

INVESTIGATING THE ROLE OF GREEN BANKING POLICY RELATED PRACTICES AND GREEN FINANCING ON SUSTAINABLE FINANCIAL PERFORMANCE OF BANKS: AN EMPIRICAL STUDY

Maryam Sohail¹, Dr. Muhammad Usman², Dr. Zargham Ullah Khan³

¹PhD Scholar, Hailey College of Banking & Finance, University of the Punjab, Lahore

^{2,3}Assistant Professor, Hailey College of Banking & Finance, University of the Punjab, Lahore

¹mayamir19@gmail.com

DOI: <https://doi.org/10.5281/zenodo.16908432>

Keywords

Green Policy-Related Practices, Operational Performance, Green Financing, Financial Performance

Article History

Received: 20 May, 2025

Accepted: 29 July, 2025

Published: 20 August, 2025

Copyright @Author

Corresponding Author: *
Maryam Sohail

Abstract

Although the concept of green banking has gained attention over the past decade, still the research on this topic remains limited in Pakistan. Although green policy-related practices are encouraged, but their implementation remains infrequent. Grounded in resource-based view theory, this study examines the influence of green policy-related banking practices on the operational and financial performance of banks in Pakistan. This study unveils the mediating role of green financing and operational performance between green banking practices and bank performance. A survey methodology was employed, gathering responses from 308 bank branches listed with the State Bank of Pakistan. Structural equation modeling was used to test the hypothesized relationships between the constructs using Smart PLS (version 4.0). The results indicate that banks' policy-related practices significantly affect financial performance, both directly and through the serial mediation of green financing and operational performance. These findings are valuable for individual and organizational investors, bank managers, and policymakers, as they highlight how adopting these practices can enhance operational performance, ultimately leading to improved financial performance.

INTRODUCTION

The United Nations Environmental Program (UNEP) (2014) defines the concept of a green economy as the enhancement of human well-being and social equity through financial activities that significantly mitigate ecological degradation and environmental challenges. The industrial catastrophes and climate change experienced in recent decades have been attributed to rapid industrialization. Global environmental issues have emerged, requiring collaborative efforts across various industries to achieve a unified objective: the preservation of the planet. In this context, the financial sector plays a pivotal role. The

implementation of environmentally sustainable banking practices imposes obligations and creates opportunities for banks. Traditional banking operations are not environmentally sustainable; however, adopting eco-friendly approaches can substantially impact the environment. The banking sector is a major consumer of resources, such as paper and electricity, owing to ATMs and an extensive network of branches. Consequently, the banking sector requires significant modifications in its practices to embrace green banking by reforming its operations, financing, and investment strategies;

promoting green practices; and implementing green policies in developing economies (Ikram et al., 2019). Banks serve as economic intermediaries and play a crucial role (Nizam et al., 2019). Banks are primarily responsible for promoting environmentally sustainable investments and providing loans for clean projects (Thombre, 2011). If banks neglect environmental considerations in their lending operations, they contribute to ecological degradation, ultimately leading to health concerns (Nizam et al., 2019). Conversely, banks should actively invest in ecologically responsible technological and managerial practices (Md Masukujjaman & Akter, 2013). Thus, banks can act unethically by disbursing loans to sectors that lack ecological considerations (Goyal and Joshi, 2012).

Pakistan is experiencing a range of ecological challenges owing to rapid population growth, unexpected use of inefficient technologies, and inadequate waste management strategies. Consequently, banking operations play a crucial role in addressing these ecological issues and enhancing both operational and financial performance through the implementation of such policies. By integrating green policy initiatives into their daily operations, banks can mitigate their environmental impact and address these challenges. This approach could contribute to environmental preservation and satisfy the increasing demand from investors and customers for ethical and sustainable banking services (Aslam and Jawaid, 2022). Furthermore, this study examines how practices related to green policies influence banks' operational and financial performance, with green financing serving as a mediator. Green financing focuses on environmentally friendly initiatives such as clean energy, energy-efficient alternatives, and sustainable industrial development (Guang-Wen and Siddik, 2022; Zheng et al., 2021a). In light of the aforementioned conditions, this study sets forth the following research objective: to investigate the impact of banks' PRP on their financial performance through green financing and their operational performance. These findings elucidate the relationship between green policy-related practices and GF on OP and their effect on banks' FP, a topic that has received limited attention in the existing literature (Aslam and Jawaid, 2022; Chen et al., 2022;

Rehman et al., 2021; Zhang et al., 2022). Consequently, this study offers unique insights into the literature on GB in an emerging economy such as Pakistan, which advocates for ecological sustainability. The results provide a foundation for policymakers to develop strategies that encourage the adoption of sustainable GB in the country. The remainder of this paper is organized as follows: The subsequent section discusses the theoretical model and hypotheses based on the literature review. This is followed by a description of the sample and data collection, scale adoption/adaptation procedure, data analysis, and conclusive remarks on the research outcomes. In the concluding section, this study addresses the implications, limitations, and recommendations for future research.

2. Literature review

2.1. Green banking

The green banking phrase 'green' is related to the responsibility and operational effectiveness of a bank (Nisha et al., 2020). In 1980 the first and foremost bank who devised the word green banking was Triodos Bank (a Dutch bank) (Yadav and Pathak, 2013) and later on it was used by the State of Florida in 2009 (Sharma and Choubey, 2022). The GB, occasionally called ethical banking practices, an ecologically friendly banking, socially considerate banking, or sustainable banking contemplates social and ecological matters in its procedures and practices (Rahman and Barua, 2016). State Bank of Pakistan states green banking as measures that help banks and customers minimize carbon footprints (SBP, 2015).

2.2. GB policy-related practices and GF

Green finance is a contemporary financial event that combines social and economic benefits with environmental improvements (Whang & Zhi, 2016). Green finance can be characterized as a current financial event. The objective of green finance is to achieve a harmonious balance between the improvement of monetary conditions, maintenance of environmental stability and ecological security, and accomplishment of sustainable economic development in the country (Zhou, Tang, & Zhang, 2020). Furthermore, the growth factor of green banking operations has the potential to reduce both the entire internal carbon footprint of banks as well

as the external carbon generation of these institutions (Zheng, Siddik, Masukujjaman, Fatema, & Alam, 2021). In their discussion, Rehman et al. found a favorable connection between green banking practices (both operational and policy-related activities) and the green initiatives undertaken by the bank. Considering all of this, one may hypothesize that:

H1: Green banking policy-related practices significantly affect green financing.

2.3. GB policy related practices and OP

Operational performance primarily means the capacity of the firm to optimize operations processes, enhance product quality and meet customer delivery deadlines (Zhu et al., 2013). Green banking policy-related practices, such as policies related to financing renewable energy and implementing eco-friendly operations, significantly enhance a bank's operational performance. Recent studies highlight that these practices lead to cost reductions and efficiency gains by investing in energy-efficient technologies and minimizing waste (Rajput, 2022; Tandon & Tandon, 2021). The researches related to GB has suggestion that green policies meaningfully impact the day to day activities of the banks (Rehman et al., 2021). Furthermore, recent researches suggested that GB practices has positive impact on the banks' OP (Bukhari et al., 2022). So, the study proposes that:

H2: Green banking PRP significantly impact operational performance.

2.4. Green Financing as Mediator

The mediating role of green financing is crucial while linking green banking practices to operational performance. Green financing mediates this relationship by enabling banks to allocate resources towards environmentally beneficial projects and initiatives. This allocation not only supports environmental sustainability but also enhances the bank's sustainable operational performance by fostering long-term economic viability and social responsibility (Kumar & Sharma, 2023). Thus, green financing is essential for translating green banking practices into tangible sustainable operational performance outcomes, bridging the gap between

sustainability efforts and measurable impacts. So, the study proposes that:

H3: Green banking PRP and operational performance is significantly mediated by green financing.

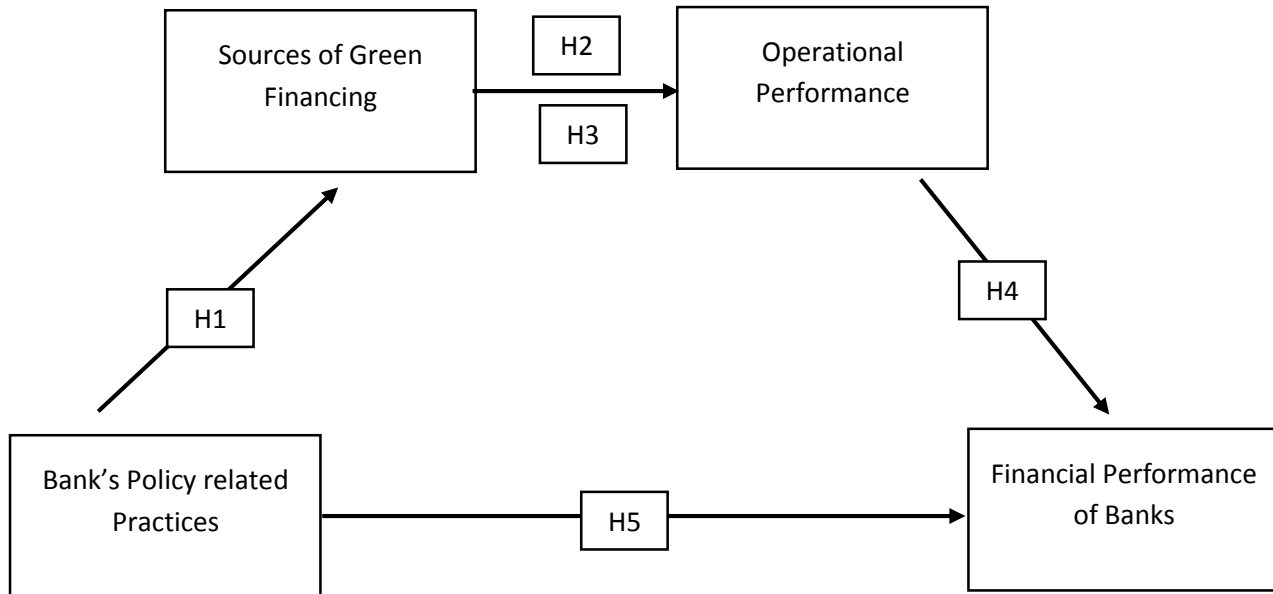
2.5. Green Financing and operational performance as Mediator between Green Banking policy-related Practices and financial Performance.

Green banking practices, which include implementing environmentally friendly policies and financing green projects, are intended to enhance a bank's operational performance which ultimately leads to sustainable financial performance. As banks need to be financially sustainable for their survival as well as continuing their operations successfully and profitably. Green financing involves providing funds for projects with positive environmental outcomes, acts as a conduit through which these practices translate into sustainable financial performance. This approach can positively impact financial performance by enhancing a company's reputation, reducing operational costs, and mitigating risks associated with environmental and social issues (Wang & Sarkis, 2022). Therefore, the study proposes:

H4: Green banking PRP and sustainable financial performance is significantly mediated by green financing and operational performance.

2.6. Green policy-related practices and financial performance

Recent literature suggested that those organizations having strong policies related to sustainability and making its implementation possible, often experience better financial outcomes. The firms tend to invest in green practices and initiatives prioritizing ethical and sustainable practices attracts more customers and investors, which can lead to more profits and financial performance (Chowdhury & Mukherjee, 2023). Moreover, these practices can lead to improve resource efficiency, and reduced waste, which directly contribute to higher profits (Kim et al., 2023). Considering these previous researches it can be hypothesized as follows:

H5: Green policy-related practices significantly affect financial performance.**Figure 1.0: Theoretical Model****3.0. Methodology**

The study follows a quantitative research design in cross-sectional way. The data was collected through branches of banks by using probability sampling technique i.e. stratified sampling. The study was conducted on Top 05 commercial banks of Pakistan in terms of market capitalization. The data was

collected through questionnaire. The sample size of the study was 310 for this study. The total 380 questionnaire were distributed among the respondents, in which 340 was returned back. Among these collected questionnaires, after initial screening, the final analysis was performed on 310 respondents. So, the response rate was 81% for the study.

Table No 1. Instruments & Measurements

Sr #	Construct	Scale	Items	Deleted	Reliability Alpha
1	Financial Performance	Krishnan (2012)	07	01	0.906
2	Operational Performance	Zhu (2013)	06	02	0.898
3	Policy Related Practices	Shaumya & Arulrajah (2016b), Shaumya & Arulrajah (2017)	05	02	0.890
4	Sources of Green Financing	Zheng (2021)	06	01	0.871

All the data were collected on 05 point likert scale and some items were deleted of the respective constructs due to low factor loadings.

Control Variable: The study used the bank market capitalization, branch deposits, and bank age as control variable in the study.

Results & Analysis

The IBM-SPSS and Smart PLS 4.0 was used to run the data analysis. First, the demographics analysis was performed by using IBM-SPSS and then SEM was performed by using Smart PLS 4.0.

Demographics

The demographic analysis was run on IBM-SPSS. The data was collected through the branches of the banks however, the employees at managerial level only participated in the survey. The 40% employees were having upto 5 years of experience and 15% were having 20+ years of experience. 49% were employees were having 20 to 30 years of age and 7% employees were above 50 years of age. 66% were having masters qualification and 16% were having Mphil qualification. 30% were branch manager and 20% were operational manager who participated on the behalf of the branch of bank in the data collection.

Moreover, Vice Presidents and Senior Vice presidents of different banks were also participated on the study. As far as the organizational demographics are concerned, It was found that 31% of banks have more than 2000 branches. 52% of banks have more than 500 saving accounts in their branches. Mostly banks having more than 30+ age.

Measurement Model (MM)

The table 2 represents the measurement model results of the analysis. In MM, the reliability and validity analysis were performed to establish them in the data. All the values below in the table, shows that there is no issue of reliability and validity in the data. Moreover, there is no issue of discriminant validity in the data at Item level and at construct level as well. The Value of HTMT (see table no 4) are less than the threshold level i.e. 0.85 and the same was supported through the Fornell & Larcker Criterion (see table 5). Indicators Loading more than 0.6 (Hulland, 1999; Churchill, 1979); Alpha greater than 0.7 (Cronbach, 1951); CR greater than 0.7 (Hair et al., 2006); AVE greater than 0.5 (Fornell & Larcker, 1981) are considered to be threshold levels.

Table 1: Outer Model (MM)

Variables	Items	F.L	Alpha	C.R	AVE
PRP	PRP1	0.863	0.890	0.899	0.820
	PRP4	0.924			
	PRP5	0.929			
OP	OP1	0.781	0.898	0.906	0.711
	OP2	0.857			
	OP3	0.802			
	OP4	0.900			
	OP5	0.871			
FP	FP1	0.729	0.906	0.918	0.685
	FP3	0.768			
	FP4	0.783			
	FP5	0.867			
	FP6	0.898			
	FP7	0.905			
SGF	SGF1	0.851	0.871	0.880	0.673
	SGF2	0.867			
	SGF3	0.841			
	SGF4	0.736			
	SGF6	0.801			

Table 2: Cross Loadings

	FP	OP	PRP	SGF
FP1	0.729	0.469	0.052	0.450
FP3	0.768	0.527	0.183	0.407
FP4	0.783	0.265	-0.072	0.486
FP5	0.867	0.420	0.136	0.676
FP6	0.898	0.479	0.118	0.619
FP7	0.905	0.516	0.198	0.600
OP1	0.422	0.781	0.259	0.388
OP2	0.394	0.857	0.310	0.434
OP3	0.404	0.802	0.242	0.472
OP4	0.503	0.900	0.395	0.485
OP5	0.530	0.871	0.289	0.494
PRP1	0.080	0.285	0.863	0.297
PRP4	0.132	0.342	0.924	0.350
PRP5	0.134	0.341	0.929	0.289
SGF1	0.583	0.471	0.298	0.851
SGF2	0.575	0.379	0.243	0.867
SGF3	0.531	0.498	0.351	0.841
SGF4	0.537	0.411	0.261	0.736
SGF6	0.488	0.453	0.255	0.801

Table 3: HTMT Values for Discriminant Validity

	FP	OP	PRP	SGF
FP				
OP	0.594			
PRP	0.169	0.395		
SGF	0.732	0.606	0.387	

Table 4: Fornell & Larcker Criterion

	FP	OP	PRP	SGF
FP	0.828			
OP	0.539	0.844		
PRP	0.129	0.358	0.906	
SGF	0.662	0.541	0.345	0.821

Table 5: VIF Values of the Items

	VIF
FP1	1.795
FP3	2.094
FP4	2.212
FP5	3.384
FP6	4.711
FP7	5.707
OP1	2.250
OP2	3.099
OP3	2.688
OP4	3.519
OP5	2.802
PRP1	2.130
PRP4	3.105
PRP5	3.398
SGF1	2.409
SGF2	2.947
SGF3	2.641
SGF4	1.704
SGF6	1.982

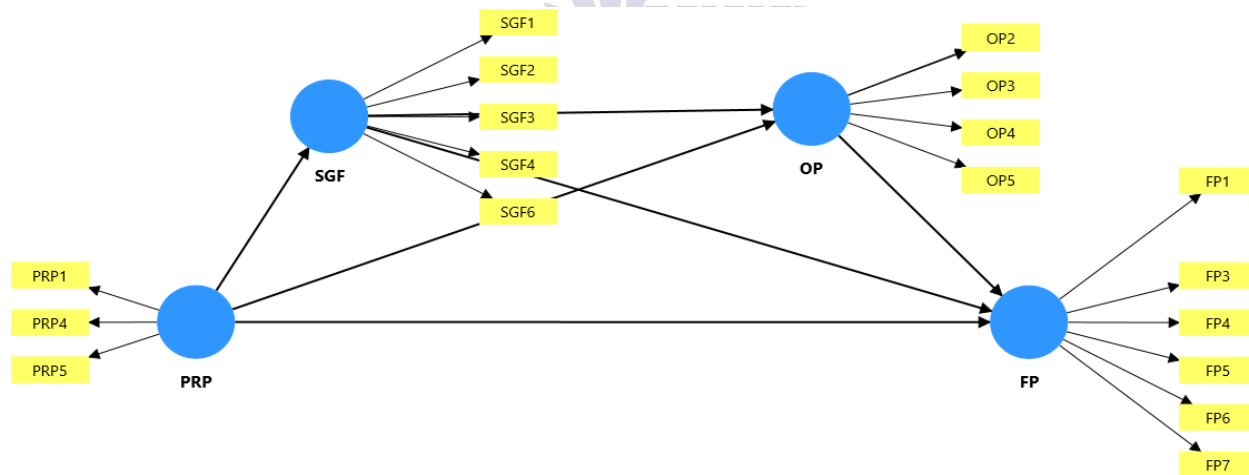


Figure 2.0: Outer Model (MM)

Inner Model (SM)

In Inner model, all hypotheses were tested. All hypotheses were supported in the study as the t-value is greater than the threshold value (i.e. > 1.96) and p-value is less than the threshold value (i.e. < 0.05) in all respective relationships. However, as far as the mediation is concerned, there exists a full serial

mediation in the study as when tested the indirect relationship between PRP → SGF → OP → FP the indirect path was supported at 1% significance level as the p-values are less than 0.01 in the results and the direction of direct path i.e. PRP → FP changed its sign from positive to negative and it is also significant at 1% significant level, which shows the full mediation in the study.

Table 6: Hypothesis-Testing

	β	T statistics	P values	2.5%	97.5%	R ²	Remarks
Direct Without Mediation							
PRP → FP	0.154*	0.155	0.063	2.462	0.014	0.50	Significant
Direct With Mediation							
OP → FP	0.295**	4.409	0.000	0.168	0.430		Significant
PRP → FP	-0.197**	3.643	0.000	-0.301	-0.087		Significant(Sign Changed)
PRP → OP	0.194**	3.365	0.001	0.076	0.305		Significant
PRP → SGF	0.345**	5.765	0.000	0.223	0.459		Significant
SGF → FP	0.535**	10.168	0.000	0.424	0.632		Significant
SGF → OP	0.474**	8.595	0.000	0.368	0.585		Significant
Bank Age → FP	0.004	0.073	0.942	-0.107	0.111		Insignificant
Bank Market Capitalization → FP	0.160	2.783	0.005	0.046	0.270		Insignificant
Branch Deposit → FP	0.085	2.122	0.034	0.005	0.164		Insignificant

Note: **, * indicate at 1%, 5%, respectively.

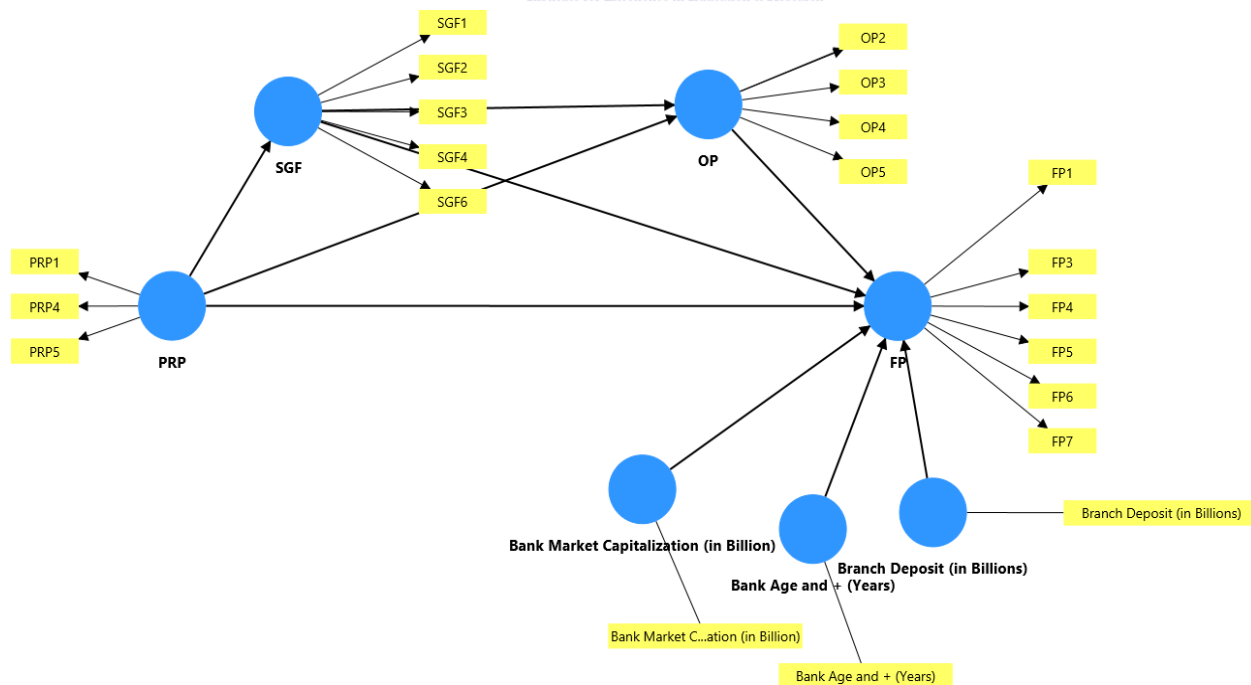


Figure 3.0: Structural Model with Mediation

Specific Indirect Effects						
	β	T-Stats	P values	2.5%	97.5%	Result/s
PRP → SGF → FP	0.185**	5.570	0.000	0.120	0.249	Significant
PRP → SGF → OP → FP	0.048**	2.616	0.009	0.021	0.092	Significant
PRP → SGF → OP	0.164**	4.233	0.000	0.095	0.248	Significant
PRP → OP → FP	0.057**	2.950	0.003	0.022	0.098	Significant
SGF → OP → FP	0.140**	3.390	0.001	0.071	0.233	Significant

Note: **, * indicate at 1%, 5%, respectively.

5.0. Discussion

All hypotheses of the study was significantly supported. Moreover, while testing the full model in the presence of mediators, the direct relationship between **BPRP → FP** remain supported but it changed its sign, which showed that there exists a full mediation in the study.

This study supports the expected links between green banking policy-related practices (PRP) and key performance outcomes, such as green financing, operational performance, and sustainable financial performance. The findings show that environmentally responsible banking regulations improve banks' financial and operational performance and are essential for sustainable development.

The supported **H1** suggests that green banking policy practice boosts green finance. This supports earlier research indicating that banks' regulatory and voluntary environmental policies direct investments to sustainable projects (Jeucken, 2001; Weber, 2010). Institutionalizing green regulations, including environmental risk assessments, green lending criteria, and sustainability disclosures, helps banks legitimize green financial products. Zhang et al. (2022) found that such procedures help banks find and support green investments, thereby advancing the green finance agenda.

H2 validates the hypothesis that green banking improves operational performance. According to Hart and Ahuja (1996), environmentally proactive enterprises have higher operational efficiency. Energy-efficient infrastructure, paperless operations, and digital banking can reduce banking expenses and boost productivity (Scholtens, 2006). Efficiency improves process management, waste reduction, and

employee participation in sustainability-focused activities.

H3 significantly supported that green finance considerably mediates the association between green banking PRP and operational performance, indicating a major indirect effect. This shows that green rules offer a framework, but green financial goods and services improve operational processes. Luo and Bhattacharya (2006) concluded that CSR measures, including green finance, boost enterprises' financial and operational outcomes. Banks indirectly improve their capacities and risk profiles by funding sustainable initiatives, which results in operational improvements.

The findings confirm **H4**, which argues that green funding and operational performance sequentially mediate the relationship between green PRP and sustainable financial performance. This tiered mediation structure argues that policy alone is insufficient until it is turned into financial instruments (green finance) that lead to efficiency (operational performance) and financial sustainability. The resource-based view (RBV) holds that capabilities and resources must be properly used to gain competitive advantage and superior performance (Barney, 1991; Russo and Fouts, 1997). Fernando et al. (2017) found that green policy frameworks improve financial performance through environmental innovation and operational practices.

H5 shows that green banking PRP directly affects financial performance, supporting research showing that ecologically responsible practices improve corporate reputation, stakeholder confidence, and long-term profitability. When the entire model was evaluated with mediators, the direct association between PRP and financial performance remained

significant but changed sign, indicating full mediation.

Green initiatives alone may not directly benefit finances and may even incur additional short-term expenses. When effectively implemented through green finance and operational improvements, these policies lead to a sustainable financial performance. Darnall et al. (2008) and Busch and Hoffmann (2011) underline the need for a systemic and integrated approach to sustainability, where policies must be implemented through actionable financing and operational systems to provide financial value.

This study contributes to the advancement of theories and practices in green banking and sustainable finance. The findings underscore the strategic significance of policy-related practices (PRP) in green banking by demonstrating their substantial impact on green financing, operational performance, and financial performance. This supports stakeholder theory and the resource-based view (RBV) by illustrating that banks' internal resources, such as environmental policies, must be operationalized through green financing to enhance performance. Furthermore, this study identifies green funding and operational performance as sequential mediators, offering a novel framework for understanding how sustainability initiatives benefit financial outcomes. The full mediation effect, wherein the direct relationship between PRP and financial performance changes sign, complicates green practices and suggests that policies alone do not yield financial returns unless they are effectively implemented.

The findings of this study can be applied by bank management, and investors. The results show that green policies are a strategic road to operational excellence and sustained financial results, not just compliance. Managers should invest in green loans or sustainability-linked bonds to convert environmental commitments into value. Operating benefits, such as cost reductions and efficiency, boost sustainability's business case. The analysis supports regulators' green banking policies to increase systemic and sustainable finance. Finally, the findings assist investors in making informed judgments by showing that green policies that are actively tied to core banking tasks yield real performance advantages..

5.1 Limitations and future directions

This study undergoes few constraints. Only managerial level staff of selected branches were selected to collect data. This may not depict the belief of other branches employees (Barnes, 1984). It is considered that the managers have appropriate information concerning a bank's strategies (Hambrick, 1981) and inspire its executions (Miller and Toulouse, 1986). So, the numeral of respondents may be increased to get more accurate data to enhance precision of result.

Secondly, the study is based on perception of manager regarding operational performance and its consequence on financial performance. In future, this could be taken to next level by using actual financials of the banks and deduce whether green policies and green financing persuade operational and financial performance or vice versa is also the extension of this work.

Third limitations concerns the sampling unit. The data is collected from the Pakistani banking industry. So, the results are restricted. Future studies may focus on underpinning cross-sectional/comparative research on banking industry and other industries in Pakistan.

6.0 References

- Alexander, K. (2016), "Greening banking policy", In: Support of the G20 Green Finance Study Group. Al
- Babiak, K. and Trendafilova, S. (2011), "CSR and environmental responsibility: motives and pressures to adopt green management practices", *Corporate Social Responsibility and Environmental Management*. Vol. 18No., pp.11-24,doi: 10.1002/csr.229.
- Barnes, J.H. (1984), "Cognitive biases and their impact on strategic planning", *Strategic Management Journal*, Vol. 5 No. 2, pp. 129-138.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J.B. (1986), "Organizational culture: can it be a source of sustained competitive advantage?" *Academy of Management Review*, Vol.11 No.3,pp.656-665.

- Bukhari, S.A.A., Hashim, F., Amran, A.B. and Hyder, K. (2019b), "Green banking and Islam: two sides of the same coin", *Journal of Islamic Marketing*, Vol. 11 No. 4, pp. 977-1000.
- Busch, T., & Hoffmann, V. H. (2011). How hot is your bottom line? Linking carbon and financial performance. *Business & Society*, 50(2), 233-265.
- Chih, H. L., Chih, H. H., & Chen, T. Y. (2010). On the determinants of corporate social responsibility: International evidence on the financial industry. *Journal of Business Ethics*, 93(1), 115-135.
- Churchill Jr, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of marketing research*, 64-73
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334
- Darnall, N., Jolley, G. J., & Handfield, R. (2008). Environmental management systems and green supply chain management: Complements for sustainability? *Business Strategy and the Environment*, 17(1), 30-45.
- Fernando, Y., Jabbour, C. J. C., & Wah, W. X. (2017). Pursuing green growth in technology firms through the connections between environmental innovation and sustainable business performance: Does service capability matter? *Resources, Conservation and Recycling*, 123, 135-144.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39-50
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* 6th Edition. New Jersey: Pearson Education.
- Hambrick, D.C. (1981), "Strategic awareness within top management teams", *Strategic Management Journal*, Vol. 2 No. 3, pp. 263-279.
- Hart, S. L., & Ahuja, G. (1996). Does it pay to be green? An empirical examination of the relationship between emission reduction and firm performance. *Business Strategy and the Environment*, 5(1), 30-37.
- Hulland, J., & Richard Ivey School of Business. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic management journal*, 20(2), 195-204
- IDRBT (2013), "Green banking for Indian banking sector", Institute for development and research in banking technology, available at: www.educons.edu.rs/sites/default/files/PROCEEDINGS.pdf
- Jeucken, M. (2001). Sustainable finance and banking: The financial sector and the future of the planet. Earthscan.
- Khairunnessa, F., Vazquez-Brust, D.A. and Yakovleva, N. (2021), "A review of the recent developments of green banking in Bangladesh", *Sustainability*, Vol. 13 No. 4, p. 1904.
- Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70(4), 1-18.
- Miller, D. and Toulouse, J.M. (1986), "Chief executive personality and corporate strategy and structure in small firms", *Management Science*, Vol. 32 No. 11, pp. 1389-1409.
- Nisha, N., Iqbal, M. and Rifat, A. (2020), "Green banking adoption: an examination of state-owned banks of Bangladesh", *International Journal of Technology and Human Interaction (IJTHI)*, Vol. 16 No. 2, pp. 69-89.
- Park, H. and Kim, J.D. (2020), "Transition towards green banking: role of financial regulators and financial institutions", *Asian Journal of Sustainability and Social Responsibility*, Vol. 5 No. 1, pp. 1-25.
- Rahman, S.M.M. and Barua, S. (2016), "The design and adoption of green banking framework for environment protection: lessons from Bangladesh", *Australian Journal of Sustainable Business and Society*, Vol. 2 No. 1, pp. 1-19.
- Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534-559.

- SBP(2015), "Concept paper on green banking", available at: [www.practitioners-dialogue.de/files/assets/Klimainvestitionen/WorkingGroups/WG3/Pakistan/StateBankofPakistan\(2015\)ConceptPaper on Green Banking.pdf](http://www.practitioners-dialogue.de/files/assets/Klimainvestitionen/WorkingGroups/WG3/Pakistan/StateBankofPakistan(2015)ConceptPaper on Green Banking.pdf)
- Scholtens, B. (2006). Finance as a driver of corporate social responsibility. *Journal of Business Ethics*, 68(1), 19-33.
- Sharma, M. and Choubey, A. (2022), "Green banking initiatives: a qualitative study on Indian banking sector", *Environment, Development and Sustainability*, Vol. 24 No. 1, pp. 293-319.
- Surmi, A., Cao, G. and Duan, Y. (2020), "The impact of aligning business, IT, and marketing strategies on firm performance", *Industrial Marketing Management*, Vol. 84, pp. 39-49.
- Weber, O. (2010). Social banking: Products and services. In *Social Banks and the Future of Sustainable Finance* (pp. 75-102). Routledge.
- Wernerfelt, B. (1984), "A resource-based view of the firm", *Strategic Management Journal*, Vol. 5 No. 2, pp. 171-180.
- Yadav, R. and Pathak, G. (2013), "Environmental sustainability through green banking: a study on private and public sector banks in India", *OIDA International Journal of Sustainable Development*, Vol.6 No.8, pp.37-48.
- Yu, H., & Zhao, R. (2015). Sustainability and firm performance: A panel study of listed companies. *Procedia Computer Science*, 55, 703-710.
- Zhang, D., Wang, J., Lin, Y., & Si, Y. (2022). How green credit affects corporate green innovation: Evidence from China. *Journal of Cleaner Production*, 338, 130595.

