

# Impact of Islamic Corporate Governance on Sustainability Performance in Islamic Banks of Pakistan: Moderating Role of Insider Ownership and Institutional Ownership

Shiraz Khan <sup>1\*</sup>, Muhammad Nisar <sup>2</sup>, Muhammad Sohail <sup>3</sup>, Malik Muhammad Usman Awan <sup>4</sup>, Asif Ur Rehman <sup>5</sup>, Muhammad Yasir <sup>6</sup>

<sup>1</sup> Assistant Professor, Department of Management Sciences, The University of Haripur, Haripur, Pakistan

<sup>2,3,4,5</sup> Ph.d Scholar, Department of Management Sciences, The University of Haripur, Haripur, Pakistan

<sup>6</sup> MS Scholar, Department of Management Sciences, The University of Haripur, Haripur, Pakistan

**Abstract:** This study aims to investigate the impact of Islamic Corporate Governance (ICG) on Social Sustainability Performance (SP) in Islamic Banks of Pakistan, focusing on the moderating role of insider and institutional ownership. The study derives influential Islamic CG mechanisms from the theoretical perspectives of Agency Theory, Institutional Theory, and Legitimacy Theory, primarily focusing on Shariah board attributes and ownership structure. The study uses the Ordinary Least Square (OLS) for regression analysis and proposes three propositions to enhance social sustainability performance through responsible decision-making. The study results reveal that Islamic corporate governance significantly influences social sustainability performance, with Shariah board independence having a positive impact while size, competence, and process have a negative impact. The ownership structure of Islamic banks in Pakistan also significantly moderates the relationship between Islamic corporate governance and social sustainability performance, with insider ownership and institutional ownership playing a significant role. This study provides policy insights for policymakers, practitioners, and corporate boards to promote sustainable operations through Islamic corporate governance, adding to existing developmental plans to address sustainability-related issues. This study also contributes to the literature by establishing the nexus between Islamic corporate governance and triple-bottom-line performance in IBs.

Keywords: Islamic corporate governance, Social sustainability performance, Islamic Shariah board, Islamic banks of Pakistan, Insider ownership, Institutional ownership

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# **INTRODUCTION**

Over the past few years, a significantly growing interest in Corporate Sustainability (CS) globally (Shad et al., 2020; Islam et al., 2019). CS involves integrating economic, social, and environmental aspects to achieve sustainability, frequently recognized as the Triple Bottom Line (TBL), as referenced in studies by (Zaid et al., 2020; Elkington, 1997). Morioka and de Carvalho (2016) note that the TBL approach aligns corporate operations with sustainable development goals. A systematic literature review by Bastas and Liyanage (2018) found that approximately 43% of recent sustainability studies were focused on the TBL, with 40% relating to environmental sustainability, 2% to social sustainability, and 15% addressing both social and environmental dimensions. Growing awareness, stakeholder demands & institutional pressures have spurred organizations to integrate sustainability into their strategies & policies & this involves prioritizing the integration of environmental, economic, and social factors in their deliberate decision-making and business goals, thereby strengthening their commitment to stakeholders (Merino et al., 2020). Corporate Governance (CG) plays a crucial role in aligning the interests of different stakeholders and enhancing a firm's long-term prosperity and success. Studies conducted in the literature on corporate governance indicate that effective governance plays a vital role in ensuring enduring corporate performance and promoting sustainable growth in the long run (Ali et al., 2010; Aras & Crowther, 2008). It is expected that companies with stronger CG practices can effectively tackle sustainability-related challenges. Furthermore, several significant factors can influence the company's decision-making procedure

<sup>\*</sup>Corresponding author: Shiraz Khan

<sup>&</sup>lt;sup>†</sup>Email: shirazkhan@uoh.edu.pk

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regarding addressing sustainability apprehensions and reporting on their ingenuities related to sustainability (Rosati & Faria, 2019). The Sustainable Development Goals (SDGs) by the United Nations (UN) emphasize the need for active engagement from both the private and public sectors in response to growing expectations from stakeholders, media, NGOs, and investors (Naciti, 2019).

The banking sector's pivotal role in economic growth and development has led to a notable rise in the prominence of sustainable banking initiatives (Jan et al., 2019-d; Levine et al., 1999). Banks function as financial intermediaries, enabling the flow of funds between investors and lenders while also playing a pivotal role in facilitating foreign inflow from diverse sources internationally that contribute significantly to economic growth (Tahir et al., 2019, 2020a). Efficiently operating financial institutions, such as banks, can incentivize businesses to embrace sustainable practices within their operations, fostering long-term growth and enhancing societal well-being (Wu & Shen, 2013, Waheed & Jam, 2010). In addition, banks bear a heightened responsibility to contribute to society due to their reliance on diverse stakeholders, including shareholders, depositors, the general public, and governmental entities, who safeguard financially distressed banks through taxpayer funds (Wu and Shen, 2013). As a result, many banking institutions worldwide have actively engaged in UN sustainable development programs to attain Sustainable Development Goals (SDGs) (Khan et al., 2014; Ziauddin et al., 2010). As an illustration, the Islamic Development Bank (IDB) has set forth its objective of surpassing a financial commitment of USD 150 billion in the upcoming years to contribute towards achieving the SDGs. Nonetheless, the research landscape concerning sustainability and the associated measurement frameworks in the context of Islamic banking remains relatively limited (Jan et al., 2019c; Lin et al., 2022).

Islamic Banking (IB) is an emerging paradigm garnering increasing attention within the banking industry. It stands apart from conventional banking through its fundamental principles, which encompass the prevention of interest (Riba), the avoidance of constricting vulnerability (Gharar), and the promotion of profit and loss-sharing mechanisms among shareholders and investors. The Shariah Board (SB) plays a crucial role in upholding adherence to Islamic principles and values, thereby differentiating the governance framework of Islamic Banking (IB) from conventional systems and commonly known as Islamic Corporate Governance (ICG). However, current Shariah screening procedures lack the integration of non-income considerations, such as environmental & social factors. To adhere to the core tenets of Shariah, Islamic Banking and Financial Institutions (IBFIs) are required to harmonize economic objectives with social and individual priorities. Corporate governance endeavors to accomplish this alignment, while sustainability has emerged as a central focus for banking and financial institutions and entities following the worldwide financial crises. This has provided Islamic Banking and Financial Institutions (IBFIs) with a fresh impetus to reinforce the governance framework in lieu of overseeing corporate sustainability practices. Nevertheless, there remains a dearth of research examining the interconnection between sustainability performance & Islamic Corporate Governance (ICG). Hence, there is an urgent requirement to establish an Islamic corporate governance framework that fosters sustainability by explicitly addressing all three dimensions of sustainability (Mollah et al., 2017; Grais and Pellegrini, 2006; BinMahfouz and Hassan, 2013; Jan et al., 2019).

The preceding discussion highlights essential questions that require resolution. This study addresses critical research questions pertaining to the influence of practices of Islamic Corporate Governance (ICG) on global financial crises on the & social sustainability performance in Islamic Banks (IBs). It further explores the influence of Islamic Corporate Governance on social sustainability performance in IBs and investigates how ownership structure moderates the association between Islamic Corporate Governance & social sustainability performance. To connect the present gaps in the literature, this study aims to accomplish three objectives. Firstly, it pursues to evaluate the level of adoption of Islamic Corporate Governance and the assessment of social sustainability in IBs following the global financial crisis. Secondly, it aims to analyze the influence of Islamic Corporate Governance on the social sustainability performance of IBs by incorporating Shariah board characteristics into the ICG framework and examining their influence on the Triple Bottom Line (TBL) social sustainability performance. Lastly, this study evaluates the moderating role of institutional ownership & insider ownership in the relationship between Islamic Corporate Governance and social sustainability performance in IBs. By fulfilling these objectives, this study will demonstrate valuable insights into the role of Islamic Corporate Governance in promoting sustainable development, enhancing sustainability performance, and ensuring the expansion and stability of IBs in the global financial market (Jan et al., 2019b; Rebai et al., 2016).

# LITERATURE REVIEW

Agency theory provides a rational basis for the board's primary responsibility to supervise senior management and the leading personnel on behalf of shareholders. According to this perspective, it can be argued that the Shariah board, through its facilitation of timely and transparent communication of pertinent information, holds the potential to mitigate organizational conflicts effectively. Therefore, the presence of a diversified Shariah board is an indication of improved sustainable performance. Based on the aforementioned justifications, this research study incorporates agency theory as a pivotal element within the theoretical framework to form a robust linkage between Islamic corporate governance and sustainable performance (Jan, Lai, & Tahir, 2021).

Another significant justification for firms' unwillingness to provide sustainability information is the New Institutional Sociology (NIS) paradigm. NIS theory offers a comprehensive analytical perspective for evaluating the impact of external variables that act as catalysts for sustainable corporate practices, enabling a deeper understanding of businesses' sustainability disclosure. DiMaggio and Powell (1983) identified three aspects of normative, coercive, and mimetic influences that have been identified as significant drivers in shaping the development and proliferation of modern sustainability policies within businesses. The exertion of coercive influence is observed through the involvement of various stakeholders such as regulatory agencies, parent companies, influential customers & service providers. On the other hand, normative influence is attributed to the roles played by diverse social actors, including academic and training organizations, social activist groups, institutional funders, media entities, and NGOs (Jan, Lai, & Tahir, 2021).

## Sustainability Performance & Insider Ownership in the Context of Agency Theory

The fundamental tenet of agency theory posits that conflicts between principals (shareholders) and agents (managers) arise due to divergent goals and aspirations. "The monitoring hypothesis" or "the convergence-ofinterest/motivating hypothesis" support ownership possibilities to align managers' goals with shareholder interests. As a result, the convergence of interest concept suggests that as management retains an increasing share of the company, the organization's market value rises. According to this concept, an organization's efficiency will increase, and its expenses will decrease as insider ownership increases. High financial rewards thereby support the promotion of sustainable practices. Building upon the aforementioned rationale, this research study assumes a relationship between sustainability performance & insider ownership within the existing theoretical framework, employing the lens of interest convergence/monitoring theory to examine this association (Jan, Lai, & Tahir, 2021).

#### Sustainability Performance and Institutional Ownership in the Context of Institutional Theory

According to institutional theory, businesses should never ignore sustainability policies and reporting. Banks all across the globe are under intense pressure from a wide range of stakeholders to conduct business sustainably. In this case, institutional ownership is crucial in promoting efforts connected to sustainability. Institutional shareholders, who have a significant stake in a company due to their ownership level, are crucial to developing improved disclosure techniques for sustainability-related data. Elevated exposure to sustainability information can be interpreted as indicative of adherence to industry best practices and response to regulatory authority pressure. Therefore, institutional ownership might be seen as a key drive for advancing sustainable practices (Jan, Lai, & Tahir, 2021).

#### **Corporate Governance & Sustainability Performance**

The significance of corporate governance and its association with sustainability concerns has garnered significant attention in both practical applications & academic research in the era of globalization. This attention extends across industries, including Islamic banks and financial institutions (IBFIs). The latest researches highlight the mounting pressure from all stakeholder on businesses to implement robust corporate governance practices for responsible management of their environmental and societal impact. This body of knowledge has been substantiated in the context of financial institutions (conventional) through numerous empirical investigations exploring various factors. A comprehensive review of prior empirical research and its corresponding theoretical underpinnings reveals the critical role of corporate governance mechanisms in attaining sustainable performance as follows:

Naciti (2019) empirically analyzed the impact of the Board of Directors on a firm's sustainability performance. Specifically, the researcher examines the influence of board diversity, board independence, and the separation

of CEO & board chair roles as independent variables, while sustainability performance is a dependent variable. Drawing upon the agency theory and stakeholder theory, hypotheses are formulated. The dataset for this research comprises information from Compustat databases & Sustainalytics, covering 362 firms operating in 46 diverse countries. The research employs a Generalized Method of Moments (GMM) two-step estimator for analysis. The findings reveal that companies with greater board diversity and a clear separation between the CEO & chair roles exhibit superior sustainability performance. However, the research concludes that increased independent directors are linked with decreased sustainability performance.

Zahid et al. (2020) study the influence of Corporate Sustainability Disclosures (CSD) in Malaysia, with a specific focus on the influence of the Malaysian Code on Corporate Governance (MCCG 2012) and certain business characteristics, including size, age, and profitability. A stratified random sample of 878 publicly listed companies was utilized, and the Ordinary Least Square (OLS) method was used to analyze data. Independent variables in this research include board independence, the board size, and the presence of women directors, while corporate sustainability disclosure is used as a dependent variable. The theoretical framework is supported by stakeholder theory & gender socialization theory. The findings of this study indicate strong positive associations between women directors and the workplace, as well as the social, environmental, and economic dimensions of corporate sustainability, thereby underscoring the pivotal role played by women directors in enhancing CSD.

Adel, Hussain, Mohamed, and Basuony (2019) examine the influence of corporate governance structure and specific characteristics of firms on the quality of corporate social responsibility disclosure within S&P Europe 350 firms and European enterprises. The independent variables considered in this research include board independence, board structure, director ownership, board diversity, and foreign ownership, whereas CSR disclosure is the dependent variable. The theoretical foundations of agency and stakeholder theory support the arguments presented in this study. The findings indicate that firm size, the presence of a dedicated CSR committee & director's ownership positively influence the quality of the CSR reporting.

Hamad, Draz, and Lai (2020) present a conceptual framework to investigate the moderating impact of sustainability reportage in the association between corporate governance systems and the level of Integrated Reporting (IR) disclosure among Malaysian PLCs. By integrating stakeholder theory & agency theory, this research provides valuable insights. The research recommends employing a content analysis approach to analyze the yearly reports of the highest 100 Malaysian PLCs based on market capitalization to obtain relevant data on IR and other related factors. The independent variables considered in this framework include board independence, board size, board diversity & sustainability reporting, while the dependent variable is Integrated Reporting Disclosure. The proposed conceptual framework has significant implications, as it can assist PLCs already engaged in sustainability practices in adopting the IR frameworks. This, in turn, can reduce information asymmetry, enhance information transparency & create value. The study contributes to the existing body of knowledge by examining IR practices & their factors in the Malaysian context, particularly following the implementation of MCCG-2017.

Hussain, Rigoni, and Orij (2018) conducted an empirical study examining the relationship between the performance of triple bottom line sustainability & corporate governance, drawing upon agency theory & stakeholder theory perspectives. The research employed content analysis of sustainability reports from corporations in the United States to assess sustainability performance. The independent variables of this research encompass board independence, the board size, board meetings & the presence of a sustainability committee, while sustainability performance serves as the dependent variable. The evidence-based findings shed light on a promising avenue for theoretical advancement, wherein theories must strive to elucidate which aspects of sustainability are more influenced by corporate governance and explicate the mechanisms through which this impact occurs.

Ghazali and Weetman (2006) study the influence of the regulatory response to the financial crisis on the relationship between insider dominance and voluntary disclosure in Malaysia, using data from the period of the 1997 financial crisis. The research aimed to assess whether the crisis led to increased recognition of disclosure as a corporate governance tool and whether it diminished the impact of insider dominance on voluntary disclosure. The findings indicate a significant positive relationship between director ownership & level of voluntary disclosure. However, factors such as government ownership, new governance measures, and industry competition were found to have no significant impact on firms' propensity to enhance transparency. Consequently, the study concludes that, despite the upheaval caused by the economic crisis, traditional factors such as direct ownership and family control of the board exert a greater influence on voluntary disclosure than accountability measures reinforced by

the government.

Janggu, Darus, Zain, and Sawani (2014) conducted a study to investigate the effect of excellent CG on sustainability disclosure in 100 publicly traded corporations in Malaysia, adopting an agency theory perspective. The study utilized content analysis of annual reports as the research methodology. The findings indicate that board size, professionalism, and board designation significantly influence the level of sustainability disclosure. However, board ownership and independence were found to have no significant impact on the motivation for sustainability disclosure. These conclusions contribute to the existing knowledge on the relationship between CG practices and sustainability disclosure, providing valuable insights into the specific factors that drive or hinder such disclosures.

Allegrini and Greco (2013) examine how disclosure and governance interact in a scenario with substantial insider shareholder participation on the board and concentrated ownership. Researchers regressed a voluntary disclosure index on seven governance factors that were related to the structure or operation of the board. The Italian stock market provides the actual evidence. The findings imply that governance and disclosure have a mutually beneficial connection. Greater external transparency is related to diligent monitoring action. Since the presence of one of them lessens the motivation for the controlling shareholders to limit the other, the findings are consistent with the idea that internal and external control tend to exist concurrently.

Garcia-Sanchez, Cuadrado-Ballesteros, and Sepulveda (2014) analyzed to investigate the influence & pressure of media on external directors' decisions to disclose CSR information. The study utilized CSR disclosure as the dependent variable, while board size, board meetings, and director ownership were considered independent variables. The agency theory supported the theoretical foundation of the study. The sample comprised 98 non-financial listed Spanish firms from 2004 to 2010. The findings revealed the impact of external board member diversity on CSR disclosure. Representing shareholders & proprietary directors actively promoted adopting GRI standards to enhance shareholder value.

Gibson and O'Donovan (2007) examined the nature and quantity of environmental information disclosed in the annual reports of forty-one Australian businesses across 8 different economic sectors from 1983 to 2003. The researchers examined the influence of good corporate governance practices on environmental protection, considering factors such as sustainability reports, the introduction of separate environmental, changes in environmental legislation, the emergence of triple bottom line reporting, and significant environmental incidents. The findings indicate an increase in the release of environmental data by businesses, with greater inclusion of such information in yearly reports across the categories. This highlights the growing prominence of corporate governance practices in addressing environmental concerns.

Htay, Rashid, and Adnan (2012) employed a panel data analysis to assess the influence of corporate governance on the disclosure of environmental & social information of listed banks in Malaysia. The study aimed to explore the association between corporate governance practices and the level of social and environmental disclosures made by these banks. Director Ownership, Board Independence, Institutional Ownership, and Board Size were used as independent variables, and Social and Environmental Disclosure were used as dependent variables of the study. The disclosure score utilized in this study is a weighted disclosure score that considers the views of financial analysts and accountants, who represent those who create and use accounting information. The results demonstrate that increased information disclosure is linked with smaller boards, higher independent director representation (1%) on boards, larger boards (1%), higher director ownership rates, and lower institutional and block ownership (5%) levels.

Cheng and Courtenay (2006) investigated to explore the correlation between board monitoring and voluntary disclosure's extent. Their study revealed compelling evidence that companies with a more significant number of independent directors on board exhibit higher levels of volunteer disclosure. While CEO duality & board size were found to have no impact on voluntary disclosure, boards consisting predominantly of independent directors demonstrated significantly high voluntary disclosure compared to the boards with optimal composition. The study utilized board size, board independence, and board composition as independent variables, while voluntary corporate disclosures were the dependent variable, supported by applying agency theory as a theoretical framework. Notably, the presence of a regulatory environment as an external governance mechanism further enhanced the relationship between the percentage of independent directors & level of voluntary disclosure. This relationship was approximately 2-3 times stronger in a "disclosure-based" controlling regime than in a "merit-based" controlling regime.

Michelon and Parbonetti (2012) conducted a study that built upon stakeholder theory to investigate the influence of leadership, board composition & structure on sustainability disclosure. The study employed board composition, board leadership, and the board structure as independent variables, while sustainability disclosure was a dependent variable. Content analysis was used as the data collection and analysis methodology in this research. The research results showed that to comprehend the influence of board composition on sustainability disclosure, it is essential to move beyond the conventional categorization of directors into insiders and independents and instead focus on the distinct characteristics possessed by each director.

# The Moderating Role of Insider Ownership

Boachie (2023) study the moderating effect of ownership in the association between corporate governance & financial performance, specifically within Ghanaian banks. This research is the first to focus solely on the ownership structure as a key moderating factor in this context. The sample consisted of 23 banks, and a panel dataset comprising 414 observations over 18 years was analyzed employing multiple regression analysis. The results of this research show several significant findings. Specifically, factors such as audit independence, the presence of non-executive directors, CEO duality, and bank size were found to influence financial performance positively. Moreover, the results demonstrated that foreign ownership moderated the relationship between corporate governance mechanisms & profitability, indicating its importance in shaping the influence of corporate governance practice on financial outcomes.

Javeed and Lefen (2019) aimed to explore moderating effects of ownership structure & CEO power in relationship with firm performance & CSR within the manufacturing sectors of Pakistan. A sample of firms was selected, and data was collected from annual reports for 2008-17. Through empirical analysis, the research yielded several noteworthy findings. Firstly, it was observed that CSR exhibited a significantly positive relationship performance of the firm. Secondly, the association between CSR & firm performance remained consistent even when accounting for CEO power. Thirdly, the study revealed a significant positive association between managerial ownership and CSR and the firm's performance. Lastly, the interaction of ownership concentration & CSR significantly impacts the firm's performance.

Ang et al. (2022) studied the association between CSR and CFP in 6306 severely polluting listed firms in China from 2012 to 2019. The findings show that CSR has a positive impact on CFP. Ownership concentration reduces this impact, while ownership balance enhances it. CSR is more effective in non-SOEs compared to SOEs. Regional differences were observed, with Middle and Western China showing more substantial promotion effects of CSR on CFP than Eastern China. Cordeiro, Tutore, and Profumo (2020) explored the association amongst the board gender diversity, majority ownership specifically, in family-controlled firms, and corporate environmental performance. Building upon theories of socioemotional wealth, resource dependency & secondary agency, the study proposed that most dual-class owners & family owners strategically select women directors to align with their likings for Environmental Corporate Social Responsibility (eCSR). An empirical analysis used data from 2,755 U.S.A companies between 2010 and 2015. The findings supported the hypothesis that these two forms of majority ownership, in conjunction with board gender diversity, positively influence corporate environmental performance.

#### The Moderating Role of Institutional Ownership

Kibiya, Aminu, and Abubakar (2019) conducted a study to examine the moderating influence of institutional ownership on the association between financial performance & intellectual capital of conglomerates in Nigeria. The research design employed in this study was correlational, utilizing historical data taken from yearly reports and accounts of the sample companies listed on the Nigerian Stock Exchange (NSE). A censor sampling method was used to select the sample firms, and the study analyzed eleven years of financial data. The data analysis technique employed was multiple regression analysis. The study results show that the intellectual capital measured through the Value Added Intellectual Coefficient (VAIC) significantly positively impacted the financial performance of listed conglomerate firms in Nigeria. Additionally, the study identified that institutional ownership played a positive and significant role in moderating the association between intellectual capital & financial performance.

Akben-Selcuk (2019) conducted a study to investigate the effect of corporate social responsibility engagement on the financial performance of the firm, with a focus on the moderating role of ownership attentiveness in the association between CSR and financial performance. The study used a sample of non-financial public companies listed in the Borsa Istanbul (BIST) 100 index, covering 2014-18. Employing an instrumental variable approach, the empirical analysis demonstrated a positive association between financial performance & CSR. Furthermore, the findings show that ownership concentration negatively moderates the association between financial performance & CSR, even after accounting for endogeneity.

Wu, Li, Du, and Li (2022) investigate the association between Environmental, Social, & Governance performance and firm value between listed manufacturing Chinese companies while exploring the moderating effect of ownership structure in this association. The researchers used the Sino-Securities ESG scale to assess the ESG performance of the companies, and executive shareholding, equity balances, ownership concentration & institutional investor shareholding were considered as measures of ownership structure. The study concluded that there is a positive association between ESG performance and the value of the firm. However, equity balance & ownership concentration were found to have no significant impact on firm value. Executive ownership & institutional ownership are positive & significantly related to firm value & they also acted as moderators in the relationship between ESG performance and the firm's value.

Guo and Zheng (2021) conducted a study to investigate foreign ownership's effects on corporate social responsibility in Chinese A-share listed companies. The study utilized CSR rating score data from 2009 to 2018 and examined the moderating impact of legal and economic institutional distance on the association between foreign ownership and CSR. Panel data models were employed to analyze the data, and the findings show that foreign ownership significantly positively influences CSR. Furthermore, the study identified that legal and economic institutional distance positively moderates the association between CSR and foreign ownership. These conclusions were supported by additional methods such as propensity score matching, two-stage least squares, and alternative variables.

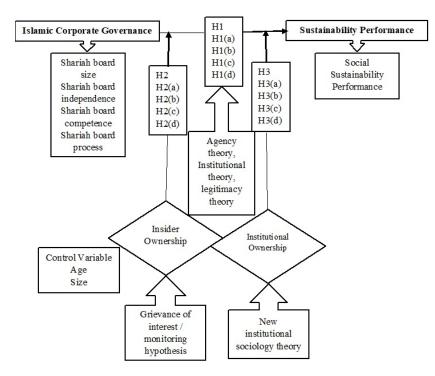


Figure 1: Theoretical Framework

# METHODS

#### Sample and Data

The target population of the study is Islamic banks operating in Pakistan. The initial sample of this study is comprised of 22 banks, including 5 full-fledged Islamic Banks (IBs) & seventeen conventional banks with Islamic banking operations (Islamic Banking Bulletin, September 2022). The sample period of the study ranges from 2012 to 2022. The final sample of the study, removing the banks with missing data and sustainability reports, consisted of 9 banks. The study employed secondary data collected from annual (yearly) reports of banks included in the

sample. The reports were downloaded from the official website of the respective bank.

#### **Variables Description**

The study's dependent variable is the Social Sustainability Performance (SSP) of Islamic banks in Pakistan. It is measured using Sustainability Reporting Guidelines and Financial Services Supplement developed by the Global Reporting Initiative (GRI). The content analysis technique counts and measures the disclosure extent per GRI guidelines in the annual reports. A weighted content analysis scheme is applied in which dummy codes of 0, 1, and 2 are assigned to each item of GRI guidelines reported in the annual reports of Islamic banks. Where 0 represents the absence of reporting item, 1 represents partial reporting of the item, and 2 represents detailed disclosure of the item.

The study focuses on Islamic corporate governance as the independent variable, measured through Shariah board attributes. These attributes include board size (SBS), board independence (SBI), board competence (SBC), and board process (SBP). Board size is quantified by determining the total number of members in the Shariah board. Board independence is assessed by calculating the ratio of independent board members to the overall size of the Shariah board. Board competence is operationalized by considering the number of Shariah board members holding a doctorate. The boarding process is evaluated by counting the board meetings conducted during a financial year. These operationalizations enable the study to effectively measure the various dimensions of Islamic corporate governance for analysis and interpretation.

The study used two moderating and independent variables, i.e., insider ownership (IDOWN) & institutional ownership (ISOWN). Insider ownership is measured as the proportion of the shares held by the board members in the bank. Institutional ownership is measured as the proportion of shares held by the institutions.

The control variables included in the study are the age of the bank (BAGE) and the size of the bank (BSIZE) of the bank. The BAGE is the number of years since the bank's inception. The BSIZE of the bank is measured as the total assets of the bank.

| Table 1: Operational Definition of Variables |        |                                                            |  |  |  |
|----------------------------------------------|--------|------------------------------------------------------------|--|--|--|
| Variables                                    | Symbol | Operational Definition                                     |  |  |  |
| Dependent Variable                           |        | Weighted content analysis with dummy values of $0, 1, 2 =$ |  |  |  |
|                                              |        | number of disclosed items                                  |  |  |  |
| Social Sustainability Performance            | SSP    |                                                            |  |  |  |
| Independent Variables                        |        |                                                            |  |  |  |
| Islamic Corporate Governance                 |        |                                                            |  |  |  |
| Shariah Board Size                           | SBS    | A total number of members on Shariah board.                |  |  |  |
| Shariah Board Independence                   | SBI    | Number of independent members on board                     |  |  |  |
| Shariah Board Competence                     | SBC    | Number of members having PhD qualification                 |  |  |  |
| Shariah Board Process                        | SBP    | Number of meetings                                         |  |  |  |
| Moderating Variables                         |        |                                                            |  |  |  |
| Insider Ownership                            | IDOWN  | Percentage of shares held by the directors.                |  |  |  |
| Institutional Ownership                      | ISOWN  | Percentage of shares held by the institutions.             |  |  |  |
| Control Variables                            |        |                                                            |  |  |  |
| Age of bank                                  | BAGE   | Number of years since inception of bank                    |  |  |  |
| Size of bank                                 | BSIZE  | Total assets of the bank                                   |  |  |  |

#### **Econometric Model and Data Analysis Techniques**

The study employed a panel econometric model to study the influence of Islamic corporate governance on the social sustainability performance. The following is the basic econometric model:

$$SSP_{it} = \alpha + \beta_1 SBS_{it} + \beta_2 SBI_{it} + \beta_3 SBC_{it} + \beta_4 SBP_{it} + \beta_5 BAGE_{it} + \beta_6 BSIZE_{it} + \mu_{it}$$
(1)

In order to examine the moderating role of insider ownership, the following econometric models will be used.

 $SSP_{it} = \alpha + \beta_1 SBS_{it} + \beta_2 SBI_{it} + \beta_3 SBC_{it} + \beta_4 SBP_{it} + \beta_5 SBS^* IDOWN_{it} + \beta_6 SBI^* IDOWN_{it} + \beta_7 SBI^* IDOWN_{it} + \beta_9 BAGE_{it} + \beta_{10} BSIZE_{it} + \mu_{it}$ (2)

In order to examine the moderating role of institutional ownership, the following econometric models will be used.

 $SSP_{it} = \alpha + \beta_1 SBS_{it} + \beta_2 SBI_{it} + \beta_3 SBC_{it} + \beta_4 SBP_{it} + \beta_5 SBS^* ISOWN_{it} + \beta_6 SBI^* ISOWN_{it} + \beta_7 SBI^* ISOWN_{it} + \beta_9 BAGE_{it} + \beta_{10} BSIZE_{it} + \mu_{it}$ (3)

Descriptive statistics will be utilized to provide a comprehensive overview of the data characteristics, including measures such as the mean, maximum, minimum, standard deviation, skewness, and kurtosis. Additionally, correlation analysis will be employed to examine the linear relationship among the variable of interest with the independent variables. This analysis will assess the strength and direction of the relationship between the variables, providing insights into their interdependence. By employing these statistical techniques, the study aims to gain a more understanding of the associations between the variables and their respective magnitudes.

# **RESULTS AND DISCUSSION**

## **Descriptive Statistics**

The results of descriptive statistics are provided in Table 1 below. The results showed that the average social sustainability score of the Islamic banks in Pakistan is around 16 points with maximum and minimum scores of 29 and 1 respectively. The social sustainability performance score deviates from the mean value to the extent of 7.02 points. The average size of the Shariah board consisted of 3 members with on average 2 independent members. Overall the Shariah board consisted of a member having a doctorate degree. Insider ownership and institutional ownership in Islamic banking showed mean values of 5.62 and 68.58 respectively. The average age of Islamic banks in Pakistan is around 40 years and the average bank size is 20.63.

| Table 2: Descriptive Statistics |       |         |         |           |  |
|---------------------------------|-------|---------|---------|-----------|--|
| Variables                       | Mean  | Maximum | Minimum | Std. Dev. |  |
| SSP                             | 15.72 | 29.00   | 1.00    | 7.02      |  |
| SBS                             | 3.12  | 7.00    | 1.00    | 1.46      |  |
| SBI                             | 2.28  | 5.00    | 0.00    | 1.25      |  |
| SBC                             | 1.07  | 3.00    | 0.00    | 1.07      |  |
| SBP                             | 3.74  | 10.00   | 0.00    | 2.59      |  |
| IDOWN                           | 5.62  | 67.41   | 0.00    | 14.47     |  |
| ISOWN                           | 68.58 | 95.34   | 0.05    | 27.42     |  |
| BAGE                            | 39.77 | 81.00   | 7.00    | 24.47     |  |
| BSIZE                           | 20.63 | 26.15   | 18.22   | 1.363     |  |

The analysis reveals several correlations between the variables. There is a significant negative correlation (r = -0.20) between SSP and SBS, indicating that as SSP increases, SBS tends to decrease. Conversely, a positive correlation (r = 0.35) exists between SSP and SBI, implying that as SSP increases, SBI tends to increase. Similarly, there is a significant negative correlation (r = -0.21) between SSP and SBC, suggesting that as SSP increases, SBC tends to decrease. However, there is no clear relationship between SSP and SBP, as indicated by a weak negative correlation (r = -0.04) that is not statistically significant. In terms of other variables, a positive correlation (r = 0.20) is observed between SSP and IDOWN, indicating that as SSP increases, IDOWN tends to increase. There is no significant correlation between SSP and ISOWN (r = 0.02), indicating no clear relationship. Similarly, no significant correlation exists between SSP and BAGE (r = -0.06), implying no clear association. On the other hand,

there is a positive correlation (r = 0.21) between SSP and BSIZE, suggesting that as SSP increases, BSIZE tends to increase.

Overall, the correlation results highlight that SSP is positively correlated with SBI and IDOWN, negatively correlated with SBS and SBC, and weakly correlated with SBP and BSIZE. However, there is no clear relationship between SSP and ISOWN or BAGE.

| Table 3: Correlation Matrix |         |          |          |           |         |          |         |         |       |
|-----------------------------|---------|----------|----------|-----------|---------|----------|---------|---------|-------|
| Variables                   | SSP     | SBS      | SBI      | SBC       | SBP     | IDOWN    | ISOWN   | BAGE    | BSIZE |
| SSP                         | 1       |          |          |           |         |          |         |         |       |
| SBS                         | -0.20*  | 1        |          |           |         |          |         |         |       |
| SBI                         | 0.35*** | 0.22**   | 1        |           |         |          |         |         |       |
| SBC                         | -0.21*  | 0.22**   | 0.27***  | 1         |         |          |         |         |       |
| SBP                         | -0.04   | 0.22**   | 0.74***  | 0.44*** 1 |         |          |         |         |       |
| IDOWN                       | 0.20*   | 0.13     | 0.18     | -0.36***  | 0.02    | 1        |         |         |       |
| ISOWN                       | 0.02    | -0.48*** | -0.21*   | 0.18*     | -0.10   | -0.61*** | 1       |         |       |
| BAGE                        | -0.06   | -0.29*** | -0.42*** | 0.08      | -0.24** | -0.37*** | 0.50*** | 1       |       |
| BSIZE                       | 0.21*   | 0.05     | 0.16     | -0.12     | 0.11    | 0.03     | 0.10    | 0.47*** | 1     |

Note: *p* < .01 =\*\*\*, *p* < .05=\*\*, *p* < =\*

The results presented in Table 3 demonstrate the correlations between the variables. A negative correlation is observed between SSP and SBS ( $r = -0.20^*$ , p < 0.05), indicating that as SSP increases, SBS tends to decrease, and vice versa. On the other hand, SSP and SBI are positively correlated ( $r = 0.35^{***}$ , p < 0.01), suggesting that as SSP increases, SBI also tends to increase, and vice versa. Similarly, a negative correlation is found between SSP and SBC ( $r = -0.21^*$ , p < 0.05), implying that as SSP increases, SBC tends to decrease, and vice versa. However, the correlation between SSP and SBP is weak and not statistically significant (r = -0.04, p > 0.05).

Furthermore, a positive correlation is observed between SSP and IDOWN ( $r = 0.20^*$ , p < 0.05), indicating that as SSP increases, IDOWN tends to increase, and vice versa. However, no significant correlation is found between SSP and ISOWN (r = 0.02, p > 0.05) or between SSP and BAGE (r = -0.06, p > 0.05). Finally, a positive correlation is identified between SSP and BSIZE ( $r = 0.21^*$ , p < 0.05), suggesting that as SSP increases, BSIZE tends to increase, and vice versa. The significance levels (p-values) are indicated in the matrix. Variables with p-values less than 0.01 are denoted with three asterisks, those with p-values less than 0.05 are denoted with two asterisks, and those with p-values less than or equal to 0.1 are denoted with one asterisk.

Table 4: Regression Results of Islamic Corporate Governance and Social Sustainability Performance, Insider Ownership as

|              |                        | Me       | ediator  |          |          |
|--------------|------------------------|----------|----------|----------|----------|
| Variables    | Dependent Variable: Sp |          |          |          |          |
| С            | 19.79*                 | 1.02     | 39.89*** | 38.19*** | 28.26**  |
| SBS          | -1.34***               | 0.29     | -1.88*** | -1.63*** | -1.84*** |
| SBI          | 4.92***                | 5.25***  | 4.99***  | 5.24***  | 4.90***  |
| SBC          | -1.53***               | -3.12*** | -1.31*   | -1.18    | -0.88    |
| SBP          | -1.46**                | -1.19*** | -1.78*** | -1.80*** | -1.71*** |
| IDOWN        |                        | 1.15***  | -2.34**  | 0.10**   | -0.40    |
| IDOWN*SBS    |                        | -0.37*** |          |          |          |
| IDOWN*SBI    |                        |          | 0.81**   |          |          |
| IDOWN*SBC    |                        |          |          | -1.23**  |          |
| IDOWN*SBP    |                        |          |          |          | 0.12     |
| BAGE         | 0.03                   | 0.05     | 0.04     | 0.05     | 0.04     |
| BSIZE        | -0.25                  | 0.41     | -1.11    | -1.14    | -0.61    |
| $R^2$        | 0.515                  | 0.639    | 0.562    | 0.566    | 0.542    |
| F-Statistics | 4.74***                | 6.78***  | 4.91***  | 4.99***  | 4.54***  |

Note: *p* < .01 =\*\*\*, *p* < .05=\*\*, *p* < =\*

The Table 4 presents the regression results of a model that examines the association between Islamic corporate governance and social sustainability performance, with insider ownership as a mediator. The dependent variable is SSP (social sustainability performance), and the independent variables are SBS (shariah board size), SBI (shariah board independence), SBC (shariah board committees), SBP (shariah board meetings), IDOWN (insider ownership), BAGE (firm age), and BSIZE (firm size). The results show the coefficients of the intercept term (C) for each model specification. These values represent the predicted value of SSP when all other independent variables in the model are equal to zero. The asterisk (\*) denotes that the coefficient is statistically significant at the 0.1 level. Further, the results show the coefficient for SBS in the first model specification is -1.34 which indicate that, one-unit increase in SBS is associated with a decrease in SSP by 1.34, keeping other variables constant.

Further, the table includes four interaction terms between Insider Ownership (IDOWN) and other independent variables: IDOWNSBS, IDOWNSBI, IDOWNSBC, and IDOWNSBP. These interaction terms show how the effect of Insider Ownership on Social Sustainability Performance (SSP) changes as the values of the other independent variables increase or decrease. The coefficient for this interaction term IDOWN\*SBS is statistically significant at the 0.01 level. It indicates that the relationship between Insider Ownership and SSP is moderated by SBS. Specifically, as SBS increases, the positive relationship between IDOWN and SSP becomes weaker, the coefficient for interaction term IDOWN\*SBI is statistically significant at the 0.05 level. It suggests that the effect of Insider Ownership on SSP depends on the level of SBI. When SBI is high, the positive relationship between IDOWN and SSP is stronger, the coefficient for interaction term IDOWN\*SBC is statistically significant at the 0.05 level. It shows that the effect of Insider Ownership on SSP depends on the level of SSP depends on the level of SBC. When SBC is statistically significant at the 0.05 level. It shows that the effect of Insider Ownership on SSP depends on the level of SBC when SBC is low, the positive relationship between IDOWN and SSP is not statistically significant, indicating that the relationship between Insider Ownership and SSP is not moderated by SBP. This suggests that the effect of Insider Ownership on SSP is independent of the level of SBP.

The *R*-squared value for the first model specification is 0.515, indicating that the independent variables in that model explain 51.5% of the variance in SSP. All F-statistics are significant at the 0.01 level, indicating that the models are overall statistically significant.

|             | Moderator               |          |          |         |  |  |
|-------------|-------------------------|----------|----------|---------|--|--|
| Variables   | Dependent Variable: SSP |          |          |         |  |  |
| Constant    | 36.43**                 | 5.91     | 18.17    | 19.46   |  |  |
| SBS         | -5.55***                | -1.10    | -1.094   | -1.43** |  |  |
| SBI         | 5.08***                 | 12.19**  | 5.22***  | 4.93*** |  |  |
| SBC         | -2.04**                 | -1.49    | 2.18     | -1.43   |  |  |
| SBP         | -1.46***                | -1.34*** | -1.28*** | -1.10   |  |  |
| ISOWN       | -0.23**                 | 0.277    | 0.038    | -0.01   |  |  |
| ISOWN*SBS   | 0.06**                  |          |          |         |  |  |
| ISOWN*SBI   |                         | -0.09    |          |         |  |  |
| ISOWN*SBC   |                         |          | -0.05**  |         |  |  |
| ISOWN*SBP   |                         |          |          | -0.01   |  |  |
| BAGE        | 0.057                   | 0.024    | 0.057    | 0.03    |  |  |
| BSIZE       | -0.26                   | -0.67    | -0.426   | -0.28   |  |  |
| $R^2$       | 0.55                    | 0.528    | 0.546    | 0.516   |  |  |
| F-Statistic | 4.69***                 | 4.28***  | 4.61***  | 4.08*** |  |  |

Table 5: Regression Results Islamic Corporate Governance and Social Sustainability Performance, Institutional Variable as Moderator

Note: *p* < .01 =\*\*\*, *p* < .05=\*\*, *p* < 0.10=\*

Table 5 shows the results of a regression analysis with the dependent variable SSP (Social Sustainability Performance) and independent variables, including institutional ownership variable as moderator. The intercept values range from 18.17 to 36.43, with the two highest values being statistically significant at p < 0.05. The coefficients of Shariah Board Size are negative, indicating that a larger Shariah board size is associated with lower SSP. The coefficients are statistically significant in all four models, with *p*-values of less than 0.01. The coefficients

of Shariah Board Independence are positive, indicating that higher levels of independence are associated with higher SSP. The coefficients are statistically significant across all four models, with p-values of less than 0.01. The coefficients of Shariah Board Composition are mostly positive, but only statistically significant in one model (p < 0.05). This suggests that the composition of the Shariah board may not have a consistent impact on SSP. The coefficients of Shariah Board Participation are negative, indicating that higher levels of participation are associated with lower SSP. The coefficients are statistically significant in three out of four models (p < 0.05). The coefficients of Insider Ownership are negative in three models, indicating that higher insider ownership is associated with lower SSP. However, in one model, the coefficient is positive but not statistically significant.

ISOWN\*SBS interaction term indicates the influence of interaction between institutional ownership & board size on SSP. The positive coefficient (0.06\*\*) suggests that the relationship between SBS and SSP is stronger for firms with higher levels of institutional ownership. ISOWN\*SBI interaction term indicates the influence of the interaction between institutional ownership and board independence on SSP. The negative coefficient (-0.09) suggests that the association among SBI and SSP is feebler for firms with higher levels of institutional ownership. ISOWN\*SBC interaction term indicates the effect of the interaction between institutional ownership and board competence on SSP. The negative coefficient (-0.05\*\*) suggests that the relationship between SBC and SSP is weaker for firms with higher levels of institutional ownership. ISOWN\*SBP interaction term indicates the influence of interaction between institutional ownership and board process on SSP. The negative coefficient (-0.01) suggests that the association among SBP and SSP that is weaker for firms with higher levels of institutional ownership. The  $R^2$  value range from 0.516 to 0.55, indicating that the independent variables explain between 51.6% to 55% the variation SSP & the *F*-statistic values range from 4.08 to 4.69, with *p*-values of less than 0.01, indicating that the models are statistically significant.

#### DISCUSSION

This study examined how Islamic corporate governance is influencing the social sustainability performance of Islamic banks in Pakistan. The results showed that Shariah board attributes and significantly linked with the social sustainability performance of the Islamic banks in Pakistan. SBS, SBC, SBP were found to be negatively and significantly associated with social sustainability performance which indicates that a larger board with members having Ph.D. Degrees and a higher frequency of meetings lead to a lower level of social sustainability performance. These results are inconsistent with the literature (Cho, Lee, & Pae, 2015, Chen & Mohamed, 2015; Chowdhury & Islam, 2019) that suggests that a larger and more competent board with frequent meeting increase social sustainability performance. This may be because of the fact that the Shariah board in Islamic banks of Pakistan largely focuses on the Shariah compliance of products and procedures and ignores social sustainability performance. However, the Shariah board's independence is positively and significantly associated with social sustainability. This implies that independent board members significantly contribute to the social sustainability performance of Islamic banks in Pakistan. The results are consistent with the extant literature (Elsayed & Elbanna, 2015; Jawadi, Chaker, & Cheffou, 2019) which argue that an independent board improves corporate sustainability performance.

In the case of ownership structure, the results are mixed with both IDOWN and INSOWN showed mixed results. Similarly, the interaction of ownership structure (IDOWN and INSOWN) with Islamic corporate governance has also shown mixed results. IDOWN significantly and negatively moderates the relationship between SBS and SBC and SSP. On the other hand, it positively moderates the relationship between SBI and SSP. IDOWN does not moderate the relationship between SBP and SSP. This shows that insider ownership does influence the relationship between Islamic corporate governance and the sustainability performance of Islamic banks in Pakistan. However, this influence is not consistent across different Islamic governance instruments.

The study delved into the moderating effect of institutional ownership on association among Islamic corporate governance and sustainability performance. The findings unveiled that institutional ownership exerts both positive and negative moderating effects. On the positive side, institutional ownership significantly enhances relationship among SBS and SSP. This implies that institutional ownership has a constructive role in mitigating the potentially adverse effects of larger Shariah boards on the social sustainability performance of Islamic banks in Pakistan. However, in contrast to previous research literature (Hussain, Nadeem, Akhtar, & Khan, 2020, Mollah, Zaman, & Quoreshi, 2020 & Uyar, & Kilincarslan, 2021) Institutional ownership significant & negatively moderates the association between SBC and SSP. This suggests that institutional ownership weakens the positive impact of Shariah

board competence on the social sustainability performance of Islamic banks in Pakistan. These findings contribute to a nuanced understanding of the intricate interplay between institutional ownership, Islamic corporate governance & sustainability performance in specific context of Islamic banking in Pakistan.

On the whole, the results of the study showed that Islamic corporate governance significantly influences the social sustainability performance of Islamic banks in Pakistan but in an inconsistent way. Similarly, ownership structure exerts a significant influence on the nexus between Islamic corporate governance and social sustainability performance.

# CONCLUSION

The aim of this study was to investigate the impact of Islamic corporate governance on the social sustainability performance of Islamic banks in Pakistan and to examine how ownership structure moderates this relationship. The findings revealed that, Islamic corporate governance significantly influences the social sustainability performance of Islamic Banks (IBs) in Pakistan. Shariah board independence increases the social sustainability performance; whereas, Shariah board size, competence, and process decrease the social sustainability performance of Islamic banks in Pakistan. Furthermore, the ownership structure of Islamic banks in Pakistan has shown the ability to significantly moderate the relationship among social sustainability performance & Islamic corporate governance. Both institutional ownership & insider ownership significantly moderates this relationship.

The study contributes to the body of knowledge by providing empirical evidence of the theoretical model proposed by the (Jan, Lai, & Tahir 2021). The study recommends that the Shariah board should play a positive role to increase the social sustainability performance of Islamic banks. Similarly, insider and institutional owners can play a significant role to improve corporate social sustainability performance. The study recommends that future research may be undertaken to incorporate other sustainability performance indicators to examine the influence of Islamic corporate governance. A cross countries analysis may extend our understanding of the impact of Islamic corporate governance on sustainability performance.

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