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Examining Green Banking Initiatives and Environmental Outcomes in Pakistan: The Role of Green Finance as a Moderator

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ABSTRACT

This research emphasis to explore the green banking activities impacts on the commercial banks environmental performance and to identify the moderating effect of green finance sources to strengthening the relationship between Green Banking Activities like Green Banking marketing and Environmental Performance of Banks operating in Punjab province of Pakistan. Purposive sampling method is used to received response form the respondent. Structured Questionnaires are employed to collect primary data from the employees of the banks and 175 responses were recorded as sample size. Structural Equation Modelling was employed to examine the relationship among dependent, independent and moderator variable. The outcomes of this research discovered that GBA has a significant impact on BEP but the Sources of Green Finance (SGF) do not moderate the relationship between GBA and BEP. After that practical implications, limitation and future directions of this research are discussed.

Introduction

Green banking is a concept that describes the implementation of environmentally friendly policies by banks to ensure the future is environmentally friendly (Manta et al. , 2024). This is done through green financial services and Green marketing like green credit financing and loans that are provided by the banks to environmentally conscious firms and projects. In addition, digitization and new

technologies are also instrumental in lowering environmental effects by implementing solutions such as paperless transactions (Ellahi, et al., 2023).Due to changing in climate such as flooding, heavy storms, increase in level of sea our planet is suffering and these changing putting the lifestyle in danger globally. Developed and developing countries are understanding this common issue and acting efficiently and collectively for sustainable lifestyle (Zheng et al., 2021; Hanif et al., 2024). To respond this global concern financial sector is also adopting guidelines issued for sustainability and to reduce carbon footmarks. Developing countries such as Bangladesh, India and Pakistan are also experiencing climate changes challenges and its implications are directly associated with the environment (Zheng et al 2021; Zhixia et al., 2018). Pakistan is also suffering from climate changes and recent flooding disaster in Pakistan has damaged life of the peoples especially poor farmers due to climate change and increase in sea temperatures globally that is harmful for the eco-friendly environment and sustainability. To make life sustainable, long term polices needs to be implemented for economic growth through environmentally friendly projects. In emerging countries like Pakistan, this movement can be evident where financial regulator i.e. State Bank of Pakistan has announced Green Banking Guidelines in 2017. These guidelines are direction for the financial sector to implement a framework for environmental protection through financial institutions by offering eco-friendly loans and their operational activities and initiatives for financing renewable energy developments, promoting energy efficient practices and socially responsible lending (SBP guidelines ,2017).

The notion of green banking means aligning banking strategies and financial operations with the objectives of sustainable environment. By focusing investments in environment friendly schemes and implementing environmental risk management initiatives, Green Banking wishes to promote a more sustainable financial environment (Chowdhury et al.,2021). Fundamentals of this pattern is green financing and to develop financial instruments that are beneficial for the sustainable environment. Green financing is loans to green projects, generation of equity through environmentally bonds and financing to green projects that cut down on carbon emission. It is not only to offer funds for the green projects but also to indicate that how banks try to ensure their focus on the protection of environment. (Ali et al.,2020). Green Banking Guideline issued by the State Bank of Pakistan encourage financial sector to incorporate environmental friendly policies in their operations and financing decisions. There is a developing concern that how GBA impact BEP. These guidelines highlight some broad areas in which financial institutions can implement these polices for the growth of energy efficient sector and environmentally friendly lending. The efficiency of these initiatives in improving environmental performance of the banks remains uncertain, especially when moderated by green financing sources.

The research problem rotates around understanding the impact of GBA on BEP with an explicit emphasis on examining the moderating effect of SGF in financial sector of Pakistan. This comprises exploring the different green banking activities started by the commercial banks to enhance their environmental performance and the extent to which the availability of sources of green finance plays an important role in strengthen relationship between GBA and BEP.

Recently multiple research studies have been accepted in the area of Green Banking growth, green finance and the numerous challenges and benefits are related with green banking worldwide. However, the main emphasis of these research studies was the adaptation of green banking, its adaptation and its challenges and benefits on environmental sustainability and sustainable financing. Besides couple of research studies have observed GBA impact on BEP in Nepal, India, Srilanka and Pakistan.

In Pakistan, few researchers have examined the relationship between GBA and BEP. However, there is no study in the literature that shed the light on GBA impact on BEP via the moderating

effect of SGF in developing countries like Pakistan. Consequently, a detailed exploration is needed in Pakistan is necessary. This examination aims to bridge the existing GAP in the undermentioned methods. First to identify the impact of GBA on BEP of the commercial banks operated in Punjab Pakistan through primary data. Secondly, this research analyses the moderating effect of SGF in strengthening the relationship between GBA and BEP of the commercial banks. By exploring these relationships, this study seeks to provide valuable understandings to optimize the environmental performance of the financial sector in Pakistan and to Provide Recommendations to policymakers, banks, and stakeholders on enhancing the effectiveness of GBA and SGF in improving environmental sustainability in Pakistan. In order to attain above mentioned goals, this research attempts to answer the following two questions. What are the impact of green banking activities (GBA) on banks environmental performance (BEP) in Pakistan? And does sources of green finance (SGF) moderates the relationship between Green banking activities (GBA) and environmental performance of the banks (BEP) in Pakistan?

Theoretical Framework

The theoretical underpinning of Socially responsible investment theory (SRI) is engrained in the confidence that investors must consider both financial and environmental criteria while making their investment decisions (Rehman et al., 2021). This method contests the traditional view that the only purpose of investment is to profit maximization. Theories supporting to SRI also include Stakeholder Theory. Freeman's Stakeholder Theory suggests that organization must consider the interests of their all stakeholders instead of shareholders only. This theory supports Socially responsible investment theory (SRI) by highlighting the importance of social, environmental and ethical considerations in organizational decisions (Freeman, 1984). Companies with robust corporate governance mechanisms are more effective at fostering ethical behaviour, enhancing transparency, and maximizing shareholder value (Jamil, Khan, Gulzar, & Shakeel, 2025)

Rehman et al. (2021) evidenced the relationship among GBA and BEP on the basis of Socially Responsible Investment theory. Results of this study highlight the strong and positive relationship exists among operation related activities, policy related activities and green finance related activities to promote Green Baking in Pakistan.

Content Analysis and Hypothesis development

Green Banking Activities

Green banking is an emergent notion that plays an important role in the realm of climatic changes, its issues and sustainable expansion in the economy of a country (Khairunnessa et al., 2021). Dutch Bank (Triodos Bank) has presented Green Banking first in 1980 (Yadav et al., 2023) and state of Florida has implemented this idea in 2009 (Bose et al.,2013). Banks have taken many initiatives to promote Green Banking and to act as a meticulous organization in the community to attain environmental sustainability inside and outside the institution (Sharma et al., 2021). Green Banking operations showcasing their engagement in social responsibility and ethical banking approach (Zhixia et al., 2018; Julia et al.,2019; Masukujjaman et al., 2014).

Furthermore, Green banking operations related activities i.e. employee related activities, policy related activities and customer related activities which provision and instrument environmental supportive technologies to minimize carbon footmark and to increase environmental management of the banks operations inside and outside the organization (Bose et al.,2018). Green Banking is beneficial for the promotion of goodwill and to enhance banks brand images, which exhibits their devotion in protect environment (Julia et al., 2019; Tu et al., 2017). Hence it may be extracted that the term green banking is contributing towards the growth of sustainable banking practices and to

curtail negatively affected banking actions on the environment by providing the credit loans to environmentally friendly projects.

Green Banking Initiatives in Pakistan

Green banking is initiative that integrates eco-friendly sustainability into the financial institutions that is attaining attention in Pakistan. The banking sector of Pakistan has started to identify importance of environmental protection and their role that how they can implement and promote environment protection through reduction of carbon emission. The monetary and economic regulator in Pakistan (State Bank) has also understood this concept and issued green banking guidelines to financial sector in Pakistan in 2017 and advised to banks to implement these guidelines into their operation and credit risk assessment for encouragement to provide loans to eco-friendly and sustainable projects (SBP, 2017).

Consequent of SBP guidelines many banks in Pakistan National Bank of Pakistan and other banks has started to provide loans to renewable energy projects like solar financing to promote environment protection and sustainability (Khan et al., 2018). United Bank Ltd and Habib Bank Ltd have started to implement paperless banking operations, employee appraisals, online banking, electronic statements to improvise banks image, environmental sustainability and optimum efficient operations (Ahmed et al., 2020). Meezan Bank Ltd has also started green buildings and use of eco-friendly energy in their new branches. The adaptation of SBP Green Banking guidelines is helping in reduction of carbon footmark through green banking operations. To provide finance to eco-friendly projects is also supporting in contribution of sustainable environment (Ahmed et al., 2020). The implementation of paperless and online banking is also reduction banks operational cost and increasing their profit and convenient customer services as well (Rashid et al., 2019). Green banking initiatives also enhance goodwill image and value of brand which attract sensible customers and investment opportunities (Shaikh, 2018). Banking sector in Pakistan is also facing some challenges in implementation of Green Banking due to less awareness, experience in green banking when compared among banking employees and the customers, which ultimately effect implementation green banking initiatives (Saeed et al., 2017). State Bank of Pakistan must also provide support and to issue comprehensive guidelines to promote green banking efficiently (Khan, 2018) Size of the banks also matter in adoption and implementation if green banking initiatives, specially the small banks face financial issued in promotion and implementation of these guidelines (Ahmed et al., 2020). Green Banking aware among the customers and the employees may be helpful for sustainable environmental protection (Shaikh,2018).

Sources of Green Finance

Green finance is also called investment in green projects and this terms has different meaning in financial sector and academics (Dorry et al., 2018). Green finance is an emerging concept (Liu et al.,2020) with unclear and identical explanation (Rawat, 2020) Green finance is important in progressing the green shift and that is attracting focus in advanced and growing countries (Wang et al., 2021; Asghar et al., 2024). However, the main focus of green finance is to attain long term goals in monetary developments through balance in environmental protection and sustainability (Zhou et al., 2020).

Green finance is also a new concept which helps to achieve economic goals with environmental sustainability (Wang et al., 2021). As per European Commission, implementation of green finance in financial sector demands environmental friendly, socially responsible investment decision and to ensure customer and the community satisfaction (Zheng et al., 2021). Resultantly, in this research, green finance is explained as to provide the finance to environment friendly projects that are solar,

wind, water energies, efficient energies projects, recycle able products and green manufacturing projects in direction to attain environmental sustainability (Zheng et al., 2021).

Environmental Performance of the Banks

Environmental performance is defined as the consequences and result of commercial decisions on the natural environment (Klassen et al., 1999). Environmental performance contains utilization of the use of eco-friendly essentials in product development for contamination reduction and to minimize carbon footprint for the enhancements in saving energy, efficiency of resources (Zhu et al., 2010). Though organizational environmental performance is measured through its operations and outputs (Risal et al.,2018) but to check and evaluate the environmental efficacy of a company lies on the efficient utilization of raw-material as confirmed by Tung et al. (2014). It is also being noted that the protection of environment by the companies is not considered environmental protection but its long terms policies, its management, its administrations and effect use of resources to achieve environmental friendly long term goals through its operations (Shaumya et al., 2017). Resultantly, to provide trainings to bank staff on efficient use of energy, paperless banking, to promote loans to eco-friendly projects can be beneficial in achieving banks environmental performance and reduction in carbon footmark for sustainability of the society and long term growth (Zheng et al., 2021).

Hypothesis Development

Adaptation and Implementation and Green banking activities are not the focused of the financial organization only but is the state level polices which ensure and encourage to financial banks to funds green projects to enhance environmental performance and sustainability of the country (Rehman et al., 2021). Therefore, implementation of GBA supports BEP by reduction in paper utilization, green energy utilization (solar, wind) to minimize carbon footprints and enhance employee skills by offering them training on green banking (Akter et al., 2018; Julia et al., 2019). Green finance can also be considered new engine for the economic growth which also have emphasis corporate social responsibility and environmental sustainability (Li et al., 2020). Recently, Zheng et al. (2021) explored the importance of private commercial banks in the growth of green finance in Bangladesh and highlighted following green finance sources that are constructed on the perception of the banks employees. These are waste management investment projects, manufacturing of green bricks, funding to recycling projects, and use of recycled products.

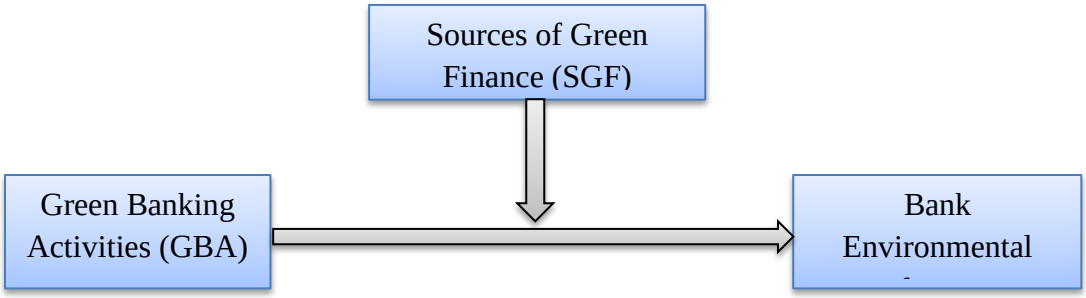
These are all beneficial for the enhancement of environment sustainability and green economic growth of a county. Rehman et al., (2021) also studies and evidenced the positive impact of GBA and SGF on environmental performance. Rehman et al. (2021) also evidenced the relationships between GBA and BEP that were based on Socially Responsible Investment theory. The outcomes of the study evidenced positive strong relationship among banks employee related activities, Banks operations relation activities, Banks customer related activities and Banks policy related activities on Bank environmental performance.

GBA also influenced environmental performance of the banks in Coimbatore city of India. Similarly, Risal and Joshi (2018) evident the effect of GBA on BEP in Nepal and they used multiple regression analysis. On the basis of above discussion, two main variables that are GBA and BEP were identified along with moderating effect of Sources of Green Finance GBA and BEP. Resultantly this research will add to existing literature that the impact of GBA on BEP by using the SGF as moderator in Pakistan. To explore the relationship and moderating effect we have developed the following research hypotheses.

H1: Do Green banking activities (GBA) have a significant impact on banks environmental performance (BEP)?

H2: Does Green Finance Sources (SGF) moderates the relationship between green banking activities (GBA) and banks environmental performance (BEP)?

Conceptual Framework



Methodology

Data Collection

Ten commercial banks (financial institutions) from Punjab Pakistan were selected because of their significant presence and contributions in Foreign Trade and Credits. Major Cities of Punjab like Lahore, Faisalabad, Multan and Sialkot were targeted because of their Trade and Credit contribution in Pakistan. Therefore, the main objective of this research is to explore the effect of GBA on BEP and the moderating effect of SGF between GBA and BEP.

To achieve the above-mentioned study goals, structured survey instrument containing 26 questions was employed to collect primary data from the respondent working in commercial banks in Punjab a largest province of Pakistan. Convenience sampling type is used to collect data from the commercial bank employees from May to June 2024. Purposive sampling is a non-random sampling method that is used to select participants who are meeting specific criteria like relevant experience, working in relevant department and are posted in targeted cities (Dornyei , 2007). This sampling method is also time saving, cost effective and to obtained required responses (Zheng et al., 2021;Yan et al., 2021). Total 200 questionnaires were delivered and out of which 175 were received showing a response percentage of 87.5. The participant's demographics are highlighted in the following table A.

Table A: Participants Demographics

Variable	Item	Number	%
Gender	Male	139	79.42
	Female	36	20.58
Qualification	Bachelor	44	25.14
	Masters	125	71.42
	MPhil	6	3.42
Working experience	Less than 2 years	32	18.28
	3 to 5 years	35	20.00
	Above 5 years	108	61.71

Measures

All measurements in this study were gathered using the following reputable, widely recognized, and well-established instruments and are considered valid and reliable: Every variable was

estimated using a five point Likert scale (1 for strongly disagree to 5 for strongly agree). The assessment of "Green Banking Activities" comprised sixteen items from the work of (Rehman et al., 2021; Risal et al., 2018; Shaumya et al., 2017). Using six items, "Sources of Green Finance" (moderating variable) was accessed from the study of (Zheng et al., 2021; Julia et al., 2019). The metric for "Bank Environmental Performance" was also calculated utilizing four elements from the study of (Risal et al., 2018; Shaumya et al., 2017). For reader's review, all the survey instrument items are presented in appendix A, which were extracted from existing content analysis on GBA, SGF and BEP.

Data Analysis Technique

To examine this research PLS (SEM) is utilized as a statistical technique (Hair et al., 2021) which developed after (Gim et al., 2020). PLS SEM was determined the most suitable model for this study because of its ability involving small sample sizes, not normal data distributions. Due to the above mentioned characteristics, it is considered the most suitable methodology for this study. For examination of internal reliability of this study latent constructs, Cronbach alpha was used. For examination of convergent validity of this research, AVE and CR were employed. Goodness of the model also checked by applying the goodness of fit indicators.

Assessment of Measurement Model

Table No.1 & 2 shows the results of convergent validity analysis, expected within the framework of structural equation model or confirmatory factor analysis. This analysis estimates several constructs each with its respective indicators, factor loadings, reliability measures, and average variance extracted.

The first construct under consideration is Green Banking Practices, its indicators comprise BCRP, BERP, BPRL and BORP. The outer loadings demonstrate the strength of the relationship among the constructs and its observed indicators range from 0.81 to 0.90. The Cronbach's alpha (α) measure the internal consistency reliability, 0.88, indicating high reliability. This construct's Composite Reliability (CR) is also 0.91, further supporting its internal consistency. For the Sources of Green Finance construct SGF1 to SGF6, factor loadings range from 0.78 to 0.91. This construct exhibits good reliability with a Cronbach alpha of 0.91 (above the 0.70 threshold) and a CR of 0.93 (above the 0.70 threshold). The AVE is 0.75, below the commonly proposed value of 0.5, representing a somewhat low extent of variance the construct captures relative to measurement error.

The construct 'Bank Environmental performance' is operationalized based on the four indicators BEP1 to BEP4 presented in Table II. The outer loadings range from 0.84 to 0.87. This construct demonstrates good consistency and reliability with a Cronbach's alpha of 0.87 and CR 0.91. The AVE for the construct is 0.72, which meets the acceptable criterion. In essence, the measurement model generally shows good reliability and evidence of convergent validity.

Table 1: Reliability and Validity of the Constructs

	Cronbach's Alpha	**rho_A**	**CR**	**AVE**
Sources of Green Finance	0.916	0.919	0.937	0.750
Banking Environment Performance	0.874	0.875	0.914	0.726
Green Banking Activities	0.883	0.920	0.919	0.739
Moderating Effect 1	1.000	1.000	1.000	1.000

Table 2: Outer Loadings

	SGF	Banking Environment Performance	Green Banking Activities	Moderating Effect 1
BCRP			0.810	
BEP1		0.844		
BEP2		0.846		
BEP3		0.873		
BEP4		0.844		
BERP			0.875	
BORP			0.841	
BPRP			0.909	
Green Banking Activities * BFS				1.047
SGF1	0.788			
SGF3	0.853			
SGF4	0.895			
SGF5	0.916			
SGF6	0.872			

Table 3 displays the discriminant validity on the basis of Heterotrait Monotrait ratio, which explain how two different constructs discriminate between each other versus their internal consistency in the range of 0.1 and 1.00. Each cell of the table presents the HTMT ratio between the pairs of the constructs, which is helpful in evaluating the discriminant validity.

The results in table 3 show that SGF has an HTMT ratio of 0.79 Bank Environmental Performance; 0.979 with Green Banking Activities; 0.336 with moderating effect. Bank Environmental Performance has an HTMT of 1.00 with GBA, 0.797 with SGF and 0.282 with moderating effect. Green Banking activities have an HTMT of 0.97 with SGF, 1.00 with BEP and 0.363 with moderating effect.

Generally, all HTMT ratios are less than the suggested threshold of 0.85 that indicates satisfactory discriminant validity between the classes used in the study (Table 3), meaning that the latent variables represented by GBA, SGF and BEP are different, and that the measurement model effectively captures unique variance of each construct (Hair Jr et al., 2017; Henseler et al., 2015). However, caution needs to be exercised because of the broader context and potential limitations when interpreting the above results as discriminant validity is an essential step in model validation; close to 0.85 or drawing towards it would have called for further investigation to ensure that robust discriminant validity; in the model – at least, to the point of below 0.85.

Table 3: Discriminant Validity (HTMT Ratio)

	SGF	BEP	GBA	Moderating Effect 1
Sources of Green Finance				
Banking Environment Performance	0.797			

Green Banking Activities	0.979	1.004		
Moderating Effect 1	0.336	0.282	0.363	

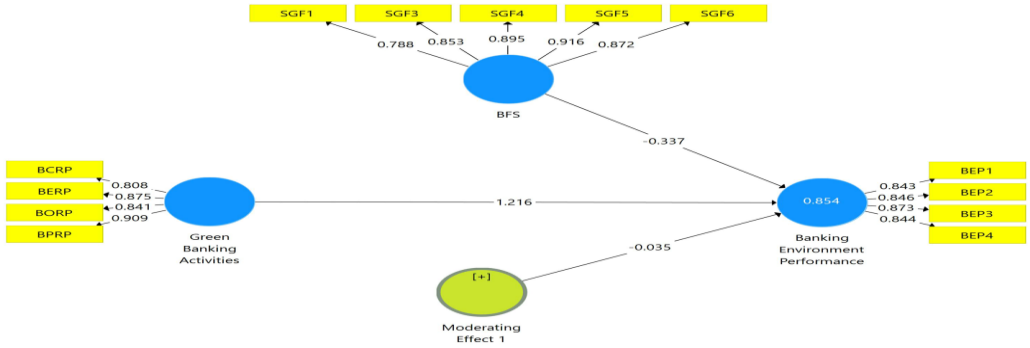
Table 4 provides the outcomes of discriminant validity by using Fornell Larcker criteria. According to criteria square root of Average Variance Extracted (AVE) must be greater than the construct correlations with others latent constructs. Starting with Sources of Green Finance (SGF), the square root of AVE is 0.866, and its correlations with other constructs are 0.715 (BEP) and 0.875 (GBA). For Green Banking activities (GBA), the square root is 0.859, and its correlations with other constructs are 0.875 (SGF) and 0.909 (BEP). Bank environmental performance has a square root of AVE of 0.85, and its correlations are 0.90 (GBA) and 0.85 (SGF).

When the Square Root of AVE of each construct is significant than its correlation with all other constructs, discriminant validity can be established based of Fornell Larcker criteria. In our research context, all diagonal values which are the representation of the square roots of AVE are less then off-diagonal values in some cases which reflects unsatisfactory discriminant validity. These results suggest that the latent constructs, GBA, SGF and BEP are not distinct, not supporting the measurement model's robustness in capturing unique variance for every construct.

Table 4: Fornell Larcker - Discriminant Validity

	SGF	**BEP**	**GBA**	**Moderating Effect 1**
Sources of Green Finance	0.866			
Banking Environment Performance	0.715	0.852		
Green Banking Activities	0.875	0.909	0.859	
Moderating Effect 1	-0.322	-0.264	-0.336	1.000

Figure 1: Measurement Model



Structural Model Assessment

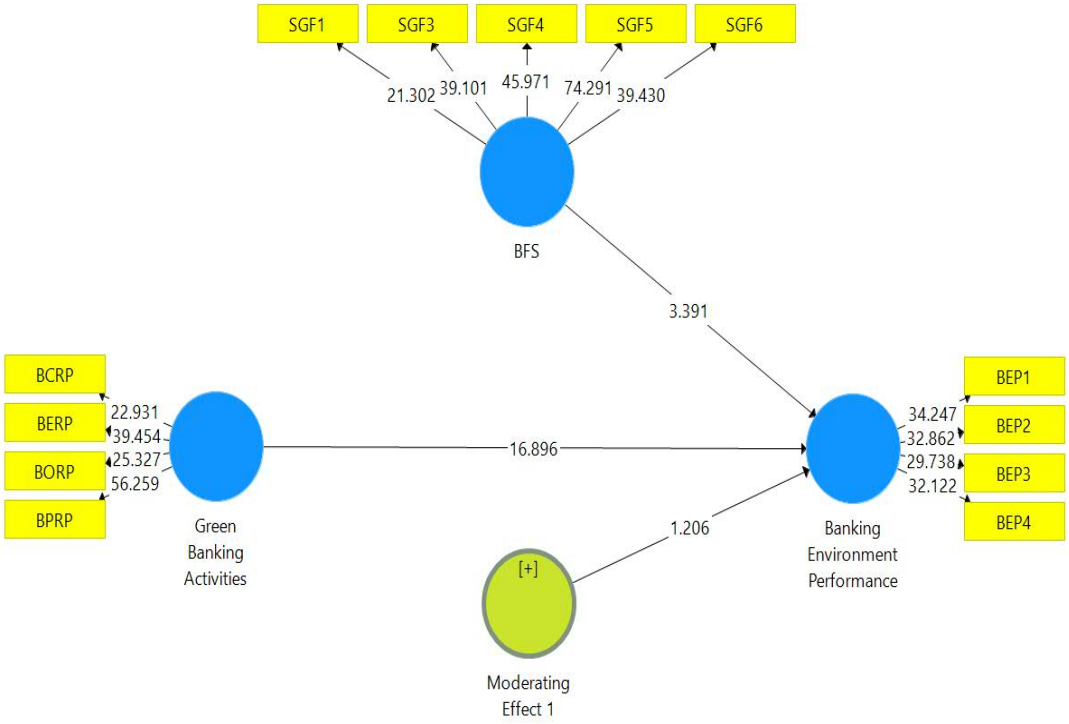
The provided results in the table 5 offer insights into direct and indirect effects within a structural equation model, shedding light on the relationships between various constructs. Regarding direct effects, the influence of GBA on BEP with a positive coefficient of 1.216 and the association is also statistically significant at 5% significance level, as suggested by the p-value of 0.000. Conversely, the impact of SGF on BEP with a negative coefficient of -0.337 and the association is also statistically significant at the 5% significance level, as suggested by the p-value of 0.001. Moving to moderating effect of Sources of Green Finance (SGF) with a positive coefficient 0.034 between GBA and BEP but with an insignificant p-value of 0.228.

The findings in a structural equation model comprehend the direct effect of GBA on BEP but moderating relationship between GBA and BEP is not evident.

Table 5: Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
SGF -> Banking Environment Performance	-0.337	-0.331	0.099	3.391	0.001
Green Banking Activities -> Banking Environment Performance	1.216	1.210	0.072	16.896	0.000
Moderating Effect 1 -> Banking Environment Performance	0.034	0.033	0.028	1.206	0.228

Figure 2: Structural model



Discussions and Conclusion

Almost from the last twenty years the academia, researcher and the financial professionals have become concerned in the area of Green Banking and Green Finance in advanced and emerging economies. Consequently, the focus of this research study was to examine the effect of GBA on BEP by applying the moderating effect of SGF. Employees of the financial institutions operating in Punjab province of Pakistan were selected to collect Primary responses by using structured questionnaires. The Structural Equational Modelling - SEM methodology was applied by using smart PLS to evaluate the conceptual model of this research. The research model was suited fit after examining the different model fitness criteria's. The results highlights that the H1 is accepted

with a significant positive relationship between GBA and BEP. This suggests that the importance of GBA in the development of banks environmental performance in Pakistan and this also support to minimize carbon footmark, to minimize pollution and in achieving sustainable economic growth of the nations. These finding are also evidenced in the research performed by Rehman et al. (2021) who explored that GBA have a significant impact on the green investments made by the financial sector operating in Pakistan. Results of this also evidenced that significant relationship exists between SGF and BEP. Risal and Joshi (2018) explored that green finance have insignificant impact BEP in Nepalese financial sector. Hence, it is evidenced that SGF support to enhance BEP through their investment decisions in multiple environmental friendly schemes like solar, wind energy, efficient use of energy and to promote recyclable products projects. This is the first exploration of moderating effect of SGF between GBA and BEP in the framework of financial institutions operating in Pakistan. The empirical results indicated that SGF had not significantly moderated the relationship between GBA and BEP, therefore, rejecting the H2. The moderating part of sources of green finance on the association between GBA and BEP is yet to be given regulator and financial institutions consideration. Results of this research contribute to the existing literature in its claim that GBA impacted BEP significantly but SGF do not moderate the relationship between GBA and BEP. Furthermore, the results of this research highlights that employees related activities, operation related activities, customer related activities and policy related activities of the banks enhance BEP by minimizing the carbon footmarks and to enhance goodwill image of the brand. The benefits also comprise on attaining the sustainable development in economy, increasing the profits of the banks in the long run. These results are also explored by earlier researcher in their studies (Tu et al., 2017; Risal et al., 2018).

Implications of the Study

The results of this research indicate some important implications to scholars, financial institutions, financial regulator and the government authorities in Pakistan to focus on implementation of green banking activities and to provide green finance to the energy efficient and renewable energy projects to enhance environmental performance of the banks by sustainable economic development. This research highlights that commercial banks in Punjab Pakistan are implementing environment friendly green banking activities to some extent but source of green finance is not there focus which should be addressed by the financial institutions and the financial regulator (SBP) and the government authorities. Government of Pakistan must encourage commercial banks by offering tax incentives on the promotion and implementation of effective green banking activities and extension of green loans to energy efficient and environmental friendly projects. State Bank of Pakistan should also provide detailed policy guidelines on implementation of green banking, green financing with certain timelines. Financial institutions must also enhance their budgets to implement green banking in their operation and management to enhance their social image and profitability by reducing paper utilization, online appraisal system, online risk assessment system and late sitting culture especially in private commercial banks. Banks must also focus on green banking training and awareness seminars for the customer education towards green banking as well.

Limitations and Future Directions

Due to limited time frame in this research, many limitations are evidenced. Only four major cities in Punjab province of Pakistan were selected to collect response from the respondent and ten banks were included in this research and the employees were selected based upon convenience, which limits the generalization of this research outcomes. Therefore, the outcomes of this exploration may be enhanced by exploring the response received from the employees working in the loan departments of the banks. The research variables used in this study are examined on the bases of

primary responses collected from the employees of commercial banks in Punjab Pakistan and the future researcher may include secondary data as well to assess the impact of GBA on BEP by applying the SGF as a moderator.

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