** (0.026)	0.0142* (0.008)	-0.6884* (0.396)	-1.0405** (0.411)	0.5616*** (0.026)	(0.998) (0.680)
Per_ESG				-0.0197* (0.011)				(0.034) (0.961)
Constant	0.0180*** (0.007)	-2.5740*** (0.499)	0.2749*** (0.073)	-2.7103*** (0.504)	13.9208*** (0.225)	-7.2040*** (1.191)	0.2749*** (0.073)	-6.9152*** (1.205)
Observations	449	294	294	294	440	293	294	293
Number of Company	35.00	25.00	25.00	25.00	35.00	25.00	25.00	25.00
R-squared within	0.23	0.90	0.75	0.90	0.62	0.70	0.75	0.69
R-squared between	0.40	0.38	0.87	0.35	0.27	0.73	0.87	0.73
R-squared Overall	0.34	0.49	0.83	0.46	0.13	0.69	0.83	0.70
RMSE	0.02	0.01	0.03	0.01	0.57	0.47	0.03	0.47
P value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IV	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mediating variable	No	No	No	Yes	No	No	Yes	Yes
Control variables	No	Yes	Yes	Yes	No	No	Yes	Yes
Fixed time effects	No	Yes		Yes	No	No	No	No
FE - Fixed effect model, RE - Random effect model								
Standard errors in parentheses								
*** p<0.01, ** p<0.05, * p<0.1								

Source: Author (2025)

Table 1 presents different regression model estimates. The controls included size, leverage, profitability, age, growth, credit risk and interest rate.

3. Findings

Green banking improves performance

Model 21 shows the direct effect without control variables. The independent variable (*GBI*) to dependent variable (*ROA*). The results are statistically significant and positive. Model 22: (*Direct effect + control variables*). Model 23: (*Indirect effect + control variables*). Model 24: (*Overall model; DV- ROA, IV - GBI, Mediating variable - ESG + control variables*). When *Per_ESG* is added, effect drops to *0.0142** suggesting partial mediation.

Green banking reduces credit risk

Model 31 shows the direct effect without control variables. The independent variable (*GBI*) to dependent variable (*NPL*). The results are not statistically significant even though the relationship is negative. In model 32 when controls are introduced the relationship is significant. *Per_GBI → Log (NPL) = -1.3343* → significant and negative*. In model 34 when ESG is included, effect is not significant.

Mixed evidence for ESG as a mediator

In model 23 *Per_GBI → Per_ESG = 0.5592* → ESG* shows a statistically strong association with green banking. In model 24 *Per_ESG → ROA = -0.0197* (SE = 0.0114) → ESG* has a limited mediating effect or neutral effect on performance and risk. In model 34: *Per_ESG → Log NPL = -0.4264 (NS)*.

4. Conclusion

- ESG mediates green banking and therefore as banks pursue ESG practices, they become greener in their operations and products.
- Green banking positively and significantly enhances a firm's profitability. The reduced effect in Model 24 implies part of this benefit might be explained through ESG performance.
- Green banking reduces NPLs, especially when firm-specific controls are included. However, the mediation effect of Per ESG is not significant in this path.
- The results suggest that ESG performance partially mediates the relationship between green banking adoption and financial performance (ROA), albeit weakly.

5. Recommendations

- This paper encourages commercial banks to build capacity, embrace ESG criteria in assessment of their portfolios and determine risk levels at environmental social and governance pillars. Banks should come up with risk models that identify benefits realizable in the short term, medium term and long term. Banks should have auditable reporting green banking and ESG framework. This paper persuades commercial banks to report on their green banking asset portfolios to allow performance measurement and benchmarking within and across industries.
- This paper persuades regulators to issue banks with a standard criterion for ESG and green banking reporting within the banking sector (sector specific). This paper encourages the regulator to develop prudential guidelines on green banking and ESG reporting in order to breed uniformity in action, implementation, timelines and reporting.
- Minimum percentage of green portfolio for each bank graduated in the short-term medium term and long term. The governments to develop laws and regulations that encourage commercial banks to provide finance for climate and nature related solutions in order to enable pathways towards net zero and climate risk resilient economies.

6. References

- Maru L. (2025). *The mediating Role of ESG on the interaction between green banking and financial performance of commercial banks in Kenya*.
- Bax, K., Broccardo, E., & Paterlini, S. (2024). Environmental, social, and governance factor and financial returns: What is the relationship? Investigating environmental, social, and governance factor models. *Current Opinion in Environmental Sustainability*, 66, 101398. <https://doi.org/10.1016/j.cosust.2023.101398>
- Velte, P. (2017). Does ESG performance have an impact on financial performance? Evidence from Germany. *Journal of Global Responsibility*, 8(2), 169–178. <https://doi.org/10.1108/JGR-11-2016-0029>

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