

**Research Article****Raising Green Finance Allocation Through Robust Governance:
Evidence from Pakistani Corporations***¹Arshad Javed | ²Younas Iqbal Qazi | ³Mezhar Hussain | ⁴Ehsan Ullah

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Citation

Javed, A., Qazi, Y. I., Hussain, M., & Ullah, E. (2024). Raising green finance allocation through robust governance: Evidence from Pakistani corporations. *Administrative and Management Sciences Journal*, 3(1), 25-36

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ABSTRACT

This study investigates the relationship between Corporate Governance (CG) and the distribution of green funding among Pakistani businesses. The study uses multiple regression analysis, correlation analysis, and descriptive statistics to evaluate the effects of Firm Size (FS), Profitability (PROF), Environmental Disclosure (ED), Board Independence (BI), Corporate Governance Scores (CGS), and Board Size (BS) on green financing using data from 100 firms trading in the PSX by using convenience sampling of non-probability sampling techniques. The results show that the distribution of green funding is greatly improved by excellent corporate governance. Increased green money is positively correlated with larger and more independent boards, greater environmental disclosures, and higher governance rankings. Another important factor is firm size and profitability, with bigger and more successful businesses drawing more green funding. Sectoral discrepancies are evident in the fact that some industries have limited access to green funding, notwithstanding these favourable links. The findings emphasize how crucial business attributes and governance procedures are to encourage sustainable investment. The study's conclusion—which offers important information to Pakistani officials and business executives—is that strong CG and transparency are necessary to get Green Finance (GF). Subsequent investigations ought to go deeper into legislative structures and industry-specific obstacles to augment the distribution of green funds.

KEYWORDS

Corporate Governance, Green Finance, Environmental Disclosure, Corporate Governance Scores, Green Finance Allocation

1 | INTRODUCTION

A vital tool for addressing environmental issues on a global scale and advancing sustainable economic growth is Green Financing (GF). It includes financial tools, investment plans, and regulations designed to assist endeavors and projects with favourable environmental effects (Ye & Dela, 2023). The idea of “green finance” has been more popular recently, thanks to growing global awareness of environmental deterioration, resource depletion, and climate change. Projects and activities that advance environmental sustainability, such as pollution reduction, energy efficiency, and renewable energy, are the focus of green finance (Li & Umair, 2023). Although the idea of GF is relatively new in Pakistan, it is gaining popularity quickly because of rising environmental consciousness and

legislative support. How businesses disclose their sustainability initiatives, manage environmental risks, and draw in green capital is largely shaped by their CG. Building investor confidence in sustainable initiatives requires transparent, accountable, and ethical behaviour, all of which are fostered by well-functioning governance frameworks. Research indicates that organizations possessing robust governance structures are more likely to successfully incorporate environmental factors into their corporate goals, which in turn improves their capacity to obtain green money (Agrawal et al., 2024; Karn et al., 2023; Walls et al., 2012; Wang et al., 2023).

1.1 | Green Finance in Pakistan

Though still in its infancy, GF practices are becoming more and more popular in Pakistan. Significant environmental issues that the nation faces include deforestation, air and water pollution, and increased susceptibility to the effects of climate change, such as droughts and floods (Singh & Singh, 2017). Acknowledging these obstacles, Pakistan has implemented measures to encourage green finance using regulatory adjustments, incentives for eco-friendly investments, and collaborations with global organizations. Pakistan is seeing a rise in GF as a result of its recognition of the need for sustainable growth in the face of environmental issues and the global trend toward green investments. Pakistan has demonstrated initiative in creating a regulatory structure to facilitate GF endeavors (Anas et al., 2023). To encourage banks to incorporate environmental factors into their lending and investment choices, the State Bank of Pakistan (SBP) has released guidelines and incentives.

In Pakistan, the issue of green bonds has become an important way to finance ecologically friendly projects. The purpose of these bonds is to raise money, especially for initiatives that support the growth of renewable energy sources, environmental preservation, and climate change mitigation. Projects using renewable energy have been given priority in Pakistan as part of its green finance goal (Ahmed et al., 2022; Wang et al., 2022). The creation of wind, solar, and hydroelectric projects is one initiative that aims to diversify the energy mix and lessen dependency on fossil fuels, thereby promoting energy security and environmental sustainability. Pakistan's public and private sectors are undertaking GF initiatives at an increasing rate (Khan et al., 2021). While commercial businesses are looking for ways to obtain green funding for environmentally friendly initiatives, public sector organisations are setting the standard by investing in sustainable infrastructure. There are still issues with market awareness, financial risk assessment for green enterprises, and regulatory compliance (Mukhtar et al., 2023). Still, there are plenty of chances, given the increasing interest in sustainable investments around the world and Pakistan's opportunity to establish itself as a regional leader in GF. International organisations and development partners greatly assist Pakistan's CF goal. Partnerships provide a strong emphasis on capacity building, technical support, and integrating regional practices with international requirements in order to attract overseas green investments (Zhang et al., 2023).

1.2 | Research Gap

Even though CF is becoming more and more popular worldwide, little is known about how CG policies affect the distribution of green capital in Pakistan (Ahmed et al., 2023). The majority of extant literature centers on industrialized economies, with relatively little empirical investigation conducted in emerging markets such as Pakistan. To close this gap, the following goals will be examined in this study: 1. To evaluate how Pakistani corporations are currently allocating green funding. 2. To examine how corporate governance elements—such as board composition, governance scores, and environmental disclosures—affect the distribution of green funding. 3. To determine the legal framework and industry-specific dynamics affecting Pakistan's accessibility to green finance.

2 | LITERATURE REVIEW

The set of guidelines, customs, and procedures that regulate how a business is run is known as CG. Stakeholder involvement, risk management, CEO compensation, and board composition are just a few of the elements it covers (Aksar et al., 2024). A company that practices effective CG will always act in the best interests of its stakeholders, ethically and openly. Due to international agreements like the Paris Agreement and the Sustainable Development Goals (SDGs) of the United Nations, GF has experienced substantial growth on a global scale (Lehmann, 2023). To combat climate change and advance sustainable development, nations are progressively integrating green financing into their economic strategies. Although the government and regulatory agencies are promoting sustainable financial practices, GF is still in its infancy in emerging economies like Pakistan (Habib et al., 2024).

2.1 | Corporate Governance in Pakistan

It is imperative to address Pakistan's contradictory views on green finance. Due to the initial expenditures associated with implementing green technologies, some businesses regard it as an expense. In contrast, others see it as a strategic investment with the potential to yield long-term financial rewards like energy savings, regulatory compliance, and improved brand recognition (Ullah et al., 2022). Reforms and policies aimed at enhancing corporate accountability and transparency have influenced the evolution of CG in Pakistan (Gull et al., 2023). One important factor in the creation and application of CG rules and guidelines has been the Securities and Exchange Commission of Pakistan (SECP). The CG Code of the SECP describes the values and procedures that companies have to follow. These cover things like shareholder rights, disclosure regulations, audit committees, and board composition criteria (Ahmad & Mahmood, 2024). The code seeks to guarantee sustainable business practices, increase investor confidence, and strengthen corporate accountability. Strong CG frameworks have been put in place by several Pakistani businesses, which has enhanced stakeholder trust and performance (Farooq et al., 2022). Engro Corporation and Habib Bank Limited, for example, have received recognition for their effective risk management, transparent reporting, and proactive stakeholder involvement in their governance procedures (Rasheed et al., 2024).

A broad spectrum of financial instruments and investments that promote ecologically sustainable initiatives are included in the concept of "green finance" (Lee, 2020). These consist of energy-efficient and renewable energy project equity investments, green bonds, and green loans. To encourage GF, the SBP has launched a number of projects. One framework that banks can use to include environmental risk management in their operations is the Green Banking Guidelines (Kumari et al., 2024; Lukšić et al., 2022). To further promote investments in sustainable energy solutions, the SBP provides concessional funding for renewable energy projects. To encourage CG, the SBP has launched a number of projects. One framework that banks can use to include environmental risk management in their operations is the Green Banking Guidelines (Park & Kim, 2020). To further promote investments in sustainable energy solutions, the SBP provides concessional funding for renewable energy projects (Park & Kim, 2020). Wind and solar energy projects, trash management programs, and energy-efficient building projects are just a few of the GF projects that have been started in Pakistan. These initiatives highlight how GF can propel national sustainable development (Wang et al., 2022).

2.2 | Corporate Governance's Effect on GF

Several theoretical frameworks can be used to analyse the connection between GF and corporate governance. For instance, agency theory emphasizes how crucial it is to match management's interests with shareholders in order to advance sustainable business practices. According to stakeholder theory, businesses must take into account the interests of all parties involved, including the environment, when making decisions (Orts & Strudler, 2002; Parmar et al., 2010). According to the stakeholder theory, businesses have obligations to other stakeholders, such as the environment, in addition to shareholders. As businesses implement sustainable practices to satisfy the demands of communities, customers, and regulators, this approach promotes green finance (Schaltegger et al., 2019). The Natural Resource-Based View (NRBV) highlights that sustainable utilization of natural resources can lead to competitive advantage. It is in favor of allocating green finance as an investment in long-term viability, cost savings, and resource efficiency (McDougall et al., 2022). These theoretical backgrounds support to this study impact of CG on GFA.

Effective CG can affect GF in a number of ways, including 1. Green investors are drawn to companies that adhere to high standards of transparency and disclosure because they receive dependable information about environmental risks and opportunities. 2. Risk Management: Sturdy governance procedures guarantee that environmental hazards are suitably handled, which improves the sustainability of green initiatives. 3. Stakeholder Engagement: The success of GF programs depends on the involvement of stakeholders, such as the community, employees, and investors. 4. strategy goal: Businesses that integrate sustainability into their long-term strategy goal are more likely to draw green investments (Long et al., 2023). The performance of green financing projects is positively correlated with corporate governance procedures, according to empirical research conducted in Pakistan (Chen et al., 2022; Rehman et al., 2021). Green money is generally more accessible to companies with higher governance scores, indicating the significance of governance in advancing sustainable financial practices. In the guidelines of the Above literature, this study proposed the following hypothesis for the study.

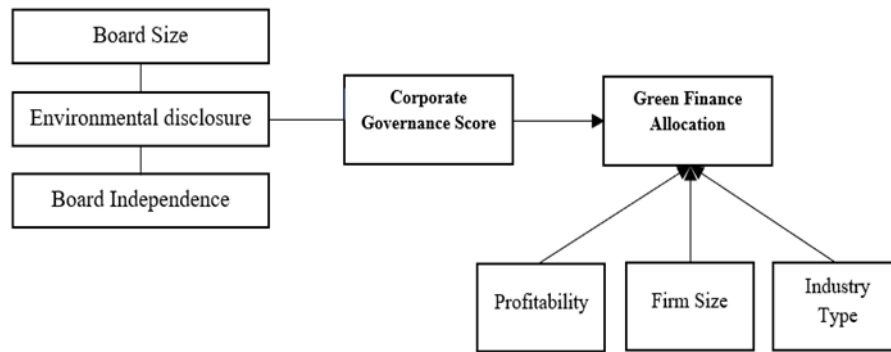


Figure 1: Theoretical Framework

H1: Corporate governance score has a positive impact on green finance allocation in Pakistani firms.

$$GFA_{i,t} = \beta_0 + \beta_1 CGS_{i,t} + \sum_{i=2}^n (\beta_i) Control + \varepsilon_{i,t} \quad 1$$

In the above equation $GFA_{i,t}$ is showing GF allocation β_0 is the intercept, β_1 is coefficient, $CGS_{i,t}$ is CG score and $\varepsilon_{i,t}$ error term.

3 | METHODS

SBP, the SECP, company annual reports, and industry reports were the sources of the data collection. The samples were collected from 2015 to 2023 using convenience sampling of non-probability sampling techniques. One hundred publicly traded Pakistani companies from a range of different sectors (financial and non-financial) of industries make up the sample. To determine how governance scores, board composition, environmental disclosures, business size, and profitability affect the distribution of green finance, data on these factors are gathered and examined (Gao et al., 2024). Initially, we selected a sample of 200 firms, but due to the non-availability of data and other constraints, we narrowed down the sample size to 100 firms. To investigate the connection between CGS factors and GFA, we used multiple regression analysis (Seddon et al., 2023). Regression analysis, correlation analysis, the creation of descriptive statistics, and the creation of graphical representations were all done utilizing statistical tools, such as SPSS and Stata, for data analysis.

3.1 | Measurement of Variables

3.1.1 | Corporate Governance Score (CGS)

A systematic assessment approach that assesses important governance factors such as board composition, independence, openness, accountability systems, and compliance with regulations is frequently used to compute CGS (Emeka-Okoli et al., 2024; Teixeira & Carvalho, 2024). Each dimension may be assigned a weighted score based on its importance, and these scores are aggregated to derive an overall CGS for each company (Black et al., 2023). Based on the significance of each component, a weighted score may be provided, and these values are added together to determine the total CGS for each company. To understand how CGS is calculated, see the example given. The following dimensions apply accountability (30%), board independence (20%), transparency (15%), compliance (25%), and ethics (10%). Scores: Compliance (85/100), Accountability (70/100), Board Independence (80/100), Transparency (90/100), and Ethics (75/100). Finally, we used the equation to Determine the value of CGS (Lu et al., 2024; Monteiro et al., 2023).

$(85 * 0.25) + (70 * 0.30) + (80 * 0.20) + (90 * 0.15) + (75 * 0.10) = 77.5$ is the CGS calculation.

3.1.2 | Board Composition

3.1.2.1 | Board Size

The term “board size” simply means the total number of people on the board of directors of a corporation. Add up all the members of the board (Sharma et al., 2023).

3.1.2.2 | Board Independence

The percentage of independent directors on the board as a whole is used to measure board independence (Biswas et al., 2023). Add up all the members of the board. Determine the proportion of independent directors—directors unaffiliated with the corporation or its principal investors—among the board members. Determine the proportion of independent directors among all board members who are not connected to the company or its principal stakeholders. 40% of the total—4 out of ten—are independent.

3.1.3 | Environmental Disclosure

The Environmental Disclosure (ED) project assesses the volume and quality of environmental data that businesses publish in their yearly reports, sustainability reports, or special disclosures (Yip & Yu, 2023). To evaluate the thoroughness and openness of environmental disclosures, create a checklist or scoring system. Give weights or scores to various disclosure categories (such as resource conservation, emissions reduction initiatives, and environmental risk management), then add up the scores to get an overall ED score for each company. Ecological risk management (score: 85/100), resource conservation efforts (score: 90/100), and emissions reduction measures (score: 80/100) are just a few examples of the comprehensive disclosure categories that are evaluated using weights and scores. $(80 * 0.4) + (90 * 0.3) + (85 * 0.3) = 83$ is the ED calculation. As the previous regression analysis showed, these computed metrics offer quantitative measurements that may subsequently be statistically analyzed to comprehend their influence on the distribution of green funding. The method used to calculate each statistic guarantees an organized way to assess board performance, environmental reporting transparency, and governance practices—all of which are critical for drawing in green investments.

3.1.4 | Green Finance Allocation

The term GFA is used to describe the amount of money that a business sets aside expressly for investments, projects, or activities that have an environmental benefit (Glavas, 2023). The following actions and standards are used to measure GFA in an organized and trustworthy manner.

3.1.4.1 | Explain Green Projects

Projects that support environmental sustainability are referred to as green projects (Kaswan et al., 2023). These comprise some projects given but are not restricted to: 1. Projects utilizing renewable energy sources (such as hydroelectric, solar, and wind power). 2. Increases in energy efficiency. 3. Preventing and controlling pollution. 4. The management of natural resources sustainably. 5. Recycle and waste management initiatives. 6. Initiatives to conserve water. 7. Initiatives for sustainable transportation.

3.1.4.2 | Gathering Information

There are several places to find information about GFA, such as annual financial reports, reports on corporate social responsibility (CSR) or sustainability, reports to oversight organisations, press releases and announcements from the business and reports or databases from third parties that monitor investments in the environment.

3.1.4.3 | Value Measurement method

Monetary Value: The precise sum of money allotted to environmentally friendly initiatives; this is usually stated in the business’s sustainability or financial reports (Chygryn et al., 2020). Percentage of Total Investment: The amount allocated to green initiatives out of all capital expenditures or investments.

3.1.4.4 | GFA Calculation

The following procedures may be involved in the GFA calculation: Determine Applicable Expenses: Obtain comprehensive data about spending that has been designated for environmentally friendly initiatives (Fan et al., 2018; Zhu et al., 2023). Total Information: Add up all of the green funding that each business has received over a given time frame, usually a fiscal year. Normalize Data: To account for variations in firm size, GFA may be normalized by the total assets or sales of the business for comparative reasons. Let's say a business includes the following information in its yearly sustainability report: A Rs. 30 million investments in a new solar power facility. About Rs. 50 million was invested in enhancing manufacturing processes' energy efficiency. A Rs. 20 million initiatives for recycling and trash management were funded. By Adding Rs. 30 million + Rs. 50 million + Rs. 20 million = Rs. 100 million. The percentage of GFA would be as follows if the company's annual capital expenditures total \$1000 million: $GFA \text{ Percentage} = (\text{Rs. } 100 \text{ million} / \text{Rs. } 1000 \text{ million}) \times 100\% = 10\%$ After the GFA data is gathered, statistical analysis is performed to determine how it relates to other variables, including corporate governance scores, board composition, and firm-specific elements.

3.1.5 | Control variables

Three control variables are part of the study: FS, PROF, and IT. FS is calculated using the natural logarithm of all assets. Return on assets (ROA) is a measure of PROF. Industry types include manufacturing, trading, services, technology, and others. The category variable of industry type denotes the various sectors in which the enterprises function. Using descriptive statistics, which are better suited for continuous variables, to summarize categorical data is difficult. Examples of these statistics are mean, standard deviation, minimum, and maximum. Alternatively, frequencies or proportions might be used to summarize the industry type.

Table 1
Variables Abbreviations and Definitions

Abbreviations	Full Form	Definitions
BI	Board Independence	Percentage of a board's independent directors.
BS	Board Size	The total amount of board directors.
ED	Environmental Disclosure	They are reporting on sustainability initiatives and their effects on the environment.
GFA	Green Finance Allocation	Money set aside for projects that respect the environment
GF	Green Finance	Monetary contributions intended to promote environmental sustainability.
IT	Industry Type	This category stands for many economic sectors.
CG	Corporate Governance	A set of guidelines, procedures, and policies that control an organisation.
CGS	Corporate Governance Score	A measurable indicator of how well a company's governance procedures are performing.
PROF	Profitability	The ability of the company to turn a profit in relation to its assets or revenue.
ROA	Return on Equity	A financial performance metric determined by dividing net income by equity held by shareholders
SBP	State Bank of Pakistan	Pakistan's central bank is known as the State Bank
SECP	Security and Exchange Commission of Pakistan	The country's capital markets and corporate sector regulator.

4 | RESULT OF THE STUDY AND INTERPRETATION

Table 2 shows descriptive statistics of the study's variables. Among the sample enterprises, the average allocation of green finance is 151 million PKR, with a standard deviation of 44 million PKR, which suggests that there is a moderate degree of variance in the corporations' allocation of green money. The standard deviation is 10, while the mean CGS is 75. The rankings, which vary from 50 to 90, indicate that while some businesses have excellent

governance procedures, others may use a lot of development. Board sizes range from five to fifteen members, with nine being the norm. According to this, the majority of businesses have a moderately sized board, which is consistent with best practices in corporate governance.

Table 2
Descriptive Statistics

Variable	Obs	Mean	Std. dev.	Min	Max
GFA	900	Rs. 151 M	Rs. 44 M	Rs. 50 M	Rs. 300 M
CGS	900	75.00	10.00	50.00	90.00
BS	900	9.000	2.000	5.000	15.00
BI	900	0.454	0.152	0.201	0.700
ED	900	0.601	0.200	0.101	0.902
FS	900	12.50	1.200	10.00	15.00
PROF	900	0.080	0.040	0.020	0.154
IT Distribution	Freq	%			
Energy	20	20%			
Agriculture	16	16%			
Manufacturing	24	24%			
Services	20	20%			
Technology	10	10%			
Others	10	10%			

GFA = Green Finance Allocation, CGS = Corporate Governance Score, BS = Board Size, BI = Board Independence, ED = Environmental Disclosure, FS = Firm Size, PROF = Profitability, IT = Industry Type

With a standard deviation of 15%, the average board independence is 45%, which shows that the average number of independent board members is close to fifty percent, which is important for making impartial decisions. With a range of 10% to 90%, the average score for environmental disclosure is 60%, which demonstrates the wide range in the amount of ecological data that businesses release. The sample exhibits a range of company sizes, as indicated by the average firm size of 12.5, which is determined by taking the natural logarithm of total assets. ROA, which is a measure of profitability, ranges from 2% to 15%, with an average of 8%

Table 3
Correlation Analysis

Variables	GFA	CGS	BS	BI	ED	FS	PROF
GFA	1						
CGS	0.43	1					
BS	0.29	0.52	1				
BI	0.24	0.61	0.36	1			
ED	0.41	0.56	0.44	0.52	1		
FS	0.36	0.41	0.51	0.46	0.32	1	
PROF	0.21	0.32	0.26	0.31	0.21	0.39	1

Table 3 shows the correlation analysis of the variables. GFA exhibits a positive correlation with every variable. The strongest correlations were seen with the ED (0.41) and the CGS (0.43), suggesting that greater green finance allocation is linked to improved governance and more thorough environmental disclosures. Significant positive associations were found between ED (0.56) and BI (0.61), indicating that corporations with higher governance scores typically have more independent boards and better environmental disclosure procedures. Furthermore, it exhibited a moderate correlation with BS (0.52), suggesting that stronger governance is associated with larger boards and positively linked with the majority of variables, particularly FS (0.51), suggesting that boards of larger firms are often larger. Highest connection (0.61) with CGS, highlighting the crucial role independent directors play in improving corporate governance. Moderately linked with FS (0.46) and ED (0.52), two key factors related to

governance. There is a strong association between BI (0.52) and CGS (0.56), suggesting that corporations with more independent boards and stronger governance release more environmental data. Moderately linked with FS (0.32), indicating a higher likelihood of environmental disclosure for larger businesses. They are moderately linked with CGS (0.41), BI (0.46), and BS (0.51), suggesting that larger companies typically have superior governance procedures and larger boards. Stronger but positive correlations with other variables show that, although profitability and governance are related, their effects are not as strong as they may be (Bauer et al., 2004).

4.1 | Hypothesis Testing

The findings of the regression analysis show that corporate governance policies have a big influence on how green funding is allocated to Pakistani businesses. Strong corporate governance is strongly correlated with the increasing allocation of green money, as demonstrated by substantial positive correlations for these variables. Higher governance scores, larger boards, stronger board independence, and better environmental disclosures typify strong corporate governance (Nkundabanyanga, 2016). More green capital is drawn to larger, more lucrative businesses, indicating that resource availability and financial stability are critical for green investments (Mrkajic et al., 2019). Sectoral disparities are marked by the fact that some industries have less access to green finance than others. The model highlights the significance of governance and corporate factors in influencing sustainable financial practices in Pakistan, accounting for 65% of the variability in the distribution of green finance.

Table4

Hypothesis Testing

GFA	Coefficient	Std. err	T-Stat	P-Value
Intercept	20.51	5.112	4.020	0.0000
CGS	1.512	0.313	5.001	0.0000
BS	0.803	0.211	4.010	0.0000
BI	10.00	3.001	3.332	0.0010
ED	15.00	4.001	3.750	0.0000
FS	2.512	0.800	3.131	0.0020
PROF	5.012	2.001	2.501	0.0131
IT	-1.001	0.500	-2.003	0.0451

GFA = Green Finance Allocation, CGS = Corporate Governance Score, BS = Board Size, BI = Board

Independence, ED = Environmental Disclosure, FS = Firm Size, PROF = Profitability, IT = Industry Type

R-squared: 0.65 p-value = 0.000; adjusted R-squared = 0.63; F-statistic = 32.50

A one-point rise in the governance score is correlated with a 1.5 million PKR increase in the allocation of green money, according to the coefficient for CGS, which is 1.5. The statistical significance of this outcome (p-value < 0.001) highlights the critical role that sound company governance plays in drawing in green capital. With a board size coefficient of 0.8, an increase in green finance allocation of 800,000 PKR is correlated with every extra board member. The p-value of less than 0.001 indicates the significance of this discovery, which implies that larger boards could offer superior supervision and decision-making powers, thereby promoting green investments. Similarly, a 1% rise in the percentage of independent directors is linked to a 10 million PKR increase in the distribution of green financing, according to the coefficient of 10.0 for board independence. Green investors who care about minimizing risks and upholding moral behaviour place a high value on independent directors' ability to provide governance monitoring and impartial decision-making. ED has a coefficient of 15.0, indicating how important it is in luring green capital. An increase in green finance allocation of 15 million Pakistani rupees is correlated with a 1% improvement in environmental disclosure standards. In addition to showcasing a business's dedication to sustainability, transparent and thorough environmental disclosures give investors the knowledge they need to evaluate environmental risks and possibilities. Favorably impact the distribution of green funds. According to the coefficients of 2.5 and 5.0, respectively, more lucrative and larger businesses are better positioned to draw in green investments. Greater market presence and resources enable larger companies to undertake expensive green projects. At the same time, profitability acts as a stand-in for financial stability and the ability to maintain investments in sustainability programs.

The significance of ED in drawing GF is indicated by its coefficient of 15.0. The distribution of green funding increases by 15 million Pakistani rupees for every 1% improvement in environmental disclosure procedures. In an open and thorough environment compared to other industries, certain industries may find it more difficult to obtain green financing, as indicated by the Industry Type (IT) negative coefficient (-1.0). This research highlights the sector-specific character of GF since certain companies may find it more challenging to secure green investments due to their greater environmental implications or regulatory uncertainties. It also emphasises how specific laws and incentives are required to support green finance in all spheres of the economy.

4.2 | Fit of the Model

With an R-squared value of 0.65, the regression model demonstrates a strong fit and tells us that the independent variables in the model account for 65% of the variability in the distribution of green financing. Further confirming the model's general robustness and reliability in elucidating the connections between corporate governance, environmental disclosure, business characteristics, and green finance allocation is the strong F-statistic (32.50).

5 | DISCUSSION ON RESULTS

The study's noteworthy conclusions are outlined in the discussion section, which also emphasizes how enhanced financial reporting quality is favorably correlated with green finance investment efficiency and efficient corporate governance. Stakeholder theory, which promotes corporate practices that are in line with stakeholders' interests in sustainability, is supported by these findings. Based on a comparison of these results with previous research, linkages that have already been established are reinforced, and Pakistan's distinct cultural characteristics are acknowledged as potential influencing factors. The practical implications imply that in order to foster stakeholder trust, businesses should improve reporting transparency, and politicians should support measures that position green finance as a strategic investment rather than an expense. Recognizing the study's shortcomings, such as sample size, creates opportunities for more research, especially when it comes to analyzing the long-term impacts of green programs across a range of industries.

6 | CONCLUSION

This study examines how corporate governance affects Pakistani companies' distribution of green money, highlighting the crucial role that good governance practices play in drawing in sustainable investments. The results show that businesses are more effective in obtaining green finance when they have strong CG, which is demonstrated by better governance scores, larger and more independent boards, and thorough environmental disclosures. Furthermore, there is a significant correlation between business size and profitability and the allocation of green money, indicating that larger and more financially stable companies are better suited to participate in green initiatives. Industry type affects access to green finance despite these beneficial links, suggesting that some industries may have difficulties obtaining such funding. In order to improve the allocation of green financing and, eventually, support sustainable development in Pakistan, the study emphasises the necessity of robust governance structures and open environmental practices. This study offers insightful information to company executives, regulators, and legislators who want to promote a greener economy through focused financial strategies and better governance.

In the study conducted by Xie et al. (2019); Xu and Zhu (2022) investigated how CGS affects the distribution of green capital in underdeveloped nations. The results showed that companies that scored higher on CGS and had more independent boards attracted a lot greener money. In contrast to governance indicators, environmental disclosure had a less significant effect. Strong CG was a major factor in determining how green cash was allocated, just like in our study. This study varied from ours in that we discovered a significant impact of environmental disclosure. Other research by Correa-Garcia et al. (2020); Jizi (2017) examined the connection between sustainable finance in emerging markets and the size and independence of boards. Higher sustainable funding was correlated with larger and more autonomous boards. Industry type was not taken into consideration, although profitability was a factor as well.

7 | IMPLICATIONS AND FUTURE DIRECTION OF STUDY

For investors, corporate executives, and policymakers in Pakistan and elsewhere, these findings have important ramifications. Attracting green funding and achieving sustainable development goals require strengthening corporate governance procedures, improving environmental disclosures, and encouraging board independence. Furthermore, increasing awareness and supporting capacity-building programs can assist businesses from a variety of industries in taking advantage of openings in the expanding green finance sector, helping to create a more resilient and sustainable economy. Subsequent studies ought to examine the function of regulatory frameworks in augmenting the distribution of green financing and scrutinize obstacles particular to certain sectors in order to formulate customized approaches. Furthermore, longitudinal research might investigate the long-term effects of enhanced corporate governance on outcomes related to green finance. In further study, corporate social responsibility can be used as the moderator.

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