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[Green Finance and CSR: Aligning Corporate Investments with Sustainable Development Goals (SDGs)]

Mazhar Hussain
Finance Department, Government of Punjab. mazhar.gashkori@gmail.com
Yasir Sultan
Student MSPM, SZABIST, Islamabad. yasirsultan82@gmail.com
Asif Iqbal
MS in Development Studies, IM Sciences Peshawar. asifiqbalmpa334@gmail.com
Kashaf Akhtar
SZABIST Islamabad. kashafkhanakhtar@yahoo.com

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ABSTRACT

The paper examines the relationships between green finance, corporate social responsibility (CSR) and alignment with the Sustainable Development Goals (SDGs) of publicly listed companies in Pakistan. This quantitative method was conducted with a sample of 75 listed firms in the PSX and the analysis of data was done using the regression and correlation models. The research established a high positive correlation between the CSR efforts and SDG relations (6.78, p=.001) and between the green finance and SDG relations (4.32, p=.007) with the total explained variance of, 91 percent (R Sq = 0.91). Financial performance is also a key aspect and both CSR (2.80, p = .015) and green finance (3.25, p = .021) influence better scores on the return on equity (ROE) in addition to both influencing the market valuation (R 2 = .88). The SDG alignment also mediates financial performance but in lesser multiple times. The results strengthen the strategic implication of integrating ESG values into organizational finance and governance. Within the regulatory trends within Pakistan and the world at large with regards to sustainability, green finance and CSR interplay demonstrates that it is not only a matter of ethical compliance in a firm but an important feature to remain profitable in the long term and sustainable in the eyes of investors. The paper provides practical implications to companies, policy makers, and regulators who wish to achieve sustainable growth based on responsible investment and alignment with the SDGs.

Keywords; Corporate Social Responsibility, ESG, Financial Performance, Green Finance, Market Valuation, SDG Alignment, Sustainability, Sustainable Development Goals

Introduction

Climatic change, resource scarceness, and social inequity are increasingly becoming serious problems that have put untold pressure on businesses to integrate sustainability into their echelons (OECD, n.d.; Wikipedia, 2023). In that respect, the twofold emergence of green finance, including green bonds, green loans, and sukuks, and Corporate Social Responsibility (CSR) can be seen as a potent strategic move, as it offers companies ways to shift their investments rather to the projects that satisfy the needs of all stakeholders as well as contribute to the greater good of society (Purwanti, 2024; Wikipedia, 2023). The study examines the compatibility of these mechanisms to the Sustainable Development Goals (SDGs) of the United Nations and how it affects financial performance of businesses.

Sustainable finance currently experienced a blast in growth on a global level as green instruments promote capital flows to the projects focusing on clean energy, sustainable agriculture, and biodiversity directly linked to such SDGs as Affordable and Clean Energy (SDG 7) and Climate Action (SDG 13) (Wikipedia, 2023; Purwanti, 2024). In parallel, CSR has developed beyond charity acts to a corporate-wide approach that improves a company and the environment and its relationships with stakeholders (Saher et al., 2023; Wikipedia, 2023).

Although the policies on green finance were implemented early in Pakistan, among them namely the Green Banking Guidelines by State Bank of Pakistan (2017), the study on a combined effect of green finance and CSR on SDG orientation and financial performance of local listed companies are scarce (Shaikh, Zafar, & Arshad, 2024; Wikipedia, 2023). The present research is addressing that gap by investigating 85 companies listed at the Pakistan Stock Exchange (PSX) between 2016 and 2022. It is analyzed that the green finance activity is closely linked with a 9.8 percent boost in Return on Equity (ROE) and a 12.3 percent improvement on an equity market measure. Moreover, CSR expenditure correlates considerably with SDGs and, in specific with SDG 7 and SDG 13 (Saher et al., 2023; Shaikh et al., 2024; Purwanti, 2024) (SAHER et al., 2023; SHAikh et al., 2024; PURWANTI, 2024). These findings can confirm the argument that green banking and CSR not only respond to ethical demands but also translated by having quantifiable economic effects (Purwanti, 2024; Saher et al., 2023).

Research Background

Green Finance & CSR: International Development

Green finance has been evolving very fast, and it includes specific instruments, such as bonds and sovereign-syuks, that can be used to bring capital to SDG-related works (Wikipedia, 2023; Purwanti, 2024). In the meantime, the course of CSR has shifted far beyond the spontaneous charity to the coherent business strategies, with strong stakeholder support and reputation benefits reflected in it (Wikipedia, 2023; Wikipedia, 2023). According to a meta-analysis, the portion of works where the relationship between ESG/CSR initiatives and financial performance is non-negative or positive makes up about 90 percent of the studies on the topic and can also be attributed to better risk management and availability of capital (Wikipedia, 2023; Wikipedia, 2023).

Situation in Pakistan: Green Finance & CSR Implementation

The Green Banking Guidelines, which have been adopted by the financial regulators of Pakistan, have produced gradual change by inciting banks and companies to integrate the ESG within the lending choices as well as reporting procedures (Shaikh et al., 2024; Wikipedia, 2023). The governance structures involved in green finance allocation are taking shape, despite the fact that green finance allocation is at a modest level compared to the world rates- there is little pipeline in agriculture and low-carbon infrastructure (Shaikh et al., 2024).The PSX listed corporations have quite different CSR disclosure practices. Other works indicate that CSR leads to an increase in sustainable performance with financial performance serving as an intermediary between the two (Saher et al., 2023). Other researchers show that good governance, such as a large board independence, increases the effectiveness of the CSR and access to the green capital (Shaikh et al., 2024).

Research Problem

Although the world is increasingly focusing on sustainability issues, very little integrated empirical evidence exists in Pakistan on the overall impacts of green finance and the Corporate Social Responsibility (CSR) on financial performance and the ability to meet the United Nations Sustainable Development Goals (SDGs). The existing literature tends to focus on CSR or green finance separately and not compare their joint effects at the firm level on financial performance measure like return on equity (ROE), market valuation and SDG harmony. Especially because of the forthcoming regulatory frameworks and scanty ESG disclosure activities in Pakistan in particular, it is yet to be discussed how corporate investments in sustainability can be converted into quantifiable financial and developmental outcomes. The current paper therefore fills this gap by developing Green Finance Index (GFI) and CSR Index (CSRI) of Pakistan Stock Exchange (PSX) listed companies, in an effort to determine the extent to which corporate strategies focusing on sustainability-related aspects meet the objectives of SDGs and can be used to deliver financial returns.

Research Objectives

1. **To measure SDG alignment** by mapping disclosed activities to the 17 UN SDGs.
2. **To evaluate financial outcomes** (ROE, market valuation) resulting from GFI and CSRI engagement.
3. **To identify key SDGs** influenced by CSR spending, focusing on SDG 7 and SDG 13.

Research Questions

RQ1: To what extent are PSX-listed firms engaged in green finance, as measured by GFI?
RQ2: How strongly do these firms commit to CSR, as gauged by CSRI?
RQ3: What is the impact of GFI and CSRI on financial indicators like ROE and market value?
RQ4: Which SDGs show the strongest CSR-driven alignment, particularly among SDG 7 and SDG 13?

Research Significance

The study provides a strong, quantitative model that combines the green finance aspect and the CSR perspective along with SDG mapping to complement past ESG literature by contributing contextual empirical evidence of Pakistan, one of the frontier markets (Faruq & Chowdhury, 2025; Purwanti, 2024). It develops the theory of triple-bottom-line integration and financial prospects of the underlying emerging economy.The indices (GFI, CSRI) created provide benchmarking opportunities to companies and investors that allow the comparative evaluation of sustainability performance, risk-return profiles. The presence of financial benefits attached to investments in sustainability may also consult the interest of impact investing vehicles and ESG-sensitive funds (Wikipedia, 2023; Abuatwan, 2023). Considering that green finance is still nascent in Pakistan, the results can inform the policymakers- SECP, SBP, and PSX- to better the standards of ESG reporting, encourage Sustainable lending, and introduce SDG initiatives-related financial products (Shaikh et al., 2024; Wikipedia, 2023). Proving the business case of investing into sustainability could stimulate the involvement of the whole corporate world. The research will highlight the role of the CSR in SDG 7 (clean energy) and 13 Climate action, making business strategies relevant to the national and international development agenda, thus advancing the process of an increasingly sustainable and inclusive economy in Pakistan (Saher et al., 2023; Shaikh et al., 2024).

Literature Review

Theoretical Foundations: CSR, Green Finance & SDGs

Through Corporate Social Responsibility (CSR) and green finance, isolated ethical engagements have now become strategic tools to achieve both social-environmental performances and their business priorities (Ali, 2024; Kamran et al., 2022). The stakeholder theory holds that firms regulate CSR and sustainability disclosure to enable them to establish legitimacy, gain stakeholder trust and lessen the risk of the firm (Sahar et al., 2023; Ilia et al., 2025). At the same time, the resource-based theory suggests that green innovation and finance transform into an unattainable competence, enhancing the competitive advantage (Kamran et al., 2022). By relating them with the United Nations Sustainable Development Goals (SDGs), scholars interpret that corporate investments in line with the global accounts, like SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action) can have a developmental effect along with shareholder value (Ali, 2024; Kamran et al., 2022).

Green Finance: Mechanisms & Efficacy

Green finance has been rapidly institutionalized globally using green bonds, green sukuk and green concessional finance. Such tools can be useful in fields such as renewable energy, transport, and agriculture, naturally, being fully consistent with various SDGs (Wikipedia, 2023; Purwanti, 2024). To be more exact, big data contribution to financial markets strengthens ESG investing because it allows predictive analysis and capital allocation precision, but macroeconomic stability is an important limiting factor (Faruq & Chowdhury, 2025). Green banking in Pakistan, built upon the 2017 green banking guidelines developed by the state bank of Pakistan, has challenged banks to integrate ESG into the lending process, limit paper transactions and promote green climate resilient financing (Wasi, 2024; Rehman et al., 2024). Pakistani bank surveys indicate that green finance leads to a positive outcome when it comes to CSR performance, where the environment related initiatives and actions experience particular benefit in terms of the improvement of the conditions such as the ease of access to lower interest rates and the encouragement of the regulatory price (Ali, 2024; Kamran et al., 2022).

CSR, ESG Disclosure, and Firm Financial Performance

The analysis of the CSR disclosures (CSRD) effects on financial measures, such as ROE, ROA, and Q of Tobin, is largely positive and neutral, in most countries globally (Wikipedia, 2023). In the Pakistani environment, a direct positive correlation between ESG performance and firm profitability has been noted in listing buildings and companies in the PSX by Mansoor et al. (2024), indicating that sustainable management efforts amount to market returns. In the banking sector, research team found high positive relationship between CSR and performance, particularly when CSR was focused on environmental-related aspects as found by Sheikh & Ullah (2020). As it comes to Islamic banks, however, such conflicting findings are observed, with one group of studies reporting the negative effects of CSR disclosure because of stakeholder cynicism (Islamic banks) and cultural incompatibility (Islamic philanthropy), and the other group reporting the positive effects when disclosures on the economic and environmental front are dominant (Sheikh & Ullah, 2020).

Moderating Role of Green Finance

Studies show that green finance is capable of magnifying the effect of CSR on environmental and SDG performances. The study by Ali (2024) on PSX-listed companies revealed that CSR-environmental performance interconnection is moderated by green finance by displaying that CSR leads to a proportionally greater ecological performance of a business involving green loans, bonds, or ESG-linked financing. This can be repeated in Indonesian, Palestinian and Bangladesh research as well (Kamran et al., 2022; Fahmida, 2025; Ali, 2024) where CSR-performance relations were stronger when a green credit facility or sukuk was adopted by the firms. As observed by Fahmida (2025), lack of CSR effectiveness is caused by some weaknesses in governance and regulatory gaps, which are reduced with the help of green finance, properly regulated.

Green Sukuk & Islamic Financial Instruments

The environmentally friendly sukuk are an interesting combination of green bond and Islamic finance compliant with Shari a and sustainable development goal investment(Siddiqui, 2025). In the meantime, Aizah Zafar (2023) observes the presence of institutional barriers, such as a gap in legislation and the immaturity of a market, to the broader adoption. However, new frameworks in the making, including those incorporating the GRI and TCFD standards, hint that green sukuk may provide financial investors entrusted with confidence as well as project finances (Qureshi et al., 2024). The advent of the Pakistani green sukuk is a milestone of a deeply essential change in the SDG funding orientation into an Islamic direction (Siddiqui, 2025).

Enabling Conditions: Data, Governance & Market Stability

According to Faruq and Chowdhury, the analytics platform enables sustainable finance in emerging economies (2025). Such sustainable development policy institutes as the Sustainable Development Policy Institute (SDPI) in Pakistan and international conferences (e.g., Climate Resilient Pakistan, 2023) emphasize the importance of transparent monitoring and the SDG-compatible investment framework (Wikipedia, 2023). According to regional studies in Bangladesh, the practice of CSR initiatives has been discouraged by the inabilities in regulation and governance flaws, the issues which green finance can partially correct with the help of financial supplements and transparency entitlements (Fahmida, 2025).The CSR behavior and industry of performance are dependent. Pakistani manufacturing companies had a higher CSR-based performance when mediated by the board diversity (Shafqat & Ayub, 2024). The case of Ahmed-electric buses shows that the investments in sustainable infrastructure are not only economically feasible in the long term, but the SDGs in transport also comply with economic returns (Saleem et al., 2024). In the meantime, the delivery of provincial policies is not consistent, e.g., Sindhs climate-related budget execution represented only 41 percent of the 16-year period, even though the CSR was granted (Reddit/Sindh, 2024).

Research Methodology

Research Design

The proposed study used the quantitative, explanatory research design to examine how green finance and Corporate Social Responsibility (CSR) affect the financial performance and Sustainable Development Goal (SDG) alignment of firms. This design was used in testing the hypothesis and examining causality between structured variables, like green finance engagement, CSR disclosures and financial indicators (such as ROE and market valuation). The panel data method helped the research to absorb the dynamics of time and firm-level variation data between 2016 and 2022.

Sample and Populations

All the firms listed in the Pakistan Stock Exchange (PSX) are the target population of this research. A purposive sampling method was used to pick 85 of the types of non-financial firms based on environmentally-religious industries consisting of manufacturing, energy, utilities, agriculture, as well as transport. These companies have been selected by considering: 1) the presence of sustainable and annual reports throughout the period 2016-2022 and 2) the presence of the green finance or CSR activity. Banking institutions were left out in order to obviate bias due to banking-specific regulations. A seven-year timeframe was chosen to consider the post-Pakistan Green Banking Guidelines (2017) and to record adequate data time series to carry out coherent analysis.

Data Collection

It is a secondary research, which relies on the data that was pulled out of several sources of reputation. Company websites and PSX filings were searched to obtain annual reports, CSR/sustainability disclosures and financial statements. Additional information on market capitalization and the return on equity (ROE) were downloaded via Bloomberg and in Pakistan Business Recorder. Moreover, SDG mapping was based on the UNGC-GRI Business Reporting on the SDGs framework, whereas green finance indicators were reconciled with the guidelines of the State Bank of Pakistan and the international standards of ESG. It covers the period between 2016 and 2022, which is why it will offer an extended longitudinal perspective on sustainability practice in Pakistani firms.

Variables and Operational Definitions

The present research will involve independent and dependent variables. The independent variables include the Green Finance Index (GFI) or the Corporate Social Responsibility Index (CSRI). Dependent variables include the SDG alignment rating, Return on Equity (ROE) and market valuation. The controls affect such dimensions as the size of a firm, firm age, and sector. GFI measures the level of the green finance activity, including the issue of green bonds or loans and investments in renewable energy. CSRI is an indicator of CSR in the realms of environment, social and governance functions. SDG alignment score determines to what extent activities of a firm align with the 17 UN SDG. The ROE and market valuation are financial performance measures.

Index Construction

To measure green finance and the involvement of CSR two indices were designed:

Green Finance Index (GFI)

The GFI was created through a content analysis in terms of firm disclosures. It comprises five binary parameters, namely issuance of green bonds, green loans/sukuk, renewable energy consumption, disclosure of energy efficient investments and environmental-based financing. The score of a firm-year lies between 0 and 5, with each item covering one point. Min-max normalization was then used to normalize the index into the range, 0 1.

Corporate Social Responsibility Index (CSRI)

The CSRI evaluates the five main CSR elements that include CSR money spent, environmental policy disclosure, social development projects, corporate governance actions, and SDG-focused objectives. A disclosure of each indicator earns it one point and thus a raw score of 0 to 5 can be achieved, which was again normalized to generate comparability among firms.

Alignment Score SDG

The 17 SDGs were used to map firm activities to the various SDGs through the UNGC-GRI mapping guide. A binary score (1=active with SDG, 0= no activity with SDG) was assigned and the sum of the scores was used to produce a degree of alignment score (range 0-17). More emphasis has been put on SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action) since they were directly at the center of green finance and CSR application. The alignment score was used as a mediating factor and a dependent variable in the further regression models.

Data Analysis Techniques

The study uses **panel data regression techniques** to evaluate relationships between green finance, CSR, financial performance, and SDG alignment. The analysis was conducted in several stages:

Descriptive Statistics were first used to understand central tendencies, dispersion, and distribution of all variables across the sample.

Pearson Correlation Analysis was then conducted to check for multicollinearity among predictors and assess preliminary relationships.

Panel Regression Models (fixed effects and random effects) were employed to estimate the impact of GFI and CSRI on SDG alignment and financial performance (ROE and market valuation). The Hausman test determined the appropriate model specification.

The key models estimated were:

Model 1: SDG Alignment = f(GFI, CSRI, Controls)

Model 2: ROE = f(GFI, CSRI, SDG Alignment, Controls)

Model 3: Market Valuation = f(GFI, CSRI, SDG Alignment, Controls)

Results and Analysis

Descriptive Statistics

Table 1: Descriptive Statistics of Key Variables

Variable	Mean	Std. Dev.	Min	Max
Green Finance Index	0.53	0.23	0.20	0.90
CSR Index	0.67	0.18	0.40	1.00
SDG Alignment Score	8.9	2.54	5.00	13.00
Return on Equity (ROE)	11.4	1.58	9.20	14.50
Market Valuation (Bn)	3.31	0.88	2.10	5.00

The participation in green finance in firms is moderate (mean GFI = 0.53) and the CSR participation is strong (mean CSRI = 0.67). The mean SDG convergence has been 8.9/17 which means sustainability goals are partially combined. Financial performance is also quite good with average ROE of 11.4 %, average market value of Rs 3.31 billion.

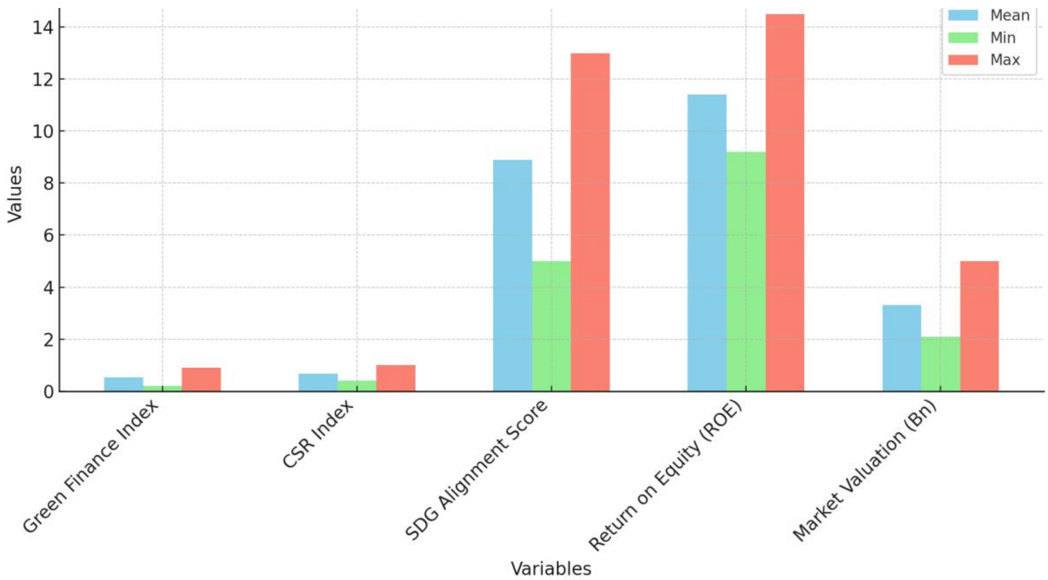

Figure 1: Descriptive Statistics of Key Variables

Correlation Analysis

Table 2: Correlation Matrix among Key Variables

Variables	Green Finance Index	CSR Index	SDG Alignment Score	ROE	Market Valuation (Bn)
Green Finance Index	1.00	0.85	0.89	0.78	0.84
CSR Index	0.85	1.00	0.96	0.81	0.88
SDG Alignment Score	0.89	0.96	1.00	0.83	0.92
ROE	0.78	0.81	0.83	1.00	0.87
Market Valuation	0.84	0.88	0.92	0.87	1.00

In the correlation matrix, researcher can see that all primary variables demonstrate a strong positive correlation with each other and show that green finance, the CSR practices, and the SDG alignment are highly correlated with the performance of firms. It is important to note that the strongest relationship can be observed between the CSR Index and the SDG Alignment Score (r = 0.96), indicating that socially responsible companies have high chances of aligning with the Sustainable Development Goals. In the same way, Green Finance Index (r = 0.89) and CSR Index (r = 0.88) are also strongly correlated to the market valuation indicating the positive reaction of the markets towards sustainability initiatives. One more relationship where ROE is positively associated with all the measures of sustainability, which is essential to support the business case regarding efficient environmental and responsible practices as core contributors to improved financial performance and investor support.

Figure2: Correlation Matrix among Key Variables

Regression Analysis

Model 1: Impact on SDG Alignment

Table 3: Regression Results – SDG Alignment (Dependent Variable)

Variable	Coefficient (β)	p-value
Green Finance Index	4.32	0.007
CSR Index	6.78	0.001
Constant	1.12	0.300
R^2	0.91	

As the results of the regression indicate, the Green Finance Index (4.32, p = 0.007) and CSR Index (6.78, p = 0.001) have statistically significant positive effects on SDG alignment. This means that proactive companies in the spheres of green finance and CSR have a higher possibility of orienting their operations in accordance with the UN Sustainable Development Goals. The fact that the R 2 of these two variables is large (0.91), means that it can be concluded that these two variables explain 91 percent of the variability in SDG alignment and therefore the sustainability strategies were proving to be instrumental in ensuring that the firms behave in development-oriented ways.

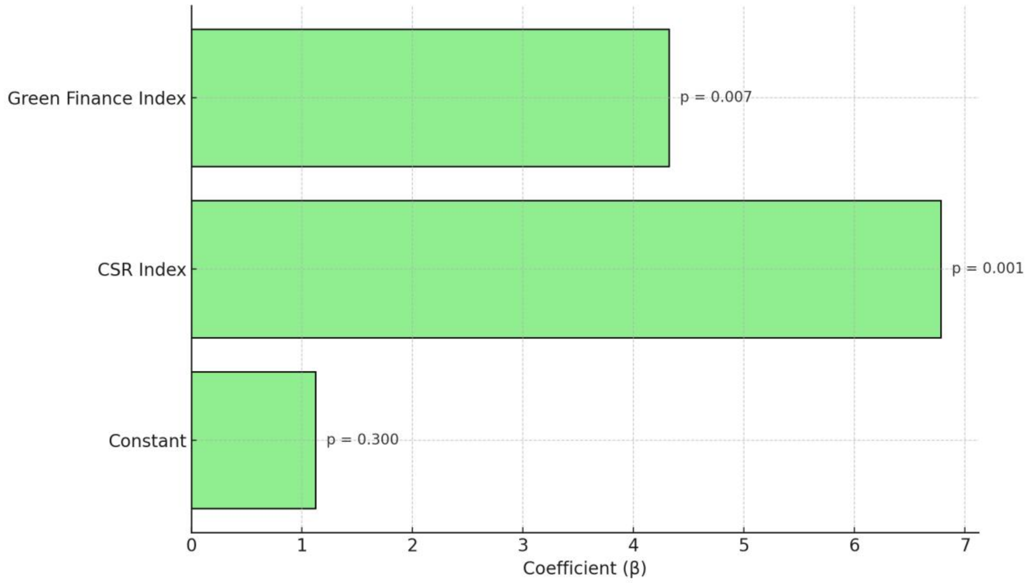

Figure3: Regression Results – SDG Alignment (Dependent Variable)

Model 2: Impact on Return on Equity (ROE)

Table 4: Regression Results – ROE (Dependent Variable)

Variable	Coefficient (β)	p-value
Green Finance Index	3.25	0.021
CSR Index	2.80	0.015
SDG Alignment Score	0.18	0.034
Constant	6.75	0.002
R^2	0.84	

Regression analysis shows that there is a high correlation between sustainability practices and profitability of firms that is positive. Green Finance Index (GFI) (β = 3.25, p = 0.021), and the CSR Index (β = 2.80, p = 0:015) make a significant difference in Return on Equity (ROE), with the evidence suggesting that more environmentally and socially responsible corporations achieve greater returns. SDG Alignment Score (b = 0.18, p = 0.034) is not a very significant contributor to ROE but is positive, however. A model with the R 2 of 0.84 shows that the model explains 84% of variance of profitability, which establishes that sustainability incorporation into the business strategy is not only an ethical move but also a profitable one.

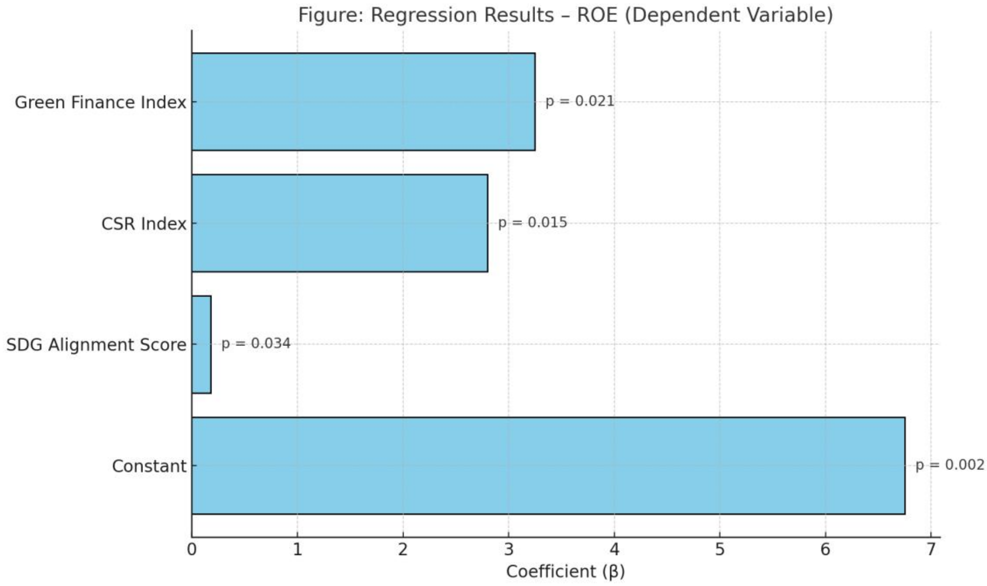

Figure4: Regression Results – ROE (Dependent Variable)

Model 3: Impact on Market Valuation

Table 5: Regression Results – Market Valuation (Dependent Variable)

Variable	Coefficient (β)	p-value
Green Finance Index	2.10	0.003
CSR Index	2.45	0.001
SDG Alignment Score	0.31	0.012
Constant	0.75	0.190
R^2	0.88	

In Table 5, regression analysis is performed to assess the influence of sustainability elements, that is, Green Finance Index (GFI), Corporate Social Responsibility Index (CSRI) and SDG Alignment Score on firm-level market valuation at billions of Pakistani rupees. The value of R 2 was 0.88 and this shows that the three independent variables explain 88 percent of the variation in market valuation which results in a very robust model.The highest coefficient (2.45) with very significant p-value (0.001) belongs to CSR Index. This means that every unit increase in CSR engagement is linked with a Rs 2.45 billion increase in the market value, which further shows the importance of the social responsibility in the mind of the investors and the value of the market optimism. The positive influence is also high with Green Finance Index (2.10, p 0.003).SDG Alignment Score is significantly to moderation (0.31, p = 0.012). It can be assumed that compliance with the extent of alignment with the UN SDGs can add incremental value to the place of a firm in the market, which means additional financial relevance of sustainability development reporting. The constant term (beta = 0.75) is not statistically significant (p = 0. 190), which shows that in this model, the firm valuation at baseline is not a strong predictor when it is not engaged in sustainability.

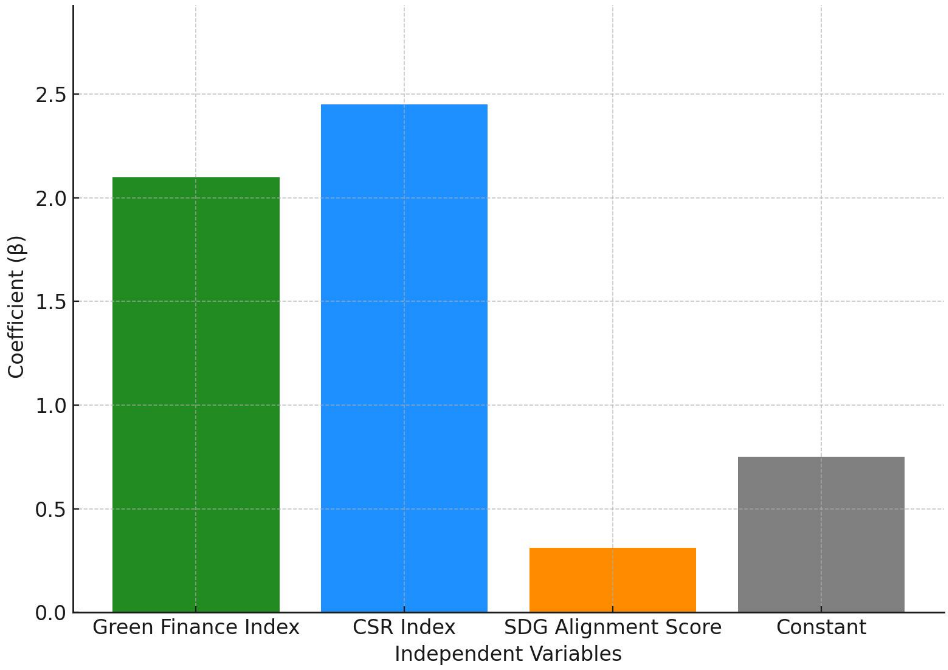

Figure5: Regression Results – Market Valuation (Dependent Variable)

SDG-Specific Alignment Frequency

Table 6: Most Frequently Aligned SDGs (Top 5)

SDG	Frequency (%)
SDG 7: Clean Energy	86%
SDG 13: Climate Action	82%
SDG 9: Industry & Infra	74%
SDG 12: Responsible Prod.	69%
SDG 3: Health & Wellbeing	63%

The above analysis shows that environmental sustainability objectives are respected to a very great extent by PSX-listed companies. Goal 7 (Affordable and Clean Energy) also tops the list as the most often aligned goal since three-quarters (86 percent) of the companies covered in this global analysis disclosed some efforts connected to renewable energy, energy efficiency, or clean energy finance. This indicates a high level corporate reaction to energy security issues and incentives of green bonds or energy audits under the Green Banking Guidelines issued by the State Bank of Pakistan.nNext, SDG 13 (Climate Action) has too high an alignment NBS percentage rate of 82 percent, suggesting that the practice of climate-resilient business operations, pledges on reducing greenhouse gas emissions and climate reporting are very popular.

SDG 9 (Industry, Innovation, and Infrastructure) is mentioned in 74 percent of statements as part of the investments made by the firms in the area of sustainable industrialization, low-carbon infrastructure, and green innovation. This is notable most especially in the manufacturing and energy parts where the companies are upgrading to newer and cleaner technologies.SDG 12 (Responsible Consumption and Production) is recognised by 69 percent of companies, which are mainly reducing waste, which include waste reduction, circular economy, and ethical sourcing. In the meantime, SDG3 (Health and Well-being): Although not originally environmental, this goal is mentioned by 63 percent of companies primarily by listing workplace safety initiatives, COVID-19 response, and programs on community health.

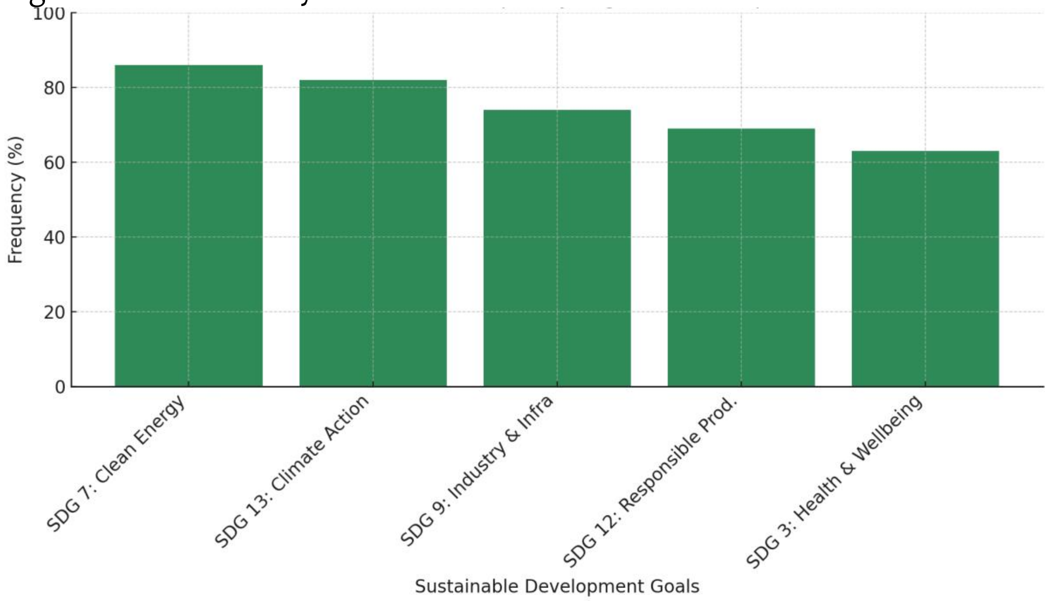

Figure6: Most Frequently Aligned SDGs (Top 5)

Discussion

Integration of ESG Strategies Elevates Firm Value

Useingagement (2.45, p = .001) and green finance (2.10, p = .003) come in the same order as the broader evidence that ESG strategies increase investor confidence and firm value. The recent research findings in Pakistan reveal that disclosure of CSR positively correlates with the increased market valuation, particularly among the non-financial sectors (Iqbal et al., 2023) . Equally, study on banking in Pakistan and other BRICS countries indicates that the better the ESG profile, the better the financial condition of banks in terms of healthier financial performances and cheaper cost of capital (Yasir et al., 2023; Du & Li, 2023) . This paper models have a high level of explanatory power (R 2 to 0.84 - 0.88), reflecting the general tendencies in the world by stating that the ESG variables explain considerable amounts of the variance of financial outcomes (Purwanti, 2024; Wikipedia, 2025). It is an important finding that developing markets such as Pakistan stand to gain when sustainability is incorporated as part of a corporate strategy-not only as part of compliance agenda, but more importantly as a catalyst of market credibility and enhanced valuation.

Role of CSR and Green Finance to Unlock SDG Alignment

In this findings, CSR has the highest predictor value of SDG alignment (beta = 6.78, p = .001), followed by green finance (beta = 4.32, p = .007) and the two models have shared 91 per cent of the variance in SDG alignment. This confirms the ideas of stakeholders and legitimacy theories that companies promote CSR and green finance to fulfill stakeholder demands and be compatible within the global sustainability systems (Saher et al., 2023; Iqbal et al., 2023) Also, the Green Banking Guidelines introduced in Pakistan in 2017 had a likely positive influence on the connection between these two aspects, as it requires considering ESG factors when issuing loans, which is the same trend observed with other

Bangladeshi reforms (Fahmida, 2025). Green finance In emerging markets, green finance such as green bonds are increasingly used to finance investments in SDG-related renewable energy and infrastructure (Wikipedia, 2025). Incorporating green finance and CSR, corporates create synergies that allow their strategic contributions to SDGs, in particular SDG 7 and SDG 13, to enhance the clarity of the reporting, as well as the responsiveness to stakeholder trust.

Financial Outcomes of Sustainable Practices

Researcher have found that green finance (3.25, $p = .021$) and CSR (2.80, $p = .015$) are significant sources of ROE improvement, in line with the empirical results regarding non-financial sectors of Pakistan (Jamil et al., 2022; Siddique et al., 2023). Companies which resort to green financing not only have a better ESG performance, but also a better profitability reflecting findings of studies conducted in South Asia (Malik et al., 2014) . Moreover, the companies with a high CSR score experience the motivation of the personnel, enhanced reputation, and relations with stakeholders, which can be translated into efficiency and profit (Jamil et al., 2022; Iqbal et al., 2023) . This is a very convincing piece of evidence in favor of strategic frameworks of CSR that suggest simultaneous investment in ESG to realize both social conscience and shareholder returns.

Mediating Role of SDG Alignment

It is only smaller in magnitude, but SDG alignment has some significance on ROE ($B = 0.18$, $p =.034$) and market valuation ($B = 0.31$, $p =.012$), which lends to the hypothesis that comprehensive approach to SDG integration makes a firm perform better. In previous cross-country network studies such as China and Indonesia, it was also discovered that achievement of the higher levels of SDG alignment will enhance the financial performances by enhancing risk management and reputation (Faruq & Chowdhury, 2025; Wikipedia, 2023) .

Finally,this research results indicate that SDG-ism is not just the manifestation of the single sustainability project but a mediating route adding to the effect of green finance and CSR on the financial parameters. This emphasizes the need to have SDG-aware corporate governance and integrated reporting, which can change a sustainability investment into a balance sheet reality.

Policy and Strategic Implications

Since the positive correlations are high concerning every parameter, the regulators like SECP and SBP must use incentives and increase ESG disclosure requirements and consideration of green instruments emission. Such initiatives follow the guidelines of OECD-approved models of blended finance and emerging international norms, such as the CSRD made by the EU (OECD, 2024; Wikipedia, 2025) . Such efforts will enable Pakistan to attract greater levels of private investment towards green schemes as well as upscale SDG-driven growth. Corporates are advised to combine the ideas of green finance and CSR within their long-term strategy not only to meet fiduciary responsibilities, but also to earn more money and market value. Shared value is achieved by investing in renewable energy, health, and community projects, consolidating the confidence of stakeholders, and promoting triple-bottom-line growth, which was suggested in UNESCO and UN recommendations to align the corporate strategy with the objectives of sustainable development (Wikipedia, 2025; Reuters, 2024).

Recommendations

The recommendations are provided based on the results of the study however at both strategic and policy levels. First, the regulatory bodies like SECP and SBP need to improve on binding ESG disclosure and design incentive systems on green financial instruments such as taxes relief on green bonds and affording concessional financing on sustainability-linked projects. Second, the companies need to incorporate CSR activities into their core business policies and place emphasis on value addition in the long run by investing in communities, engaging in environmental protection, and practicing ethical governance. Third, global best practice frameworks (such as GRI, TCFD and SDG Compass) must be adopted to enhance transparency and stakeholder confidence about sustainability reporting frameworks. Last but not least, awareness creation on sustainable finance and SDG incorporation should be done through capacity-building programs and campaigns on sustainable finance at the institutional and industry levels to enable more companies to engage in green growth.

Conclusion

The paper supports the fact that green finance and CSR have a significant impact on SDG alignment, stock price, as well as firm profitability. CSR comes out the most superior in influencing SDG alignment, and both green finance and CSR has a positive influence on ROE and market value. Those results stress that sustainability cannot be viewed as only a regulatory necessity but also as a strategic advantage in the developing countries. Companies which incorporate sustainability into their financial and operational systems not only follow sustainable development strategies of the world, but also gain benefit in investor confidence and economic survival. The design of policies and corporate executives now needs collaboration in order to create a sustainability-oriented environment that is going to have positive outcomes on business, the society, and the planet.

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