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THE NEXUS BETWEEN THE GENDER DIVERSITY IN BOARDROOMS AND FINANCIAL SOUNDNESS: EVIDENCE FROM PAKISTAN'S BANKING SECTOR

Muhammad Abdullah[1], Dr. Ahmad Fraz[2], Dr. Muhammad Imran[3*], Dr. Rashid Rauf[4]

[1] Research Scholar at Pakistan Institute of Development Economics (PIDE) Islamabad. E-mail: informabdullah98@gmail.com
[2] Assistant Professor, Pakistan Institute of Development Economics (PIDE) Islamabad Islamabad.. E-mail: ahmad.fraz@pide.org.pk
[3] Ph.D. Economics and visiting faculty member at International Institute of Islamic Economics (IIIE) International Islamic University, Islamabad. Corresponding Author E-mail: muhammademrran@gmail.com
[4] Lecturer at International Institute of Islamic Economics (IIIE) International Islamic University, Islamabad. E-mail: rashid.rauf@iiu.edu.pk

Abstract

This study investigates the effect of gender diversity on the financial soundness (FS) of banks. More specifically, the study aims to assess how the presence of women in the boardroom affects the bank's financial soundness. We also investigate the percentage of women (greater representation of women) impacting the FS of Islamic banks (IBs) and conventional banks (CBs) of Pakistan. We employed data from several sources, such as bank-level data obtained from financial statements and annual reports over the period of 2010 to 2022. Selection of banks is on the basis of full-fledged IBs and CBs. Moreover, on the basis of the Hausman test, random effects models are employed for the empirical analysis. Empirical results for the model suggest that having women as a board of directors (BOD) does represent a valuable resource for CBs. Our results imply that IBs face a possible explanation for the negative association between women's presence and FS of IBs, which is that the social role theory and the importance of social norms and religious values in either discouraging or upholding gender stereotypes contribute to the debate by studying women's board participation in IBs on religious doctrine. Moreover, in case of CBs, the presence of women can positively enhance the FS of the CBs; it also enhances creativity, innovation, and productivity. Our findings provide supporting evidence for recruiting women to serve on boards in the banking industry.

Keywords: Islamic bank; Conventional banks; Gender diversity

Introduction

Background

The Board of Directors (hereafter BOD) is a corporate body that is responsible for the management, direction, and operation of the bank, and its members are chosen by the shareholders (Rashid et al., 2020; Jimenez et al., 2020). Companies board has the same legal duties or responsibilities as a board of conventional bank (CBs) (Abdeljawad et al.,

2020). Furthermore, the board members of an Islamic bank (IB) have additional duties and obligations as a result of the Islamic financial principles (Hakimi et al., 2018; Rehman & Hashim, 2020). In principal, numerous board attributes can play a key role in managing financial soundness (hereafter FS) of the companies e.g. expertise, independence and education. Among the board attributes, board diversity is one of the major issues in the literature of corporate governance (Jabari & Muhamad, 2021). Gender diversity has involved increasing attention from various researchers (García-Meca et al., 2015).

Woman presence is important to enhance the bank FS and reputation (Bear et al., 2010). In addition to that, diversity on BOD is likely to improve the quality of board decisions, and rise the ability of a board to deliver better transparency. Further, having more women on the BOD improves monitoring of managers' operations, activities and financial statements through increased auditing, better board attendance, and better manager accountability (Adams & Ferreira, 2009). Moreover, women directors are more motivated to stop bad corporate practices (Cumming et al., 2015). The percentage of women board members has gradually increased in recent years, though, the class prejudice has slowed down representation of women in specific sectors of the economy, such as financial sector (Kokas, & Wood, 2021). Women directors tend to get paid less money and are sometimes passed over for promotions despite having more qualifications than their male colleagues (Field et al., 2020). As a result, discussions about the impact of the gender diversity of the BOD are ongoing.

In general, across countries, bank’s FS may be different due to differences in the macroeconomic environment, particularly the inflation rate and GDP growth (Ishioro, 2023). It is important to note that the specific effects of inflation on a bank's FS can be influenced by various factors, including the overall economic conditions, monetary policies, regulatory environment, and the bank's risk management practices

(O'Connell, 2023). In principal, the banks can be influenced by changes in GDP growth, and the literature highlights several ways in which GDP can affect bank FS (Kanapiyanova et al., 2023). The specific impact of GDP on a bank's FS will depend on factors such as the bank's business model, market position, and overall economic conditions (Rashid et al., 2017).

From social role theory of leadership, task leadership is understood to align with stereotypically masculine (i.e., Instrumental) roles. Task leadership includes activities like requiring subordinates to follow guidelines and processes, setting high expectations for performance, and clarifying leader and subordinate roles. This understanding stems from the social role theory of leadership. Conversely, stereotypical feminine roles align with interpersonal leadership, which include actions like assisting and demonstrating concern for subordinates, watching out for their wellbeing, and being approachable and available (Eagly et al., 2009).The point of view adds to the explanation, why women and men often frequently display different behaviors and leadership styles (Eagly et al., 1995; Nassar et al., 2021). Particullarly, women tend to exhibit greater tendency to display people-oriented behaviors than men do (Martinez-Leon & Olmedo-Cifuentes, 2020) or transformational leadership styles (Kark et al., 2023).

In the existing literature, numerous studies investigate the presence of women on the BOD and its outcomes on the management of stock market performance of IB and CB; see, for example, (Loy & Rupertus, 2018; Yang et al., 2018; Greene et al., 2020; Menicucci & Paolucci, 2022). Some scholars have reported that the presence of women in BOD does not have a significant impact on the FS of IB; see, for instance, (Almutairi & Quttainah, 2019; Bitar & Tarazi, 2019). However, the existing literature is limited and inconclusive regarding the impact of women's presence in BODs on the FS of IBs and CBs, especially in developing countries like Pakistan.

Numerous studies investigate the role of women in different aspects of

banks, e.g., the role of women directors in financial operations (Loy & Rupertus, 2018; Birindelli et al., 2020), the presence of women on the board and its impact on stock market returns (Greene et al., 2020), and the role of women on the board to overcome financial loopholes (Li & Li, 2020). But now this study can see the change, therefore, this study makes two contributions to the understanding of the impact of presence of women in IB and CB on their FS. First, it investigates the presence of women on BODs and its impact on the FS of IB and CB. Second, this study empirically explores how the role of women (percentage of women) in BODs affects the FS of IB and CB. According to Dobija and Pulawska (2022), the presence of gender diversity in BODs has resulted in more skills, experiences, knowledge, and professionals in their team. Due to gender diversity in boards and audit committee has more capability to fulfill tasks and responsibilities for following up on the interests of shareholders.

The study will help to look into the FS of the banks especially for Pakistan. Moreover, the study helps specially to the banking sector to make sure to promote role of women in the board decisions that may help the policy maker in the future to make their decisions vigorous for the better FS of the banks.Future researchers can assist policy maker to design such investigation such as foreigner in the board that will help in making board room more affective policies.

Literature Review

Corporations are facing societal and legal pressure to include more women on their boards, and authorities in a number of nations have established laws quoting women directors (Mazza et al., 2024). These policies are typically underpinned by the idea that having more women on boards improves boards' FS, which in turn improves bank performance; in academics, however, there is continuous dispute regarding this idea, and empirical results are not entirely conclusive (Venkatarathna et al., 2024). According to Alharbi (2022) there is a

positive and significant correlation between the bank FS of the CBs and the proportion of women in boardrooms. The association between women's board representation and FS is found to be beneficial in some recent research (Bernile et al., 2018; Duppati et al., 2020), negative in others (Bennouri et al., 2018; Yang et al., 2019) or even nonexistent (Arnaboldi et al., 2018). Surprisingly, though, no academic study has examined how different the FS, like IBs with women on the board, are from CBs as far as we are aware, IBs may find it more problematic to have women on their boards than CBs due to the lower acceptance of women in positions of leadership in companies with a strong religious component (Alazzani et al., 2019). Performance may be hampered by this conservative conduct, which could prevent human capital from being allocated efficiently (Khan et al., 2020). Thus, the primary goal of this research is to determine whether the proportion of women directors on IB boards is notably lower than that of CBs, and more crucially, how the soundness of IBs with female board members differs from that of CBs.

In the context of Pakistan, the importance of gender diversity is at its initial stage. Gender diversity in the corporate sector of Pakistan has become a broadly discussed topic. By increasing number of women on corporate boards has raised many questions regarding firm's FS (Shafique et al., 2014). Besides, many defined theories it is widely known the board size is a dynamic core structure of board and plays a main role in the FS of the banking system (Majeed et al., 2020; Gyamerah et al., 2020). For this purpose, the most discussed topic in board structure is the effect of board size on a bank's FS (Nomran & Haron, 2020). Smaller boards may have an impact on the agency theory and improve the FS of banks (Pahtan & Robert, 2013; Agoraki et al., 2010; Majeed et al., 2020). Agency theory basically contends that if ownership and management of a company are divided, management will always want to act in its own best interests, which frequently goes against the primary goal of maximizing shareholder value. Adverse selection and moral hazard are the two ways

that this, often referred to as the agency problem, can appear (Eisenhardt, 1989; Stoelhorst & Vishwanathan, 2024; Bouteska et al., 2024).

Operational efficiency is a measure of management's ability to control expenses. According to Uddin (2022), operating efficiency has a negligible and unfavorable effect on profitability.Rent, rates and taxes, publishing and stationery costs, legal and professional fees, travel expenditures, maintenance and repair costs, depreciation, and other costs are included in operating expenses (OEXP). The ratio of a bank's total operating expenses to its total operating revenue is used to calculate OEXP (Endri, 2018). Similarly, Anggraeni et al. (2022) suggested that operational efficiency ratio has a significant negative impact on profitability. Likewise, Setyowati and Indratjahyo (2020) demonstrated that operational effectiveness significantly and negatively affects IB profitability.

There are several macroeconomic factors that can influence the liquidity of banks, including GDP and inflation rates. Therefore, it can be concluded that GDP can influence the liquidity of IBs indirectly through its impact on profitability, while inflation can directly affect the liquidity of IBs (Prastiwi, 2021;Ibrahim, 2023). Previous research conducted by Bunda and Desquilbet (2008) conclude that GDP growth had a positive effect on bank liquidity levels (Bunda, et al., 2008). In contrast to these findings, research conducted by Dinger and Hagen (2009) states the opposite, even with the assumption that GDP growth occurs in developing countries (Dinger&Hagen, 2009). Another difference emerges from Moussa's (2015) research which states that a decline in GDP triggers the implementation of expansionary economic policies by the government, which actually provides an opportunity for banks to earn more income and reduce liquidity risk.

Inflation, which is an indicator of a country's general price level that is negatively affected by the purchasing power of the national currency. Waemustafa and Sukri (2016) investigated performance

between IBs and CBs in Malaysia, stating that the relationship between inflation rate and risk is positive for IBs, while it was not significant for CBs (Hidayat, 2024). Theoretically, inflation is considered to have a positive effect on liquidity, especially because banking liquidity positions are very responsive to inflation fluctuations. High inflation can reduce the ability of borrowers or financing customers to fulfill their obligations, resulting in a decrease in their real income. Therefore, rising inflation rates and unexpected fluctuations can result in problematic level of loans for banks. Therefore, theoretically, the relationship between inflation and liquidity should be positive (Nkusu, 2011).

GDP, inflation, and interest rates have a statistically significant negative association with banks' profitability (Abate & Mesfin, 2019). Phan et al. (2020) examined the variables influencing banks' profitability. The findings demonstrated that the elements that positively affect profitability are state ownership, GDP growth, operating efficiency, loan size, retail loans ratio, and inflation rate. According to Aburime (2009), interest rates have a big influence on bank profitability. A positive link between the two parameters is also shown by the correlation coefficient results. Athanasoglou et al. (2006) examine the impact of inflation and interest rate on banks' FS, the ability of banks' supervisory and monetary authorities to forecast future inflation, implying that interest rates were appropriately adjusted in consonance with the prevalent rate of inflation to achieve higher performance.

To conclude, country specific variables and bank specific variables are given in the table 1. Further, this study answers variables impact on the FS of the banks in context of Pakistan. In contrast, the impact of Gender diversity in the boardroom is rather ambiguous a priori with respect to the FS of the IBs and CBs particularly for Pakistan banking industry. Further, the pertinent literature, presented above, finds that this nexus could be affected by a board-specific, bank specific and

country specific characteristics. Thus, to fill this gap in the literature this study intends to test the following hypothesis:

***H_1**: The presence of women improves the FS of the IB and CBs.*

***H2**: Greater representation of women in the board room improves the FS of the banking system.*

Presence Of Women And Financial Soundness

Our first independent variable is the presence of women on the BOD. Following Yang et al. (2018), Jabari and Muhamad (2021), we capture the presence of women if it takes a value of 1 when at least one woman sits on the BOD and 0 otherwise. Following Loukil and Yousfi (2016), Khan et al. (2020), and Mukhibad et al. (2022).Numerous studies investigate the role of women in different aspects of banks, e.g., the role of women directors in financial operations (Loy & Rupertus, 2018; Birindelli et al., 2020), the presence of women on the board and its impact on stock market returns (Greene et al., 2020), and the role of women on the board to overcome financial loopholes (Li & Li, 2020).

Percentage Of Women And Financial Soundness

Ratio of women is represented by our second independent variable, which explains the proportion of women sitting on the BOD. In order to measure the proportion of women sitting on the BOD, we will use the following formula to measure the presence of women in the boardroom:

$$WomenRatiointheBOD = \frac{Numberofwomen}{Totalnumberofmembers}$$

By giving a large number of proportions to women on the board, as long as the presence of women can positively enhance the FS of the banks, it will also enhance creativity, innovation, and productivity (Simionescu et al., 2021). Woman presence is important to enhance the bank FS and reputation (Bear et al., 2010). In addition to that, diversity on BOD likely to improve the quality of board decisions, and rise the ability of a board to deliver better transparency. Other way around previous studies show that the percentage of women on the BOD has no effect on the z-score

(Mukhibad et al., 2022).

Data and Research Methodology

The aim of the study is to empirically investigate the impact of the presence of women on the FS of the IB and CB. In this study, we use a sample of full-fledged IBs and CBs in case of Pakistan over the period 2010–2022.

Construction of the Variables

1.1.1 Dependent Variable

Following Karkowska and Acedanski (2020), Qasim (2020), and Khalil & Slimene (2021), the FS of banks is measured by the z-score.

$$Z - score = \frac{ROA+KA}{\sigma_{ROA}} \ldots\ldots\ldots\ldots\ldots (1)$$

With,

ROA = return on asset = net income/total asset.

KA = total equity/total assets.

σ_{ROA} = standard deviation of ROA

Moreover, according to Abrar et al. (2018) and Khalil & Slimene (2021), the Z-score measures and compares (returns and capitalization) and volatility in ROA. Further, Bourkhis and Nabi (2013) and Amine (2018) add that the Z-score ratio estimating the number of standard deviations of return achievement must fall to deplete equity under the hypothesis of normality of banks' returns. A higher Z-score indicates that the banks have higher FS, and a lower Z-score, therefore, implies that the banks have lower FS (Abrar et al., 2018; Khalil & Taktak, 2020).

Independent Variable

Our first independent variable is the presence of women on the BOD. Following Yang et al. (2018), Jabari, and Muhamad (2021), we capture the presence of women if it takes a value of 1 when at least one woman sits on the BOD and 0 otherwise. Following Loukil and Yousfi (2016), Khan et al. (2020), and Mukhibad et al. (2022), our second independent variable is the proportion of women sitting on the BOD. In order to measure the proportion of women sitting on the BOD, we use the

following formula to measure the presence of women in the boardroom:

$$WomenRatiointheBOD = \frac{Numberofwomen}{Totalnumberofmembers} \ldots\ldots\ldots \quad (2)$$

Control Variables

The motivation for choosing these control variables is primarily based on variables that are likely to affect banks' FS. Furthermore, this study will use the different bank level as well as country level control variables motivated by the existing literature (Farag et al., 2018; Li & Chen, 2018; Khalil & Slimene, 2021; Jabari & Muhamad, 2022; Yitayaw et al., 2023). The following variables are used in the empirical analysis: size of BOD, loan ratio, real interest rate, non-performing loans, operating expenses, inflation rate and GDP per capita growth.

Table 1: List of Variables

Variables	Definition	Measurement
Dependent Variable		
Z-Score (Financial Soundness)	The Z-score indicator measures the number of the standard deviations of return achievement that must decrease to reduce equity, assuming that the bank's returns are normal.	$= \frac{ROA + KA}{\sigma_{ROA}}$ A higher Z-score indicates that the banks have higher financial soundness.
Independent Variables		
WPBOD	The presence of women on the BOD.	It takes the value of 1 when at least one woman sits on the BOD and 0 otherwise (Dummy).

WPPBOD	The percentage of women on the BOD.	$WomenRatiointheBOD = \frac{Numberofwomen}{Totalnumberofmembers}$

Control Variables

BODSIZE	The number of BOD members	The total number of members on the BOD
LOAN	Loan ratio to assets	LOAN=$\frac{Loan}{Asset}$
Real Interest rate	Real interest rate	the lending interest rate adjusted for inflation as measured by the GDP deflator
NPL	Non-Performing Loans	NPL=$\frac{Badloan}{Loan}$
Operating Expenses	OEXP	an expense that a business incurs through its normal business operations.
INF	Inflation	The annual inflation in percentage.
GDP_PC	Growth in GDP per capita	The annual growth rate of per capita GDP in percentages.

Empirical Model

In equations 3 and 4 we represent our empirical models, where the Z-score measures the FS of IB and CB. $WPBOD_{1,t}$ represents the presence of women sitting in the boardroom and its impact on the FS of the IB and CB. Similarly, $WPPBOD_{1,t}$ representing the percentage of women sitting in the boardroom and its effect on the FS of the IB and CB. In addition, the following control variables are used in the empirical analysis as suggested by the existing literature: size of BOD, loan ratio, real interest rate, non-performing loans, operating expenses, inflation rate and GDP per capita growth.

Z - Score = f (WPBOD, WPPBOD, BODSIZE, LR, R_INTEREST RATE, NPL, OPERATING EXPENSES, INF, GDP_PC) ..... (1)

$$Z - score_{1,t} = \beta_0 + \beta_1 \text{WPBOD}_{1,t} + \beta_2 control_{1,t} + \varepsilon_t \quad (3)$$

$$Z - score_{1,t} = \alpha_0 + \alpha_1 \text{WPPBOD}_{1,t} + \alpha_2 control_{1,t} + \varepsilon_t \quad (4)$$

We apply the panel data technique such as common, fixed and random effect models. The selection between the fixed effects model and the random effects model based on Hausman test. The Hausman test is also required to determine whether a fixed effects or random effects would be employed (Farag & Mallin, 2017). To identify whether the fixed or random effects estimator should be used in these panel data set (Farhana, 2020). The study employed the Hausman test to ascertain whether the fixed effect or the random effect is more appropriate. Statistic from the Hausman test is not significant, indicating that the random effect estimation is preferred to the fixed effects.

Table 2: Hausman Test Criterion

	H_o is true	H_1 is true
β_1 (RE estimator)	Consistent Efficient	Inconsistent
β_o(FE estimator)	Consistent Inefficient	Consistent
If results show;		
H_o: Select RE (p > 0.05)		
H_1: Select FE (p < 0.05)		

Data Collection

This study combines data from several sources, such as bank-level data obtained from financial statements and annual reports. Similarly, country-specific data are obtained from the IMF's International Financial Statistics (IFS) and the World Bank's World Development Indicators (WDI). The sample period of this study comprises 13 years, from 2010 to 2022. Further, we choose full-fledged Islamic and commercial.Corporate governance-related data is gathered via the web page of the bank, the banks' governance reports, and director biographies. Sources of data collection are mainly from the State Bank of Pakistan (SBP), annual balance sheet and income statement analysis, profiles of the bank,

official websites of the company and the PSX web site. According to the new regulations of the Securities and Exchange Commission of Pakistan (SECP), all Pakistan's listed companies must disclose their information regarding their financial positions, annual reports, and governance structure. Moreover, we select the 6 IBs and 16 CBs on the basis of full-fledged Islamic and conventional banks. The list of selected banks is provided in Table 3.Only financial institutions listed as the sample for this study, data sample is also taken from the Pakistan Stock Exchange (PSX) sample data. Specifically, the reason for selection of only these banks is that the financial structure, reporting style.

Table 3: List of Banks

Islamic Banks		
Meezan Bank Limited	Al-Baraka Bank (Pakistan) Limited	Bank Islami Pakistan Limited
MCB Islamic Bank Limited	Dubai Islamic Bank Pakistan	Faysal Bank Limited
Conventional Banks		
Bank AL Habib Limited	Summitbank	Bank of Khyber
Askaribank	National bank of Pakistan (NBP)	HabibMetro
The bank of Punjab	AlliedBank	Silkbank
Standard Chartered	Unit ed Bank Limited (UBL)	Bank Alfalah
JS bank	Habib Bank Limited (HBL)	Samba Bank Limited
Soneri Bank		

EmpiricalResults

Descriptive Statistics for Full Sample Period

We present the results of the empirical study concerning the impact of

women presence in boardroom on FS of banks and also, to examine the greater representation of women (Percentage) in the boardroom of banks in the context of Pakistan. Table 4 illustrates the descriptive statistics of the full sample period. Starting from the dependent variables, we use the Z-score as an indicator of the FS of banks, which shows our mean is 3.092 on the other extreme the standard deviation is proving a value greater than 1. Further, presence of women presence (dummy) capture the presence of a woman in board equal to 1 and if not then equal to 0 otherwise. The percentage of women (women ratio) or greater representation of women in the boardroom, mean of 0.044 ranging from 0 to 0.17, having a standard deviation of 0.058.

Table 4: Descriptive Statistics for Full Sample

Variable	Obs	Mean	Std. Dev.	Min	Max
Z-Score	192	3.092	2.38	-2.65	15.821
Presence Women (Dummy)	191	.377	.486	0	1
Women ratio	191	.044	.058	0	.17
Bank Specific Variables					
Return on Asset (ROA)	192	.835	1.357	-8.39	3.18
Board Size (Total Members)	191	9.162	2.152	5	14
Loans ratio	141	5.759	20.49	1.637	246.908
Non-Performing Loans (NPL)	124	271461.35	195346.13	14501	849824
Log Operating Expenses (LOEXP)	130	12.755	.735	11.088	14.375

Country Specific Variables					
Real Interest rate	175	2.246	3.417	-4.37	7.13
Inflation (INF)	147	7.511	3.316	2.53	12.94
GDP Per Capita	192	2.339	2.26	-2.97	4.55

Summary Statistics of Islamic Banks

In Table 5 we present the descriptive statistics of the IBs. The descriptive statistics on the basis of 65 observations of the data indicates that the minimum Z-score during the period of time is -0.239 and the maximum Z-score is 5.505 and the average is 3.389%.

Table 5: Descriptive Statistics for Islamic Banks

Variable	Obs	Mean	Std. Dev.	Min	Max
Z-Score	65	3.389	1.365	-.239	5.505
Presence Women (Dummy)	65	.323	.471	0	1
Women ratio	65	.028	.04	0	.1
Bank Specific Variables					
Return on Asset (ROA)	65	1.18	.734	-.14	3.18
Board Size (Total Members)	65	10.862	2.364	7	14
Loans ratio	44	4.204	1.132	1.833	6.102
Non-Performing Loans (NPL)	40	189176.58	117241.92	14501	465092
Log Operating Expenses (LOEXP)	41	12.57	.636	11.088	13.7

Country Specific Variables					
Real Interest rate	60	2.267	3.569	-4.37	7.13
Inflation (INF)	55	7.746	3.388	2.53	12.94
GDP Per Capita	65	2.267	2.204	-2.97	4.55

Summary Statistics of Conventional banks

Table 6 we have provided summary statistics based of the CBs. The first independent variable is presence of women presence (dummy) capture the presence of a woman in board will be given the value 1 if not then equal to 0 otherwise. The descriptive statistics on the basis of 127 observations of the data indicates that the minimum z-score during the period of time is -2.65 and the maximum z-score is 15.821 and the average z-score is 2.94.

Table 6: Descriptive Statistics for Conventional Banks

Variable	**bs**	**Mean**	**Std. Dev.**	**Min**	**Max**
Z-Score	127	2.94	2.752	-2.65	15.821
Presence Women (Dummy)	126	.405	.493	0	1
Women ratio	126	.052	.064	0	.17
Bank Specific Variables					
Return on Asset (ROA)	127	.658	1.557	-8.39	2.7
Board Size (Total Members)	126	8.286	1.379	5	12
Loans ratio	97	6.464	24.7	1.637	246.908
Non-Performing Loans (NPL)	84	310644.57	212778.91	55609	849824
Log Operating Expenses (LOPEX)	89	12.84	.765	11.438	14.375

Country Specific Variables					
Real Interest rate	115	2.236	3.351	-4.37	7.13
Inflation (INF)	92	7.371	3.283	2.53	12.94
GDP Per Capita	127	2.376	2.295	-2.97	4.55

Correlation Matrix

The matrix of correlation examines the correlation of variables by observing relationship between the variables and also indicates the problem of multicollinearity (Boachie, 2021). Thereby, looking into the first research problem is focus on the correlation between the variables used in this study of empirical investigation.

Table 7

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Variables											
(1) Z-Score	1.000										
(2) Return on Assets	0.515	1.000									
(3) Presence Women	0.197	0.238	1.000								
(4) Women ratio	0.208	0.224	0.971	1.000							
(5)	-	0.3	0.17	0.0	1.0						

Board Size	0.059	08	5	39	00					
(6) Loans ratio	0.459	-0.117	0.082	0.082	0.018	1.000				
(7) Real Interest rate	-0.027	-0.085	-0.100	-0.070	-0.065	0.009	1.000			
(8) NPL	0.010	0.056	-0.116	-0.097	-0.139	0.315	0.010	1.000		
(9) LOPEX	0.188	0.426	0.276	0.265	0.063	-0.151	0.006	0.580	1.000	
(10) Inflation	0.122	0.038	0.050	0.050	0.052	0.164	-0.166	-0.045	0.052	1.000
(11) GDP Per Capita	-0.112	-0.055	0.290	0.280	0.063	-0.102	-0.184	0.085	-0.103	-0.754

The fact that every coefficients of variable is less than the (0.5) threshold established by Kervin (1992), demonstrating that there is no issue with the existence of multicollinearity. All values are less than 0.5 except the two variables (presence and percentage) that are separately measured; therefore, the outcome shows that there is no such existence of a multicollinearity problem in our data set. Based on the Woolridge (2000) as far as correlation may not always imply causation, as the causal relationship is examining by the regression analysis. Therefore, we apply the panel regression.

Empirical Findings

Full Sample Period

In Table 7 we depict the impact of women presence on bank's FS for full sample period, IB and CB respectively. Gender diversity is itself considered as most effective board's characteristics due to the positive effects it has on the firm's outcomes such as FS, social responsibility and disclosure of financial firms (Jouber, 2024). In terms of corporate governance, banks with better FS are those in which women representation is higher (Mirza et al, 2012). However, in case of full sample period we find insignificant positive effect of women presence on FS. Having women on the BOD does represent either a valuable resource for banks. Following most studies on board gender diversity and corporate governance, we apply critical assumptions of the various types of diversity to explain how board gender diversity adds to FS (Aljughaiman et al., 2023). Further, gender diversity does guarantee an increased FS of the BOD, studies that shows a positive impact of the presence of women on board on FS aspects of non-financial firms are as follows (Poletti-Hughes & Briano-Turrent, 2019; Bui et al., 2023; Trinh et al., 2020; Brahma et al., 2021; Carbonero et al., 2021). Nevertheless, the culture of the board can be the aspect that may influence that how a well diverse board performs its obligations and manages the banks' matters. In this connection, the women as a member of BOD affect as much as whether the board's management lets them to be combined actively into the making strategies for the banks.

Women directors contribute a diversified set of functional skills and information resources to the board. Notably, female directors possess more expertise than male directors, and hence newly appointed women directors also add to the board more skills than newly appointed men directors (Kim & Starks, 2016; Aljughaiman et al., 2023).

Besides, many defined theories it is widely known the board size is a dynamic core structure of board and plays a main role in the FS of the banking system (Majeed et al., 2020; Gyamerah et al., 2020). We find that board size has a negative and significant impact on the FS, which means that a large number of board members has a negative impact on the FS of banks. These results are in line with the agency theory, for example; a larger BOD increases communication problems and presents difficulties in coordinating efforts between directors (Jensen, 1993; Khalil & Slimene, 2021). Further, the agency problem can manifest in two different forms: moral hazard and adverse selection (Stoelhorst & Vishwanathan, 2024). Adverse selection occurs when agents bias their ability to perform assigned tasks and moral hazard happens when agents evade their duties or responsibilities or when they simply underperform due to a lack of commitments. These issues arise due to the large number of members making the directors role passive (Bouteska et al., 2024).

However, in Table 7 we find that loan ratio, NPL and OPEX have a positive and significant impacts on FS for the banks (full sample). Loans typically generate interest income for banks, which contributes to their revenue and profitability (Laeven & Majnoni, 2003; Nugroho & Rachmaniyah, 2020). A higher loan ratio indicates that a larger portion of the bank's assets is invested in loans, potentially leading to higher interest income if those loans are performing well borrowers or shareholders may take more involvement in the respected banks. These findings are consistent with the following studies (Islam et al., 2022; Rokhimah et al., 2024). However, excessive operating expenses can hinder a bank's ability to generate revenue effectively. If operating costs are not managed efficiently, they can erode the margins on banking products and services, thereby limiting revenue growth.

Islamic Banks

In principal several board attributes can play a crucial role in managing FS of the companies e.g. expertise, independence and education. Among

the many board attributes, board diversity is a major issue in the corporate governance literature (Jabari & Muhamad, 2021). Moreover, in the oppose of agency theory, resource dependence notion states that a board with more directors may have a positive financial impact on the company. Larger boards may also present more opportunities than smaller ones (Staikouras, 2010; Pahtan & Robert, 2013). The size of the board of directors has a detrimental effect on the FS of IBs, as demonstrated by Bukair and Rahman (2015); Buallay& Hamdan (2019). In Table 8 (column 2) we present the impact of women presence on FS for the IBs over the period of 2010 to 2022 for Pakistan. We find a significant negative association between women presencein boardroom and FS for the IB in Pakistan. The possible explanation of the negative association between the women presence and FS is because the larger number of women are less efficient for the IBs. One possible explanation of the negative association between women presence and FS of IBs is that the social role theory (Eagly& Kite, 1987) and the importance of social norms and religious values in either discouraging or upholding gender stereotypes, to the debate by studying women board participation in IBs on religious doctrine. Due to religion matters for women appointments in the bank board due to gender stereotypes which is the main reason for the participation or presence of women in boardroom (Khan et al., 2020).

These empirical findings are consistent with (Almutairi & Quttainah, 2019; Bitar & Tarazi, 2019) who reported a significant negative effect of women presence on bank performance. Another reason of the negative relationship can be that women as a board member may be viewed more controversial for IBs than CBs. Because there is less acceptance of women in the leadership position of religiously conscious firms (Alazzani et al., 2019). This conservative behavior may hinder efficient allocation of human capital, and thereby impede performance (Khan et al., 2020). However, we contradict (Jabari & Muhamad, 2021) who reports a significant positive effect of women presence on

boardroom.Similarly, operating expenses is highly significant and positively associated with FS of the IBs. Findings are consistent with (Shrestha, 2023). The operating ratio, also known as the efficiency ratio, is a measure used to assess how well bank management is able to manage operating expenses in relation to operating income (Syafrizal et al., 2023).

Conventional Banks

Table8 illustrates case of CBs, in which we represent significant and a positive impact of women presence on FS of CBs in Pakistan. A possible explanation can be that, as long as the presence of women can positively enhance the FS of the CBs, it will also enhance creativity, innovation, and productivity. These findings are consistent with the Cardillo et al. (2021) and Simionescu et al. (2021). Moreover, according to the psychological-economic theory approach, women tend to avoid risk as compared to men because men take risk more frequently (Sila et al., 2016).Furthermore, women's boards are superior to men's in terms of their ability to oversee directors' performance in a manner that is significant (Jabari & Muhamad, 2021). Likewise, Byrnes et al. (1999) report that organizations with women boards are less likely to face bankruptcy because women typically stay away from daring experiments, reckless behavior, and gambling-prone policies. Consequently, women are less sensitive to choose hazardous modes of action (Fehr-Duda et al., 2006; Abou-el-sood, 2021). Additionally, it is also observed that a company's financial success is enhanced when there are women on its boards (Cardillo et al., 2021).Consequently, a diverse board is able to consider more creative ideas and contribute a wide range of viewpoints to the banks' decision-making process, enhancing the banks' FS, than a board without gender diversity, which may constrain different thinking due to a higher level of consistency and pressure towards customs. In addition to that, the amount and quality of comprehensive information provided to decision-makers influences their creativity (Vairavan & Zhang, 2020), and that

gender diversity fosters higher levels of innovation by improving idea quality, creativity, and inventiveness (Bennouri et al., 2018; Bansal et al., 2023).

In addition, we find significantly negative impact of board size on FS of the CBs. However, there is neither direct effect of board racial diversity on CBs performance nor is there an indirect effect through either employee productivity. It is commonly recognized that the board size is an important system of board structure and plays vital role in the administration of the banks. For this purpose, the FS of CBs influence by board size, so that board size is most deliberated issue in board structure. Smaller boards may have an impact on the agency theory and improve the FS of CBs. Additionally, a smaller board appears to be more effective in managing the company's financial presentation than the CEO (Jensen, 1993; Goodstein et al., 1994; Ruigrok et al., 2006).

The agency theory states that there are more communication issues and coordination challenges when there is a larger board of directors (Jensen, 1993). In addition, a high number of directors pushes board members to follow their own agendas, which leads to issues with agencies (Lipton and Lorsh, 1992; Jensen, 1993). According to Prowses (1997), a big board will result in more information asymmetry and possible conflicts of interest between management and directors. According to Amine (2018), there may be a greater financial risk associated with a board that has a big number of directors. On the other hand, a larger board is said to have a wider range of expertise and experience by proponents of the resource reliance theory (Rositha et al., 2019; Rashid et al., 2020). Additionally, a large board serves the demands of stakeholders, enhances control, and makes successful decisions also sizable board can better manage risk to prevent bankruptcy and is favorably correlated with FS (Almutairi & Quttainah, 2017; Hakimi et al., 2018; Ulussever, 2018; Naveed & Abdin, 2020).

Positive and substantial impact on the value of the firm; that is, if the

value of the non-performing financing rises, the company's value rises as well, and vice versa. The NPF ratio demonstrates the bank management's capacity to oversee its issue loans. According to Hidayat (2024) and Haq (2023) the higher the NPF ratio, the worse the credit quality, which leads to more problematic loans and losses or difficulties for the bank. We find a significant and positive impact of loan ratio on FS of the CBs. Similarly, non-performing loans is also a significant and positive impact on the FS of the CBs. However, an increase in non-performing loans (NPL) corresponds with a rise in the bank's value, meaning that shareholders will continue to invest in a bank as long as it generates profits, regardless of the quality of the bank's credit (Nugroho & Rachmaniyah, 2020). Additionally, the scale of the NPL reflects this, meaning that stakeholders do not view the danger of bad credit that may arise as the primary source of worry from banks. Nonetheless, investors frequently focus more on the returns on their share investments than on other outside factors that can have an impact on the CBs' ability to make money (Marwansyah, 2016; Rokhimah et al., 2024).

Similarly, operating expenses is highly significant and positively associated with FS of the CBs. Furthermore, a bank's ability to generate revenue can be directly impacted by its operating costs. Investments in customer service, marketing, and technology, for example, can increase customer's retention and satisfaction, which in turn promotes revenue development. On the other hand, some costs are incurred in order to guarantee risk management and regulatory compliance, both of which are essential to the bank's long-term stability and viability. These findings are consistent with the (Ferreira, 2020).Bigger banks frequently gain from economies of scale, which allow them to spread fixed costs over a bigger asset base and achieve lower operating expenses as a percentage of revenue. Scale of operations also plays a key influence. Smaller banks can still compete, though, if they concentrate on specialized markets or prioritize providing individualized care.

In general the investors evaluate a bank's financial stability and managerial effectiveness in part by carefully examining its operating costs. Unexpectedly large costs could make people wonder if the bank can properly control costs and remain competitive. Innovations in technology are changing the way that banks incur operating costs. Initial investments in automation and digital banking platforms may result in higher costs, but over time, they can save costs by increasing efficiency and decreasing the need for manual operations. For banks to experience long-term financial success in a market that is becoming more and more competitive, finding the ideal balance between funding expansion efforts, controlling expenses, and preserving operational effectiveness is crucial.

The BOD's legal obligations are equivalent to those of a traditional bank's board. In general, a number of board characteristics board diversity is one of the numerous characteristics of a board and a significant concern in the literature on corporate governance (Jabari & Muhamad, 2021).

Furthermore, Operational efficiency is a performance metric that evaluates how successfully banks are simplifying their operations while accounting for input and output costs. The study also discovered a positive association between FS and the deposits to assets ratio, indicating that a bank's FS increases with the amount of deposits it accepts.

Table 8: Women Presence in the Boardroom and Financial Soundness

		Col (1) Full Sample zscore	**Col (2) Islamic Banks zscore**	**Col (3) Conventional Banks zscore**
Women (Dummy)	Presence	0.842	-0.961*	2.058**
		(0.556)	(0.538)	(0.825)

Board Size	-0.289***	0.100	-0.726***
	(0.099)	(0.171)	(0.185)
Loan Ratio	0.088***	-0.384	0.097***
	(0.01)	(0.283)	(0.011)
Real Interest rate	2.173	2.253	0.891
	(1.956)	(2.276)	(2.606)
Non-Performing Loans	0.103***	0.027	0.109***
	(0.001)	(0.001)	(0.018)
Operating Expenses	2.690***	1.285**	2.510***
	(0.407)	(0.597)	(0.514)
Inflation	-0.224	-0.196	-0.078
	(0.33)	(0.343)	(0.417)
GDP pe capita growth	-1.11	-1.288	-0.300
	(1.152)	(1.274)	(1.519)
Constant	-30.607***	-15.674**	-23.757***
	(5.714)	(7.302)	(8.105)
Observations	111	40	71
Year Dummy	Yes	Yes	Yes
Within R^2	0.406	0.331	0.54

This table illustrates about the estimation of the over-all performance of models. We use dependent variable Z-score proxy for the FS, which is measured by the soundness of the banks. Year fixed effects are included in all regressions, but their coefficients are not reported. We apply random effect technique with robust standard errors for our estimations. Robust standard-errors are reported in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

Women Percentage in the Boardroom

Banks with a more gender-diverse BOD are expected to have better FS as measured by the Z-Score. Regarding gender diversity among the board members, the results show that women's proportion on the BOD

positively affect FS for the full sample period as well as for the CBs. On contrary we find a negative and significant effect of women percentage for the IBs. These findings are discussed in detail in the following subsections.

Full Sample Period

Since women place a high importance on upholding their own reputations in the directorship market, the agency theory states that having them on the board should enable greater oversight of managers and curtail their opportunism (Pathan & Faff, 2013). In Table 8 column 1 we present the empirical findings based on full sample period. We find that the coefficient of women percentage is a significant and positively related with FS of the banks for the full sample period. This finding is consistent with the Khan et al. (2020), Arnaboldi et al. (2021), Karavitis et al. (2021), and Jabari and Muhamad (2021). This positive linked between women percentage and FS of the banks can be explained as that increased gender diversity in the boardroom reduces risk taking (Gulamhussen & Santa, 2015; Khaw et al., 2016) reduces institutions' leverage and susceptibility to bankruptcy risk (Adusei & Obeng, 2019), reduces the cost of lending (Karavitis et al., 2021).

In addition, in Table 9 column (1) the board size coefficient clearly indicates that a board size is a factor having a negative and significant impact on the bank performance. This could be considered as an evidence of either low economic results that call for constant and active board involvement or of challenges reaching broad director agreement on objectives and carrying out the bank's strategy, which impairs performance. Alternatively, it could be seen as a correlation between smaller board sizes and lower margins. These empirical results are in line with (Amine, 2018; Nastiti & Kasri, 2019; Skvarciany et al., 2019). Further, group size literature supports that as group size increases, members' liking for each other decreases (Klein et al., 2009), leading to low social integration (Seashore, 1977) and low perceived attachment

(Smith et al.,1994). Thus, they are likely to seek out similar group members resulting in subgroup formation (Hamilton et al., 2010).

In the banking sector, performance of banks depends on especially the provision of loans, the transmission of monetary policy, the system of payments and also the preservation of financial stability. In the FIs particularly for the banking sector, the market power surges banks' average incomes but infers huge costs to banks deposit holders due to lower deposit-rates and higher loan-rates, with unfavorable effects on economic growth and investments in the economy. However, in case of boom in the economy particularly with higher expected returns banking sector may be interested to tend to take more risk and accordingly charge higher loan interest rates. In other words, since the demand for commercial loans and other banking products and services upsurges during periods of strong economic growth, banking industry's revenues rises faster than costs (Igan et al., 2021).

This study also finds a significant and positive association between loan ratio and non-performing loans withthe FS for a full sample period. Banks possess substantial market dominance into the manner of a higher concentration in the finance and saving market because of tight entry as well as exit boundaries, which helps in decrease in competition and lead it to the profits that are monopolistic. In order to help their managers and shareholders through taking advantage of their opportunities for growth prospects. Banks might choose additionally risky investment and financing decisions. In doing so, institution might risk not just their own long term continued existence along with making their financial circumstances more uncertain overall. In this respect it is important to recognized the roles of members of the board with the aim to sustain systemic and sectoral sustainability. Nevertheless, an increase in deposits to assets ratio ought to cause greater expenses for promoting capital thus, reducing markups particularly during steady economy certain points. On the contrary a higher loan to assets ratio suggests that

FIs focus on the traditional credit business, which results in greater risk of default other than generally delivers higher profitability margin (Delis et al., 2016).

Concerning the presence of women on the BOD, the estimation of variable, operating expenses shows that the presence of expenses affects the FS of banks positively with statistical significance.Operating expenses include a wide range of costs associated with daily expenses that is why it is an essential component for a bank's FS. Costs that are associated with regulatory compliance that are typically included in expenses such as administration charges, marketing costs, technologies and investments. Considering the framework of operating expenses allows for identifying areas that might gain profit from the reducing expenses or improving efficiency. Banks might utilize the benchmarking to identify in efficiency and set strategies in place to regulate costs more effectively and earn greater profits compared to their competitors with the goal to assess their expenses and FS against their competitors, banks often take part in the benchmarking projects. (Chiaramonte et al., 2023).

Islamic Banks

The results in Table 9 column (2) show that the coefficient of women percentage is significant and negative. This negative association means that IBs have lower profitability which can be due to their higher inefficiency, which is similar to the findings of the Khan et al. (2020). This finding can be view as women as a board member may be viewed more controversial for IBs. Because there is less acceptance of women in the leadership position of religiously conscious firms (Alazzani et al., 2019). This conservative behavior may hinder efficient allocation of human capital, and thereby impede performance (Khan et al., 2020).

Similarly, operating expenses is highly significant and positively associated with FS of the IBs. Following regulatory obligations signifies a component of operating expenses for banks. After the global financial crisis (2007-08) oversight by regulators has led to increase in

operational costs related to management of risk, laundering measures of anti-money, protection of consumers, and privacy of data. For the effective FS bank should manage the regulatory compliance costs by maintaining cost of regulatory compliance. The FS of banks is affected directly by the operating expenses. It is critical for banks to control the operating expenses for the better performance, profitability and also enhancing the value for shareholder. To achieve the better FS of banks must attract a balance between investing in management of operating expenses and initiatives for to attain optimal FS (Adhikari et al., 2023).

Conventional Banks

In table 9 column (3) we document that the women ratio in boardroom is positively and significantly associated with the bank FS of the CBs. This empirical finding is consistent with (Khan et al., 2020; Alharbi, 2022). The can be due to that, woman directors may improve a bank's FS as woman directors carry various new practices, financial and managerial skills, and expertise to the board (Farag & Mallin, 2017). Another possible explanation of the positive association can be that racial diversity brings to the board a new perception, new ideas, unique set of product knowledge, values, and a mixture of these different perspectives influences the board's working in effective ways. However, it is observed that women are more risk averse as compared to that of men (Berger et al., 2014; Loy & Rupertus, 2018) further, this statement does not be generalized for the professionals or decision-making level (Croson & Gneezy, 2009).

Further, the performance of board may be affected by inequality in gender. In order to achieve the optimal performance of board, it must fulfill certain criterion. For instance, increase in gender diversity may well effective for the decision-making (Jabari & Muhamad, 2022), new experience on different subjects (Srivastav & Hagendorff, 2016). And also, with mutual thoughts of ideas coming from members of boardroom with different backgrounds and different life experiences. Furthermore, the

presence of women on the board might facilitate FIs to access to a vast range of consumers (Aliet al., 2014).We find a negative and significant influence of board size on the FS of the CBs. One of reason of this negative association can be that the more members in the board room, in general, can give rise to more coordination glitches in exchanging information and in designing strategy (Cheng, 2008; Amine, 2018; Bansal, 2023). In the same vein, it takes more compromises for a large board to reach consensus (Priharta & Gani, 2024). Thus, increased board size negatively impacts the ability of board members to make strategic decisions because of a lack of cohesion (see for instance Nastiti & Kasri, 2019). Further, these highlighted coordination problem among the board members might be attributed to stronger fault lines in these boardrooms. However, “small- and large-sized” boards face strong fault-lines, while a “medium-sized” board faces weak fault-line. Nevertheless, according to Ali and Ayoko (2020), the ideal board size seems to be ten. Furthermore, it is very important to note that the nomination committees need to consider the trade-off between adding new value and low-quality decisions before increasing a board’s size (Cheng, 2008; Appiah et al., 2016).

The association of NPL and the FS of banks is not that simple as it seems, frequently marked by unfavorable impact on financial sector for example profitability, liquidity and capital adequacy (Islam et al., 2022). In this empirical analysis we find that FS of a bank is positively and significantly correlated with each of the loan ratio and NPL. The main channels through which NPL is connected with the FS of banks is by setting up expenses’ usage. These findings are consistent with the following studies (Marwansyah, 2016; Hidayat, 2024; Nugroho & Rachmaniyah, 2020). In order to overcome the losses that are arising from the NPL, provisions are essential to manage potential losses from NPLs, which may directly affect the profitability of a bank (Hidayat, 2024). A bank's exposure to economic crises or adverse events occurs in

specific sectors, evaluation of credit risk or lending procedures might be affected by a high substantial number of NPLs. However, there is a positive relationship between NPL and the FS of banks under certain conditions. For instance, effective management and handling NPL can lead to reduced credit risk over time and better asset quality (Marwansyah, 2016; Rokhimah et al., 2024). Furthermore, banks and FIs are likely to improve their balance sheets and raise confidence level of investor if they implement effective NPL resolution initiatives including loan deductions or restructuring of loan (Sukmadewi, 2020; Setiawan & Tobing, 2024).

In Table 9 column (3) we report that operating expenses highly significant and positively associated with FS of the CBs for the selected sample period. The possible explanation can be that, for example, investment in skills, new technologies (application of the Artificial-intelligence, software or application installation) and trainings can enhance operational efficiency, advance service delivery according to the demand of customers and it can also decrease the cost of the banks. Moreover, applications of new digital banking channels, the mechanization of routine tasks, and reforms for the processes can also lead to cost effective and enhancing the productivity, eventually it will improve the profitability of the banking sector (Dadhich et al., 2020). In addition to that, investments in advertising platforms and customer care initiatives can determine growth in revenue by adding new customers' base, improving customer satisfaction, and nurturing loyalty of the existing customers. Though, these strategic investments may primarily surge in operating expenses of the banks, however, the surge in expenses can harvest long-term financial and strategic benefits in terms of higher profits and penetration in the banking industry. To sum up, while dealing operating expenses it is indispensable, particularly, for strategic investments in research and development, new technologies, increasing the customer satisfaction and loyalty, and maintaining profitability and

thus contribute to the long-term FS of the CB. Therefore, finding the accurate balance between cost control and investment in growth initiatives is very crucial for attaining sustainable financial achievement in the banking sector of Pakistan.

Table 9: Women Percentage in the Boardroom and Financial Soundness

	Col (1) Full Sample zscore	**Col (2) Islamic Banks zscore**	**Col (3) Conventional Banks zscore**
Women Percentage	8.092*	-10.70*	13.967**
	(4.873)	(6.151)	(6.430)
Board Size	-0.263***	0.083	-0.705***
	(0.098)	(0.171)	(0.192)
Loan Ratio	0.088***	-0.397	0.098***
	(0.010)	(0.283)	(0.011)
Real Interest rate	2.158	2.472	0.731
	(1.944)	(2.263)	(2.639)
Non-Performing Loans	0.103***	0.029	0.111***
	(0.002)	(0.001)	(0.018)
Operating Expenses	2.681***	1.313**	2.593***
	(0.404)	(0.604)	(0.516)
Inflation	-0.218	-0.221	-0.092
	(0.330)	(0.343)	(0.422)
GDP per capita growth	-1.102	-1.402	-0.247
	(1.146)	(1.269)	(1.539)
Constant	-30.802***	-16.083**	-24.252***
	(5.686)	(7.371)	(8.239)
Observations	111	40	71

Within R^2	0.406	0.328	0.528

Conclusion and Policy Recommendations

This study examines the impact of women's presence on the FS of IB and CB in Pakistan. It focuses on how female representation on boards of directors (BODs) influences bank performance, using data from six IBs and sixteen CBs from 2010 to 2022.Findings show no significant overall effect but distinct trends in IBs and CBs. In IBs, a negative association suggests that female presence correlates with lower profitability, potentially due to inefficiencies and conservative management. Conversely, CBs experience a positive impact, indicating that greater female representation strengthens corporate governance and FS.Despite their expertise, women directors in Pakistan often face challenges such as limited strategic involvement, work-life balance issues, and restricted access to financial decision-making processes. With most banks meeting only the legal minimum for female board representation, their influence on financial oversight remains constrained.

To enhance the impact of women in Pakistan's banking sector, policies should focus on increasing female representation beyond the legal minimum and ensuring their active involvement in decision-making. Providing financial and corporate governance training can strengthen their expertise, while flexible work policies can support work-life balance. Banks should integrate women into financial oversight roles, ensuring direct access to financial reporting. Islamic banks should address inefficiencies by adopting better governance practices, while conventional banks can further leverage the positive impact of female directors. Strengthening diversity regulations and promoting inclusive leadership will improve corporate governance and financial success.

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