Corporate Governance, Bank Performance and Value—Evidence from Pakistan

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A B S T R A C T

The study aims to investigate the relationship between ownership structure, board structure and bank-specific variables with bank performance and value. Panel Data is collected from eighteen conventional commercial banks of Pakistan from 2012 to 2017. The analysis is carried out by employing pooled OLS model estimation, descriptive statistics and correlation analysis, using Eviews-9, with 108 observations. The board size and board independence are found to have a determinantal effect on the bank performance and value. This implies that the larger board is more probably to increase corporate performance. Also, an ample number of independent directors, in the board of directors, results in better bank performance. The study also reveals that ownership structure does not contribute directly to bank performance and value; however, foreign shareholding is found to have a positive relationship with the value of banks which reduces agency problems. Additionally, adequate capital reserves help banks sustain in the market while the size of the bank and non-performing loans contribute to bank performance. The study established a link between corporate governance attributes with the performance and market value of banks while taking bank-specific variables as well. This study implies for all the stakeholders in banks i.e. corresponding banks, shareholders, central banks, practitioners and academicians. The study includes only conventional commercial banks and can be extended to study the overall financial sector in a setting or a comparative manner.

Key words: Board Structure, Corporate Governance, Ownership Structure, Bank Value and Performance

1. INTRODUCTION

In the corporations, the ultimate authority rests with shareholders who elect directors and delegate decision-making powers to the managers (Adusei, 2015; Gompers et al., 2014). The shareholders want to earn a profit on the capital invested in a firm,
whereas, managers focus on the consummation of perquisites (Abid & Ahmed, 2015; Jensen & Mechling, 1976). Further, the mismatch exists due to the managers’ reluctance to invest in risky but rewarding projects to avoid the consequences i.e. job insecurity and the net worth of the firm. The financial crises that occurred in 1997 and later in 2007 had adverse effects on the economies of many Southeast Asian countries. The literature identifies poor corporate governance structure to be the contributing factor in the crises to some extent (Abid & Ahmed, 2015; Naeem-Ullah & Rizwan, 2018). A firm with good corporate governance practices shows outstanding performance due to the efficient utilization of financial and human resources (Kaufmann & Lafarre, 2020; Khushnood et al., 2020). In this way, investors become confident while injecting in the capital of such firms and believe that agency problems will be minimized which will tend to increase the equity price and hence enhanced firm value (Carter et al., 2003). This helps to build a better firm’s market reputation.

The role of the financial sector in promoting local and global economies cannot be ignored. But, at the same time the information asymmetry in the banking sector cause the main reason of financial crises emerge. Such banking and currency crises affect the economies of the emerging countries (Ari & Cergibozan, 2016; Kasri, 2011). Banking is a profitable but highly risky business. Its performance relies on building reputation and trust among customers. The failure of financial institutions in the backdrop of financial crises of 1998 & 2007 is found as an outcome of deprived corporate governance mechanisms and management of banks’ risk. In the aftermath of the Asian Financial Crises, several efforts are made to bring reforms in the banking sector with a major emphasis on reducing the amount of NPLs, strengthening the banking regulations, improving recapitalization and promoting corporate governance practices (Grabel, 2013; Nam & Nam, 2004).

The Asian Financial Crisis has revived the stakeholders’ interest in the issues of corporate governance. A great emphasis is given by academicians, practitioners, regularity bodies and investors to establish enhanced corporate governance standards (Tanna et al., 2011). In this connection, several practices have been initiated by the Asian countries such as new disclosure standards and training of board of directors etc.
Moreover, various international organizations are designated to monitor the regulatory framework worldwide, which suggests countries adhere to the codes of corporate governance to avoid unexpected circumstances. For instance, OECD (2016), formulated a set of principles named “Principles of Corporate Governance” aiming to focus on shareholders rights, equal shareholders treatment, responsibilities of the board, stakeholders’ role and the transparency in the dissemination of firms’ financial and non-financial information. Particularly, financial institutions are advised by International Monetary Fund (IMF) to include governance improvements in their debt relief programs. Moreover, private sector rating agencies like Standard & Poor are called for sweeping governance mechanisms reforms in the emerging markets (Bai et al., 2004; Cho et al., 2019).

An enormous extant literature is available investigating corporate governance and its significance in developed markets. On the other hand, limited studies have contributed to the literature of developing countries (Abid & Ahmed, 2015; Kumar & Singh, 2013). Moreover, Adams & Mehran (2012) identify that a major part of research on corporate governance effectiveness excludes financial institutions. Consequently, the corporate governance effect on the financial sector and the stock market is still unknown or limited. Therefore, the current study aims to investigate the relation of CG practices with the performance and market value of conventional banks of Pakistan.

The remaining of the study is designed as next section documents the existing literature on the research matter; Section 3 comprises the methods applied to achieve the purpose of the study, whereas, the results and analyses are presented in Section 4 and Section 5 concludes the research.

2. LITERATURE REVIEW

The relation of CG mechanisms with firms’ performance is investigated in several types of research conducted in developed countries. Most studies focused on the compliance of the code of CG and its effects on firm performance (Moudud-Ul-huq et al., 2018; Outa & Waweru, 2016). However, in emerging countries, limited literature is available on the relationship of both constructs.
Focusing on developed countries, for instance, Alves & Mendes (2004) investigated the Portuguese Code of Corporate Governance and its effects on firm performance and found 17 indicators of the Code of Corporate Governance directly related to the firms’ performance. Similarly, Goncharov et al. (2006) and Rose (2016), revealed that corporate governance compliance has positive relation with firms’ performance. Also, Renders & Gaeremynck (2012) show that corporate governance compliance resulted in better performance.

However, Moudud-Ul-Huq et al. (2018) posit that assigning dummy values for corporate governance compliant and non-compliant companies addresses the serious problem of endogeneity, commonly exist in several studies on corporate governance. Andres & Vallelado (2008) used a two-step system estimator. The findings reveal that board composition and size enable the BOD to monitor and assist the decision-making by the management. The researchers suggest that boards with larger size but with lesser independent members are likely to perform more efficiently in advising and monitoring functions, through which the companies can create higher value.

The board structure and its composition have been under great concern by researchers and academicians in assessing their relationship with the board and firm performance. Coles et al. (2008) investigated the effect of the size of the board on firm performance by using Tobin’s Q. The authors found that the larger firms are more likely to influence performance higher than the small firms. Similarly, Adams & Mehran (2012) found a significant positive effect of the size of the board on performance. A similar type of results are revealed in the study of Mak & Li (2001).

In several studies, firm performance is represented through ROE, ROA and EPS, however, greater work has been done on ROA. Boone et al. (2007) found a positive relation between ROA & board size. However, Vafeas (1999) and examined the board size effect on ROA and found a negative relationship between both. Moreover, Bennedsen et al. (2008) and Bhagat & Blank (2002) find the insignificant effect of ROA & board size.

constitute small-sized boards with few independent directors for the improvement of their performance. These opposite views need to be investigated in more detail and this is one of the objectives of the current study. Contrary to Yermack (1996) and Adusei (2015), agency cost theory proponents claim that independent directors’ presence in the boardroom ensures the legitimacy of decisions taken by the management and minimizes the agency conflicts confronted by managers and shareholders, hence enhances the firms’ performance. Several studies have been conducted to observe the effects of board independence on firms’ performance. The board independence has positive effects on the ROA and ROE Ramdani & Witteloostuijn (2010) and Cho & Kim (2007). However, Ghosh (2006) and Klein (2006) found that board independence negatively affects firm performance. Some studies also found insignificant results such as Abdullah et al. (2016), and Keil & Nicholson (2003).

The literature on banks’ corporate governance is mainly comprised of the assessment of risk-taking and the performance of the banks. Banks’ risk-taking comportment varies with the shareholders’ discretionary power within the structure of corporate governance of the banks (Laeven & Levine, 2009; Ponomareva et al., 2019; Russino et al., 2019). Moreover, capital reserve requirements and deposit insurance policies depend on the ownership structure of banks. Whereas, Mawanza et al. (2018) reveal in Zimbabwe that the banks have been complied with board composition, board committees and code of ethics, as required by Reserve bank of Zimbabwe’s guidelines.

Lestari (2018) analyzed the effects of corporate governance of Indonesian listed banks, taking data from 2009 to 2016. The effectiveness of governance is measured by taking ownership concentration and audit committee whereas capital reserve and non-performing loans are taken as bank-specific controls. The findings reveal that the ownership concentration and audit committee negatively impact the risk-taking conduct on the bank. Moreover, the capital reserves has an insignificant impact on the risk-taking conduct on the banks, while non-performing loans are associated negatively with risk-taking (Lestari, 2018; Tarchouna et al., 2017).

On the other side, Berger et al. (2005) investigated the effect between foreign, state and domestic ownership concentration on the recital of the Argentinian banks. The
study focused on the selection, static and dynamic impact of ownership structure on the performance of banks. State-owned banks are found to have poor performance compared to those which had undergone privatization. The improvement in the privatized banks is due to the transfer of NPLs regarding the residual entities. A comparison of the performance of state-owned and private commercial banks is also conducted by Sarkar & Sarkar (2018) in the Indian context. Considering the enormous reforms during the sampled period, the study find a positive relation of board structure and private banks’ performance, whereas a negative association is found with state-owned banks. Further, the study takes into account the board characteristics by using CEO duality and finds that CEO duality is high in state-owned banks having negative effects on performance while CEOs tenure have a significant and positive impact on banks’ performance. Setiyono & Tarazi (2014) investigate the impact of board diversity on firms’ performance and risk-taking by the bank and found that the bank performance is influenced by the degree of diversity i.e. demographic, education and experience. However, the results also show a negative association when it comes to ethnicity affecting both the performance and risk of banks (Alkalbani et al., 2019).

Bank corporate governance is subject to encounter insider trading which is likely to increase agency cost. Brio et al. (2018) study the entrenchment of directors and its impact on shareholders’ value and identify the factors of insider trading in banks. The researchers suggest that the banks with high entrenched directors are unlikely to attain high prestige among shareholders. Concentrated ownership in banks tends to increase insider trading which may be due to the absence of an efficient control mechanism (Sarkar & Sarkar, 2018; Zhang & Zhangs, 2018).

An extensive literature covers corporate governance practices in conventional banks. However, a few studies have compared Islamic and conventional banking CG practices. In this connection, Chazi et al. (2018) established a comparative analysis of the attributes of CG mechanisms in Islamic and conventional banking systems. The research is conducted in GCC countries on panel data from 2007 to 2009 to assess the board specification, ownership structure, legal system effectiveness and protection of investors in the sampled countries. The results identify that the non-conventional bank performance
was higher than the commercial banks’ performance during financial crises.

While measuring the banks’ performance through Tobin’s Q, Adams & Mehran (2012) investigated linked the performance with board governance and found that board independence is insignificant in defining the performance. However, there is a positive association between board size bank performance. Moreover, the study suggests that the composition of the board with directors holding subsidiary directorship is likely to add value to the boards’ effectiveness.

A European study on banks’ corporate governance conducted by Staikouras et al. (2007) studied the effects of non-executive directors’ proportion and board composition on the board. The study finds a negative effect of board size on performance whereas, board composition is insignificantly related to bank performance.

Tulung & Ramdani (2018) analyzed the board size and board independence using data of 26 Indonesian banks and find a positive association of board size & independence with banks’ performance. The study shows that non-executive directors are critically required to improve bank performance and larger boards are more likely to result in better governance. Mandala et al. (2018) examined the panel data of Kenyan financial institutions to investigate the link between firms’ performance & board structure and find a significant association. Also, how frequently the meetings of the board are happening to enable the board to enhance governance.

The effect of ownership concentration on banks’ lending practices is reported by Bai et al. (2018), who employ data from Chinese banks. The results indicate that the announcement of loans tends to have a negative response. The banks with a high loan portfolio are likely to have a higher non-performing loan, hence resulting in reduced profitability (Nadeem et al., 2018). Moreover, the study finds out that the banks having more ownership concentration produce higher capital adequacy ratio thus they have lower insolvency risk.

An amply sized sample study by Vu et al. (2018) having 577 firms listed on Vietnam Stock Exchange shows mixed results of ownership concentration and CEO ownership’s effect on the performance represented of ROA & ROE. Whereas, board independence and women membership is found to have an insignificant impact on both
performance measures. While investigating the impact of foreign shareholding on financial institutions in emerging markets, The researchers attributed this relation to foreign corporations having larger shareholdings on average, higher commitments, and longer-term involvements.

The study by Choi & Hasan (2005) in Korea investigates the involvement of foreign investors, foreign board members in banks’ return and risk and found a positive link of overseas ownership and banks return and negative relation of foreign ownership with the risk. Whereas, the presence of foreign board members is linked with bank risk and return. The variables of the study are explained, and hypotheses are developed in the upcoming section.

3. RESEARCH METHODOLOGY

3.1. DATA

All the conventional commercial banks of Pakistan are considered as the population of the study. Out of commercial banks, the sample includes listed conventional banks in Pakistan Stock Exchange (PSX). At present, 18 conventional commercial banks are listed in PSX. We excluded Islamic banks due to variations in characteristics. Our dataset is comprised of three categories: (1) board-specific, (2) ownership structure, and (3) bank-specific. Thus, the sample consists of a balanced panel of 108 bank-year observations for 18 commercial banks for the period of six years from 2012 to 2017. The Pooled OLS regression method is carried out to measure the associations of variables in the study by employing Eviews-9. The test of normality and correlation is also conducted among the determinants.

3.2. VARIABLES

3.2.1. DEPENDENT VARIABLES

Both the book and market-based measures to capture the performance of the banks are considered in this study, as it may be specious to rely only on a single performance measure (Adjaoud et al., 2007; Ciftci et al., 2019). Accounting measures may be manipulated and varied in terms of accounting and consolidation methods (Dalton et al., 1999; Reischmann, 2016), whereas market-based measures are subject to
be affected by shareholder anticipation (Aspris et al., 2014; Müller, 2014). ROA and MBV are used as dependent variables aligned with existing literature (Boone et al., 2007). ROA measures the accounting performance and it is represented as the ratio of net income with total assets, whereas, MBV is represented as the percentage of market value to the book value of the total assets (Mahmood et al., 2018). Data on both ROA and MBV is collected from the publicly available annual reports of the sample banks.

3.2.2. Independent Variables

3.2.2.1. Board Specific

a) Board Size

The board size is considered as one of the prominent dimensions in the board structure as it influences the corporate governance practices which result in elevation of firm performance. The resource-based theory proposes that larger boards hold higher diversity. In larger boards, members enjoy thorough knowledge and requisite experience and resultantly the board is more likely to influence the strategies and the decision making hence improves the firm performance. Likewise, agency theory posits that a board with a larger number of directors ensures the vigilance of the management in managing the agency problems. Despite the importance highlighted by the above theories, the literature shows mixed results. Some studies found a positive impact of a larger board while others found it to have an adverse effect on the performance of the firm. For instance, Kao & Chen (2004) found that large boards are more likely to negatively affect the boards’ functioning and performance due to the reason that large boards may confront issues through effective communication among their members. Based on these theoretical explanations and empirical results, it is hypothesized that:

H$_1$: (a) *The Board size negatively affects the financial performance of the banking companies.*

(b) *The Board size positively impacts the market value of banking firms.*

b) Board Independence

The agency theory claims that the presence of non-executive and independent directors in a board produce less agency costs, which leads to protection of shareholders’ interest as they may monitor the board activities and contributes effectively in the
efficient decision making because they are out of management influence, thereby improves financial reporting and the value of the firm (Fernando et al., 2020; Shah & Shah, 2018). The independence of the board has been studied by many researchers and reported mixed results. Some studies show that the presence of independent directors have a significant and positive effect on the firm financial performance whereas others advocate the negative relationship of both (Kim et al., 2020; Sauerwald & Su, 2019; Yang & Abeysekera, 2019). The proposed hypotheses are developed on basis of existing literature and relevant theories.

H2: (a) The Board independence positively impacts the banks’ performance.
(b) The Board independence positively impacts the market value of the banks.

3.2.2.2. Ownership Structure Specific

a) Ownership Concentration

Ownership concentration is referred to the concept that how much the owners of a company are concentrated among top five shareholders (Nguyen et al., 2015). A well-designed ownership structure is considered a way to maximize the firm’s market value. The firms in concentrated ownership are managed by large shareholders and owners and managers are alike hence the problems of the agency are likely to be limited Maheshwari & Gupta (Maheshwari & Gupta, 2018). However, a high concentration of ownership gives discretionary powers to larger shareholders due to which conflict of interest could arise with the minority shareholders (Johnson et al., 2000; Oradi et al., 2020; Russino et al., 2019). The owners of such firms possess rights to influence decisions and affect the operational activities due to equity tunneling i.e. insider trading, asset tunneling i.e. transferring assets in less market value and cash flow tunneling i.e. transfer pricing and excessive executive salaries (Atanasov et al., 2008). This conflict results in the tunneling of resources in highly concentrated firms and affects their performance (Bertrand et al., 2002; Yoshikawa et al., 2020). Shleifer & Vishny (1997) found that in less developed countries ownership is more concentrated among few shareholders due to weak legal protection and institutional environment and lack of property rights. The emerging countries possess a weak legal system with poor enforcement of law and corruption (Claessens & Fan, 2002; Moursli, 2020). Based on the literature related to ownership
concentration, firm performance and valuation, this study hypothesizes that:

**H3**: (a) *The ownership concentration positively affects the banks’ performance.*  
(b) *The ownership concentration positively impacts the market value of banks.*

*b) Foreign Ownership*

Agency theory argues that foreign investors’ shareholding plays a critical role in enhancing CG mechanisms due to foreign stakes in the firm capital. It facilitates the development of capital in the market, established governance practices, and improved financial disclosure and accounting standards (Ananchotikul, 2007; Banerjee et al., 2019; Choi et al., 2013). Chhibber & Majumdar (1999) find foreign shareholders to have a comparatively high monitoring effect on firms, especially in emerging markets, due to which the performance of the firm improves. Moreover, opening avenues for foreign investors enhance firms’ shareholding base and reduces exploitation of the stake of minority shareholders (Cheung et al., 2009). These studies support our study to hypothesize the relation of foreign shareholding and firm performance and value.

**H4**: (a) *The foreign ownership positively affects the banks’ performance.*  
(b) *The foreign ownership positively affects the market value of the banks.*

c) *Managerial Ownership*

The management ownership is important regarding firms’ performance in two ways. First, it causes managerial entrenchment which leads to increase agency cost and decreased firm performance and value. Second, managers are provided with incentives to increase firm performance and value (Jensen & Meckling, 1976). However, managers’ share in ownership is not that significant which contributes to the cost of ownership of the firm, and increased managerial ownership is likely to increase managers’ stake in the ownership that boosts their concern in the long term value of the firm (Nazir & Afza, 2018). Also, the more stake managers hold the fewer managerial incentives they receive to manage earnings (Banderlipe, 2009). The proposed hypotheses are as:

**H5**: (a) *Managerial ownership positively impacts the performance of the banking companies.*  
(b) *Managerial ownership positively impacts the market value of the banks.*
3.2.2.3. Control Variables

Besides governance and board-specific variables, some control variables such as bank-specific variables i.e. size of bank, capital adequacy ratio (CAR), non-performing loans (NPL) and advances to deposit ratio (ADR) are also added in this research to compute their impact on the banks’ performance and value.

\textit{a) Size of Bank}

The bank size is estimated in terms of the total assets held by the bank. Total assets are used in various studies as a proxy of firm size (Bennedsen et al., 2008). The logarithm of total assets is taken to standardize the values. The size of banks is considered to be the major determinant of banks’ ability to manage governance issues. The banks with large asset bases are likely to sustain in the crisis period in comparison with the smaller banks (Kumar & Singh, 2013). This implies that the size promotes diversification which minimizes risks and allows banks to assist smooth operations (Adusei, 2015). Big size firms are more likely to be efficient as they enjoy economies of scale, employ experienced management and a well-formulated governance body that leads to enhanced performance and value of the firm (Lang & Stulz, 1994; Malik et al., 2020). However, Himmelberg et al. (Himmelberg et al., 1999) argue that smaller firms are more efficient than larger ones because in larger firms the top management loses to control over their operational & strategic decisions related activities. The proposed hypothesized are as:

\textbf{H}_6: (a) The bank size is positively related with banks’ financial performance.

\textbf{H}_6: (b) The bank size is positively related with the market value of the banks.

\textit{b) Capital Adequacy}

Maintaining minimum capital reserves is a limit imposed by the central bank on all the associated banks, as per the guidelines of BIS (Basel Committee of the Banks for International Settlements. The capital adequacy ratio enables the banks to keep a balance between capital maintenance and risk. It is a measure of a bank’s core capital with risk-weighted assets. It determines the bank’s capability to meet financial obligations and risks (Zaman et al., 2020). The management seeks to minimize regulatory costs to improve the capital adequacy of banks (Moyer, 1990), capital adequacy is found to have
a positive relationship with ownership concentration (Shehzad et al., 2010). Therefore, we hypothesize that:

**H7:** (a) Capital adequacy positively affects the performance of the banking companies.  
(b) Capital adequacy positively affects the market value of the banking companies.

c) Non-Performing Loans

These are the loans that are not repaid by the customers. The greater share of non-performing loans in the overall lending portfolio diminishes the quality of assets of the bank. It affects negatively the profitability of banks (Berger et al., 2005; Vodová, 2013; P. K. Vodová & Stavárek, 2017). Furthermore, Shehzad et al. (2010) also find that non-performing loans are negatively related to ownership concentration. Based on the literature, the study hypothesizes that:

**H8:** (a) Non-performing loans negatively affect the performance of the banking companies.  
(b) Non-performing loans negatively affect the market value of the banking companies.

d) Advances to Deposit Ratio

The advance to deposits ratio is an indirect method of measuring the liquidity of a bank. It is calculated by dividing advances or the loans given by the bank to the customer by the deposits of customers. The high ratio implies that the bank is less liquid to meet the withdrawals in liquidity shocks. The high portfolio of advances is likely to increase the earning of the bank; hence the performance and value tend to increase consequently. This implies us to hypothesize that:

**H9:** (a) Advances to deposit ratio positively affects the performance of the banking companies.  
(b) Advances to deposit ratio positively affects the market value of the banking companies.

### 3.3. Econometric Models

We developed two econometric models to test the hypotheses for the performance and value of banks separately.

\[
ROA_{it} = \beta_0 + \beta_1 BS_{1it} + \beta_2 BI_{2it} + \beta_3 OC_{3it} + \beta_4 MO_{4it} + \beta_5 CAR_{5it} + \beta_6 ADR_{6it} + \beta_7 NPL_{7it} + \beta_8 SIZE_{8it} + \varepsilon_{it}
\]

Equation (1)
Equation (2)

\[
MBV_{it} = \beta_0 + \beta_1 BS_{1it} + \beta_2 BI_{2it} + \beta_3 OC_{3it} + \beta_4 MO_{4it} + \beta_5 CAR_{5it} + \beta_6 ADR_{6it} + \beta_7 NPL_{7it} + \beta_8 SIZE_{8it} + \varepsilon_{it}
\]

Where ROA\(_{it}\) represents the performance of the bank \(i\) at time \(t\), MBV\(_{it}\) represents the market to book value for bank \(i\) at time \(t\), BS\(_{1it}\) represents the size of the board of directors for bank \(i\) at time \(t\), BI\(_{2it}\) represents the board independence for bank \(i\) at time \(t\), OC\(_{3it}\) represents the ownership concentration for bank \(i\) at time \(t\), MO\(_{4it}\) represents the managerial ownership for bank \(i\) at time \(t\), ADR\(_{5it}\) represents the advances to deposits ratio for bank \(i\) at time \(t\), CAR\(_{6it}\) represents the capital adequacy ratio for bank \(i\) at time \(t\), NPL\(_{7it}\) represents the non-performing loans for bank \(i\) at time \(t\), SIZE\(_{8it}\) represents the logarithm of total assets for bank \(i\) at time \(t\), \(\varepsilon_{it}\) represents the error term, and \(i = 1\) to \(18\) & \(t = 2012\) to \(2017\)

4. RESULTS AND ANALYSIS

To examine the data normality, descriptive analysis is carried out in Eviews-9. Descriptive statistics are summarized in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>0.787391</td>
<td>0.967482</td>
<td>-0.143092</td>
<td>3.255903</td>
</tr>
<tr>
<td>MBV</td>
<td>11.21263</td>
<td>0.75023</td>
<td>0.212299</td>
<td>2.822703</td>
</tr>
<tr>
<td>BS</td>
<td>8.611111</td>
<td>1.610905</td>
<td>0.836209</td>
<td>3.589832</td>
</tr>
<tr>
<td>BIN</td>
<td>0.23988</td>
<td>0.042524</td>
<td>0.301976</td>
<td>3.84025</td>
</tr>
<tr>
<td>FO</td>
<td>2.602973</td>
<td>6.311279</td>
<td>3.558239</td>
<td>15.37188</td>
</tr>
<tr>
<td>MO</td>
<td>126.6155</td>
<td>959.5701</td>
<td>8.495912</td>
<td>77.18558</td>
</tr>
<tr>
<td>FS</td>
<td>12.89738</td>
<td>1.095969</td>
<td>0.662197</td>
<td>2.768823</td>
</tr>
<tr>
<td>OC</td>
<td>2.388889</td>
<td>1.717602</td>
<td>-0.558043</td>
<td>2.136452</td>
</tr>
<tr>
<td>ADR</td>
<td>46.68731</td>
<td>19.19202</td>
<td>-0.829127</td>
<td>3.728442</td>
</tr>
<tr>
<td>NPL</td>
<td>12.54406</td>
<td>26.91613</td>
<td>8.93278</td>
<td>88.1567</td>
</tr>
<tr>
<td>CAR</td>
<td>14.33999</td>
<td>4.504049</td>
<td>0.173</td>
<td>3.505647</td>
</tr>
</tbody>
</table>

The results show that ADR has the lowest skewness (SK= -0.8, Mean=46.68), while the highest value with NPL (SK=8.9, Mean=12.54). Whereas, the kurtosis has the lowest value with OC (K=2.13, Mean=2.39) and highest with NPL (K=88.15, Mean=12.54). The results of the above table confirm that all variables have normal
distribution except NPL with the highest skewness and kurtosis values due to the presence of heterogeneity in the dataset. The data includes the banks with both larger and smaller sizes with different asset bases. Hence, it is observed that they may have a different advanced portfolio.

4.1. Correlation Analysis

The correlation analysis was carried out to examine the linear correlation among variables adopted in the study. Correlation statistics are presented in Table 2.

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>MBV</th>
<th>BS</th>
<th>BIN</th>
<th>FO</th>
<th>MO</th>
<th>OC</th>
<th>FS</th>
<th>ADR</th>
<th>NPL</th>
<th>CAR</th>
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<tbody>
<tr>
<td>ROA</td>
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<td></td>
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<tr>
<td>MBV</td>
<td>0.224</td>
<td>1</td>
<td></td>
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<tr>
<td>BS</td>
<td>0.205</td>
<td>0.074</td>
<td>1</td>
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<tr>
<td>BIN</td>
<td>-0.156</td>
<td>-0.016</td>
<td>-0.967</td>
<td>1</td>
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<td>-0.011</td>
<td>-0.188</td>
<td>-0.14</td>
<td>0.131</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>0.021</td>
<td>-0.068</td>
<td>0.023</td>
<td>-0.031</td>
<td>-0.035</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OC</td>
<td>-0.003</td>
<td>-0.092</td>
<td>0.15</td>
<td>-0.137</td>
<td>0.446</td>
<td>0.198</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>0.546</td>
<td>-0.135</td>
<td>0.12</td>
<td>-0.078</td>
<td>0.123</td>
<td>-0.017</td>
<td>-0.015</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADR</td>
<td>-0.155</td>
<td>-0.091</td>
<td>-0.04</td>
<td>0.038</td>
<td>0.188</td>
<td>0.07</td>
<td>0.415</td>
<td>-0.334</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPL</td>
<td>-0.245</td>
<td>-0.015</td>
<td>-0.224</td>
<td>0.362</td>
<td>-0.037</td>
<td>-0.029</td>
<td>-0.077</td>
<td>-0.182</td>
<td>0.098</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td>0.46</td>
<td>0.309</td>
<td>0.189</td>
<td>-0.186</td>
<td>-0.122</td>
<td>0.001</td>
<td>-0.198</td>
<td>-0.02</td>
<td>-0.047</td>
<td>-0.194</td>
<td>1</td>
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</table>

From the above table, it can be seen that return on assets (ROA) is correlated positively with the market to book value (MBV), board size (BS), managerial ownership (MO), bank size (FS), and capital adequacy ratio (CAR). While, it is negatively correlated with board independence (BIN), foreign ownership (FO), advances to deposits ratio (ADR) and non-performing loans (NPL). The correlation of MBR with BS and CAR is positive while negative with the other variables. The board size has a negative correlation with BIN, FO, MO, OC, FS and CAR while the rest are correlated positively with BS. Board independence shows a negative correlation with MO, OC, FS and CAR and positive with FO, ADR and NPL. The correlation of FO is negative with MO, NPL, and CAR, whereas, it is positively correlated with OC, FS and ADR. Managerial ownership has been evident to be positively correlated with OC, ADR and CAR. The correlation of OC is negative with FS, ADR and CAR. Bank size is correlated negatively with all three control variables i.e. ADR, NPL and CAR. The correlation of ADR is
positive with NPL which implies that an increase in the advanced portfolio will have an increase in non-performing loans whereas ADR is negatively correlated with CAR which shows that the more the bank provides loans the less it will have to meet capital requirements. Finally, NPL is negatively correlated with CAR.

4.2. Regression Analysis

**Model-I**

<table>
<thead>
<tr>
<th>Table 3. OLS Regression with ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>BS</td>
</tr>
<tr>
<td>BIN</td>
</tr>
<tr>
<td>FO</td>
</tr>
<tr>
<td>MO</td>
</tr>
<tr>
<td>OC</td>
</tr>
<tr>
<td>FS</td>
</tr>
<tr>
<td>ADR</td>
</tr>
<tr>
<td>NPL</td>
</tr>
<tr>
<td>CAR</td>
</tr>
<tr>
<td>R-squared</td>
</tr>
<tr>
<td>F-Statistic</td>
</tr>
<tr>
<td>Prob(F-stat)</td>
</tr>
</tbody>
</table>

***, **, & * Significance at level 1%, 5%, & 10% respectively.

The results of the regression model I show that all independent variables have an overall contribution of 55% (R-square 0.55) in explaining the dependent variable. The probability of F-statistics is significant (<α) which confirms the fitness of the model. The coefficient of foreign ownership (FO) has a negative insignificant relationship with bank performance and NPL has a negative, but significant relationship with the performance of banks at a 10% significance level. The relationship of board size (BS), board independence (BIN), bank size (FS) and capital adequacy ratio (CAR) is positive and significant at a 5% level of significance with bank performance. The rest of the variables i.e. managerial ownership (MO), ownership concentration (OC), and advances to deposit ratio (ADR) are insignificant but positively related to the bank performance.

**Model-II**
Table 4. OLS Regression with MBV

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.535675</td>
<td>3.342224</td>
<td>0.187</td>
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<tr>
<td>BS</td>
<td>0.30337*</td>
<td>0.199735</td>
<td>0.0935</td>
</tr>
<tr>
<td>BIN</td>
<td>12.69055*</td>
<td>7.764126</td>
<td>0.0749</td>
</tr>
<tr>
<td>FO</td>
<td>-0.021842*</td>
<td>0.011924</td>
<td>0.0871</td>
</tr>
<tr>
<td>MO</td>
<td>-6.78E-05</td>
<td>6.84E-05</td>
<td>0.3295</td>
</tr>
<tr>
<td>OC</td>
<td>0.039359</td>
<td>0.049472</td>
<td>0.4398</td>
</tr>
<tr>
<td>FS</td>
<td>-0.036125</td>
<td>0.067201</td>
<td>0.5921</td>
</tr>
<tr>
<td>ADR</td>
<td>-0.000275</td>
<td>0.003933</td>
<td>0.9445</td>
</tr>
<tr>
<td>NPL</td>
<td>-0.005019</td>
<td>0.003262</td>
<td>0.1271</td>
</tr>
<tr>
<td>CAR</td>
<td>0.077413***</td>
<td>0.015264</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

R-squared | 0.2900
F-Statistic | 4.6600
Prob(F-stat) | 0.0000

***, **, & * Significance at level 1%, 5%, & 10% respectively.

The results of model II show that all independent variables have an overall contribution of 29% (R-square 0.29) in explaining the dependent variable. The probability of F-statistics is significant (<α) which confirms the fitness of the model. The results indicate that board size (BS), board independence (BIN), and capital adequacy ratio (CAR) are positively related to the value of banks at significance levels 10% for BS and BIN and 5% for CAR. The coefficient of foreign ownership (FO) shows a negatively significant relationship with bank value at 10% whereas non-performing loans (NPL), managerial ownership (MO), bank size (FS) and advances to deposit ratio (ADR) have a negative and insignificant relationship with the value of bank while ownership concentration is positively and insignificantly related to the value of the bank.

5. DISCUSSION

The CG mechanism in the banking sector is unique and possesses different features. The study in hand focuses on revealing governance and ownership structure in banks in terms of performance and the value in the share market. The study finds that board structure measured by board size and board independence is related positively with the performance of banks and bank value at 5% and 10% significance respectively. Therefore, hypotheses H₁ and H₂ are accepted. These results are in line with the extant
literature and are supported by resource-based theory and agency cost theory (Adams & Mehran, 2003; Boone et al., 2007). The larger board size is likely to have diversified board members with requisite skills which enhances the performance of the board. The presence of independent directors tends to reduce agency cost problems as they do not have managerial influence in the firm. The studies by Coles et al. (2008), Tulung & Ramdani (2018) found a positive relationship of board size with bank performance while Adusei (2015), Kao & Chen (2004) and Yermack (1996) found negative relationship, suggesting that larger boards may lack communication and consensus among directors and affects the efficiency of decision making and the performance (Bonn et al., 2004; Hai et al., 2018; Vafeas, 1999). The positive results of board independence are consistent with the study of Tulung & Ramdani (2018) and Hai et al. (2018). The results are supported by stewardship theory which confirms the existence of a relationship between board independence and firm performance in terms of their counseling and advisory contribution in the governance of firm (Daily & Dalton, 1993; Liu et al., 2015; Ramdani & Witteloostuijn, 2010). Some research suggests that board composition and structure have no significance in assessing performance (Abdullah et al., 2016; Al Farooque et al., 2007; Bennedsen et al., 2008; Chen et al., 2015; Ghosh, 2006).

The results of the ownership structure of banks are insignificant except the foreign ownership’s relationship with bank value having a negative coefficient. Hence, hypotheses related to ownership structure i.e. H₃, H₄ and H₅ are rejected and challenge the work of Chhibber & Majumdar (1999), Choi & Hasan (2005) and Cheung et al. (2009) who find a positive relationship of foreign investors. The ownership concentration is hypothesized to be positively related to firm performance and value but we found insignificant results that are consistent with previous researches such as Brio et al. (2018) and Lestari (2018) and the results confirm that concentrated ownership in developing countries is due to weak property rights and legal system (Andrei Shleifer & Vishny, 1997; Claessens & Fan, 2002). The concentrated ownership cause tunneling in the emerging market firms which influences decisions and affects the performance (Atanasov et al., 2008). Moreover, managerial ownership may also increase agency problems due to managers’ stake in the firm which may influence the decisions (Nazir & Afza, 2018).
However, Hai et al. (2018) posit that managerial ownership brings managers and shareholder interest together and reduces conflicts between them.

Besides corporate governance, the study includes control variables that are hypothesized to contribute to the performance and value of banks. The size of a bank is positively and significantly related to bank performance (Adusei, 2015; Kumar, 2011; Lang & Stulz, 1994), while it has a negative but insignificant relationship with bank value (Himmelberg et al., 1999). Thus, our hypothesis $H_{6(a)}$ is accepted, while $H_{6(b)}$ is rejected. This implies that the asset base of banks will affect the performance of banks but will not affect the value because of the higher concern of shareholders towards the market value of the banks. The second control variable taken in the study is the capital adequacy ratio which is positively and significantly impacts the bank performance and value, hence accepting hypothesis $H_7$. The results suggest that banks with high adequate capital to meet their risks are stable in performance and marketplace as well. The shareholders are confident that the firm will survive even in a crisis period and their investment will be paid off. However, these findings are inconsistent with the study of Lestari (2018). Furthermore, non-performing loans have a negative and significant relationship with performance while insignificantly negative with the value of banks, thus hypothesis $H_{8(a)}$ is accepted and $H_{8(b)}$ is rejected. This implies that bad quality and unrecoverable loans affect the profitability of banks (Berger et al., 2005; Lestari, 2018; P. K. Vodová & Stavárek, 2017). However, market value is not affected by the presence of non-performing loans. Lastly, advances to deposit ratio have shown an insignificant relationship with bank performance and value hence rejecting hypothesis $H_{9}$. However, the positive coefficient of ADR with performance implies that the more the bank advances the more it has earning avenues. The banks provide loans to different categories i.e. agriculture, industries, commercial and consumer to protect their assets and mitigate risks.

6. CONCLUSION

The study examined the relationship of the board and ownership structure with the performance and value of the conventional Pakistani banks. The performance of
banks is measured by return on assets and the bank value is measured through the market to book value. The board structure in this study is constituted by taking board size and board independence, whereas, the ownership structure is comprised of ownership concentration, foreign shareholding and managerial ownership. The study employs pooled OLS method to measure the relationship among variables. This study contributes to the existed literature on board composition, ownership structure and corporate governance practices in the banking sector. The results suggest that board size and board independence are significant in bank performance and value, which implies that larger boards perform well in managing corporate issues while maintaining the stability of bank performance and market value and along with the presence of independent directors the board is likely to improve the corporate governance due to their independent role in decision making without being influenced by management pressure. The ownership concentration, managerial ownership and foreign ownership have not shown a significantly positive relationship; however, foreign shareholding is related to the value of banks because foreign investors seek accurate accounting and financial information and international auditing standards. This study further analyzed the relationship of bank-specific control variables i.e. capital adequacy, advances to deposit ratio, size of the bank and non-performing loans. The results are aligned with the existing literature as capital adequacy is found positively related to both the performance and value of banks suggesting that banks are concerned to reduce the regulatory cost and maintain adequate capital to cope with risks. Also, the high capital adequacy improves the performance as well as enhances the market value of the bank. The higher percentage of non-performing loans in the advances portfolio is a sign of the existence of bad quality assets, therefore, the results indicate that non-performing loans tend to decrease firm performance, but the value of banks surprisingly has not been affected in our results.

The study has an implication both theoretically and practically and may benefit almost all stakeholders i.e. policymakers, practitioners, correspondent bankers, shareholders and board members. The current study is limited to commercial conventional banks only, however, this research may be further extended by taking a sample of all financial institutions including Islamic banks, microfinance banks and other
development financial institutions to measure the impact at large. Furthermore, a comparative study may also be carried out between Islamic and conventional or foreign and domestic banks.

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