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Impact of Green Financing and Green Banking Practices on Banks' Environmental Performance[1]

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Abstract

The banking sector remains a cornerstone of the world economy, which includes India. However, the ongoing financial crisis has put pressure on banks worldwide to operate more efficiently, and implementing green banking practices is seen as the best course of action offering them a competitive advantage and improved performance. Hence, this study aims to provide insight into how the banking industry views the connection between GBP and banks' competitive advantage and performance. Data for this study is being gathered from 423 employees of Indian public banks, using a convenience sampling method. Using structural equation modelling, the empirical results show that green banking practices greatly improve banks' competitive advantage and performance. Furthermore, the connection between green banking practices and banks' performance is facilitated by competitive advantage. The implications of this work for banks and other institutions make it unique and important. To promote green banking practices and investigate opportunities for competitive advantage, the study's findings will be helpful to academics, bankers, banking institutions, government officials, and managers in India. Ultimately, this will improve the organizational performance of banks. As a result, this helps the nation's economy grow sustainably and remain stable.

Keywords: Green Banking, Banks Environmental, Performance, Competitive Advantage

JEL Codes: Q01, Q56, O13, G20, E60

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Introduction

A country's financial system serves as a barometer for the overall health of its economy. Indian banks, widely distributed geographically and providing a range of functions, have been essential to the nation's socioeconomic growth (Afsar et al., 2020). Over sixty percent of households' savings are routed through the banking sector, which moreover furnishes over 90% of the nation's financing for business (Srivastava, 2016). Although the expansion of banks boosts economic growth, several Indian banks have closed branches recently to strengthen their already fragile financial position, which has been under strain for several years. Furthermore, today competition in every segment of the market is very stiff. Banks are no exception (Gupta and Barua, 2018). To compete in this highly competitive environment and enhance their overall performance, they must have some USP (Anning-Dorson et al., 2018). One factor that can be the panacea for banks is green banking practices (Olson, 2008). Therefore, it is essential to quickly address a crisis in the financial sector so that banks, which are the main source of credit, can resume their regular operations. An efficient way to address this crisis is to adopt a strategy that is unique and fits the current demands of the market. This unique strategy can be green banking practices (Rai et al., 2019).

Green banking is a set of practices and policies that banks and other financial institutions use to encourage people to do things that are good for the earth and are sustainable (Rehman et al., 2021). The objective of green funding is to defend the ecological ecosystem without sacrificing the quality of financial services (Sahoo and Nayak, 2007; Zhang et al., 2022).

Green banking can be defined as a bank examining a project's long-term viability before providing funding (Nanda and Bihari, 2011). Green banking is predicated on the notion that humanity must preserve the environment for it to support human habitation (Aubhi, 2016). A Dutch bank by the name of "The Triodos Bank" was the first to employ G-banking in 1980 (Yadav and Pathak, 2013). The "State of Florida" took the identical action in 2009 (Sharma and Choubey, 2022). This has motivated banks to launch green banking initiatives across the globe. Adopting and implementing green banking practices in their operations can give banks a competitive advantage.

According to Hertati, 2016, a competitive advantage is a benefit over rivals that can be attained by providing more consumer value at lower costs, greater customer advantages, or services that can provide cost for consumers (Porter, 1985). The capacity of an association to sustain a defensive stance against its rivals is another definition of competitive advantage (Li et al., 2006). Expense, value, provision, reliability, production improvement, and time to the marketplace are markers of each. Therefore, green banking practices allow banks to do something different from their competitors, increasing their image, customer loyalty satisfaction, and profit (Ali et al., 2021).

Additionally, competitive strength also helps businesses to improve their performance. Performance can be defined as the extent to which a company or organization—a collection of individuals assigned roles and responsibilities—achieves its objectives by adjusting to and thriving in a continuously changing environment. It speaks to how well a firm achieves its goals (Edi Suandi et al., 2022). Furthermore, different firms use various methodologies to evaluate their performance; for example, some evaluate from a financial perspective, while others do so from a non-financial one. How well a corporation trades value with its members to make optimum use of its resources is the primary determinant of its performance (Chaudhary and Akouri, 2018).

A firm's success is mostly controlled by its internal qualities, permitting the source-created view theory (Youssef et al. 2018). The firm's resources and competencies are among these attributes. As a result, most Indian banks are increasingly concentrating on their performance. So, adopting green banking practices creates differentiation opportunities, reduces cost, and ensures high profit thus providing them competitive strength and improved performance. Even though many studies have shown GBP acceptance, success, environmental sustainability, and trends and awareness, some studies have looked at how GBP affects the Bank's performance in countries like Bangladesh, Nepal, India, Sri Lanka, and Pakistan (Zheng et al., 2021; Risal et al., 2018; Vidyakala, 2020; Shaumya and Arulrajah, 2017; Rehman et al., 2021). However, there aren't many studies that look at the impacts of GBP on banks' performance in India. Green banking practices and green financing are increasingly seen as crucial tools for promoting environmental sustainability in the financial sector. After an extensive literature review, it has been found that most of the research on green banking has focussed on its needs, benefits, trends, and challenges. Furthermore, most of the past studies have focussed on the association between green banking practices and environmental performance by taking green financing as a mediating variable. This study fills the identified gap by linking the association between green banking practices and banks' performance by taking competitive advantage as a mediating variable.

Literature Review And Hypothesis Development

Green Banking

The use of economic essential services to protect the situation by emphasizing environmental and socio-economic issues is known as "green banking." (Choubey and Sharma, 2022). The term "green" in "green banking" mainly describes how well banks function and how responsible they are for the environment in their business dealings (Munim et al., 2014). The concept of "green banking" was introduced in 1980 by the Dutch bank Triodos Bank (Pathak and Yadav, 2013). It created a "Green Fund" for ecological projects, which became a template for banks investigating green banking practices in 1990 (Kumar et al., 2015). As a result, this is a new concept in the banking sector, to create environmentally friendly and sustainable practices to counteract the external challenges that banks face. GB entails putting into practice eco-friendly practices and reducing both internal and external CO2 emissions as a result (Hashim et al., 2020). The GB agenda places a strong emphasis on corporate social responsibility (CSR). For this reason, it is frequently referred to as ethical banking (Park and Kim, 2020). It is a kind of banking that helps reduce both internal and external carbon footprints by operating in a certain location and way to manage global warming.

Organizational Performance

Employee work satisfaction is a critical component of organizational performance and output, and as such, it can determine the future success of a business or organization. The effectiveness of an organization's implementation of strategies to achieve institutional purposes and goals is known as organizational performance (Randeree & Al Youha, 2009). The effectiveness of an enterprise, organization, or commercial entity is heavily impacted by the effectiveness of the people and resources that work for it (Babelova, Z. G., 2020). An organization must work tirelessly to improve its managerial procedures, as failing to do so will ultimately result in its demise. One type of managerial tool for promoting organizational success is employee participation in decision-making and other key activities. Participation of workers in organizational decision-making affects performance in both positive and negative ways (Tamunomiebi et al., 2020).

Competitive Advantage

Although managers may find it difficult to implement digital business strategies, companies need to leverage these tools and solutions to gain a competitive advantage and boost financial performance (Chae et al., 2018). In addition to creating a corporate culture that embraces and encourages the use of technology, managers must be knowledgeable about the digital tools and solutions that are now available. Every institution strives to outperform and outgrow its rivals to remain competitive. Developing competitive capacities in the modern world has emerged as one of the main issues facing many nations on the global stage. Various definitions and interpretations of the term "competitive advantage" will be discussed here. Any difference in a company's attributes or characteristics that helps it offer superior customer service to rivals is known as a competitive advantage. It also refers to the extra appeal that the business provides from the standpoint of its clients in comparison to its rivals (Hosseini & Shams, 2014). Porter characterized a competitive advantage as the values that a business provides to its clients in a way that outweighs the costs to the clients. Considering the criteria along with other definitions, it can be shown that a competitive advantage demonstrates the direct correlation between a customer's desired values and the values provided.

Green Banking Practıces and Organizational Performance

Effective green banking rules and standards must undoubtedly be created by developing workable plans for executing green economics and directing governing bodies. With an emphasis on ecological, community, and supremacy factors, Bukhari et al. (2020) developed a set of best procedures for green finance. This paradigm, which has its roots in human ecology, emphasizes how closely related environmental sustainability factors are to one another. The adoption of green banking can be accomplished either sequentially or parallelly, the authors found, depending on internal and external environmental conditions. Green funding methods, assumption strategies, and the need to put green finance ideas into a method were all studied by Mir and Bhat (2022). The tasks and roles of banks in progressing environmental sustainability and accomplishing the UN SDGs were also examined by the writers. Their results clearly showed how important financial institutions—banks in particular—are to the growth of low-carbon financial systems. Several research on green finance looks at how important it is to build stronger, more resilient financial institutions that support sustainability. Using data from 2011 to 2021, Chen et al. (2022) investigated the impact of sustainable supporting motivations on banks. The authors discovered that while decreasing default risk, a rise in green exposure had a favourable impact on the intermediation spread. Although it is impossible to overestimate the significance of sustainable banking in reaching carbon a neutral stance, Sarma and Roy (2021) pointed out the paucity of studies on the subject. The necessity to make ethical investments drives SRI, according to Revelli & Viviani (2015). According to Korzeb and Samaniego-Medina (2019), the theory also explains why the practice of green banking emphasizes investing in social responsibility as a way to boost sustainability performance and create money for managers and politicians. When accepting a loan, banks that engage in green banking must be socially responsible and take into account the project's intended outcome or the long- and short-term environmental savings. Stakeholder demand—which includes investors who have looked beyond variables like low risk and return on investment—is the reason for this.

H1: Banks' green practices are positively associated with banks' organizational performance.

Green Banking Practices And Competitive Advantage

According to M.-S. Kim and Stepchenkova (2020), the leader's green banking practices promote green advocacy in the workgroup, which may enhance the leader's attention to the environment. The authors found that the magnifying impacts of the dynamic dynamics at play put social pressure on individuals to act in an environmentally responsible manner. Furthermore, employees' need for acknowledgment and appreciation from supervisors and peers may serve as important sources of motivation (Brick, Sherman, & Kim, 2017). Empirical studies demonstrate that positive peer interactions and the impression of support foster "eco-helping," or environmentally conscious behavior, in the workplace (Paillé, Valéau, & Renwick, 2020). In terms of competitive strategy and organizational performance, it's a complex and unsolved problem (Ghaith, 2020; Tavitiyaman, Qu, & Zhang, 2011). The profitability of a corporation is a function of the industrial structure, according to studies on the behavior of an industry by (Bain, 1956) and (Mason, 1939), who offer a framework for competitive strategies and organizational performance. The primary determinants of an organization's performance within a particular industry, rather than the organization itself (Barney, 1986). A company's core competencies are especially potent and difficult to replicate since they are linked to the way its value chain's connections are handled, claim Johnson, Scholes, and Whittington (2009). The survival of a company is the only reliable measure of organizational performance, according to Drucker (1954). A company can try to be the lowest-cost producer or differentiate itself to maximize success, according to Porter (1985). According to the theory guiding the corpus of studies on the connection between strategy and performance, a strategy that is specially designed for a company's internal and external environment will almost certainly result in higher performance (Kubickova & Smith, 2019).

H2: Green banking practices are positively associated with sources of competitive advantage.

Competitive Advantage and Organisational Performance

The ability of an organization to establish a plausible edge over its rivals is known as competitive advantage (Li et al., 2006). Although the organizational concert is the worth obtained from the commercialization of competitive benefit, Newbert (2008) emphasized that a competitive advantage can be defined as the financial worth produced by the application of innovative business strategy. According to Stalk et al. (1992), competition nowadays is viewed as a "war of movement" that changes in foreseeing and acting swiftly in response to shifting market demands. Competitive advantage leads to creating superior competencies thus resulting in higher market share and profitability performance (Barney, 1991; Coyne, 1986; Day and Wensley, 1988; Prahalad and Hamel, 1990). One significant contextual aspect influencing how well an organization performs is competition (Lee & Yang, 2011). When banks are in a competitive market, they perform best when they offer low service prices (Neely, 2005). The competition impacts the overall success of the company (Hussain & Hoque, 2002). Moreover, Mia & Winata (2014) discovered a favorable correlation between financial performance and competitiveness. Numerous empirical research has demonstrated the beneficial relationships between organizational performance and competitive advantages. The implementation of a sustainable business strategy can yield differentiation competitive advantages that can lead to increased customer satisfaction, a higher rate of repeat business, and the attraction of new client segments that are environmentally conscious. By making use of this competitive advantage, businesses can fortify their business communal accountability in the goal marketplaces, create a distinctive public image, boost their reputation, and increase customer value thus enhancing their organizational performance(Wright, M et al, 2005). Previous empirical research suggests that a firm's performance may increase as a result of differentiation in its competitive advantages (Leonidou et al, 2017). Additionally, because proactive environmental tactics provide a company with a competitive edge over rivals, a company's financial performance may be enhanced by increased rates of repeat business and possible sales from previously untapped markets of environmentally conscious consumers. According to Wang et al. (2018) and Li et al.(2017), competitive advantage positively affects the amount of sales, market position, and return on investment as indicators of a company's performance. According to Bharadwaj et al., Miller, Rosiana, and Supranoto, a business entity that pays attention to the market will get a competitive edge over its competitors thus creating a positive impact on their organizational performance. Therefore, the hypothesis is formulated as follows

H3: There is a positive relationship between competitive advantage and organizational performance.

Competitive Advantage as a Mediator

Based on what was said about the association between GBP, competitive advantage and organizational performance, it is clear that GBP and competitive advantage improve organizational performance. However, there haven't been many studies that look at the link between GBP, competitive advantage and organizational performing competitive advantage as a "mediating" inconsistent. So, the current study tries to fill this gap by looking at how these factors relate to each other in the Indian banking sector. According to scholars like Teece (2007), businesses would be encouraged to develop their competencies to achieve long-term organizational performance through innovation such as green banking practices. A successful innovation may make it more difficult for rivals to produce knockoff goods (Wingwon, 2012). As a result, innovation has the potential to impact competitive advantage, which will subsequently boost organizational performance (Wu et al, 2007). Additionally, Sakchutchawan et al. (2011) endorse it. According to research findings, an organization's performance will be impacted by innovation and its ability to create a competitive edge. In this research, competitive advantage will be used as a moderator to study the association between green banking practices and corporate performance. Therefore, the hypothesis is formulated as follows:

H4: Competitive advantage mediates between green banking practices and the organizational performance of banks.

Model of the Study

Figure 1 presents the Conceptual Framework of the study which was compiled by the authors.

Research Methodology

Sample Collection

A total of 423 employees working in various public sector banks in Uttarakhand, India participated in an online survey, with the assurance of confidentiality for their responses. Convenience sampling was chosen for the current study. Reminder emails were sent regularly to increase response rates, by the guidelines proposed by Dillman et al. (2014). Out of the total responses received, 233 (55%) male and 190 (45%) female were complete and valid. The demographic characteristics of defendants are presented in Table 1.

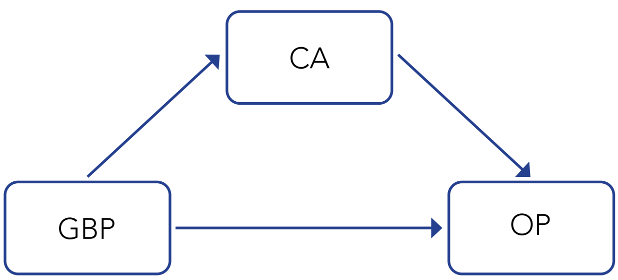

Figure 1. Conceptual Framework

Structures Used

A structured questionnaire was used to collect data on the study's variables. The adoption of instruments is influenced by how the condition of Indian banks is as suggested by members (Jain and Jeppesen, 2013).GBP was assessed using 12-item questionnaires developed by Rehman et.al (2021), and Shaumya and Arulrajah (2017). This tool method defendants' perceptions of various facts of GBP in their banking institutions. Organizational performance (OP) was assessed using 29-item questionnaires developed by Carstens and Kock (2017). Competitive Advantage (CA) was assessed using 15-item questionnaires explained by Newbert (2008)

Analysis and Results

The study targeted staff members between the ages of 25 and 60 working in PSB across India. The gender distribution of the respondents was 55% male and 45% female. A described profile of the participants is provided in Table 1. The detailed profile of the respondents is given in Table 1.

Table 1. Demographic Profile of Respondent

Demography	Particular	Frequency
Gender	Male	233
	Female	190
Age	25-39 years	162
	40-54 years	144
	55-65 years	89
	66 years and above	28
Educational Qualification	Undergraduate	147
	Postgraduate	189
	Doctorate	52
	Others	35
Job position	Assistant general manager	96
	Senior Manager	85
	Manager	126
	Officer	116

This study utilized IBM SPSS version 22.0 for Exploratory Factor Analysis (EFA) and AMOS version 22.0 for Confirmatory Factor Analysis (CFA) to conduct the data analysis. The construct validity of this study is measured using fitness indices as illustrated in Table 2, where Chi-sq/df is 1.923 (Between 1 and 3), CFI IS 0.988>0.95 and RMSEA is 0.021< 0.06 demonstrating that there are no problems with construct validity.

Table 2. Model Fit

	Values	Threshold	Interpretation
χ2	1758.248	---	---
Df	1481	---	---
χ2/df	1.923	Between 1 and 3	Excellent
CFI	0.988	>0.95	Excellent
SRMR	0.032	<0.08	Excellent
RMSEA	0.021	<0.06	Excellent
PClose	1.000	>0.05	Excellent

Convergzalidity was assessed using the Composite Reliability (CR) and Average Variance Extracted (AVE). As depicted in Table 3, CR and AVE values are exceeded the recommended threshold of 0.70 and 0.50 respectively, indicating that the research confirms to convergent validity.

Table 3. Model Validity Measures

	CR	AVE	MSV	MaxR(H)	OP	CA	GBP
OP	0.984	0.679	0.282	0.984	0.824		
CA	0.967	0.662	0.246	0.967	0.479***	0.814	
GBP	0.963	0.682	0.282	0.963	0.531***	0.496***	0.826

Hypothesis Analysis

The hypotheses were tested using standardized regression weights as shown in Table 4, whereas Fig 2 represents SEM path analysis for the current research.

Table 4. Path analysis Table

	Estimate	S.E.	C.R.	P	Label
CA <--- GBP	.495	.054	9.833	***	
OP <--- CA	.428	.051	9.146	***	
OP <--- GBP	.292	.049	6.053	***	

Note: ***p < 0.001.

Hypothesis 1 assumed a significant relation between GBP and OP in PCBs. The beta value is 0.292 (t = 6.053, p-value < 0.001) calibrates the important association between GBP and OP, confirming Hypothesis 1. Similarly, Hypothesis 2 (relation between GBP and CA) and Hypothesis 3 (relation between OP and CA) were vindicated with beta values 0.495 (t = 9.833, p-value < 0.001) and 0.428 (t= 9.146, p-value < 0.001).

Finally, Hypothesis 4, which posited the mediating role of CA in the relation between GBP and OP was tested using Hayes (1986) approach. Table 5 shows the result obtained from AMOS 22.0 using the 95-percentile bootstrap method. The presence of a mediator is confirmed as the indirect effect is significant (relation between GBP and OP through CA (0.19***). The result further confirms CA as a partial mediator in the relationship between GBP and OP as the direct effect is also significant (0.36***).

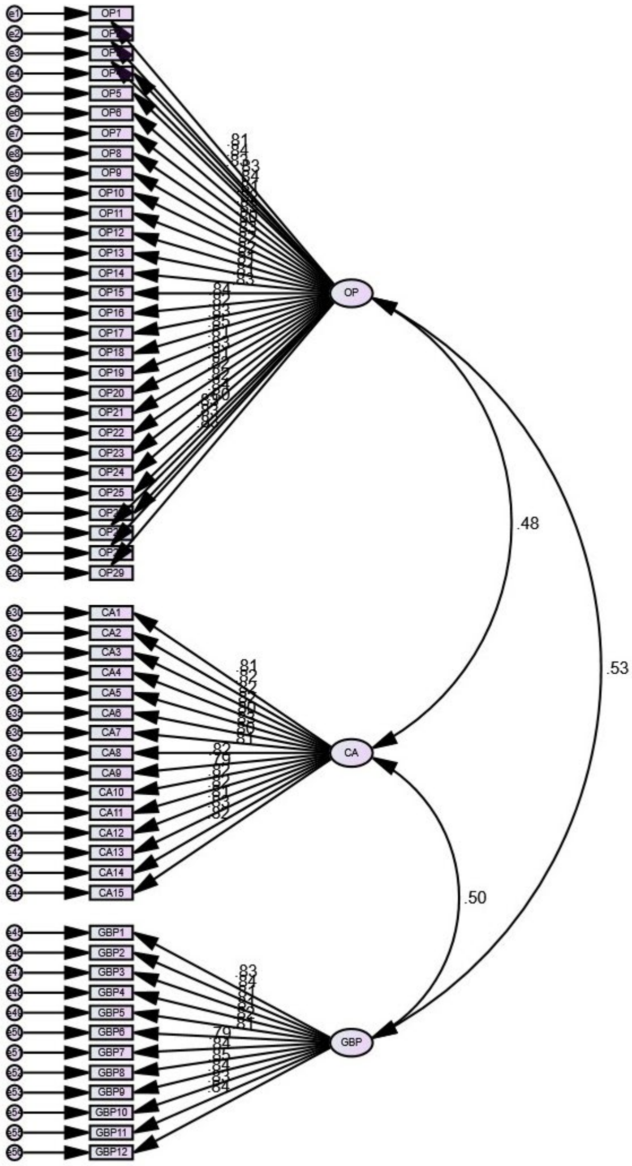

Figure 2. Confirmatory Factor Analysis
Source: SPSS AMOS)

Table 6. Mediating Hypothesis Table

Hypothesis	Direct Effect	Indirect Effect	Total Effect	Conclusions
GBP ➛ CA ➛ OP	0.36	0.19	.55	H4 accepted (Partial Mediation)

Note ***p<0.01; *p<0.05;¥p> 0.05.
GBP→CA→OP

Discussion

The study was carried out to find out how green banking in Indian private commercial banks boosts the competitive advantages for them leading to improved organizational performance. The data collected through organized surveys show that the entire study model was accepted and thought to be good. The goals of this study were to explore how strong the link was between GBP and banks' performance and to find out the role of competitive advantage in explaining this link. A study that used AMOS found that GBP is linked to CA and banks' performance in a good way. It was also found that CA has a big effect on banks' performance. Using Baron and Kenny's (1986) method for mediation analysis, it was found that the link between GBP and their performance is kept alive by CA. The first hypothesis shows that PCBs have a strong link between GBP and their performance. The significant link between GBP and their performance is measured by the beta value of 0.292 (t = 6.053, p-value 0.001), which proves Hypothesis 1. The results of Zheng et al. (2021), Rehman et al. (2021), Rishal and Joshi (2018), and Shaumya and Arulrajah (2017) all show that GBP has a good effect on banks' performance. Banks are a key part of making the change to a low-carbon economy easier. The study findings confirm the results of Kumar et al., 2024 that Indian Banks are actively building human skills through a variety of green activities, such as teaching its staff, and a green award system, which will improve their performance outcomes. The study findings also reveal that environmentally conscious employees will fund renewable sectors that are closely linked with the UN Sustainable Development Goals, which will elevate their brand image and consequently their performance (Opoku et al., 2024; Prokopenko et al., 2023). Responsible banking at Indian banks means that environmental and social issues are considered in the Bank's total risk analysis. To do this, the Bank made an Environmental and Social Organization Approach to evaluate the environmental and community hazards of loans and make sure that these risks are within a set of international and national standards. According to the Indus Land Bank ESG report for 2021-22, there will be a 54% decrease in paper emissions compared to FY 2019-20, 53,440 kg of e-waste will be recycled through approved suppliers, and 5,252 MW of electricity will be saved through several efforts to save energy. So, all these green banking methods help finance green areas and help the environment.

Hypothesis 2 said that there was a strong link between GBP and CA. The strong link between GBP and CA is measured by the beta value of 0.495 (t=9.833, p-values 0.001). Vidyakala (2018), Raihan (2018), and Miah et al. (2018) all say that their green practices create a good impact on the CA, which backs up Hypothesis 2. This study is consistent with previous studies (Malik et al., 2023, Tu and Wu, 2021) as all confirm that green strategies thrive in innovation and customer engagement driving firms' competitiveness. Mustafa et al., 2023 find that green human resources management practices like green recruitment and training significantly influence banks' competitive strength, aligning with this study's results. González-Viralta et al., 2023 study indicates that financial institutions are working on several projects and making their green loans more diverse to increase their exposure to environmentally conscious customers and hence gain a competitive edge. Hence, financial institutions are already well on their way to attracting customers by funding green projects and programs like the WASH program, electric cars, and green buildings. All these things influence how well banks take care of their customers which will surely enhance their performance. So, green banking practices affect the organization's success by creating a positive impact on its market positioning.

Hypothesis 3 said that there was a strong link between OP and CA. The significant link between OP and CA is measured by the beta value of 0.428 (t = 9.146, p-value 0.001), which proves Hypothesis 3. So, the study backs up the results of Chen et al. and Zhang et al. by showing that CA is a good indicator of their performance process. Asiaei et al. (2023) show that businesses adopting green strategies influence their financial performance and competitiveness. Barakat et al., 2023 study also indicates that green training improves resource use, saves cost, and enhances operational efficiency. All these factors boost a firm competitive advantage that directly impacts business performance. Policymakers and financial institutions are dedicated to making the world a better place by making its activities, systems, and processes as green as possible, which directly impacts competitiveness and performance (Xu et al., 2023). Ali et al., 2022 study also finds that the banking sector motivates retail banking customers to switch to electronic accounts to save paper, to use online banking services to cut down on emissions caused by travel, and to have a big office. By taking these steps, financial institutions are stepping up their game in the sustainability drive that gives them a competitive advantage and will consequently lead to improved performance.

Hypothesis 4 measures the importance of GBP on performance by taking CA as a mediating factor. The significant link between GBP and their performance when CA acts as a mediator is measured by the beta value (path ab=0.19***), which proves Hypothesis 4. The study shows that the condition for partial mediation is met and hence confirms Hypothesis 4. This backs up what Zhang et al., 2022; Waqas et al., 2021 found. Khan et al., 2020 find that firms are getting rid of their fossil fuel interests and putting their money into green energy and energy-efficient ways to meet their energy needs. This gives a positive signal to their stakeholders that today's banks value customer preferences. This will automatically increase their customer base thus placing them better than their rivals and enhancing their performance. Zhu and Yang, 2021 find that banks are holding classes for their employees to teach them how to save energy and spread the word about the importance and need of incorporating sustainability into their operations. All these activities will improve banks' performance as they will be operating much better than their rivals in a highly competitive market. So, CA is a bridge between the GBP and their performance. So, we can say that banks' performance can only be improved if GBP and CA are brought together. If banks take green banking seriously, it will help businesses to become more competitive and will augment their performance (Biswas, 2011). Green banking can be a very important part of helping a country grow and progress. So, a bank must use real facilities, IT, and responsible loans to make banking processes more efficient and effective.

Conclusion, Implication and Future Scope

This study has explored the considerable relations between GB, CA, and OP in the finance region. 423 banking employees were contacted to collect the data. Data was analysed using IBM SPSS AMOS version 22.0. The research findings highlight that the GBP has a considerable impact on Indian banks' competitive advantage as well as performance. The study findings provide concrete ways in which financial institutions can support sustainability objectives that improve their goodwill and performance. This might entail conducting green training, solar panel installation, carpooling by staff members, or better waste management. All these initiatives directly and positively influence performance. The findings of the present work have several implications for banks as well as other institutions. The findings of the study will be beneficial for academicians, bankers, banking institutions, government officials, and managers in India to promote green banking and avenues for competitive advantage to augment the bank's organizational performance and, consequently, the sustainable growth and economic stability of the country. This study will encourage Indian banks that wish to innovate but are held back by worries that the innovation will not be embraced enthusiastically by the market and won't affect bank performance. Hence, banks must adopt and promote green products such as green loans, green bonds, or green savings accounts. The study encourages banks to continually conduct assessments of their performance so that they can get competitive strength. Similarly, stakeholders should engage in the development and implementation of green banking practices for sustained performance. Despite its significant contribution, the study faces several shortcomings. Since the study was conducted in the Uttarakhand region, future studies can evaluate the study variables in different states, countries and sectors. Future studies can also take other banks than public sector banks to test the relationship between variables. Finally, future authors can research the long-term impacts of green financing, looking into new metrics to assess environmental performance, or looking into how technology can improve green banking practices.

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