

## CHAPTER-5

### BOARD DIVERSITY AND FIRM PERFORMANCE

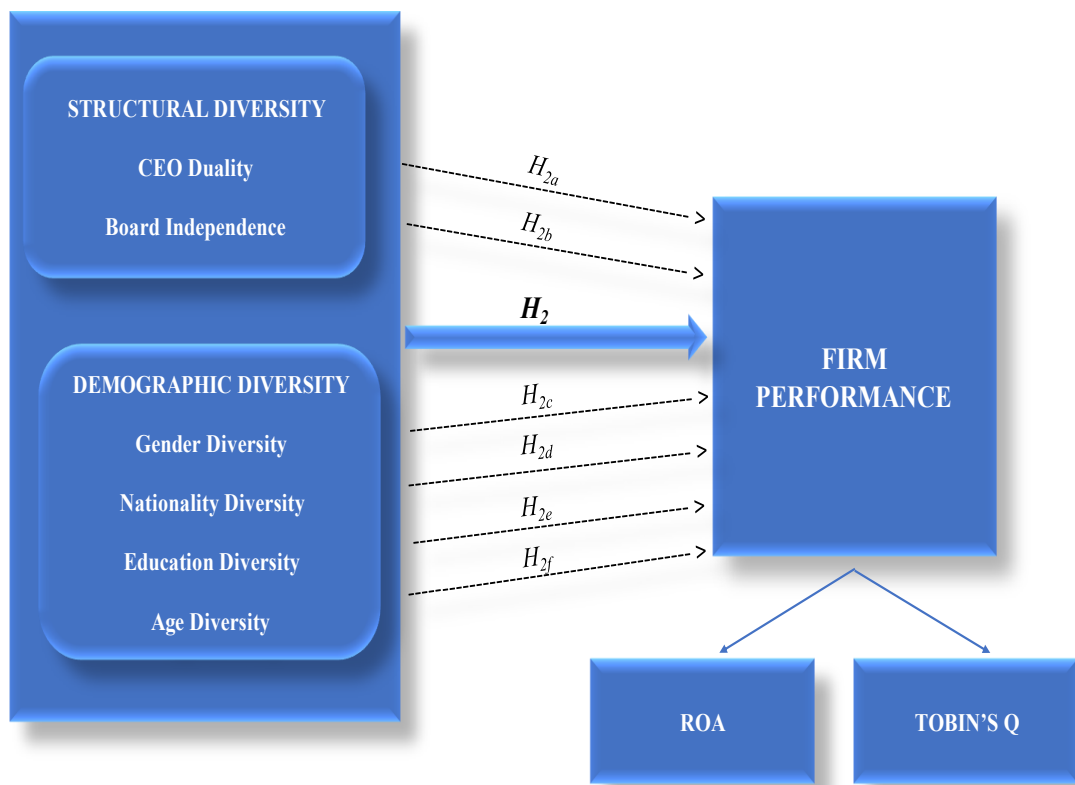
*“Governance and leadership are the yin and yang of successful organisations. If you have leadership without governance, you risk tyranny, fraud and personal fiefdoms. If you have governance without leadership, you risk atrophy, bureaucracy and indifference.”*

– Mark Goyder

#### 5.1 Introduction

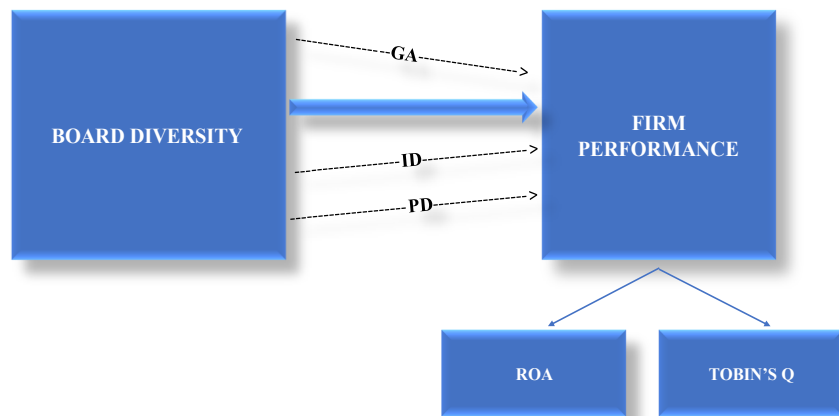
Board of directors are a cardinal component of CG. They serve as the firm’s compass, establishing the strategic course and supervising the management team. Several scholarly investigations have examined the potential significance of boards in addressing agency issues, wherein managers' objectives may deviate from those of shareholders (Hermalin & Weisbach, 2003). Although many agree that boards are important and valuable (Villalonga et al., 2019), firms must also invest a large sum of money in them. It is critical to comprehend the essential elements of a successful board given this expense. From their perspective, each CG theory suggests the best course of action for boards to take when making decisions. The agency thesis states that the board's role should be administrative and impartial, aiding shareholders in maintaining their ownership stakes and assessing the FP. Using a different tack, the stewardship idea contends that the board ought to give management more authority. It suggests that the board becomes competent and capable of properly managing corporate assets when it has jurisdiction over the firm's management. The resource dependency hypothesis, on the other hand, proposes that the board has considerable external linkages and performs a co-optation function. Stakeholder theory also maintains that a firm ought to act for the best interests of all, not just its shareholders. This opinion holds that the interests of all stakeholders should come first for the board (Amer, 2016). Thus, under all circumstances, the board a priori guarantees that the interests of the management and its shareholders are concordant (Wellalage & Locke, 2013). However, following the global financial crisis of 2008-09, stakeholders' faith in the efficiency of boards of directors started eroding (Terjesen et al., 2009). While the board characteristics has been one of the most widely celebrated domains of CG, the cataclysm further fanned the flames.

A synthesis of the extant literature leads to the conjecture that the association between BD and FP has mostly been tested in the context of gender diversity (Darmadi, 2011). Defined as the diverseness in the board’s composition (Kagzi & Guha, 2018), BD is an admixture of both demographic diversity and structural or statutory diversity. Diversity in the board started gaining widespread momentum in the form of demographic diversity in the light of various developments in the company regulations which mandates the presence of women in the BOD (Kagzi & Guha, 2018). For instance, the Companies Act, 2013 of India and the CG Code, 2019 of Pakistan require mandatory participation of women in the BOD. However, apart from the diversity in gender, other demographic variables also exert influence on the functioning of an entity (Post & Byron, 2015). Figures 5.1 and 5.2 illustrate the framework that has been employed to assess the BD-FP relationship.



**Figure 5.1: Framework for the Analysis of BD-FP Relationship**

**Source: Author’s Design**



**Figure 5.2 Framework for Assessing the Impact of Moderating Variables on BD-FP Relationship**

**Source: Author's Design**

This chapter empirically investigates the association between BD and FP while accounting for both demographic and structural-diversity attributes of BD. While the attributes of BD are analysed individually, their combined impact on FP is also ascertained. Further the analysis also explores country wise variations in this relationship. To add to the literature comprehensively, the chapter additionally includes the examination the moderating influence of GA and culture in the BD-FP relationship.

## **5.2 Investigation of the Relationship between BD and FP**

### *5.2.1 Descriptive Statistics*

Table 5.1 outlines the descriptive statistics of the variables employed for analysing the relationship between BD and FP. As explained previously, both the FP metrics have been able to generate profitable means for the period of investigation. In case of structural diversity variables, the table reveals that only 31 per cent of the firms had CEO duality implying that most firms do not adhere to CEO duality. Again, it is evinced that BInd captures a mean of 0.404, indicating the substantial presence of independent directors on the board. Moving to the demographic diversity variables, it can be witnessed that the mean value of BGen is only a meagre 0.173 with a minimum value of 0. It implies that there are firms where GD is in absentia during the period of study. The lack of mandatory express quotas for employing women directors may be a plausible explanation for the same. Again, BNat accrues a mean of 0.115 with a minimum value of 0 signifying the lack

of foreign directors' presence. Further, with a mean of 0.414, BEdu demonstrates that a sizeable count of directors possesses financial expertise. Furthermore, a wide degree of diversity is also witnessed in case of age diversity. Additionally, in case of BS some degree of dispersion is witnessed. This dispersion is evidenced in case of both the firm specific and country specific control variables as well.

**Table 5.1: Descriptive Statistics of BD-FP Variables**

<b>Variables</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>	<b>Skewness</b>	<b>Kurtosis</b>
<b>ROA</b>	7.302	6.202	-2.950	32.610	1.573	6.277
<b>TQ</b>	1.819	1.942	0.230	10.030	2.450	8.997
<b>CEO</b>	0.310	0.462	0.000	1.000	0.821	1.675
<b>BInd</b>	0.404	0.094	0.100	0.500	-0.934	2.832
<b>BGen</b>	0.173	0.160	0.000	0.500	0.445	2.047
<b>BNat</b>	0.115	0.176	0.000	0.500	1.124	2.613
<b>BEdu</b>	0.414	0.111	0.142	0.500	-2.029	7.279
<b>BAge</b>	0.435	0.158	0.132	0.820	-1.204	4.381
<b>BS</b>	9.202	3.053	4.000	23.000	1.032	4.330
<b>LEV</b>	0.249	1.790	0.010	0.210	1.632	9.174
<b>FS</b>	6.116	2.096	0.993	12.193	0.393	2.657
<b>FA</b>	3.491	0.746	0.693	5.176	-0.244	3.096
<b>GDP</b>	4.905	3.072	-6.600	9.100	-1.821	7.123

**Source: Author's Computation**

### 5.2.2 Correlation Analysis

Tables 5.2 and 5.3 report the Pearson's correlation coefficient among variables used in the BD and FP regressions. The co-efficient values reflect that there are significant correlations among the variables under study. However, the highest co-efficient value in case of both the tables is 0.565 which implies that multicollinearity is potentially not a concern. Interestingly, apart from BGen and BEdu, all the other board characteristics show significantly positive correlation with both the performance metrics. The unfavourable correlation attested by BGen on both the FP metrics can be attested to the social identity and critical mass theories, wherein owing to their negligible presence on the boards, female directors fail to or adversely affect the FP. Again, in case of BEdu, many researchers have posited an inverse relationship between BEdu and FP as diverse educational backgrounds across the board may create communication barriers owing to differences in semantics, frames of reference, and methods to problem-solving ultimately affecting the FP.

**Table 5.2: Correlation Matrix of BD-FP variables (with ROA as the dependent variable)**

	<b>ROA</b>	<b>CEO</b>	<b>BInd</b>	<b>BGen</b>	<b>BNat</b>	<b>BEdu</b>	<b>BAge</b>	<b>BS</b>	<b>LEV</b>	<b>FS</b>	<b>FA</b>	<b>GDP</b>
<b>ROA</b>	1											
<b>CEO</b>	0.138***	1										
<b>BInD</b>	0.078***	0.119***	1									
<b>BGen</b>	-0.061**	-0.056**	0.007	1								
<b>BNat</b>	0.221***	-0.012	0.066**	-0.113***	1							
<b>BEdu</b>	-0.099***	-0.023	-0.066**	0.124***	-0.085***	1						
<b>BAge</b>	0.060**	0.042*	0.032	0.085***	0.014	-0.032	1					
<b>BS</b>	0.056**	0.224***	0.094***	-0.103***	-0.061**	0.075***	0.179***	1				
<b>LEV</b>	-0.192***	0.037	-0.092***	-0.135***	-0.082***	-0.036	0.054**	-0.071***	1			
<b>FS</b>	0.032	0.267	0.075***	-0.003	-0.023	-0.012	0.020	0.565***	-0.139***	1		
<b>FA</b>	0.248***	0.122***	0.122***	-0.132***	0.046*	-0.103***	0.012	0.095***	-0.049**	0.166***	1	
<b>GDP</b>	0.027	0.011	0.029	0.165***	-0.095***	0.024	-0.026	0.091***	-0.178***	0.171***	-0.123***	1

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

**Source: Author's Computation**

**Table 5.3: Correlation Matrix of BD-FP Variables (with TQ as the dependent variable)**

	<b>TQ</b>	<b>CEO</b>	<b>BInD</b>	<b>BGen</b>	<b>BNat</b>	<b>BEdu</b>	<b>BAge</b>	<b>BS</b>	<b>LEV</b>	<b>FS</b>	<b>FA</b>	<b>GDP</b>
<b>TQ</b>	1											
<b>CEO</b>	0.351***	1										
<b>BInD</b>	-0.485***	0.119***	1									
<b>BGen</b>	-0.087***	-0.056**	0.007	1								
<b>BNat</b>	-0.054**	-0.012	0.066**	-0.113***	1							
<b>BEdu</b>	0.056**	-0.023	-0.067	0.124***	-0.085***	1						
<b>BAge</b>	0.034	0.042*	0.032	0.085***	0.014	-0.032	1					
<b>BS</b>	0.045**	0.224	0.094***	-0.103***	-0.061**	0.075	0.179***	1				
<b>LEV</b>	0.193***	0.037	-0.092***	-0.135***	-0.082***	-0.036	0.054**	-0.072**	1			
<b>FS</b>	-0.110***	0.267***	0.075***	-0.003	-0.023	-0.012	0.028	0.565***	-0.139***	1		
<b>FA</b>	-0.052**	0.122***	0.122***	-0.132***	0.046**	-0.103***	0.012	0.095***	-0.049**	0.166***	1	
<b>GDP</b>	-0.106***	0.119	0.029	0.165***	-0.095***	0.024	-0.026	0.091***	-0.178***	0.172***	-0.123***	1

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

**Source: Author's Computation**

The positive correlations of the other diversity variables and both the FP proxies suggest the potential benefits that are accrued to a firm in the presence of a diverse board. This attests its rooting in the agency, human capital and resource dependency theories. The VIF results further attest that the data is free from multicollinearity. The mean VIF value stands at 1.510, far below the threshold of 5.

**Table 5.4: VIF of BD-FP Variables**

	VIF	I/VIF
<b>CEO</b>	1.120	0.896
<b>BInD</b>	1.050	0.952
<b>BGen</b>	1.180	0.849
<b>BNat</b>	1.060	0.945
<b>BEdu</b>	1.060	0.942
<b>BAge</b>	1.080	0.925
<b>BS</b>	1.650	0.606
<b>LEV</b>	1.110	0.899
<b>FS</b>	1.680	0.596
<b>FA</b>	1.120	0.895
<b>GDP</b>	1.550	0.643
<b>Mean</b>	1.510	

Source: Author's Computation

### 5.2.3 Results and Discussion

The outcomes of the System GMM Model applied to the panel data is exhibited in Table 6. The insignificant AR (2) values in case of both the proxies of FP demonstrate the absence of second-order autocorrelation, and the Sargan test findings confirm that there is no over-identifying limitation and that instruments are not linked with residuals. Both the ROA and TQ model have significant Wald Chi-Square values, indicating that they are well-fitted. The results meet all the criteria of the System GMM model; hence they may be considered credible. An elaborate account of the results for each diversity variable has been provided in the following sub-sections:

**Table 5.5: Results of System GMM Model for BD-FP Association**

Variables	ROA Model		TQ Model	
	Coefficient	z-value	Coefficient	z-value
<b>Lag of Dependent Variable</b>	-0.056	-1.44	0.019	0.97
<b>CEO</b>	0.676	0.65	2.167	1.34

<b>BInD</b>	-0.306*	-1.90	-0.871*	-1.91
<b>BGen</b>	-0.952*	-1.74	-1.459***	-2.85
<b>BNat</b>	0.893	0.64	0.613	0.91
<b>BEdu</b>	-0.755*	-1.79	-0.467*	-1.92
<b>BAge</b>	2.483***	2.91	0.043**	2.21
<b>BS</b>	-0.069	-1.01	-0.324	-1.62
<b>LEV</b>	-3.670*	-2.45	0.257*	1.84
<b>FS</b>	0.195*	1.79	-0.123*	-1.71
<b>FA</b>	0.023	0.45	0.034	1.35
<b>GDP</b>	0.153***	2.50	0.002	0.22
<b>CG_Reforms</b>		Yes		Yes
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	5.338*	1.76	-1.515*	-1.97
<b>Wald chi sq</b>	334.27***		489.94***	
<b>AR (1)</b>			-3.654***	
<b>AR (2)</b>			-0.972	
<b>Sargan Test</b>			0.185	
<b>Woolridge Test for autocorrelation</b>	36.057(0.000)		65.522(0.000)	
<b>Breusch-Pagan / Cook-Weisberg Test for heteroskedasticity</b>	377.980(0.000)		402.10(0.000)	
<b>Durbin-Wu-Hausman Test for endogeneity</b>	31.389 (0.000)		24.590(0.000)	
Note: *, **, and *** represent significance levels at 10%, 5% and 1%, respectively.				

**Source: Author's Computation**

### 5.2.3.1 CEO Duality and FP

The results in Table 5.5 and 5.6 document a positive but insignificant CEO duality-FP association. This is attuned with the findings of previous studies of Ghosh (2006); Shrivastav and Kalisie (2016) and Khan et al. (2021). Traditionally, agency theory predicted negative consequences of CEO duality due to weakened board oversight (Levy, 1981; Dayton, 1984) in alignment with the concern of "who monitors the monitor?" raised by Alchian and Demsetz (1972). Later, drawing on the contingent theory, Chen et al. (2008) and Lam & Lee (2008) suggest that the impact of CEO duality on FP can be influenced by firm characteristics. They are of the opinion that family-owned businesses probably experience fewer negative effects of CEO duality. Prior studies also highlighted that dual-CEO firms often have higher CEO ownership, potentially aligning interests and



reducing agency concerns. Moreover, even without a strong independent board chair, other monitoring mechanisms might take effect. The recent findings by Duru et al. (2016) and McNally & Milbourn (2018) suggest that presence of substantial independent directors and strong board committees can mitigate the agency concerns. Duru et al. (2016) initially identified a substantial negative relationship between CEO duality and FP. However, they further documented that board independence had a beneficial moderating influence on this association. This shows that the inclusion of independent directors on the board provides an effective monitoring tool. Independent directors might possibly mitigate the negative repercussions of CEO duality by minimising managerial opportunism and exercising disciplinary authority, while also allowing enterprises to reap the benefits of a mixed leadership structure, such as more decisive decision-making. In tune with the stated evidences, the insignificant positive relationship between CEO duality and FP observed in this research contradicts agency theory but aligns more with stewardship theory, which emphasizes long-term value creation and responsible management (Srivastav & Kalsie, 2016).

#### *5.2.3.2 Board Independence and FP*

As evinced in Table 5.5 and 5.6, board independence attested a negative and significant association with both the FP proxies. Justifying the results, Garg (2007) attests that an independent board in an emerging economy does not warrant any enhancement in FP. This is further corroborated by the findings of Garg (2007), Sheikh et al. (2013), Rashid (2018) and Shan (2019) all conducted in the same socio-economic setting as the sampled firm for the present study. Like other idiosyncrasies of BD, board independence is also a recent development in the sampled countries. Consequently, a delay is anticipated in the manifestation of its positive effects. Furthermore, a plausible explanation for this association lies in the 'stewardship theory'. The absence of sufficient training for independent directors, coupled with their limited understanding of the procedures, tasks, and responsibilities associated with their role, may be other reasons for independent directors' negative contribution towards FP (Garg, 2007; Koerniadi & Tourani, 2012). The ubiquity of "cross-directorships," in which directors of one company hold executive positions in another with reciprocal arrangements, is another factor that casts doubt on the negative association between board independence and FP. This practice raises questions about quid pro quo and a reluctance for aggressive monitoring because of potential future

interactions (Vafeas, 2005). In such cases, a director's desire for reciprocity on the board when they hold executive roles may damage their independence of judgement and their ability to oversee effectively (Carter et al., 2010). Adding to it, Ararat et al. (2010) in their study suggest that independent directors in developing economies at times tend to share close personal, economic and social connections with dominant shareholders. In such settings, the independence of the directorship is jeopardized. Therefore, it is suggested that stronger requirements for independent director qualification should be established by CG principles to counter the "cross-board" phenomena and encourage the 'true spirit' of board independence.

#### *5.2.3.3 Board Gender Diversity and FP*

Board gender diversity attested a significantly negative association with both the measures of FP employed. This finding derives its rationale from the social identity theory and social network theory (Khan & Subhan, 2019). This association attested by BGen and FP further mirrors the findings of prior studies conducted in different developing countries, suggesting that gender diversity initially has an adverse effect on FP (Dongol, 2021; Mohsni, et al., 2021). The findings seem plausible, considering that legislation encouraging the participation of female directors on corporate boards are relatively recent in the nations under consideration. Additionally, most emerging economies have more family-owned businesses (Claessens et al., 2000). In such cases, board posts may be filled based on familial relationships rather than merit or broad talents. This may weaken the potential benefits of gender diversity (Chaudhury & Wahid, 2018). Furthermore, the "critical mass theory" proposed that at least three women are needed to have a significant positive influence (Owen & Temesvary, 2018). Building upon it, Joecks et al. (2023) state that once an appropriate level of gender diversity is achieved, it exerts a positive effect on FP. With sensitization of women's representation on the board being a 'work in progress' in the nations under study, the result is plausible.

#### *5.2.3.4 Board Nationality Diversity and FP*

Nationality diversity established a beneficial yet insignificant association with the FP proxies in this study. This finding is attuned with that of Rose (2007) Darmadi et al. (2011), Bauer et al. (2017) and Jansen et al. (2020). This result may be explained by a narrow market perception of enhanced desirability linked to a larger percentage of foreign

nationals serving on boards of directors in emerging economies. In other words, the market may not perceive firms with a more international board composition as being more valued or having a strategic advantage.

While upper-echelons theory argues that nationality diversity on boards can improve FP (Hambrick & Mason, 1988), subsequent study findings provide a more complex picture. Furthermore, recent empirical findings indicate that managing a diverse board might be difficult. Communication hurdles, different work styles, and difficulty in achieving consensus can all impede effective decision-making, potentially affecting performance (Jansen et al., 2020). Directors with similar origins may establish subgroups on the board, restricting the interchange of varied viewpoints and impeding the full potential of nationality diversity (Stahl et al., 2013). Furthermore, diverse directors may lack strong networks in the firm's main markets, limiting the benefits of information access (Bauer et al., 2017). Hu and Jiang (2018) in their study further state that the curvilinear relationship among board nationality diversity and FP may account for the negligible link. This implies that a reasonable degree of variety may be most advantageous, with excessively high levels of nationality diversity on the board likely to have declining benefits or even adverse effects. Additionally, Nguyen et al. (2015) suggest that the influence of nationality diversity may be contingent on other firm- and board-specific attributes.

#### *5.2.3.5 Board Education Diversity and FP*

The present study documented a significantly negative association between the education diversity and both the measures of FP. While limited empirical evidence is available on education diversity, the finding is however in alignment with the studies of Bathula (2008), Chen et al. (2016), Kagzi and Guha (2018), Boadi and Osarfo (2019) and Miguel *et al.* (2020). Several scholars believe that a broader spectrum of knowledge and beliefs has a favourable impact (Wellalage & Locke, 2018). The present study's contradictory findings, however, are based on social identity theory. According to theory, people categorise themselves and others based on common features, resulting in in-groups and out-groups. In the context of educational diversity on boards, this might result in directors with similar educational backgrounds creating an in-group, possibly impeding communication and collaboration with individuals from other educational backgrounds (Chen et al., 2016, Miguel et al., 2020). In their study, Kagzi and Guha (2018) further argue that investors as well perceive a danger from differing education levels as a potential cause of conflict and

value it negatively, resulting in poor market performance. This posits that shareholders place a lower value on boards with more educational diversity.

#### *5.2.3.6 Board Age Diversity and FP*

A significant positive association can be witnessed in Tables 5.5 and 5.6 between age diversity and both the FP metrics. This association between age diversity and FP implies a mutually reinforcing influence between the characteristics of younger and older directors. Firms may improve their asset management skills by taking advantage of this diversity in experience and expertise (Miguel et al., 2020). Adding to the empirical evidence of the favourable relationship between age diversity and FP, Herrmann and Datta (2005) argue that age serves a twofold purpose on boards of directors. It may be seen as both a proxy for experience and an indicator of a director's risk tolerance. Prior researchers further assert that there exists an inverse association between age and risk-taking propensity, with younger managers often being more receptive to risk than their older counterparts (Hambrick & Mason, 1984; Barker & Mueller, 2002). This can be useful since younger directors are more likely to support new tactics that foster corporate growth (Barker & Mueller, 2002). Again, the presence of elder directors can help to balance the propensity for excessive risk-taking among younger directors. Daily et al. (2010) emphasise the importance of senior directors in maintaining stability and giving historical context for decision-making. Similarly, Carter et al. (2010) emphasizes how their experience might serve as an important cautionary voice, minimising potentially risky endeavours. Moreover, younger directors bring new ideas and technological insight, whilst elder directors provide long-term industry expertise and strategic counsel.

#### *5.2.3.7 Control Variables and FP*

##### *5.2.3.7.1 BS and FP*

BS failed to attest any significant impact on the FP in the present study. The results are in alignment with the prior studies of Bonn et al. (2004), Engelen et al. (2012) and Kagzi and Guha (2018). While bigger boards improve monitoring capacities by expanding supervision, these advantages may be overshadowed by coordination and communication issues (Yermack, 1996). Larger groups may struggle to obtain consensus effectively, reducing decision-making agility (Bonn et al., 2004). Processing complicated information

gets more difficult as the board size increases, potentially affecting responsiveness. Furthermore, a "free rider" problem can arise in bigger boards, when individual directors become less accountable, diminishing total performance (Brick et al., 2007).

#### *5.2.3.7.2 LEV and FP*

LEV documented contrasting associations with both the measures of FP. While it attested a significant negative association with ROA, the accounting-based measure of profitability; a significantly inverse relationship was established by LEV with TQ, which is the market-based proxy of FP. The 'pecking order theory' is responsible for the negative link between leverage and ROA. According to this idea, organisations that borrow less can be more lucrative in accounting terms (Javed et al., 2015). In contrast, the positive connection between TQ and Lev supports Jensen's (1986) theory. It asserts that the higher the leverage, the lower the risk of overinvestment (Upadhyay et al., 2014).

#### *5.2.3.7.3 FS and FP*

FS established a significant positive association with ROA and a significant negative association with TQ. Similar results have been documented by the studies of Guest (2009), Rashid et al. (2010), Prasetyantoko and Parmono, (2012), Olawale et al. (2017), Ibhagui and Olokoyo (2018) and Vu et al. (2019). The positive association demonstrated by FS on accounting-based profitability measure, ROA, may be attributed to the economies of scale wherein the large firms can achieve lower per-unit costs and potentially higher profit margins which is reflected in ROA in this case.

Advocating for the negative association between FS and market-based measure of FP, Greiner (1972) emphasises the propensity for big organisations to become bureaucratic, with complicated hierarchies and decision-making procedures that impede agility and innovation. This institutional rigidity can cause slow reactions to market developments and missed opportunities for growth resulting in negative influence of FS on market-based performance metrics.

#### *5.2.3.7.4 FA and FP*

An insignificant positive association was witnessed between firm age and both the FP metrics. While established brand recognition and accumulated knowledge associated with

older firms might provide potential benefits, these advantages may be overshadowed by downsides such as bureaucratic inertia and resistance to change (Loderer & Waelchli, 2010). This interaction of conflicting factors may contribute to an insignificant overall relationship between FA and FP. Significant variation exists across enterprises of different ages. Management approaches, innovation skills, and industry dynamics can all vary greatly (Ilaboya, 2016). This variety may conceal any underlying link between FA and FP, making it difficult to establish a distinct trend. The findings of Coad et al. (2013) support the results by arguing that older businesses may fail to transfer employment expansion into equal profit growth, whereas younger firms may have greater predicted growth rates.

#### 5.2.3.7.5 GDP and FP

In case of GDP, a significant positive association was witnessed against ROA. However, the same was positive but insignificant in case of TQ. This is in accordance with the findings of Vithessonthi and Tongurai (2015), Ogebe et al. (2016) and Ameen and Shahzadi (2017). These studies assert that higher GDP translates to higher economic activity in the nation which leads to increased production, consumption and investments. These combined effects tend to positively affect the FP.

#### 5.2.4 Robustness Test

As previously mentioned in chapter three, the GEE Population-averaged model was employed to test the robustness of the findings. The results evinced in Table 5.6 for investigating the association between BD and FP are in alignment with the System GMM estimates of Table 5.5. This implies that the results are tenable.

**Table 5.6: Results of GEE Population-averaged Model for BD-FP Association**

Variables	ROA Model		TQ Model	
	Coefficient	z-value	Coefficient	z-value
<b>CEO</b>	0.923	1.08	0.511	1.32
<b>BInD</b>	-0.059*	-1.70	-0.478*	-1.65
<b>BGen</b>	-0.556**	-2.44	-0.682*	-1.72
<b>BNat</b>	2.580	1.11	0.282	0.66
<b>Bedu</b>	-2.416*	-1.97	-0.533*	1.74
<b>Bage</b>	1.125*	1.83	0.790***	3.19

<b>BS</b>	-0.127	-1.07	-0.029	-1.22
<b>LEV</b>	-5.186*	-1.76	0.311***	3.68
<b>FS</b>	0.644***	-3.73	-0.190***	-2.93
<b>FA</b>	0.056***	4.80	0.002	0.51
<b>GDP</b>	0.013*	1.80	0.010	0.68
<b>CG_Reforms</b>		Yes		Yes
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	5.709***	4.11	4.529***	8.39
<b>Wald chi sq</b>	91.04***		71.78***	

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

Source: Author's Computation

### 5.3 Investigation of the Relationship between Composite BD Index (BI) and FP

The composite BD index was developed based on the OECD (2008) methodology. This method employs Principal Component Analysis (PCA), a factor analysis technique that minimises data set complexity while identifying underlying, significant variables (Jolliffe, 2002).

This study uses Principal Component Analysis (PCA) to discover hidden components from BD data. The investigation considers seven variables: CEO duality, board independence, gender diversity, educational diversity, nationality diversity, age diversity, and board size. Prior to doing PCA, the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy and Bartlett's test of sphericity are used to determine the data's eligibility for this approach. A KMO value of 0.687 shows an adequate degree of sampling adequacy. Furthermore, Bartlett's test of sphericity produces a statistically significant chi-square value at the 1% level, rejecting the null hypothesis of sphericity and validating the use of PCA.

Two criteria are used to decide how many factors to keep in the final model: (1) eigenvalues greater than one, and (2) individual factor contributions to total variance more than 10%. Following factor extraction, the study uses the OECD (2008) approach to create a composite index of BD. This technique consists of two steps. First, the factor loadings are normalised by dividing each variable's squared loading by the total squared loadings for all variables. The factors are then aggregated by assigning a weight to each factor based on its percentage of explained variation in the dataset.

The weight is computed by the following formula:

$$\text{weight} = \frac{\text{maximum normalized factor loading}}{\text{ratio explained to the total variance of the respective factor}}$$

The ratio of explained to total variance is again computed as follows:

$$\text{ratio of explained to total variance} = \frac{\text{explained variance of the respective factor}}{\text{total explained variance}}$$

Having calculated the above, the composite BD index (BI) is calculated as follows:

$$BI = \sum_{i=1}^n (\text{weight of each variable} * \text{original value of the variable})$$

Where, n=the number of variables.

### *Results of the analysis*

Table 5.8 presents the System GMM estimates, revealing a positive yet statistically insignificant association between BI and both FP metrics. This conclusion is consistent with previous studies indicating a lack of a clear and substantial association between BD and performance (Berkman et al., 2021; Garg et al., 2023). Several variables might explain the absence of a significant relationship. First, the individual diversity variables within the BI may not have had a significant influence on their own. This supports the idea that an acceptable degree of diversity across several variables (gender, nationality, etc.) may be required for a significant performance effect.

Second, one possible contributing reason might be the relatively recent establishment of strong CG norms in the SAARC area. The efficacy of hypotheses such as the management networking theory and the efficient monitoring hypothesis, which suggest a positive correlation between BD and FP (Li et al., 2017), may be dependent on the presence of a robust CG framework. This is because management networking theory argues that diverse boards may use their larger networks to get access to important resources, information, and alternative viewpoints. However, a poor CG framework may fail to guarantee that these networks are used ethically and in the best interests of the enterprise. Again, the efficient monitoring hypothesis suggests that diverse boards might bring a broader set of talents and experiences to bear on management choices. A weak CG structure may lack clear communication routes and adequate monitoring, limiting diversity's positive influence. Thus, in situations where governance systems are still developing, diversity may not provide all its potential advantages.



**Table 5.7: Results of System GMM Model for BI-FP Association**

Variables	ROA Model		TQ Model	
	Co-efficient	z-value	Co-efficient	z-value
<b>Lag of dependent variable</b>	-0.025	-0.87	0.067	0.92
<b>BI</b>	0.648	0.08	6.685	1.08
<b>LEV</b>	-0.001***	-3.55	0.001*	1.69
<b>logFS</b>	0.291*	1.81	-0.064*	-1.72
<b>logFA</b>	0.023	0.34	0.007	0.21
<b>GDP</b>	0.062*	1.66	0.219*	1.82
<b>CG_Reforms</b>		Yes		Yes
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	1.192**	2.15**	-4.381*	-1.80
<b>Wald Chi</b>		183.35***		158.42***
<b>AR (1)</b>		-5.991***		-4.130***
<b>AR (2)</b>		-0.885		0.002
<b>Sargan Test</b>		0.283		0.545
<b>Woolridge Test for autocorrelation</b>		48.621(0.000)		64.729(0.000)
<b>Breusch-Pagan / Cook-Weisberg Test for heteroskedasticity</b>		342.81(0.000)		238.71(0.000)
<b>Durbin-Wu-Hausman Test for endogeneity</b>		33.755 (0.000)		24.106(0.000)

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

**Source: Author's Computation**

The estimates of the GEE population averaged model as presented in Table 5.8 are in alignment with the results of Table 5.7. Thus, it is plausible to assert that the results are tenable.

**Table 5.8: Results of GEE Population-averaged Model for BI-FP Association**

Variables	ROA Model		TQ Model	
	Co-efficient	z-value	Co-efficient	z-value
<b>BI</b>	0.424	0.24	0.904	0.40
<b>Lev</b>	-0.007*	-1.71	0.008**	2.47
<b>logFS</b>	0.031*	1.81	-0.172**	-2.51
<b>logFA</b>	0.019	1.30	0.019	0.36
<b>GDP</b>	0.048*	1.81	0.005*	1.88

<b>CG_Reforms</b>		Yes		Yes	
<b>Year Dummy</b>		Yes		Yes	
<b>Constant</b>	0.174**		2.11	3.928*	1.94
<b>Wald Chi</b>		46.35***		27.53***	

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

Source: Author's Computation

#### 5.4 Country-wise Analysis of the Impact of BD on FP

The four major nations of the SAARC region, namely, Bangladesh, India, Sri Lanka and Pakistan were investigated in the present study. The detailed findings are presented in Table 5.9.

**Table 5.9: Comparative Table of BD Across the Selected Countries**

Bases	Bangladesh	India	Pakistan	Sri Lanka
<b>Regulatory Framework</b>	CG Code 2018	Companies Act, 2013	The Companies Act 2017 (Act); Listed Companies (Code of CG) Regulations 2019	Code of Best Practice on CG 2017 (Code)
<b>Regulatory Body</b>	Bangladesh Securities and Exchange Commission (BSEC)	Securities and Exchange Board of India (SEBI)	Securities and Exchange Commission of Pakistan (SECP)	Securities and Exchange Commission of Sri Lanka (SEC)
<b>Separation of role of chairman of BOD and CEO</b>	No. 1(4)(a) has separated the role of chair of BOD and CEO ensuring that the posts must be held by different individuals.	Section 203 of the Companies Act, 2013 provides that an individual should not be appointed/reappointed as the chairperson of a company, as well as its Managing Director (MD) or Chief Executive officer (CEO), unless allowed by articles of a company or such a	Regulation 9 of the Code makes it an express requirement that chair of BOD and CEO shall not be the same person.	The Code, by virtue of A.2.1 allows for the roles of chair of BOD and CEO to be held by a single person, some qualification.

		company does not undertake multiple businesses.		
<b>Mandatory Independent Directors' Quota</b>	At least one fifth of the total number of board members.	One-third of the total number of board members.	Independent directors shall be less than two or one-third of the total members of the BOD, whichever is higher	Where the BOD has three nonexecutive directors, they should all be independent. Otherwise, three or two-thirds of the total members of BOD, whichever is higher, must be independent directors.
<b>Mandatory Women Director</b>	No provision exists which stipulates a mandatory diversity quota. However, the Nomination and Remuneration Committee is under obligation to devise a policy on board diversity.	At least one-woman director.	Regulation 4 of the Code require there to be at least one woman on the BOD.	No express requirement is made for gender quota. However, Schedule A states that the Nomination Committee shall regularly review the composition of the Board including gender representation.
<b>Initiatives for improving board diversity</b>	The Bangladesh Securities and Exchange Commission (BSEC) Corporate Governance Code, issued vide Notification No. BSEC/CMRRCD/2006-158/207/Admin/80 dated June 3, 2018, mandates that all listed companies in Bangladesh establish a board diversity policy.	Pursuant to Regulation 19(4) read with Part D of the Schedule II of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements), 2015, as amended ("SEBI Listing Regulations"), the	None	Disclosure of board diversity in the annual reports of listed companies is promoted by the Section 89(2) of the Securities and Exchange Commission of Sri Lanka Act, No. 19 of 2021.

	The Nomination and Remuneration Committee (NRC) is tasked with assisting the Board of Directors in formulating this policy.	nomination and remuneration committee of the board of directors of a listed entity is required to devise a policy on diversity of board of directors.
<b>Results of the Analysis</b>		
<b>CEO Duality</b>	Negative and insignificant	and Positive and insignificant
<b>Board Independence</b>	Negative and significant for accounting profitability	and Negative significant for accounting profitability
<b>Board Gender Diversity</b>	Negative and significant for accounting profitability	and Negative significant for accounting profitability
<b>Board Nationality Diversity</b>	Positive and significant	and Negative significant
<b>Board Education Diversity</b>	Negative and significant for market-based measure of FP	and Negative significant
<b>Board Age Diversity</b>	Positive and significant for accounting profitability	and Positive significant for market-based measure of FP

**Source: Author's Compilation**

#### 5.4.1 Descriptive Statistics

Table 5.10 documents the descriptive statistics of the individual nations. All the sampled firms documented considerable degree of profitability both in terms of ROA and TQ. India however topped the chart with a mean ROA of 8.975 and TQ of 2.921. Moving to the independent variables, India again documented the highest mean of CEO duality (0.486),

followed by Pakistan (0.304), Sri Lanka (0.272) and a mean of meagre 0.094 in case of Bangladesh. This involuntary nature of the CG norms to separate CEO and chairman roles can be attributed to this substantial presence of CEO duality in India. In case of board independence (BInd), all the countries exhibited a substantial presence of independent directors. Gender diversity however, documented a less substantial presence with the highest mean of gender diversity being 0.233, secured by Bangladesh. This is followed by India with a mean of 0.214 and Pakistan and Sri Lanka with means marginal of 0.125 and 0.121 respectively. This is in similar lines with the findings of the Asian Development Bank (2022) where the mean gender diversity in the boardrooms attained by Bangladesh, India, Sri Lanka, and Pakistan were 18, 18, 9.5 and 9.2 percent respectively. In alignment with the tokenism of gender diversity, nationality diversity also registered an average Blau index value of 0.160, 0.119, 0.106 and 0.073 in case of Sri Lanka, Pakistan, India, and Bangladesh respectively. Contradictorily, education diversity recorded significant and similar presence across the sampled countries. Bangladesh recorded the highest degree of education diversity with a mean of 0.427, followed by India (0.412), Sri Lanka (0.409) and Pakistan (0.407) respectively. A considerable degree of diversity was further observed in case of age diversity of the board reflecting the unified presence of both young and elder directors in the boardrooms of the sampled firms. Pakistan registered the highest with a mean of 0.448, followed by India (0.447), Bangladesh (0.424) and Sri Lanka (0.419) respectively.

In case of the co-variates, it was observed that the BS corroborated to the industry standards with occasional presence of large boards in the sample. Furthermore, wide degree of dispersion is witnessed for the other control variables.

**Table 5.10: Country-wise Descriptive Statistics of BD-FP Variables**

	Mean	SD	Min	Max	Skewness	Kurtosis
<i>Bangladesh</i>						
<b>ROA</b>	5.320	4.892	-3.640	26.320	1.750	7.684
<b>TQ</b>	1.590	1.267	0.240	7.310	2.197	8.761
<b>CEO</b>	0.094	0.292	0.000	1.000	2.782	8.742
<b>BInD</b>	0.375	0.069	0.165	0.500	-0.495	3.251
<b>BGen</b>	0.233	0.204	0.000	0.500	-0.042	1.304
<b>BNat</b>	0.073	0.163	0.000	0.500	1.833	4.504
<b>BEdu</b>	0.427	0.091	0.000	0.500	-2.03	8.017
<b>BAge</b>	0.419	0.173	0.000	0.734	-0.891	3.523

<b>BS</b>	7.336	2.191	4.000	15.000	0.991	4.011
<b>LEV</b>	0.270	0.244	0.010	1.790	1.824	8.621
<b>FS</b>	4.567	1.366	1.458	8.352	0.305	2.436
<b>FA</b>	3.177	0.690	0.693	4.753	-0.092	3.008
<b><i>India</i></b>						
<b>ROA</b>	8.975	5.517	0.980	24.180	0.816	2.908
<b>TQ</b>	2.921	2.616	0.500	11.060	1.511	4.401
<b>CEO</b>	0.486	0.500	0.000	1.000	0.056	1.003
<b>BInD</b>	0.468	0.056	0.170	0.500	-2.906	12.351
<b>BGen</b>	0.214	0.112	0.000	0.490	0.370	2.633
<b>BNat</b>	0.106	0.161	0.000	0.500	1.205	3.005
<b>BEdu</b>	0.412	0.117	0.000	0.500	-2.082	7.134
<b>BAge</b>	0.447	-0.140	0.000	0.820	-1.556	5.875
<b>BS</b>	11.956	3.169	6.000	22.000	0.744	3.745
<b>LEV</b>	0.199	0.173	0.010	0.640	0.593	2.125
<b>FS</b>	8.680	1.489	5.023	12.193	-0.133	2.159
<b>FA</b>	3.619	0.619	1.609	4.736	-0.406	2.766
<b><i>Pakistan</i></b>						
<b>ROA</b>	7.723	6.599	-5.400	28.100	0.742	3.624
<b>TQ</b>	1.353	1.397	0.150	8.140	2.913	12.331
<b>CEO</b>	0.304	0.460	0.000	1.000	0.852	1.726
<b>BInD</b>	0.324	0.105	0.104	0.500	0.155	1.649
<b>BGen</b>	0.125	0.140	0.000	0.489	0.710	2.477
<b>BNat</b>	0.119	0.177	0.000	0.500	1.083	2.573
<b>BEdu</b>	0.407	0.128	0.000	0.500	-1.951	6.252
<b>BAge</b>	0.448	0.179	0.000	0.714	-1.311	3.971
<b>BS</b>	8.66	2.438	5.000	15.000	1.394	4.041
<b>LEV</b>	0.256	0.197	0.010	1.480	0.982	5.991
<b>FS</b>	5.945	1.471	0.993	8.708	-0.352	2.745
<b>FA</b>	3.443	0.642	0.693	4.663	-0.734	3.704
<b><i>Sri Lanka</i></b>						
<b>ROA</b>	7.706	9.666	-1.010	61.740	3.921	20.256
<b>TQ</b>	1.412	1.771	0.330	9.960	3.256	13.785
<b>CEO</b>	0.272	0.445	0.000	1.000	1.024	2.050
<b>BInD</b>	0.449	0.052	0.218	0.500	-1.282	4.574
<b>BGen</b>	0.121	0.136	0.000	0.489	0.747	2.652
<b>BNat</b>	0.160	0.193	0.000	0.500	0.597	1.676
<b>BEdu</b>	0.409	0.103	0.000	0.500	-1.741	6.607
<b>BAge</b>	0.424	0.131	0.000	0.691	-1.149	4.997
<b>BS</b>	8.836	2.111	5.000	15.000	0.294	2.617

<b>LEV</b>	0.271	0.212	0.010	1.610	2.160	12.735
<b>FS</b>	5.271	1.271	1.386	8.861	-0.225	3.533
<b>FA</b>	3.727	0.886	0.693	5.176	-0.377	2.840

**Source: Author's Computation**

#### *5.4.2 Results and Discussion*

The System GMM estimates for the respective BD variable's impact on ROA and TQ are presented in Tables 5.11 and 5.12, respectively. Although there is a noticeable pattern of coherence across the estimates from the four nations, they are not perfectly uniform. The next sections will expand on these country-specific findings:

##### *5.4.2.1 Bangladesh*

The results demonstrated that in contradiction to the other sampled nations, CEO duality though insignificant, asserted a negative direction. The results mirror the findings of Rashid (2010). Drawing on the agency theory, it is thus posited that independent leadership structure will perhaps be more beneficial for firm's economic performance in Bangladesh.

The 2018 revised CG Code issued by BSEC requires that at least 20% of directors on boards be independent. However, BInd in the context of Bangladesh exerted a significant negative association with ROA and a negative but insignificant association with TQ. Justifying this negative association Rashid (2018) stated that listed firms in Bangladesh are featured by concentration of ownership; although these owners play an enormous role in disciplining the firm, board independence is difficult to achieve and the board has very little to do with monitoring management. Further, Sobhan and Werner (2003) noted that directors who would fit the definition of 'independent' in Bangladesh are often current or former government officials or bureaucrats who are appointed to help companies obtain licenses or as payback for previous favours. When boards need an independent opinion, they rely on hired outside consultants or advisors. The implication for practitioners is that regulators need to consider the qualifications, expertise, and legitimacy of outside independent directors.

In terms of gender diversity, a significant negative association was observed between accounting profitability and BGen. While TQ also demonstrated a negative impact of BGen, it was however, insignificant. There are no statutory provisions mandating women directors on the board in Bangladesh. However, Bangladesh has a ratio of female directors on boards (18 per cent) equivalent to India. Despite this many reserachers have revealed a

counterintuitive negative association between board gender diversity and FP. Muttakin et al. (2012) ascribe the unfavourable connection to possible nepotistic practices in board appointments. Their research indicates that many female directors in Bangladesh are appointed primarily on family relationships to promoters rather than skills and expertise. This raises concerns about how successful such appointments are in influencing strategic decision-making and, ultimately, FP. Rahman and Saima (2018) confirm the negligible relationship between BGen and FP. They argue that emphasising on the credentials and performance of female directors, as well as future CG law improvements, might be critical in unlocking Bangladesh's positive board gender diversity potential.

Interestingly, among the selected nations, only Bangladeshi context, a significant positive association was observed between board nationality diversity and FP. Bangladesh also recorded the lowest mean of BNat. These results echo previous research conducted by Ararat et al. (2015), Muttakin et al. (2015), and Khan et al. (2023). Muttakin et al. (2015) attribute the positive association in Bangladesh to the increasing incidence of multinational ventures in the country. The entrance of foreign firms requires the appointment of foreign directors to boards, who may contribute crucial global expertise and viewpoints. Expanding on this, Khan et al. (2023) proposes for further inclusion of foreign directors in Bangladeshi firms. Given the established favourable connection with FP and the rising flow of foreign investment, this approach has the potential to generate greater advantages.

Education diversity however attested negative and significant association with TQ while securing a negative but insignificant association with ROA. Literature exploring the impact of board education diversity on FP is scanty in the context of Bangladesh. Researchers attest that there is a risk when concentrating solely on board's education diversity for the sake of a diverse-board in the context of emerging countries (Kagzi & Guha, 2018). Developing economies are frequently typified by a small number of highly skilled individuals with a range of educational backgrounds. A mismatch might result from selecting directors purely based on attaining educational heterogeneity rather than considering how well their qualifications meet the demands of the organisation. This mismatch may cause FP harm in the long run by creating communication gaps and making it harder to make synergistic decisions. It is therefore suggested to shift the emphasis from an education-diverse board to skill-based board composition.



Attuned with the results of the other selected countries, board age diversity in Bangladesh also secured a positive association with FP. This implies that an age-diverse board is perhaps beneficial for corporate success in the context of Bangladesh. It is therefore suggested to promote a balanced age distribution on boards which may result in better decision-making, leading to enriched FP.

The Bangladesh Securities and Exchange Commission (BSEC)'s 2018 amended CG Code is a foray towards boosting BD in Bangladesh. This is accomplished through a two-pronged strategy: compulsory disclosure requirements and encouragement for businesses to adopt their own diversity programmes. While the Code does not currently prescribe precise guidelines for different BD features, it does outline an envisaged long-term path to a more comprehensive framework for board composition in Bangladesh.

#### *5.4.2.2 India*

From the extant literature, it can be posited that CG guidelines governing the board attributes is more developed and stringent in the Indian context in comparison to the other nations under study. In case of structural diversity of the board, CEO duality exercised a positive but insignificant influence on ROA, however it documented a positive and significant association with TQ. This implies that while CEO duality does not significantly impact the accounting profitability, it favourably influences the market-based profitability of the sampled Indian firms. This is because CEO duality strives to address the agency problem, however its influence on ROA may already be mitigated by dominant ownership arrangements in India (Garg, 2007). Indian firms may further prioritise market share and expansion above short-term profitability, resulting in a greater market value (TQ) despite no substantial improvement in ROA (Mishra & Kapil, 2018).

The study discovered a negative and significant relationship between board independence and ROA, but no significant influence on TQ. This calls into question the governmental emphasis on board independence as an indicator of good governance in the Indian setting. Clause 49 of the Listing Agreement stipulates minimum proportions of independent directors based on chairman position, mirroring norms in industrialised economies. However, the focus in India may differ. Developed economies seek to punish management, but India may prioritise safeguarding minority shareholders due to the preponderance of family-owned enterprises (Mishra & Mohanty, 2014). This ownership arrangement makes it difficult to provide real board independence while still protecting minority shareholder

interests. Mishra (2023) emphasises the need of qualified and truly independent directors, rather than simply meeting quota requirements.

Turning to the demographic characteristics of BD, it can be witnessed that gender diversity exerted significant negative impact on both the measures of FP. Despite the provisions of Companies Act 2013 mandating female representation on the board, in the absence of express quotas, the sampled firms fail to reap benefits of a gender diverse board (Kagzi & Guha, 2018, Aggarwal et al., 2019). Drawing on feminist theory, Jادیyappa et al. (2019) argue that female directors in developing countries, such as India, may have inferior social capital due to persistent gender discrimination. Given women's traditionally lower socioeconomic standing in such situations, the inclusion of female directors without an adequate representation may have a detrimental impact on FP. Furthermore, Dupatti et al. (2020) attest that gender diversity follows a u-shaped trend, wherein it affects the FP negatively at first. While gender diversity is undoubtedly in its embryonic stage, adequate representation of equipped women on the board is suggested as drawing on extant evidence from literature it may potentially be beneficial for the FP.

The results indicate a strong negative association between nationality diversity and FP. This demonstrates that appointing more foreign directors may be associated with a reduction in FP. This is in tune with previous studies in India and other emerging nations (Setiyono & Tarazi, 2014; Rafinda et al., 2018; Kaur & Singh, 2019; Mohd Idris, 2021). While foreign directors can provide useful insights into global business practices, perhaps leading to increased performance, Masulis et al. (2012) point out several downsides. These include the additional costs and time required for logistical problems such as making on-site visits. Furthermore, as is apparent in developing countries, foreign directors' lack of understanding of language and cultural subtleties may increase the negative impact, which might also apply to India (Rafinda et al., 2018). Based on this evidence, it is proposed that Indian firms if required, may give priority to hiring foreign directors with expertise in emerging markets, develop onboarding programmes that address the specifics of Indian industry, and ensure that the board is balanced. Furthermore, targeting directors with specialised sector experience might help them maximise the value of their worldwide knowledge. These approaches may assist Indian firms in optimising the benefits of BD while reducing any downsides.

Following the BNat, a negative but insignificant association was observed between board education diversity (BEdu) and both the FP metrics. As previously stated, education diversity has received modest attention among the BD variables (Kagzi & Guha, 2018). However, the negative yet insignificant association with FP implies that directors with different educational backgrounds may not automatically lead to higher performance. In a knowledge-intensive Indian economy, specialised sector expertise or experience managing related firms may be more advantageous.

In conformity with the overall findings, board age diversity illustrated a significant positive association with the FP measures. While there is sparse evidence on the influence of age diversity on FP in India, research by Kagzi and Guha (2018), Limbasiya and Shukla (2019), and Pandey et al. (2023) all demonstrate a strong favourable connection. The combined participation of senior and younger members on the board should thus be promoted more to increase the firm's profitability. Thus, it is suggested that a strategic diversity of age should be encouraged to maximize the profitability. This entails merging seasoned directors with young directors. Furthermore, encouraging knowledge exchange via mentoring initiatives and routinely assessing the efficacy of the board may further translate into more well-informed decision-making and enhanced FP.

India certainly made significant advancement in increasing BD. Notable is the advancement in gender representation, as the country has one of the highest percentages of female board members in Asia (about 18 per cent; EY Report, 2022). This accomplishment represents a significant improvement above the meagre 6 per cent noted in 2013 (EY Report, 2022). However, more strict and efficient monitoring procedures are required that ensure that businesses benefit from boardroom diversity.

**Table 5.11: Country-wise Results of System GMM Model for BD-ROA Association**

Variables	Bangladesh		India		Pakistan		Sri Lanka	
	Coefficient	z-value	Coefficient	z-value	Coefficient	z-value	Coefficient	z-value
<b>Lag of ROA</b>	0.081***	3.37	-0.026	-0.67	-0.180***	-5.59	0.112**	2.10
<b>CEO</b>	-0.793	-1.00	0.452	1.27	0.219	0.21	6.053***	4.22
<b>BInD</b>	-9.182***	-7.16	-3.291*	-1.70	-6.086	-1.34	-1.356	-0.21
<b>BGen</b>	-3.402***	-4.11	-2.787*	-1.69	-4.961**	-2.06	-5.415**	-2.36
<b>BNat</b>	2.511*	1.70	-2.801*	-1.87	-2.348	-0.97	-1.693	-0.90
<b>BEdu</b>	-2.337	-1.28	-0.430	-0.49	-6.961***	-3.79	-1.196	-0.60
<b>BAge</b>	0.062***	3.09	0.756	1.03	2.458	1.26	0.507	0.36
<b>BS</b>	-0.279	-2.71	-0.095*	-1.74	0.625***	3.33	0.097	0.59
<b>LEV</b>	-0.547	-1.08	2.171	0.86	-8.204***	-7.16	4.421	1.20
<b>FS</b>	-0.707**	-2.63	-0.918**	-2.11	-0.595	-0.92	-2.145***	-2.14
<b>FA</b>	0.023	0.03	-0.779	-0.67	1.247***	4.14	-0.097***	-3.46
<b>Year Dummy</b>		Yes		Yes		Yes		Yes
<b>Constant</b>	5.995***	4.72	7.397***	3.18	2.931*	1.70	5.569**	2.00
<b>Wald chi sq</b>	694.78***		955.48***		294.8***		453.81***	
<b>AR (1)</b>	-1.912*		-2.796***		-2.807***		-3.374***	
<b>AR (2)</b>	0.734		-0.760		-1.599		-1.367	
<b>Sargan Test</b>	0.184		0.124		0.382		0.619	

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

Source: Author's Computation

#### 5.4.2.3 Pakistan

To begin with, CEO duality attested an insignificant association with both the measures of FP. This suggests that CEO duality may not adversely affect FP in Pakistan, and can potentially have a modestly favourable effect (Ali et al., 2022). Pakistani firms are frequently characterised by strong ownership concentration. This signifies that a small number of individuals or families own a substantial part of the firm's shares. These controlling shareholders may have tremendous influence over decision-making, thereby minimising the negative consequences of CEO duality and hence the positive association (Yasser et al., 2014). However, research indicates that boards in Pakistan may lack actual independence, restricting their capacity to hold CEOs responsible regardless of duality, resulting in the positive but negligible connection (Ali & Bhutta, 2011).

In case of BInd, the other structural diversity variable, a negative and insignificant association was observed between BInd and ROA while a negative yet statistically significant association was observed between BInd and TQ. According to Sheikh and Khan (2011), the witnessed negative relationship could possibly be attributed to the lack of independent directors on Pakistani corporate boards. This diminishes CG and promotes management opportunism which ultimately has a negative influence on FP (Yasser et al., 2017). Boateng (2021) adds that the cultural context in Pakistan may promote a stewardship form of CG over an agency one. Thus, independent directors may be an impediment and deterrent to executive management, resulting in a considerable negative relationship with the market-based measure of FP.

Moving to the demographic variables, BGen demonstrated a negative association with FP. However, this inverse relationship was significant only in the context of accounting-based profitability, ROA. Based on the 'double standard theory', the insignificant association with TQ perhaps implies that the market is indifferent or hesitant to value firms with female representation on boards despite the accrued benefits (Mirza et al., 2012; Khan et al., 2023). The significant negative association is attributed to the 'tokenistic' presence of women on the board (Sajjad & Rashid, 2015; Amin et al., 2022). This is plausible as Pakistan has the lowest representation of boardroom gender diversity among the sampled firms (a meagre 9.2 per cent as per the Asian Development Bank, 2022). While the Code of CG Regulations, 2017 necessitates the presence of at least one woman director in the

boards of listed firms, enforcement of express quotas and appointment of women directors with requisite skills and expertise may be suggested.

Board nationality diversity again attests a negative association with FP. The association is however significant in case of TQ. Consistent with the other countries in the study, Khan et al. (2019) ascribe this correlation to variations in intercultural perspectives and impediments to communication. Therefore, even in the context of Pakistan, it is suggested that firms hire foreign directors who possess the necessary abilities and are culturally compatible to mitigate the negative consequences of board nationality diversity.

Continuing with the inverse relationship, board education diversity attested a significant negative association with both the measures of FP. The results are consistent with recent empirical evidences provided by Khan and Subhan (2019) and Khan et al. (2023) in the Pakistani setting. The findings strongly communicate that boards with a diverse educational background may struggle with cohesiveness and communication, resulting in poor decision-making and an adverse influence on FP. The objective should thus be to develop a board with different educational backgrounds that complement one another, encouraging synergy and fostering innovation.

As anticipated, a positive relationship was observed between board age diversity and FP in the context of Pakistan. The association, however, was significant for TQ but insignificant for ROA. This indicates that the market prefers firms with age-diverse boards. Furthermore, in the context of accounting profitability, it is argued that, while there are potential benefits, having complementary abilities and a balanced age range is critical for optimisation of the favourable association (Khan et al, 2019).

Nevertheless, the CG regime in Pakistan is still in its embryonic stage and requires more stringent compliance to reap the maximum benefits of board heterogeneity.

**Table 5.12: Country-wise Results of System GMM Model for BD-TQ Association**

Variables	Bangladesh		India		Pakistan		Sri Lanka	
	Coefficient	z-value	Coefficient	z-value	Coefficient	z-value	Coefficient	z-value
<b>Lag of TQ</b>	0.687***	6.33	0.711**	5.35	0.011	0.70	-0.452***	-4.18
<b>CEO</b>	-1.096	-1.60	0.262	1.63	0.153	0.70	0.436*	1.79
<b>BInD</b>	-0.905	-1.08	-0.336	-0.61	-2.989***	-3.08	-2.068***	-3.48
<b>BGen</b>	-0.318	-0.75	-0.307*	-1.65	-0.125	-0.67	-1.063**	-2.34
<b>BNat</b>	0.913*	1.65	-0.708*	-1.94	-2.943***	-7.78	-0.191	-0.62
<b>BEdu</b>	-1.234*	-1.69	-0.469	-1.31	-1.949***	-6.79	-0.679**	-2.33
<b>BAge</b>	0.167	0.61	0.433**	1.96	1.002***	5.15	0.057	0.25
<b>BS</b>	-0.146***	-3.94	-0.009	-0.65	0.013	0.48	0.054***	2.86
<b>LEV</b>	-0.344	-1.41	-0.983	-1.26	0.324**	2.41	-0.859***	-4.58
<b>FS</b>	-0.024	-0.24	-0.327***	-3.72	-0.386***	-6.50	-0.172	-1.40
<b>FA</b>	0.311***	3.58	-0.212	-1.03	0.443*	1.73	-0.005	-1.15
<b>Year Dummy</b>	Yes		Yes		Yes		Yes	
<b>Constant</b>	1.716***	3.06	4.829***	5.29	2.974***	2.73	1.598*	1.70
<b>Wald chi sq</b>	815.61***		557.82***		223.13***		486.15***	
<b>AR (1)</b>	-2.357**		-3.584***		-2.699***		-2.151**	
<b>AR (2)</b>	0.931		0.257		-0.735		-0.775	
<b>Sargan Test</b>	0.416		0.336		0.538		0.432	

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

Source: Author's Computation

#### *5.4.2.4 Sri Lanka*

The sampled Sri Lankan firms documented a positive and significant relationship between CEO duality and FP. CEO duality is common in Sri Lankan firms as their ownership structure is highly concentrated (Masulis et al., 2009). While empirically, CEO duality is assumed to have adverse effect on FP, Wellalage and Locke (2011) explain that the association is best explained by the 'contingent theory'. The findings of Wellalage and Locke (2011), Guo and Kga (2012) and Danoshana & Ravivathani (2019) provide credence to our results.

Board independence however attested a significant association with TQ; while displaying a negative direction of association with both TQ and ROA. This finding mirrors the results obtained in case of the Pakistani firms. The CG code of best practices mandates the presence of independent directors on the board. This even translates to the market placing their confidence upon the independent directors which is evident in the results obtained. However, independent directors' presence on boards is not linked to accounting profitability of Sri Lankan listed firms, indicating that the mere existence of non-executive directors on corporate boards does not guarantee stakeholders that the firm is operated fairly and smoothly, thereby minimising agency conflicts (Danoshana & Ravivathani, 2019).

In terms of demographic diversity, a significant negative association was demonstrated by board gender diversity with both the measures of FP. This corroborates with the findings of Wellalage & Locke (2013). Based on the negative relationship and envisioned advantages associated with a gender diverse board, Wellalage and Locke (2013) recommend providing resources to assist women enhance their leadership abilities and also improve their quantum of representation.

An inverse association was again observed in case of board nationality diversity. This association was however insignificant in case of both the proxies of FP. This is in alignment with the findings of Dedunu and Anuradha (2020). Wellace and Locke (2013) assert that diverse boards are more beneficial in the Sri Lankan context for MNCs. However, limited market exposure, cultural differences among directors, and a greater emphasis on local knowledge since firms are primarily family-owned may explain the insignificant association witnessed in certain research.



Board education diversity while being insignificant against ROA, attested a significant association with TQ. The direction of both the association is however negative. These findings mirror the evidence provided by Wellace and Locke (2013). They asserted that while educational diversity might increase the board's knowledge base, it may also result in competing opinions due to different disciplinary backgrounds and professional interests. This potential for conflict could undermine effective decision-making, especially in a country like Sri Lanka, where hierarchical institutions may be less adaptive to multiple perspectives (Udawaththa & Wijesinghe, 2022). Hence, a more compatible and strategic board education diversity is suggested.

Board age diversity albeit positive in direction was observed insignificantly influencing FP in the Sri Lankan context. This is in conformity with the findings of Dedunu and Anuradha (2020) and Udawaththa and Wijesinghe (2022). They assert that diversity in age might be interpreted as a stand-in for board members' experience and willingness to take risks. Thus, a company is anticipated to benefit financially from the synergy of both youthful and experienced directors. On the other hand, the hierarchical corporate culture in Sri Lanka may respect experience gained through time. Even with excellent talents, younger directors could not have the same influence on decision-making, which may dilute the effect of age diversity. Therefore, to capitalize on the benefits of age diversity, directors with complementary aptitudes and a balanced age range are recommended.

The BD in Sri Lankan context does not portray a robust structure. Addressing this, Rooly (2021) highlights the contentious efficacy of CG in Sri Lankan firms. The difference that exists between acknowledged standards for CG and the real procedures employed by Sri Lankan companies serves as the foundation for this thesis. Undoubtedly, Sri Lanka has progressed significantly from a voluntary code of compliance to the current minimal standards of CG that listed businesses are required to adhere to. According to Palipana (2015), listed firms have experienced improvements in board performance, stakeholder relations, and corporate integrity since the required rule was implemented. However, more stringent regulations and mandatory provisions clubbed with express quotas for gender diversity is proposed to significantly improve the benefits associated with a diverse-board. The results outlined in Tables 5.13 and 5.14 add to the robustness of the findings.

**Table 5.13: Country-wise Results of GEE Population-averaged Model for BD-ROA Association**

Variables	Bangladesh		India		Pakistan		Sri Lanka	
	Coefficient	z-value	Coefficient	z-value	Coefficient	z-value	Coefficient	z-value
<b>CEO</b>	-1.381	-1.10	0.663	1.23	1.612	1.21	2.267	1.21
<b>BInD</b>	-9.011**	-1.90	-1.396*	-1.70	-7.208	-1.47	-1.396	-0.19
<b>BGen</b>	-7.887***	-4.86	-0.219**	-2.11	-6.999**	-2.18	-1.521	-0.52
<b>BNat</b>	4.254	1.58	-0.989*	-1.68	-4.237	-1.40	4.855**	1.97
<b>BEdu</b>	-7.609***	-3.89	-1.925*	-1.80	-0.011	-1.00	5.094	1.54
<b>BAge</b>	1.404	1.63	0.069	0.05	1.089	0.46	0.213	0.08
<b>BS</b>	-0.097	-0.55	-0.124*	-1.75	-0.108	-0.50	-0.315	-1.23
<b>LEV</b>	-1.762**	-1.83	-2.126	-0.85	-1.044***	-4.40	3.540	1.47
<b>FS</b>	-0.177	-0.53	-1.319***	-3.42	-0.064	-0.17	-3.006***	-4.35
<b>FA</b>	0.700	0.98	0.699	0.82	2.419**	2.35	0.061**	2.32
<b>Year Dummy</b>	Yes		Yes		Yes		Yes	
<b>Constant</b>	3.564***	3.86	3.429***	4.29	10.561**	2.15	8.561***	3.00
<b>Wald chi sq</b>	148.33***		34.02***		39.78***		75.19***	

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

**Source: Author's Computation**

**Table 5.14: Country-wise Results of GEE Population-averaged Model for BD-TQ Association**

Variables	Bangladesh		India		Pakistan		Sri Lanka	
	Coefficient	z-value	Coefficient	z-value	Coefficient	z-value	Coefficient	z-value
<b>CEO</b>	-0.472	-1.02	0.306*	1.96	0.005	0.20	0.274	0.83
<b>BInD</b>	-4.197***	-3.76	-0.842	-0.82	-0.103*	-1.91	-3.039**	-2.17
<b>BGen</b>	-0.493	-0.96	-0.336*	-1.68	-0.140*	-1.78	-0.474	-0.87
<b>BNat</b>	1.600**	2.13	-1.994***	-3.34	-0.151**	-2.25	-0.343	-0.75
<b>BEdu</b>	-2.191***	-2.78	-1.343***	-2.61	0.007	0.09	-2.124***	-3.40
<b>BAge</b>	0.472**	2.09	1.209***	2.87	0.144**	2.10	0.128	0.27
<b>BS</b>	-0.014	-0.28	-0.030	-1.19	0.003	0.73	0.028	0.60
<b>LEV</b>	-0.147	-0.50	0.133	0.19	0.054	0.74	-0.185	-0.41
<b>FS</b>	-0.369***	-4.21	-0.644***	-4.27	-0.021***	-2.85	-0.367***	-3.01
<b>FA</b>	0.197	1.21	-0.713*	-1.80	-0.024	-1.22	0.014***	3.27
<b>Year Dummy</b>	Yes		Yes		Yes		Yes	
<b>Constant</b>	5.431***	6.29	1.667***	4.18	0.269**	2.41	2.696*	2.39
<b>Wald chi sq</b>	156.61***		76.34***		27.66***		53.72***	

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

**Source: Author's Computation**

## 5.5 Accounting for Moderating Influences

### 5.5.1 *BD and GA*

As discussed in the previous chapter business groups, as an organisational structure, are often observed in emerging economies of Asia. However, numerous challenges of CG stem from the disparity between ownership and control within contemporary firms. The complex ownership structures in these corporate groupings or business groups provide a distinct set of CG concerns because of weak institutions and the ensuing agency problems (Khanna & Palepu, 2000). Group businesses, being entrenched in a business group network, maintain only "some part of their separate identity" (Granovetter, 2001), making them quite different from non-group firms. When studying the influence of BD on FP, this variability in board structure must be considered. Neglecting this variation in board structure between standalone and group-affiliated businesses may lead to spurious conclusions concerning the influence of BD on FP in markets with business groups (Aggarwal et al., 2019). Business groups have been the subject of several studies in the past, but empirical research on their economic impact is still sparse (Ararat et al. 2018; Sanan et al., 2021). In addition, there is absence of study exploring the moderating impact of GA in the relationship between BD and FP in developing economies (Singh et al., 2018). This section of the study strives to make a modest attempt to fill this significant research vacuum. For this study, GA has been measured as a dummy variable, where a value of 1 is assigned to a group-affiliated firm whereas 0 is assigned to a standalone firm. The results of the system GMM model analysing the moderating impact of GA is documented in Table 5.15. It can be observed that the interaction term has a negatively significant impact on FP. This implies that the beneficial impacts of BD on performance may be mitigated or potentially negated for group-affiliated businesses.

The emergence of business groups in developing economies can be linked to their capacity to overcome the obstacles of inadequate institutional contexts (Khanna & Palepu, 1997, Singh & Gaur, 2009). These organisations cover institutional gaps, offering critical help in areas like as funding, legal frameworks, and market access that are frequently undeveloped in emerging nations. Furthermore, corporate groupings in these circumstances frequently benefit from strong reputations and maintain close contacts with governments, giving them benefits than independent enterprises (Khanna & Palepu, 1997). However, recent years have seen considerable developments in CG norms, labour markets, capital markets, and

product markets in countries such as the SAARC nations (Gaur, 2007). This strengthening of institutional frameworks has partially filled the institutional apertures that business organisations formerly filled, potentially reducing the relative benefits of group affiliation for member enterprises and hence the negative but insignificant association. Aggarwal et al. (2019) concede that GA plays a significant contextual role in the relationship between BD and FP on a global scale, but they also suggest that the relationship needs to be re-evaluated in the many nations where GA is predominant. The resource dependency and agency viewpoints contend that more diversified boards in terms of demographics and structure should help improve FP since they are more likely to have greater monitoring and advising skills, respectively. In this case, it is argued that the predictions based on these two viewpoints are likely to be accurate only in cases when the boards are structurally and demographically diverse, in compliance with the applicable laws and regulations both in text (de jure) and spirit (de facto).

**Table 5.15: Results of System GMM Model for Moderating Impact of GA on BD-FP Association**

Variables	ROA Model		TQ Model	
	Co-efficient	z-value	Co-efficient	z-value
<b>Lag of dependent variable</b>	0.014	0.07	-0.007	-0.03
<b>BI</b>	0.247**	2.23	8.150***	3.29
<b>GA</b>	2.961	0.83	9.735	1.50
<b>BI*GA</b>	-0.402**	-2.21	-0.476*	-1.87
<b>Lev</b>	-1.153*	-1.86*	0.004*	1.72
<b>FS</b>	0.389	0.62	-0.021	-0.28
<b>FA</b>	-5.516***	-4.04	0.002*	1.74
<b>GDP</b>	0.067	1.53	0.017	1.27
<b>CG_Reforms</b>		Yes		Yes
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	-5.201**	-2.39	-4.239***	-2.95
<b>Wald Chi</b>		278.09***		390.85***
<b>AR (1)<sup>1</sup></b>		-5.150***		-4.966***
<b>AR (2)<sup>2</sup></b>		-1.201		-0.662
<b>Sargan Test<sup>3</sup></b>		0.607		0.185

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

Source: Author's Computation

Table 5.16 provides the estimates of the GEE population-averaged model. The results confirm to those recorded in Table 5.15. Thus, it is plausible to assume that the results are tenable.

**Table 5.16: Results of GEE Population-averaged Model for Moderating Impact of GA on BD-FP Association**

Variables	ROA Model		TQ Model	
	Co-efficient	z-value	Co-efficient	z-value
<b>BI</b>	4.031*	1.65	6.373**	2.24
<b>GA</b>	1.809	1.06	5.960	1.59
<b>BI*GA</b>	-6.923**	-2.04	-6.831*	-1.89
<b>Lev</b>	-0.085*	-1.74	0.001***	3.21
<b>logFS</b>	0.028	1.23	-0.225	-0.75
<b>logFA</b>	0.001*	1.89	0.017*	-1.84
<b>GDP</b>	0.066	1.38	0.019	1.24
<b>CG_Reforms</b>	1.773	1.26	0.041	0.49
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	-2.732**	2.18	-0.525**	-2.21
<b>Wald Chi</b>	55.85***		41.84***	

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

**Source: Author's Computation**

### 5.5.2 Moderating Effect of Culture

Expanding on the preceding research of Ji et al. (2018) and Mohsni et al. (2021), this study underscores the importance of culture in shaping the 'perceptions, preferences, and behaviours' of the board of directors. This cultural effect extends to implications on FP and risk-taking methods. It is hypothesised that the impact of BD on these outcomes varies significantly amongst nations with different cultural values. To elucidate, individualistic cultures, as evaluated by Hofstede's Individualism against Collectivism index (Hofstede, 1980), may provide difficulties in achieving consensus choices, potentially leading to higher risk-taking behaviour (Gundlach et al., 2006). Thus, evaluating the moderating effect of culture may offer useful insights into the inequitable impact of BD on FP, especially in developing nations where cultural norms and practices tend to have typically strong influence.

Aligned with previous studies (Li et al., 2013), this study employs Hofstede's national culture framework to examine the cultural impact. This study focusses on PD and ID

indices. These factors are particularly pivotal for understanding how cultural norms regarding power dynamics and group orientation may impact board decision-making and the efficacy of diversity in the boardroom (Jensen et al., 2020).

#### 5.5.2.1 Moderating Effect of Individualism vs. Collectivism

The degree to which societies are integrated into groups, as well as their perceived duties and dependency on groupings, are taken into account in ID. In societies that value individualism, the focus is on the rights and accomplishments of the individual, with the needs of the self and the immediate family prevailing prior to anything. Collectivism suggests that the objectives and welfare of the community are given greater prominence. Relationships and loyalty are frequently valued higher by people from collectivist backgrounds than by those from individualistic cultures (Frijns et al., 2016).

In conformity with prior empirical evidences, the estimates recorded in Table 5.17 reveals that in the presence of high individualism, BD negatively influences FP. The estimates of the interaction variable (BI\*ID) imply that in the presence of high ID, the positive influence of BD on FP is negated. This is because individualistic societies value personal success and freedom. Such situation leads to board members focusing solely on their own agendas or areas of expertise, stifling collaborative decision-making and synergy from several views (Li et al., 2013). It is thus crucial to concentrate on inclusive leadership, effective communication, and complementing board compositions to counteract the detrimental effects of individuality.

**Table 5.17: Results of System GMM Model for Moderating Impact of ID on BD-FP Association**

Variables	ROA Model		TQ Model	
	Co-efficient	z-value	Co-efficient	z-value
<b>Lag of dependent variable</b>	-0.018	-0.52	-0.085	-0.46
<b>BI</b>	9.557*	1.74	5.474*	1.77
<b>ID</b>	0.400	0.93	0.378	1.10
<b>BI*ID</b>	-0.633*	-1.77	-0.464**	-2.25
<b>Lev</b>	-0.002***	-2.98	0.004*	1.70
<b>logFS</b>	0.299*	1.80	-0.111*	-1.83
<b>logFA</b>	0.182*	1.89	0.038	1.62

<b>GDP</b>	0.061	1.45	0.004	0.20
<b>CG_Reforms</b>	0.730	1.06	0.744	0.99
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	-4.480**	-2.31	-3.049***	-2.52
<b>Wald Chi</b>		197.38***		41.71***
<b>AR (1)<sup>1</sup></b>		-5.601***		-3.896***
<b>AR (2)<sup>2</sup></b>		-1.149		0.158
<b>Sargan Test<sup>3</sup></b>		0.304		0.177

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

Source: Author's Computation

Table 5.18 outlining the estimates of GEE population averaged model, resonate with the findings of Table 5.17. This implies that the results are robust.

**Table 5.18: Results of GEE Population-averaged Model for Moderating Impact of ID on BD-FP Association**

Variables	ROA Model		TQ Model	
	Co-efficient	z-value	Co-efficient	z-value
<b>BI</b>	2.938*	1.71	1.066***	2.89
<b>ID</b>	0.097	0.75	0.216	1.16
<b>BI*ID</b>	-0.126*	-1.84	-0.312***	-2.72
<b>Lev</b>	-0.007*	-1.93	0.009***	2.94
<b>logFS</b>	0.053*	1.72	-0.125**	-2.01
<b>logFA</b>	0.009	1.55	0.004	0.91
<b>GDP</b>	0.057	1.27	0.009	0.58
<b>CG_Reforms</b>	0.445	0.92	0.016	0.20
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	-2.256*	-1.74	-3.562*	-1.85
<b>Wald Chi</b>		38.17***		64.24***

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

Source: Author's Computation

### 5.5.2.2 Moderating Effect of Power Distance Index

PD measures the degree to which inequality and power are permitted. A high PD index implies that a culture tolerates injustice and power imbalances, promotes bureaucracy, and values rank and authority. A low PD implies that a culture values flat organisational structures with decentralised decision-making authority, participative management, and a focus on power distribution (Frijns et al., 2016; Jensen et al. 2020). In Table 5.19 it can be observed that the interaction variable (BI\*PD) attests a significantly negative influence on



both ROA and TQ. This negative effect in high PD societies is ascribed to an intense focus on hierarchy and submission to authority. In a high PD culture, board members with varied backgrounds may be less inclined to question the viewpoints of more powerful directors. This can undermine the usefulness of varied viewpoints and limit the board's capacity to recognise possible concerns. The hierarchical structure can lead to groupthink, in which directors avoid voicing opposing ideas for fear of disrupting the power dynamic ultimately leading to 'confirmation bias' (Frijns et al., 2016; Mohsni et al., 2021). To offset such influence of PD, robust CG procedures and an environment that encourages candid discussion in the boardroom is proposed.

**Table 5.19: Results of System GMM Model for Moderating Impact of PD on BD-FP Association**

Variables	ROA Model		TQ Model	
	Co-efficient	z-value	Co-efficient	z-value
<b>Lag of dependent variable</b>	-0.052	-1.33	-0.033	-0.87
<b>BI</b>	4.843*	1.68	3.788**	2.53
<b>PD</b>	0.267	0.81	0.227	1.59
<b>BI*PD</b>	-0.592*	-1.67	-0.279*	-1.68
<b>Lev</b>	-0.002***	-4.25	0.007	0.86
<b>logFS</b>	0.299*	1.98	-0.141**	-2.14
<b>logFA</b>	0.167	1.15	0.018	0.88
<b>GDP</b>	0.068	1.59	0.020	1.09
<b>CG_Reforms</b>	0.491	1.01	0.131	1.36
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	-1.479**	-2.43	-3.858**	-2.33
<b>Wald Chi</b>		239.77***		59.95***
<b>AR (1)</b>		-5.544***		-5.076***
<b>AR (2)</b>		-0.366		-0.568
<b>Sargan Test</b>		0.246		0.338

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

**Source: Author's Computation**

The results outlined in Table 5.20 compliment the results of Table 5.19 thereby attesting the robustness of the findings.

**Table 5.20: Results of GEE Population-averaged Model for Moderating Impact of PD on BD-FP Association**

Variables	ROA Model		TQ Model	
	Co-efficient	z-value	Co-efficient	z-value
<b>BI</b>	2.398*	1.90	4.680***	3.55
<b>PD</b>	0.074	0.24	0.108	1.28
<b>BI*PD</b>	-0.097**	-2.28	-0.252***	-2.65
<b>Lev</b>	-0.004***	-3.03	0.004	0.16
<b>logFS</b>	0.035*	1.71	-0.202***	-3.90
<b>logFA</b>	0.003	0.79	0.001	0.03
<b>GDP</b>	0.037	0.41	0.012	0.92
<b>CG_Reforms</b>	0.335	0.94	0.076	0.91
<b>Year Dummy</b>		Yes		Yes
<b>Constant</b>	-1.899**	-2.08	-8.501**	-2.37
<b>Wald Chi</b>		38.44***		125.68***

Note: \*, \*\*, and \*\*\* represent significance levels at 10%, 5% and 1%, respectively.

**Source: Author's Computation**

## 5.6 Summary

This chapter elaborately documented the findings of the BD-FP association. Different attributes of BD attested diverse associations with both the measures of FP. The overall results however reveal that ceteris paribus, BD has a positive but insignificant association with FP. Further, GA and the two dimensions of culture are also witnessed to be negatively moderating the relationship between BD and FP. To address and mitigate such negative influences and capitalize on the potential benefits of a diverse-board, more robust CG regimes are proposed for the selected countries.