

The Bond between Board and Performance: A Case of the Banking Industry of Pakistan

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Abstract

This investigation inspects the link of some specific CG attributes pertaining to the board with the financial health of the 23 banks from the banking industry of Pakistan from 2011 to 2017. The independent directors and board size positively influence ROE and ROA. However, women directors negatively affect the ROE and ROA which might be owing to their low or cosmetic representation that endorses the tokenism and critical mass theories. Overall, the findings add to the literature, especially in the regulatory context, and practice by offering valuable insights for the banking industry and other major stakeholders in Pakistan.

Keywords: Independent directors, Women directors, Size of the board, Firms' financial performance, Banking industry of Pakistan

Introduction

The epic Asian financial crisis of 1997 and the demise of gigantic corporate debacles, especially Enron and WorldCom (USA) sparked the propagation of corporate regulations around the world at the advent of the twenty-first century (Rahman, Ibrahim, & Che-Ahmad, 2017a; Rahman *et al.*, 2019). Like others, the Securities and Exchange Commission of Pakistan (SECP) also handed out the first Corporate Governance (CG) regulation of the country – 2012 code in March 2002. This was reviewed and revised in 2012 and 2017, respectively, after gaining new experiences and corporate scandals at national and international levels (Haseeb Ur Rahman *et al.*, 2017a; PWC, 2017). However, most provisions of all these soft regulations, unlike many other countries around the world, remained mandatory in compliance and required to report 'non-compliance' if any. The approach is favored in a developing country like Pakistan where compliance to voluntary regulations is not fully honored (Rahman, Ibrahim, & Ahmad, 2015; Tsamenyi & Uddin, 2008).

On the contrary, the uniform policy for all firms, regardless of their nature and size, and its mandatory compliance criticized that it could create complications and increase costs. Subsequently, the SECP issued a revised version - the fourth CG Code on 23 April 2019 to replace the 2017 code, with effect from July 1, 2019. This version, unlike the previous codes of the country, is mostly based on the 'comply or explain'

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principle with the exception of a few provisions which are mandatory (PWC, 2017). By comparing and contrasting all the four CG codes, it could be inferred that the regulation aimed to increase compliance with good corporate practices in the country. These codes, among others, addressed independence of the board which is logical in a country like Pakistan where CG practices are not as mature as in developed countries. This country has recently been included in the index of emerging markets (Morgan Stanley Corporation International) and is much different from other countries, especially developed countries in social, political, economic, legal and cultural dynamics. This country, carrying the legacy of British rule for more than two centuries has the institutions and regulations greatly influenced by the colonial era. Hence, the corporations in the country are characterized by a single management board, highly concentrated family ownership, weak reporting, and investor protection.

Firms with high family ownership are mostly controlled by the family members who hold different key positions, especially in the top management (Dittus & Prowse, 1999; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000; Zaidi & Aslam, 2006). Therefore, CG codes in Pakistan, like most others around the globe, are based on the agency approach that assumes the board to guard shareholders' interests from the exploitation of the management (Naseem *et al.*, 2019; Rahman, Ibrahim, & Che-Ahmad, 2017b; Rahman *et al.*, 2017a). Thus, this study inspects the effect of some specific provisions of the CG codes, especially the 2017 code in Pakistan, like the independence of the Board, the existence of female directors, and the total number of directors on the Board on the performance of 23 banks from 2011 to 2017. As the study is focusing on the Board's independence, thus, predictors like the proportion of independent directors and women directors (heterogeneity and cognitive independence) on the board have been selected. Likewise, the inclusion of Board size has a rationale that a larger Board size has a higher probability of hosting more independent and women directors. The study is significant as the revision and upgradation of regulations raise a question of whether these disciplined firms have improved their performance or not? The study also adds to the incongruent scarce literature of CG in the regulatory context of developing countries (Owusu, 2012). The introduction of new regulations or reforms changes previous findings in the area that necessitate reinvestigation or new empirical evidence (Ness *et al.*, 2010). Besides, the study offers practical implications for the regulatory bodies and institutions, bankers, the State Bank of Pakistan, policymakers and other interested parties in developing countries, particularly Pakistan.

Literature Review and Hypotheses

Independence of the Board and Firm Performance

Independent directors augment independent judgment, expression of opinion, monitoring, advising, and quality of decisions of the board and firm (Fama, 1980). As per the assumptions of the Agency Theory, they are supposed to defend shareholders and their interests or benefits by opposing those projects and policies of management which might endanger their returns (Jensen, 1993; Zhu *et al.*, 2015). Accordingly, like other CG regulations which are mostly based on the agency approach, the 2017 code in Pakistan also required the presence of not less than two or one-third independent directors of the total Board, whichever is greater. The earlier code – 2012 code mandated at least one independent director and encouraged the listed firms to ensure one-third independence of their Boards (PWC, 2017).

Empirically, most of the studies, with a few exceptions (Bhagat & Bolton, 2008, 2009; Ponnu, 2008), oppose independent directors on account of their none or negative influence on the firm's financial performance (Jindal & Jaiswall, 2015; Zabri, Ahmad, & Wah, 2016) due to their political based appointments, low knowledge or experience of the firm or industry, bypassing in important decisions, and high costs, among others (Abdullah, 2004). Therefore, on the basis of the Agency Theory and the focus of CG codes in Pakistan, it is hypothesized for further inquiry that:

H₁: Board independence has a positive effect on ROE and ROA

Women Directors and Firm Performance

The Agency Theory favors boardroom variety including that gender strengthens surveillance, scrutiny, impartiality, and liberty of the Board (Andersson, Shivarajan, & Blau, 2005; Rahman, Zahid, & Naveed, 2018). The theory assumes that boardroom gender diversity aligns the benefits and comforts between the two key stakeholders - shareholders and management (Abdullah & Ismail, 2013; Jensen & Meckling, 1976). A substantial chunk of empirical scholarships shows that women directors improve firms' financial performance (Campbell & Mínguez-Vera, 2008; Ismail, Abdullah, & Nachum, 2013). Accordingly, many countries introduced specific laws and regulations to ensure the presence of female directors or increase their depiction on the Board. Likewise, the SECP in the recently introduced 2019 CG code also required all listed firms to ensure the seating of at least one female director on their boards.

However, on the contrary, many investigations noted that women directors have none, or even a negative connection with firm's financial performance (Abdullah & Ismail, 2013; Hassan & Marimuthu, 2016). Therefore, the mandatory quota, or increasing the depiction of women directors through regulations are criticized at large. In view of these contradictory arguments and findings, this study, following the expectations of the Agency Theory hypothesized that:

H₂: Women on the board have a positive effect on ROE and ROA

Board Size and Firm Performance

The total number of directors on the Board is known as its size. As per Agency theorists and extant prior literature, the Board has two key tasks i.e. advising and monitoring. In view of these, a large size of the board is supported to strengthen core tasks of the board for improving firm’s financial performance (Adams & Ferreira, 2007; Fama & Jensen, 1983). A substantial number of distinguished studies established that large-sized boards positively affected financial performance (Sanda, Mikailu, & Garba, 2010) of 35 US banks (Adams & Mehran, 2012). Nevertheless, in the real world, no law could guide the exact board size, and thus, the matter is left at the discretion of the firms in most of the CG codes around the globe. The CG codes in Pakistan also require a Board size of 5 to 15 members (Malik, 2012).

In contrast, many studies show that the size of the Board has no concern with the firm’s financial health or indicators (Dulewicz & Herbert, 2004; Wintoki, Linck, & Netter, 2012). Some studies also noted that firms’ financial performance is negatively impacted by the Board size (Al-Matari *et al.*, 2012). As plausible clarifications, these scholarships described that large boards suffer in communication, coordination, and consensus. Furthermore, they also noted that these boards take too much time and energy in decision making (Jensen, 1993). The findings are contradictory, as discussed and hence, the issue of Board size is controversial yet, which necessitates further investigation. Thus, as per the Agency Theory, this study hypothesized that:

H₃: Board size has a positive effect on ROE and ROA

Data and Methodology

Population and Sample of the Study

A total of 35 banks operate in Pakistan and 23 banks⁴ from this industry composed the sample of this investigation as provided in Appendix A. The corresponding annual reports are employed as a source of data collection from 2011 to 2017. The extracted data was purely quantitative and secondary in nature.

Control Variables

Tariq and Abbas (2013) support, while Ibrahim and Samad (2011) do not support the large size of the firm for improving their performance. Likewise, firm leverage is also opposed on account of the increasing interest expense and micro-management from the creditors (Haseeb Ur Rahman, Rehman, & Zahid, 2018). Hence, in anticipation of affecting the computation, these are controlled for accurate estimation in the study.

Following is the model developed for investigation:

$$FP_{it}(\text{ROE \& ROA}) = \beta_0 + \beta_1\text{INDB}_{it} + \beta_2\text{WoB}_{it} + \beta_3\text{BSIZ}_{it} + \beta_4\text{FSIZ}_{it} + \beta_5\text{FLEV}_{it} + \beta_6\text{ID}_{it} + \beta_7\text{YD}_{it} \dots\dots\dots\text{Model 1}$$

⁴ <http://www.sbp.org.pk/ecib/members.htm>

Where:

FP (ROE & ROA) = Firm financial performance measured by ROE and ROA

β = Beta

INDB = The percentage of independent directors on the board

WoB = Women directors on the board

BSIZ = Total number of directors on the board

FLEV = Firm leverage

FSIZ = Firm size

ID = Dummies for industries

YD = Dummies for years

ϵ = Error term

Operationalization of Variables

Table 1 provides the operationalization of all the variables along with the support of previous literature.

Table 1: *Operationalization of Variables*

Variables	Measurement	Reference
1. Board Independence	The percentage of independent directors on the board.	(Rahman <i>et al.</i> , 2017a)
2. Women directors on the board	The existence of women directors denoted by 1 and 0 otherwise	(Abdullah, Ismail, & Nachum, 2016)
3. Board Size	Number of directors on the board	(Shukeri <i>et al.</i> , 2012)
4. Firm Size	Log of assets	(Haseeb Ur Rahman, Rehman, <i>et al.</i> , 2018)
5. Firm Leverage	Debt to equity ratio	(Haseeb Ur Rahman, Rehman, <i>et al.</i> , 2018)
6. Firm Performance	ROE and ROA	

Descriptive Statistics

Table 2 shows that ROE and ROA have average values of 17.8% and 1.3% respectively. INDB has an average of .318 which indicates that Pakistani banks are yet to attain bulk of the independent directors on their Boards. Likewise, it is revealed in the data collection process that only 68 firm-year observations have women directors out of a total of 154 observations. This means that half of the sample banks are yet to accommodate a single female director on their boards. The average size of the board in the banking industry is around 9, which is large enough to handle the matters of the banks. The average value for FLEV is .102, while the average size of the sample banks is 450.61 Million Rupees.

Table 2: *Descriptive Statistics*

	Min Statistic	Max Statistic	Mean Statistic	S.D Statistic
ROE	-.354	.276	.178	.109
ROA	-.015	.097	.013	.012
INDB	.130	.666	.318	.128
WoB	.000	1.000	-	-
BSIZ	6.000	13.000	9.120	1.716
FLEV	-2.384	2.486	.102	.975
FSIZ (in Million rupees)	.992	590.000	450.61	659.260

Correlation Matrix

Table 3 shows that INDB has a negative, but statistically insignificant bonding with ROE and ROA. The statistics exhibiting a significant negative mark of WoB on ROE and ROA.

Table 3: *Pearson's Correlation Matrix*

	ROE	ROA	INDB	WoB	BSIZ	FLEV	FSIZ
ROE	1						
ROA	.651**	1					
INDB	-.043	-.140	1				
WoB	-.260**	-.182*	.020	1			
BSIZ	.354**	.298**	-.175*	-.179*	1		
FLEV	-.055	-.472	-.004	.207*	.088	1	
FSIZ	.055	.088	.118	-.264**	.162*	.105	1

*** Significance at < 0.10 , ** at $< .05$ and * $< .001$ (2-tailed) respectively

However, the connection of BSIZ in regard to ROE and ROA is not only significant, but also positive. Generally, the estimation shows that independent directors have an insignificant negative, while women directors have a negative and significant relation with ROE and ROA respectively. In regard to control variables, FLEV has no significant and negative, while FSIZ has a positive and significant link with ROE and ROA. The statistics reported in Table 3 are below the threshold for multicollinearity which provides evidence for no multicollinearity.

Results and Discussion

The statistics for heteroscedasticity (as reported in Table 4) show that data is heteroscedastic. Based on these statistics, this study employed the Prais-Winsten Regression that corrects for heteroscedastic panels. The estimator is efficient in controlling the major deviations of homoscedasticity.

The statistics reported in Table 4 provide evidence that INDB exerts a statistically significant positive effect on the ROE and ROA of the banking industry of Pakistan. The findings, which support the first hypothesis (H_1) of this investigation also certify the assumptions of the Agency Theory in the context of Pakistani banks that

Board independence enhances firms' performance by firming up the watching, observing and counseling or directing roles of the board (Fama & Jensen, 1983; Jensen, 1993; Zhu *et al.*, 2015). Furthermore, the findings also provide support to the recommendation of the 2017 code that requires the presence of not less than two or one-third of the board as independent directors, whichever is greater. The findings also provide support to the code that increase in the level of at least one independent director on the board as required by the 2012 code (PWC, 2017). Overall, the findings are compatible with prior investigations (Bhagat & Bolton, 2008, 2009; Ponnu, 2008), but at the same time, are also contradictory with substantial prior literature (Jindal & Jaiswall, 2015; Zabri *et al.*, 2016).

Table 4: *Prais-Winsten Regression (Heteroscedastic Panels Corrected Standard Errors)*

	ROE	ROA
INDB	1.336* (.795)	1.800** (.881)
WoB	-.230* (.136)	-.213** (.217)
BSIZ	.163*** (.042)	.098** (.068)
FLEV	-.197** (.089)	-.019** (.088)
FSIZ	.044 (.092)	.011 (.090)
Years Dummy	-.028 (.037)	.043 (.042)
Constant	54.202 (74.917)	-88.603 (84.462)
Observations	154	154
R-squared	.116	.049
Chi-square (Heteroscedasticity)	54.310	43.880
Prob > chi2	.000	.015

*** $p < .01$, ** $p < .05$, * $p < .01$

The significant negative figure for WoB, as stated in Table 4, elaborates that ROE and ROA of the banking industry of Pakistan are negatively affected by the women directors. The findings, which do not provide support to the second hypothesis (H₂) of the study, are also not compatible with the assumptions of the Agency Theory. The theory supports the presence of women directors on account of reinforcement of the Board independence through heterogeneity (Andersson *et al.*, 2005; Rahman *et al.*, 2018b). The

findings also do not support the recent regulatory stance for increasing boardroom gender diversity in Pakistan. However, the findings are not unique and show similarities with many previous studies (Abdullah & Ismail, 2013; Hassan & Marimuthu, 2016). Following the analogy of these studies along with the suppositions of tokenism and critical mass theories, the findings could have a plausible explanation that one or two female directors in an average Board size of 9 could not be effective. Instead, this might be mere compliance with the regulatory requirement that has increased firms' compliance costs. A significant and positive effect, as provided in Table 4, is exerted from the Board size on financial measures (ROE and ROA) of the banking industry of Pakistan. These findings not only support the third hypothesis (H_3), but also back the claims of the Agency Theory that the board has two key jobs – intensive care and counseling. Hence, increasing the size of the Board augments both these jobs of the board which positively affects firms' financial health. The findings show similarities with many previous studies exhibiting a significant positive bond of the Board size with firm performance (Adams & Ferreira, 2007; Sanda *et al.*, 2010). Overall, the findings also support the regulatory approach to leave the matter of the Board size at the discretion of the firms in a specific range.

The significant negative coefficient of FLEV in Table 4 shows that firm leverage significantly and negatively influence ROE and ROA of the banking industry of Pakistan. This is rational and logical in that leverage increases interest expense which decreases profitability. Hence, sample banks may rely more on equity financing instead of leverage. Interestingly, FSIZ demonstrated a positive but not a significant direction towards ROE and ROA of the banking industry of Pakistan. The fascinating findings might have a plausible explanation that the size of the sample firms that is gauged on the basis of total assets, may not be significantly used for maximizing the returns. To summarize, INDB and BSIZ have a significant positive, while WoB has a significant negative exertion on both the ROE and ROA, among the variables of interest.

Conclusion and Recommendations

This study investigated the bond of some specific recommendations of the different CG codes issued or revised in the country like the independence of the Board, women directors and Board size on financial performance (ROE and ROA) of the 23 leading banks from the banking industry of Pakistan from 2011 to 2017. Mostly, the specific recommendations remained the subjects of discussion and interest since the introduction of the first CG code – 2012 code to the last or till date – 2019 code and hence these are selected for an empirical investigation in the current study. The findings revealed that the independence of the Board, as assumed by the Agency Theory, or anticipated by the CG codes, has a significant positive exertion on ROE and ROA of the

sample banks. However, keeping in view the current status of Board independence, which is around 31.8%, the banking industry of Pakistan may work on a further increase of Board independence. Interestingly, the ROE and ROA of the banking industry are found to be negatively affected by female directors. This is divergent and dissimilar to the assumptions of the Agency Theory and to the expectations of the regulators in Pakistan. However, as per the postulations of tokenism and critical mass theories, the findings might be because one or two women directors are powerless in changing the Boardroom environment. Hence, based on the postulations of these theories, the banking industry may ensure the presence of at least three women directors on their Boards to yield the desired benefits, as suggested. The Board size positively impacts the ROE and ROA, nevertheless, keeping in mind the current average size of the board in the banking industry of Pakistan i.e. 9, this study does not recommend any expansion in the size of the Board due to the fear of associated costs and problems. Like others, this study also has certain limitations, like focusing on few CG practices and relying purely on the quantitative approach of research. Therefore, the studies in future may expand the scope of this study by adding some other CG practices and qualitative aspects of research. Overall, the findings of the study not only contribute to the literature, especially in a regulatory context, but also provide valuable insights for the regulatory authorities and institutions, banking industry, State Bank of Pakistan and other interested parties.

References

- Abdullah. (2004). Board composition, CEO duality, and performance among Malaysian listed companies. *Corporate Governance*, 4(4), 47–61.
- Abdullah, & Ismail, K. N. I. K. (2013). Gender, ethnic and age diversity of the boards of large Malaysian firms and performance. *Jurnal Pengurusan*, 38(2013), 27–40.
- Abdullah, S. N., Ismail, K. N. I. K., & Nachum, L. (2016). Does having women on boards create value? the impact of societal perceptions and corporate governance in emerging markets. *Strategic Management Journal*, 51(37), 446–476. <https://doi.org/10.1002/smj.2352>
- Adams, & Mehran, H. (2012). Bank board structure and performance: Evidence for large bank holding companies. *Journal of Financial Intermediation*, 21(1), 243–267.
- Adams, R. B., & Ferreira, D. (2007). A theory of friendly boards. *Journal of Finance*, 62(1), 217–250.
- Andersson, L., Shivrajjan, S., & Blau, G. (2005). Enacting ecological sustainability in the MNC: A test of an adapted value-belief-norm framework. *Journal of Business Ethics*, 59(3), 295–305. <https://doi.org/10.1007/s10551-005-3440-x>
- Bhagat, & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14(1), 257–273.
- Bhagat, & Bolton, B. (2009). *Corporate governance and firm performance: Recent evidence*. 1–57. Retrieved from <http://ssrn.com/abstract=1361815>.
- Campbell, K., & Mínguez-Vera. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of Business Ethics*, 83(3), 435–451.
- Dittus, P., & Prowse, S. (1999). *Corporate control in central Europe and Russia: Should banks own shares? Policy, Research Working Paper No. WPS 1481, The World Bank*,

Washington, DC.

- Dulewicz, V., & Herbert, P. (2004). Does the composition and practice of boards of directors bear any relationship to the performance of their companies? *Corporate Governance: An International Review*, 12(3), 263–280.
- Fama, E. (1980). Agency problems and theory of the firm. *Journal of Political Economy*, 88(2), 288–307.
- Fama, E., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(1), 1–32.
- Hassan, & Marimuthu, M. (2016). Corporate governance, board diversity, and firm value: Examining large companies using a panel data approach. *Economics Bulletin*, 36(3), 1–15.
- Ibrahim, H., & Samad, F. A. (2011). Corporate governance mechanisms and performance of public-listed family-ownership in Malaysia. *International Journal of Economics and Finance*, 3(1), 105–115.
- Ismail, Abdullah, S. N., & Nachum, L. (2013). Women on boards of directors of Malaysian firms: Impact on market and accounting performance. *Academy of Management Proceedings*. Retrieved from HTTP// dx.doi.org/10.2139/ssrn
- Jensen. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(1), 831–880.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jindal, V., & Jaiswall, M. (2015). *Board diversity and firm performance influenced by ownership concentration: Evidence from India. Working Paper Series WPS No. 765, Indian Institute of Management Calcutta.*
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1–2), 3–27.
- Malik, S. U. (2012). Relationship between corporate governance score and stock prices: Evidence from KSE- 30 Index companies. *International Journal of Business and Social Science*, 3(4), 239–249.
- Naseem, M. A., Lin, J., Rehman, R., Ahmad, M. I., Ali, R., Naseem, M. A., ... Lin, J. (2019). Does capital structure mediate the link between CEO characteristics and firm performance? *Management Decision*, 1–18. <https://doi.org/10.1108/MD-05-2018-0594>
- Owusu, A. (2012). *An empirical investigation of the relationship between corporate governance and firm performance: Evidence from Ghana. Ph.D. Thesis.*
- Ponnu, C. H. (2008). Corporate governance structures and the Performance of Malaysian public listed companies. *International Review of Business Research Papers*, 4(2), 217–230.
- PWC. (2017). *Listed Companies (Code of Corporate Governance) Regulations, 2017.*
- Rahman, H.U., Ibrahim, M. Y., & Ahmad, A. C. (2015). The impact of soft regulations on boardroom diversity and shareholders' confidence in Malaysia. *2nd International Symposium on Technology Management and Emerging Technologies, ISTMET 2015 - Proceeding*. <https://doi.org/10.1109/ISTMET.2015.7359056>
- Rahman, Haseeb Ur, Ibrahim, M. Y., & Che-Ahmad, A. (2017a). Corporate governance reforms and shareholders' confidence in emerging markets: A case of Malaysia. *World Journal of Science, Technology and Sustainable Development*, 14(1), 60–74.
- Rahman, Haseeb Ur, Ibrahim, M. Y., & Che-Ahmad, A. (2017b). Physical characteristics of the chief executive officer and firm accounting and market-based performance. *Asian Journal of Accounting and Governance*, 8(1), 27–37.

- Rahman, Haseeb Ur, Rehman, S., & Zahid, M. (2018). The impact of boardroom national diversity on firms' performance and boards' monitoring in emerging markets: A case of Malaysia. *City University Research Journal*, 18(1), 1–15.
- Rahman, Haseeb Ur, Zahid, M., & Naveed. (2018). Does the ' Business Case ' for academic directors on corporate board stand up ? *Journal of Managerial Sciences*, XIII(3), 190–202.
- Rehman, H. U., Zahid, M., Rehman, S., Jan, A., & Rehman, A. (2019). Does Corporate Governance Prevent Corporate Debacles? Malaysian Bankrupted Corporations. In *Corporate Insolvency Law and Bankruptcy Reforms in the Global Economy* (pp. 215–232). <https://doi.org/10.4018/978-1-5225-5541-4.ch011>
- Sanda, A. U., Mikailu, A. S., & Garba, T. (2010). Corporate governance mechanisms and firms' financial performance in Nigeria. *Afro-Asian Journal of Finance and Accounting*, 2(1), 22–39.
- Shukeri, S. N., Shin, O. W., & Shaari, M. S. (2012). Does the board of directors' characteristics affect firm performance? Evidence from Malaysian public listed companies. *International Business Research*, 5(9), 120–127.
- Tariq, Y. Bin, & Abbas, Z. (2013). Compliance and multidimensional firm performance: Evaluating the efficacy of a rule-based code of corporate governance. *Economic Modelling*, 35(February), 565–575.
- Tsamenyi, M., & Uddin, S. (2008). *Corporate governance in less developed and emerging economies*.
- Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105(1), 581–606.
- Zabri, S. M., Ahmad, K., & Wah, K. K. (2016). Corporate governance practices and firm performance: Evidence from the top 100 public listed companies in Malaysia. *Procedia Economics and Finance*, 35(1), 287–296.
- Zaidi, R., & Aslam, A. (2006). *Managerial efficiency in family-owned firms in Pakistan: An examination of listed firms*, Center for Management and Economic Research, Lahore University of Management Sciences, Lahore.
- Zhu, J., Ye, K., Tucker, J. W., & Chan, K. C. (2015). *Hierarchy, independent directors, and firm value: Evidence from China*. Retrieved from <http://ssrn.com/abstract=2638512>

Appendix A: List of Sample Banks

SNo.	Bank Name	Status
1	Muslim Commercial Bank Limited	Private
2	United Bank Limited	Private
3	Meezan Bank Limited	Private
4	Habib Bank Limited	Private
5	Bank Al Habib Limited	Private
6	Summit Bank Limited	Private
7	Silk Bank Limited	Private
8	Soneri Bank Limited	Private
9	Allied Bank Limited	Private
10	Standard Chartered Bank Limited	Private
11	Bank Al Falah Limited	Private
12	Sindh Bank Limited	Private
13	JS Bank Limited	Private
14	Zarai Taraqyati Bank Limited	Private
15	Askari Bank Limited	Private
16	Habib Meteropolitan Bank Limited	Private
17	Khushali Bank Limited	Private
18	Faysal Bank Limited	Private
19	Dubai Islamic Bank Limited	Private
20	Albarak Bank Limited	Private
21	NRSP Micro Finance Bank	Private
22	National Bank Limited	Public
23	Bank of Khyber	Public