

Impact of Board Composition on Bank Performance : Evidence from the Indian Banking Sector

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Abstract

India has recently witnessed a set of banking frauds, pointing toward the possibility of loose corporate governance mechanisms in the banking sector. The present study aimed to evaluate the composition of the board of directors in terms of the corporate governance parameters to assess whether they impacted the performance of the listed Indian banks. The hypothesis for the same was formulated based on the agency and the resource dependency theory. The study made use of the 34 public as well as private sector banks listed on the Bombay Stock Exchange 500 for a period of 12 years (2010–2022). The analysis was conducted using the STATA software's fixed-effect panel data regression model. The results suggested that board size, percentage of women directors, and percentage of independent directors on the board of banks impacted the financial performance of these banks. The study shed light on the mechanism and ways to improve bank performance using corporate governance parameters. It makes valuable contributions to the literature on corporate governance and shall be helpful for both managers and policymakers in formulating regulatory guidelines.

Keywords : board of directors, board composition, resource dependency theory, agency theory, bank performance, corporate governance

JEL Classification Codes : G21, G28, G32, M48

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The significance of corporate boards has been a questionable topic, but when things go south, they become the center of attention in the company. Numerous scandals and concerns about corporate governance have been brought to light lately. Consequently, the committee of the board has been the focal point for policy

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discussions regarding the reformation of the governance systems and has become a topic for substantial academic research (Adams et al., 2010).

In the context of developing economies, where inadequate protection of shareholders' rights and ownership concentration pose a significant threat, the board conducts multidisciplinary tasks which directly or indirectly affect the firm's performance. The responsibility of the executive board is not limited to merely conducting the lawful necessities but extends to implementing control all over the company while remaining answerable to the shareholders. With expertise, independence, and legal powers, the corporate board serves as a powerful governance system. Being at the apex of the internal control system, the board, through its various committees, is responsible for the corporation's functioning and decision-making (Bugeja et al., 2016). Independent directors on boards are significantly influential because of their innermost position within the firm and their ability to observe on behalf of shareholders. Therefore, they are considered one of the most effective instruments for ensuring that companies are well-governed (Byrd et al., 2010).

Banks play an essential role in the development of an economy, and safeguarding them is, thus, important (Sardana & Shukla, 2020; Sardana & Singhania, 2022). Moreover, the growth of digital banking has further pushed its relevance (Sardana & Singhania, 2018). The BASEL Committee on Banking Supervision (BCBS, 2018) focused on the need to refine the governance and management of financial institutions. The committee advised a standardized composition of the directors of the board and the executives to strengthen the governance of such institutions, driving home the fact that good corporate governance enhances monitoring efficiency. In developing economies, the importance of bank governance increases because of multiple reasons. First, banks have a superior position in the financial system of emerging economies and can be significant facilitators of economic growth. Second, they serve as the prime source of finance for a substantial number of firms, as well as the prime depository of the economy's savings. Failure of banks, especially commercial banks, can therefore have repercussions on the trust of depositors, payment systems, and credit creation (Gupta & Sardana, 2021). Third, privatization and liberalization of the banking systems in developing economies have reduced the role of economic supervision. As a result, the managers in these countries have attained liberalization in the administration of banks.

With a growing number of banking frauds in India, researchers have tried to delve deeper to identify banks' financial and risk-mitigation controls (Ahamed, 2015; Jain et al., 2021). The complexities of the banking industry require the presence of a diverse board of directors to identify the various issues prevalent in the banking sector (Kumari & Pattanayak, 2014). The board's awareness and expertise about the industry's complications help them to advocate and advise the managers coherently and implement the right strategies within the institution based on their diverse expertise (Berezinets et al., 2017). Although multiple conceptual and empirical studies have been undertaken in corporate governance, only a small portion of them concerns the dimension of the banking industry, thereby necessitating this study in India, a developing economy. The need to evaluate corporate governance from an Indian perspective is essential because of its distinctive features, which are not necessarily present in other nations. Due to the inheritance of the English legislatures, the corporate governance system of India is one of the finest. However, the faulty execution of the law, along with the policies of the pre-reform phase of the following socialism, altered it to great extents.

Based on the extant literature, it was observed that most of the studies linking board composition with performance have focussed on non-banking areas (Bezawada, 2020) or have been conducted in developed economies (Ghosh & Ansari, 2018). Moreover, the case of India is unique since many regulatory changes have been brought up in the board's composition based on the regulations (Companies Act 2013) and the reports of the Reserve Bank of India (RBI).

The study makes vital contributions to the corporate governance domain in the banking sector. Firstly, most corporate governance studies focus on firms' performances. The banking sector is often left out due to the different

nature of its regulations from that of the corporates. This study tries to fill that research gap and contributes to the growing literature in the field of the banking sector. Secondly, on 26th April 2021, the RBI issued a notification for commercial banks to follow various corporate governance practices (Reserve Bank of India, 2021a). This study, in a way, enhances the robustness of such practices for the improvement of banks' governance and performance. Finally, the study provides an empirical justification to the corporate governance theories, specifically the agency theory and resource dependency theory, by highlighting the role played by the board-related corporate governance parameters in improving banks' performance.

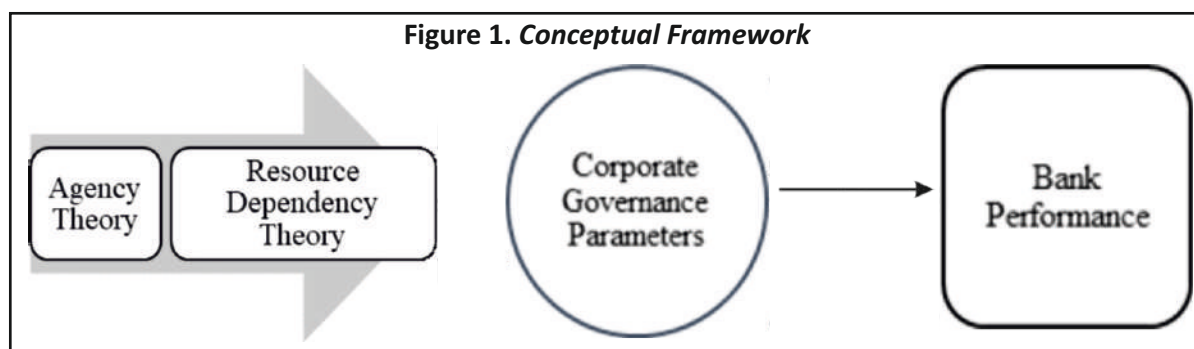
The paper focuses on specific aspects of boards of directors in the Indian banking sector. It studies the composition and characteristics of the board among certain Indian commercial banks and their impact on the bank's financial performance.

Review of Literature and Hypotheses Development

The agency theory and resource dependency theory demonstrate an active linkage between the performance of the firm and the directors of the firm's board (Jensen & Meckling, 1976; Pfeffer & Salancik, 2003). Agency theory stresses the separation of the objectives of the managers and shareholders (Jensen & Meckling, 1976) and focuses on enhancing the control to achieve the given objectives. According to the resource dependency theory (Pfeffer & Salancik, 2003), the activeness and the size of the board are key resources for enhancing performance. Thus, we can see that a plethora of corporate governance theories exist that create wide linkages between governance mechanisms and firm performance (Singhania, Singh, Singh, & Sardana, 2022). Thus, in Figure 1, we formulate a conceptual framework using these corporate governance theories and their linkage with governance and performance.

Board Size and Performance

Based on the existing research, the linkage between the board size and the bank performance is mixed. In America, a study examining the holding companies of the banks confirmed that larger banks escalate the efficacy of management supervision (Adams & Mehran, 2012). The same was confirmed in the study of banks of five countries in the Eurozone (Bouteska, 2021) and the banks of Pakistan (Malik et al., 2014), where both studies found a direct relationship between the board size and the efficiency leading to positive performance. Some studies have also shown that bigger boards enhance the firm's functioning by minimizing agency costs, bringing in a diversity of stakeholders, and increasing proficiency and resources (Huu Nguyen et al., 2020). According to Ofoeda (2017), a huge board also helps expand the organization's expertise with enhanced understanding and skill, leading to better monitoring of activities.



Conversely, various studies confirmed an inverse connection between the board size and the bank's accomplishments (Al-Manaseer et al., 2012; Kumar & Singh, 2013). Consequently, such research studies argue that larger boards reduce the board's productivity, leading to a system where the topmost authority only takes the most important decisions. Furthermore, in the context of Indian cooperative banks, it has been found that the bigger the board, the lesser the returns (Ghosh & Ansari, 2018). Contemplating these arguments, we hypothesize that board size positively affects performance.

✦ **H1** : Board size positively affects the banks' performance.

Women's Directorship and Performance

The available literature on the connection between women directors and performance seems inconclusive (Singh, Singhania, & Aggrawal, 2021), and the research on the gender gap is growing (Sitaraman et al., 2022). The representation of females on the board has been continuously increasing but at a very slow pace (Singh, Kota, Sardana, & Singhania, 2021). A recent study on Indian banks concluded that the presence of women directors positively affects the accounting return (Shukla et al., 2021). In addition, several studies have shown a positive impression of female directors on the firm's performance (Singhania, Singh, & Aggrawal, 2022; Kaur & Vij, 2017).

A recent study about Indian firms coming out with initial public offerings conducted by Singh et al. (2019) concluded that the ratio of women directors has a negligible impact on the firm's performance. However, another study on state-owned firms in India revealed that the presence of women directors on the board has an inverse but noteworthy influence on the firm's performance (Kiranmai & Mishra, 2019). Moreover, based on the industry-wide impact, a recent study of the Indian IT sector reported an insignificant impact on gender diversity on board (Singh et al., 2022). Furthermore, a higher percentage of female directors on the board can be harmful. It would further lead to a difference of opinion among the directors and a decrease in the firm's valuation (Pathan & Faff, 2013). Therefore, considering the findings of the literature as well as the Resource Dependency Theory, we hypothesize that number of women directors on the board positively affects the performance of banks.

✦ **H2** : The number of women directors on the board positively affects the banks' performance.

Independent Directors and Performance

Previous studies have shown that independent directors on the board lead to stronger corporate governance and a reduction in total risks and help the firm thrive well in the long run, thus improving performance (Francis et al., 2012). Academicians suggest that the presence of independent directors on the board is in line with the agency theory. It positively influences the firm's performance (Al-Manaseer et al., 2012; Kakanda et al., 2017).

However, recent research on Indian banks inferred that invites to independent directors elevated market risk (Shukla et al., 2020). Additionally, Majeed et al. (2020), in their study based in Pakistan, established a negative association of independent directors with performance. The plausible explanation for such inconclusive results could be that merely emphasizing the regulatory norms might not lead to better governance and performance (Gafoor et al., 2018). Based on available evidence, we hypothesize that boards with a higher consistency of independent directors are more likely to successfully observe the management and provide the needful support to improve the performance. In other words, independent directors positively affect the performance of the banks.

✦ **H3** : The presence of independent directors positively affects the banks' performance.

CEO Duality and Performance

The primary objective of the CEO is to formulate and execute the company's strategies, policies, and goals. Therefore, one of the major duties given to the board is to keep an eye on the activities of the CEO. Since the president or chairman of the board will have to monitor and audit the activities of the CEO, it is suggested that distinct individuals should fill the positions of the president of the board and the CEO (Singh, Kota, Sardana, & Singhanian, 2021).

A study conducted in Italy found that CEO duality negatively affects firm performance (Doğan et al., 2013). The phenomenon of CEO duality is widespread in Lebanese banks, leading to cutting back on the monitoring responsibility of the board due to the absence of independence (Patton & Baker, 1987). Carty and Weiss (2012) reported no connection between the bank performance and the CEO duality, suggesting that it leads to misuse and misconduct of power. Li and Tang (2010) reached the same conclusion through their study in China. Hence, we can state that when the company adopts CEO duality, the performance standards of the banks are greatly reduced.

✍ **H4 :** CEO duality is negatively linked with banks' performance.

Busy Directors and Performance

The directors who serve on the boards of eminent firms are more likely to receive proposals to serve on multiple boards based on their networks and connections. This phenomenon indicates a direct connection between busy directors and the recognized quality of directors. For example, a recent study based in Brazil showed that the presence of busy directors positively improves the market value of the firms (Mbanye, 2020). This outcome is based on the premise that busy directors have extensive monitoring and advising capabilities due to their vast experience on various boards (Elyasiani & Zhang, 2015).

On the other hand, a strong argument against the busy director is that directorial duties demand time and attention, which is scarce with busy directors due to their multiple roles (Mbanye, 2020). Moreover, such multiple responsibilities also impair the effectiveness of the advisory and monitoring function (Kress, 2018). Moreover, as per Field et al. (2013), busy directors positively help the newer firms, but for old firms, the demission of a busy director favorably influences the market value. This is because busy directors may avoid their duties due to a shortage of time and other commitments. Therefore, based on existing literature, we hypothesize that the presence of busy directors on boards negatively affects the performance of the banks.

✍ **H5 :** Busy directors negatively affect the banks' performance.

Research Design and Methodology

Sample

Secondary data has been collected for all commercial banks listed on the Bombay Stock Exchange 500 (BSE-500) to measure the impact of board composition on the performance of Indian banks. Since BSE 500 represents 93% of the market capitalization (Raithatha & Haldar, 2021), the banks sampled from the list shall have greater scope for generalization. They shall be representative of the banking scenario in the country. This comprised 22 public sector banks and 12 private sector banks. A period of 12 years, from 2010 to 2022, was considered for the analysis because corporate governance received massive attention after the global financial crisis. Several practices were suggested to improve the banking sector's governance mechanism (Orazalin & Mahmood, 2019). The total sample comprised 408 firm-year observations. The data for the corporate governance variables were manually

collected from the sampled banks' annual and corporate governance reports. In contrast, the financial variables were collected from the CMIE Prowess Database, a well-accepted database for conducting the secondary research analysis (Singh, Kota, Sardana, & Singhanian, 2021; Singhanian, Singh, & Aggrawal, 2022).

Description of the Variables

Dependent Variables :

Bank performance is one of the substantial outcomes that the stakeholders are interested in, as it mirrors the way the resources and amenities of the banks are being used to accomplish their goals. Therefore, this study employs Return on Assets (ROA) and Tobin's Q to measure bank performance.

➤ **ROA :** ROA is one of the most crucial accounting-based measures to evaluate bank performance. It computes the overall efficacy of the administration in creating returns for the shareholders with its assets. A positive ROA suggests that the company's total assets are being efficiently utilized to increase the profitable returns of the shareholders. In contrast, a negative ROA depicts that the company's total assets are not being efficiently used, thereby hampering the company's growth (Alghifari et al., 2013). Hence, ROA has been used as a dependent variable to measure financial performance in numerous studies, such as Singhanian, Singh, Singh, & Sardana (2022) and Singh et al. (2019).

➤ **Tobin's Q :** Tobin's Q is one of the most eminent market-based parameters for evaluating bank financial performance for many reasons. First and foremost, Tobin's Q considers the risk factors and, unlike the accounting-based measures, is not subject to manipulations. Second, it mirrors the market anticipation of future returns and effectively helps to measure the enterprise's competitiveness (Montgomery & Wernerfelt, 1988). Therefore, Tobin's Q can be used as an effective proxy to measure the performance of the banks based on previous studies (Gupta et al., 2021; Haldar et al., 2015; Kakkar & Kamboj, 2011; Singh et al., 2022). Third, Tobin's Q is computed using the formula given by Chung and Pruitt (1994), that is, the market valuation of shares plus debt divided by the total assets. A Tobin's Q ratio of 1 serves as a break-even point for evaluating the bank's performance. Banks with a value of more than 1 are expected to offer finer returns than those with less than 1.

Independent Variables and Control Variables :

Table 1 summarizes the various independent and control variables employed in the study, along with their definition, symbols, and supporting literature.

Model Specification

We used the panel data regression model to determine the impact of the board characteristics on the performance of the sampled banks. We ran the Hausman test (Hausman & Taylor, 1981) to determine the suitability of the fixed effect or random effect model for the regression analysis. After evaluation, the null hypothesis was rejected, and thus fixed effect regression analysis was used. The methodology is supported by the previous studies conducted in the corporate governance literature (Haldar et al., 2015; Kumar & Sudesh, 2019; Singh, Kota, Sardana, & Singhanian, 2021).

Two models were run using the fixed effect regression, using the STATA version 16 Software to conduct the analysis. The model specifications are as follows:

Table 1. Summary of Independent Variables and Control Variables

Variables	Symbols	Definition/M Measurement	Supporting Literature
Independent Variables			
Board Size	<i>BD - Size</i>	Board size represents the total number of board directors on the board of a bank.	Liang et al. (2013) ; El-Chaarani (2014) ; Singh, Singhania, & Aggrawal (2021)
Percentage of Women Directors	<i>P - Women</i>	The percentage of women directors refers to the proportion of female directors out of the total directors on the board. It is used as a proxy to determine gender diversity within the board.	Liang et al. (2013) ; Singh et al. (2019) ; Gupta et al. (2021)
Percentage of Independent Directors	<i>P - Ind</i>	The percentage of independent directors is assessed as the proportion of independent directors out of the total directors on the board.	Sarpal (2015) ; Agnihotri & Gupta (2019) ; Shukla et al. (2020) ; Mbanyele (2020)
CEO Duality	<i>CEO-D</i>	CEO duality refers to the situation in a bank where the CEO of the enterprise also serves as a member of the board of directors. CEO-D has been used as a dummy variable with a value of 1 if the CEO serves as a board member and 0 otherwise.	Carty & Weiss (2012); El-Chaarani (2014); Bukair & Abdul Rahman (2015)
Percentage of Busy Directors	<i>P-Busy</i>	The percentage of busy directors is measured as the proportion of directors (who serve on the board of three or more firms as directors) out of the total number of directors on the board.	Saleh et al. (2020) ; Mbanyele (2020) ; Gupta et al. (2021)
Control Variables			
Bank Size	<i>B-Size</i>	Bank size is denoted as the natural log of the bank's total assets. The bigger banks seem to have a comparative edge over the smaller banks due to their economies of scale. Further, they also have an advantage of a substantial number of deposits along with the benefits of diversification. All of this leads to better profits for bigger banks.	Liang et al. (2013) ; Chowdhury & Mohd Rasid (2016) ; Bezawada (2020)
Bank Age	<i>B-Age</i>	Bank age is measured as the natural log of the current year less the year of the bank's inception. The age of the banks plays a key role in profitability since the older banks are considered to have a competitive edge over the newer banks.	Sharma & Dey (2020) ; Gupta et al. (2021)
Leverage	<i>Lever</i>	Leverage is determined as the ratio of long-term debt to long-term assets, revealing the percentage of assets of the enterprise being funded by debt. Leverage = Company Debt/ Shareholders' Equity	Bukair & Abdul Rahman (2015)

$$\text{Model 1 : Tobin's } Q_{it} = \beta_0 + \sum \beta_1 BD\text{-}Size_{it} + \sum \beta_2 P\text{-}WOMEN_{it} + \sum \beta_3 P\text{-}Ind_{it} + \sum \beta_4 CEO\text{-}D_{it} + \sum \beta_5 P\text{-}Busy_{it} + \sum \beta_6 B\text{-}Size_{it} + \sum \beta_7 B\text{-}Age_{it} + \sum \beta_8 Lever_{it} + \epsilon_{it} \quad (1)$$

$$\text{Model 2 : } ROA_{it} = \beta_0 + \sum \beta_1 BD\text{-}Size_{it} + \sum \beta_2 P\text{-}WOMEN_{it} + \sum \beta_3 P\text{-}Ind_{it} + \sum \beta_4 CEO\text{-}D_{it} + \sum \beta_5 P\text{-}Busy_{it} + \sum \beta_6 B\text{-}Size_{it} + \sum \beta_7 B\text{-}Age_{it} + \sum \beta_8 Lever_{it} + \epsilon_{it} \quad (2)$$

where,

i refers to the various firms included in the sample of the time,

t is the time measured in years from 2010 to 2021.
All other variables are defined in Table 1.

Analysis and Results

Descriptive Results

Table 2 reports the descriptive statistics. The board size average is 12.93, which shows that, on average, the board size is larger in Indian commercial banks. The average percentage of independent directors is approximately 58.34, which is a positive sign, indicative that at least 50% of the board of directors in Indian banks are independent. The average percentage of women directors is only 18.02, representing the low proportion of women directors on boards of Indian banks. The average percentage of busy directors is 39.57, indicating that the members of the board of directors participate in multiple assignments simultaneously. CEO duality is approximately 51%, stating at least 50% of the firm suffers from independence issues. The average bank size is sufficiently large, with an average value of 13.88. Leverage value is expected to be low, and it is found to be 18% on average. The average bank age is 69.73 years. In terms of the profitability parameters, *ROA* and Tobin's *Q* are 12.6% and 0.322, respectively, indicating that these banks' profitability is sound.

Empirical Findings

Table 3 reports the results of the panel data regression. The board size is negative and significant ($p = 0.079$), stating that the larger the board size, the more bank performance is negatively affected. This result could be due to the communication problem between the board of directors (Sharma & Dey, 2020). Thus, H1 is not supported. The percentage of female directors is found to be positively related to bank performance ($p = 0.005$). This means that women directors, through their diverse experience, personality, and skills, have impacted performance (Moreno-Gómez et al., 2018) in support of H2. The percentage of independent directors is found to have a positive and significant ($p = 0.045$) impact on bank performance, and thus H3 is also supported. The plausible reason is that independent directors bring about transparency and independence in decision-making, which leads to improved governance and performance (Armstrong et al., 2014). CEO Duality is found to impact bank performance negatively, but the results were not significant ($p = 0.142$), as also suggested by Duru et al. (2016). Thus, H4 is not

Table 2. Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
<i>B - Size</i>	12.939	3.494	4	32
<i>P - Ind</i>	0.5834	2.928	0	14
<i>P - Woman</i>	0.1802	0.734	0	4
<i>CEO - D</i>	0.519	0.5	0	1
<i>P - Busy</i>	0.3957	3.009	0	15
<i>B - Size</i>	13.884	1.666	-0.693	17.421
<i>Lever</i>	0.187	0.461	0	3.741
<i>Tobin's Q</i>	0.322	0.647	0	6.1
<i>B-Age</i>	69.733	39.098	0	156
<i>ROA</i>	0.126	2.607	-51.6	0.171

Table 3. Results of Regression Models

Model 1 : Tobin's Q as a Dependent Variable			Model 2 : ROA as a Dependent Variable		
Variable	Co-efficient	p-value	Variable	Coefficient	p-value
<i>B - Size</i>	-0.023	0.079***	<i>B - Size</i>	-0.28	0.093***
<i>P - Ind</i>	0.016	0.045**	<i>P - Ind</i>	0.019	0.037**
<i>P - Woman</i>	0.058	0.005*	<i>P - Woman</i>	0.079	0.003*
<i>CEO - D</i>	-0.119	0.142	<i>CEO - D</i>	-0.001	0.695
<i>P - Busy</i>	-0.018	0.154	<i>P - Busy</i>	-0.001	0.039*
<i>B-Size</i>	0.023	0.001*	<i>B - Size</i>	0.004	0.000*
<i>Lever</i>	-0.771	0.000*	<i>Leverage</i>	-0.006	0.005*
<i>B - Age</i>	0.004	0.000*	<i>B - Age</i>	0.009	0.000*
<i>R Square</i>	0.4029		<i>R Square</i>	0.2980	
<i>Adjusted R Square</i>	0.3894		<i>Adjusted R Square</i>	0.2822	

Note. *N* = 408 ; *Significant at 1% ** Significant at 5%, *** Significant at 10%.

supported. The percentage of busy directors is negatively related to the bank's performance ($p = 0.154$), leading to the rejection of H5. The results of both the financial variables, which are Tobin's *Q* and *ROA*, are found to be similar. The control variables used in the study, comprising bank size, bank age, and leverage, are also found to impact the banks' performance significantly ($p = 0.001$, $p = 0.000$, $p = 0.000$, respectively), as supported by past literature.

Discussion and Conclusion

The banking sector in India has witnessed rapid growth in recent years, where a set of reforms have been explicitly accelerated with respect to corporate governance. However, this upsurge is caused by the growing fraudulent activities in the Indian banking system, which caused a loss of over INR 3.95 trillion (Reserve Bank of India, 2021b). In light of such mishappenings, it is imperative to build mechanisms that will ensure a high degree of transparency and foster good governance. The current study is rightly timed in this direction to provide empirical support as to how the board composition can affect the performance of these commercial banks. Accordingly, the results of the study are focused on comprehensively evaluating the various characteristics of the board, which shall have a bearing on the financial performance of banks.

With a theoretical backing of the agency theory and the resource dependency theory, this study aims to evaluate the impact of board composition on banking performance. The study uses a sample of 34 banks (22 public sector banks and 12 private sector banks) listed on the BSE-500 for 12 years (2010–2021) to achieve the objectives. Two performance indicators, the market-based performance (Tobin's *Q*) and the accounting-based measure (*ROA*), are used as measures of bank performance. The parameters of board composition, such as board size, percentage of women directors, and percentage of independent directors, are found to significantly impact banks' performance, consistent with previous studies (Gafoor et al., 2018; Leone et al., 2018). However, the other two variables, the percentage of busy directors and the CEO duality, are insignificant, consistent with past studies (Grove et al., 2011; Isik, 2017). Nevertheless, the results highlight that since these board-related characteristics are expected to improve transparency, they shall foster better governance mechanisms (Matta et al., 2022), further improving banks' performance.

This study contributes to the literature by being among the earliest studies to decipher the interlinkages

between governance and performance aspects of the banking sector in an emerging economy like India. Not only does it support the theoretical framework of corporate governance, but it also provides additional insights by linking gender diversity and performance in the banking sector, which has been hitherto under-explored (Ghosh & Ansari, 2018).

Theoretical and Managerial Implications

The study has both theoretical and managerial implications. The study outcome provides theoretical justification for the agency and resource dependency theories (Singhania, Singh, Singh, & Sardana, 2022) of corporate governance, which focus on the role of various board characteristics impacting performance. In addition, the study provides empirical justification for these theories.

Regarding the managerial implications, the study results can prove fruitful for the managers to improve the recruitment practices of the board of directors. Knowing the characteristics that impact banks' performance, the managers can use it to their advantage and improve their respective banks' governance and performance. The results can also be used by policymakers, such as the central bank and the government, to frame regulatory norms based on these parameters. If followed in the true spirit, such norms and practices can boost banks' performance.

Limitations of the Study and Scope for Future Research

Despite various important contributions, the study suffers from certain limitations, which opens the door for future research. The study is based on a sample of 34 banks only listed on the BSE-500 index. Future studies can focus on enhancing this sample for better generalizability of the results. Moreover, the study has focused on limited parameters of the board structure. Future scholars may also work on parameters such as age diversity, education of the board members, etc. Further, such governance parameters can be compared between the private and public sector banks.

Authors' Contribution

Dr. Amit Kumar Singh and Shubham Singhania conceived the idea and developed the research design to undertake the empirical study ; whereas, Aditya Vikram extracted research papers, reviewed the abstracts, and classified them into relevant literature. Dr. Amit Kumar Singh and Dr. Arun Kumar Attree verified the analytical methods and supervised the study. Aditya Vikram undertook the collection of relevant data. The data analysis part and the writing of the research article were done by Shubham Singhania and Varda Sardana in consultation with all the authors.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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References

- Adams, R. B., & Mehran, H. (2012). Bank board structure and performance: Evidence for large bank holding companies. *Journal of Financial Intermediation*, 21(2), 243–267. <https://doi.org/10.1016/j.jfi.2011.09.002>
- Adams, R. B., Hermalin, B. E., & Weisbach, M. S. (2010). The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature*, 48(1), 58–107. <https://www.jstor.org/stable/40651578>
- Agnihotri, A., & Gupta, S. (2019). Relationship of corporate governance and efficiency of selected public and private sector banks in India. *Business Ethics and Leadership*, 3(1), 109–117. [http://doi.org/10.21272/bel.3\(1\).109-117.2019](http://doi.org/10.21272/bel.3(1).109-117.2019)
- Ahamed, N. (2015). Corporate governance: Panting to keep up with scams. *Prabandhan: Indian Journal of Management*, 8(11), 42–53. <http://doi.org/10.17010/pijom/2015/v8i11/81253>
- Alghifari, E. S., Triharjono, S., & Juhaeni, Y. S. (2013). Effect of return on assets (ROA) against Tobin's Q: Studies in food and beverage company in Indonesia stock exchange years 2007–2011. *International Journal of Science and Research (IJSR)*, 2(1), 722–725. https://www.ijsr.net/get_abstract.php?paper_id=IJSRON2013372
- Al-Manaseer, M. F., Al-Hindawi, R. M., Al-Dahiyat, M. A., & Sartawi, I. I. (2012). The impact of corporate governance on the performance of Jordanian banks. *European Journal of Scientific Research*, 67(3), 349–359.
- Armstrong, C. S., Core, J. E., & Guay, W. R. (2014). Do independent directors cause improvements in firm transparency? *Journal of Financial Economics*, 113(3), 383–403. <https://doi.org/10.1016/j.jfineco.2014.05.009>
- Basel Committee on Banking Supervision. (2018, October 19). *Instructions for Basel III monitoring*. https://www.bis.org/bcbs/qis/biiiimplmoninstr_oct18.pdf
- Berezinets, I., Ilina, Y., & Cherkasskaya, A. (2017). Board structure, board committees and corporate performance in Russia. *Managerial Finance*, 43(10), 1073–1092. <https://doi.org/10.1108/MF-11-2015-0308>
- Bezawada, B. (2020). Corporate governance practices and bank performance: Evidence from Indian banks. *Indian Journal of Finance and Banking*, 4(1), 33–41. <https://doi.org/10.46281/ijfb.v4i1.502>
- Bouteska, A. (2021). Correction to: Do board characteristics affect bank performance? Evidence from the Eurozone. *Journal of Asset Management*, 22, 240. <https://doi.org/10.1057/s41260-021-00212-6>
- Bugeja, M., Matolcsy, Z., & Spiropoulos, H. (2016). The association between gender-diverse compensation committees and CEO compensation. *Journal of Business Ethics*, 139, 375–390. <https://doi.org/10.1007/s10551-015-2660-y>
- Bukair, A. A., & Abdul Rahman, A. (2015). Bank performance and board of directors attributes to Islamic banks. *International Journal of Islamic and Middle Eastern Finance and Management*, 8(3), 291–309. <https://doi.org/10.1108/IMEFM-10-2013-0111>
- Byrd, J., Cooperman, E. S., & Wolfe, G. A. (2010). Director tenure and the compensation of bank CEOs. *Managerial Finance*, 36(2), 86–102. <https://doi.org/10.1108/03074351011014523>

- Carty, R., & Weiss, G. (2012). Does CEO duality affect corporate performance? Evidence from the US banking crisis. *Journal of Financial Regulation and Compliance*, 20(1), 26–40. <https://doi.org/10.1108/13581981211199407>
- Chowdhury, M. A., & Mohd Rasid, M. E. (2016). Determinants of performance of Islamic banks in GCC countries: Dynamic GMM approach. In, D. S. Mutum, M. M. Butt, & M. Rashid (eds.), *Advances in Islamic finance, marketing, and management* (pp. 49–80). Emerald Group Publishing Limited. <https://doi.org/10.1108/978-1-78635-899-820161005>
- Chung, K. H., & Pruitt, S. W. (1994). A simple approximation of Tobin's q. *Financial Management*, 23(3), 70–74. <https://www.jstor.org/stable/3665623>
- Doğan, M., Elitaş, B. L., Ağca, V., & Ögel, S. (2013). The impact of CEO duality on firm performance: Evidence from Turkey. *International Journal of Business and Social Science*, 4(2), 149–155.
- Duru, A., Iyengar, R. J., & Zampelli, E. M. (2016). The dynamic relationship between CEO duality and firm performance: The moderating role of board independence. *Journal of Business Research*, 69(10), 4269–4277. <https://doi.org/10.1016/j.jbusres.2016.04.001>
- El-Chaarani, H. (2014). The impact of corporate governance on the performance of Lebanese banks. *The International Journal of Business and Finance Research*, 8(5), 35–46.
- Elyasiani, E., & Zhang, L. (2015). Bank holding company performance, risk, and “busy” board of directors. *Journal of Banking & Finance*, 60, 239–251. <https://doi.org/10.1016/j.jbankfin.2015.08.022>
- Field, L., Lowry, M., & Mkrtchyan, A. (2013). Are busy boards detrimental? *Journal of Financial Economics*, 109(1), 63–82. <https://doi.org/10.1016/j.jfineco.2013.02.004>
- Francis, B. B., Hasan, I., & Wu, Q. (2012). Do corporate boards matter during the current financial crisis? *Review of Financial Economics*, 21(2), 39–52. <https://doi.org/10.1016/j.rfe.2012.03.001>
- Gafoor, C. P., Mariappan, V., & Thiyagarajan, S. (2018). Board characteristics and bank performance in India. *IIMB Management Review*, 30(2), 160–167. <https://doi.org/10.1016/j.iimb.2018.01.007>
- Ghosh, S., & Ansari, J. (2018). Board characteristics and financial performance: Evidence from Indian cooperative banks. *Journal of Co-Operative Organization and Management*, 6(2), 86–93. <https://doi.org/10.1016/j.jcom.2018.06.005>
- Grove, H., Patelli, L., Victoravich, L. M., & Xu, P. (2011). Corporate governance and performance in the wake of the financial crisis: Evidence from US commercial banks. *Corporate Governance: An International Review*, 19(5), 418–436. <https://doi.org/10.1111/j.1467-8683.2011.00882.x>
- Gupta, J., & Sardana, V. (2021). Deposit insurance and banking risk in India: Empirical evidence on the role of moral hazard. *MUDRA: Journal of Finance and Accounting*, 8(2), 79–94. <https://doi.org/10.17492/jpi.mudra.v8i2.822105>
- Gupta, L., Sardana, V., Narula, G., & Singhanian, S. (2021). Does corporate social responsibility affect corporate financial performance? A myth or a reality. *Business Analyst*, 42(1), 71–100. https://www.srcc.edu/system/files/Article%204_0.pdf
- Haldar, A., Shah, R., & Rao, S. V. (2015). Gender diversity in large listed Indian companies. *Corporate Ownership & Control*, 12(3–5), 573–580. <https://doi.org/10.22495/cocv12i3c5p8>

- Hausman, J. A., & Taylor, W. E. (1981). Panel data and unobservable individual effects. *Econometrica*, 49(6), 1377–1398. <https://doi.org/10.2307/1911406>
- Huu Nguyen, A., Thuy Doan, D., & Ha Nguyen, L. (2020). Corporate governance and agency cost: Empirical evidence from Vietnam. *Journal of Risk and Financial Management*, 13(5), 103. <https://doi.org/10.3390/jrfm13050103>
- Isik, O. (2017). The dynamic association between CEO-duality and bank performance: The moderating role of board size. *Research Journal of Business and Management*, 4(4), 460–468. <https://dergipark.org.tr/en/pub/rjbm/issue/33045/367474>
- Jain, S., Bagga, T., & Aggarwal, R. (2021). ICICI Bank Ltd. - Quintessence of corporate governance failure and board ineffectiveness. *Prabandhan: Indian Journal of Management*, 14(12), 8–18. <https://doi.org/10.17010/pijom/2021/v14i12/167457>
- 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. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kakanda, M. M., Salim, B. & Chandren, S. (2017). Corporate governance, risk management disclosure, and firm performance: A theoretical and empirical review perspective. *Asian Economic and Financial Review*, 7(9), 836–845. <https://doi.org/10.18488/journal.aefr.2017.79.836.845>
- Kakkar, D., & Kamboj, G. (2011). Board structure and corporate performance: A causal analysis of select Indian companies. *Prabandhan: Indian Journal of Management*, 4(11), 44–56. <https://doi.org/10.17010/pijom/2011/v4i11/62647>
- Kaur, M., & Vij, M. (2017). Board characteristics and firm performance: Evidence from banking industry in India. *Asian Journal of Accounting & Governance*, 8, 39–53. <https://doi.org/10.17576/AJAG-2017-08-04>
- Kiranmai, J., & Mishra, R. K. (2019). Corporate governance practices in listed state-owned enterprises in India: An empirical research. *Indian Journal of Corporate Governance*, 12(1), 94–121. <https://doi.org/10.1177%2F0974686219849760>
- Kress, J. C. (2018). Board to death: How busy directors could cause the next financial crisis. *BCL Rev.*, 59, 877. <https://heinonline.org/HOL/LandingPage?handle=hein.journals/bclr59&div=25&id=&page=>
- Kumar, N., & Singh, J. P. (2013). Effect of board size and promoter ownership on firm value: Some empirical findings from India. *Corporate Governance*, 13(1), 88–98. <https://doi.org/10.1108/14720701311302431>
- Kumar, N., & Sudesh. (2019). Does corporate governance affect bank performance? Empirical evidence from India. *Prabandhan: Indian Journal of Management*, 12(3), 7–23. <https://doi.org/10.17010/pijom/2019/v12i3/142337>
- Kumari, P., & Pattanayak, J. K. (2014). Earnings management and corporate governance issues in the banking and finance sector: A review of literature. *Prabandhan: Indian Journal of Management*, 7(12), 22–32. <https://doi.org/10.17010/pijom/2014/v7i12/59287>
- Leone, P., Gallucci, C., & Santulli, R. (2018). How does corporate governance affect bank performance? The mediating role of risk governance. *International Journal of Business and Management*, 13(10), 212–229. <https://doi.org/10.5539/ijbm.v13n10p212>

- Li, J., & Tang, Y. (2010). CEO hubris and firm risk taking in China: The moderating role of managerial discretion. *Academy of Management Journal*, 53(1), 45–68. <https://doi.org/10.5465/amj.2010.48036912>
- Liang, Q., Xu, P., & Jiraporn, P. (2013). Board characteristics and Chinese bank performance. *Journal of Banking & Finance*, 37(8), 2953–2968. <https://doi.org/10.1016/j.jbankfin.2013.04.018>
- Majeed, M. K., Jun, J. C., Zia-ur-Rehman, M., Mohsin, M., & Rafiq, M. Z. (2020). The board size and board composition impact on financial performance: An evidence from the Pakistani and Chinese's listed banking sector. *The Journal of Asian Finance, Economics and Business*, 7(4), 81–95. <https://doi.org/10.13106/jafeb.2020.vol7.no4.81>
- Malik, M., Wan, D., Ahmad, M. I., Naseem, M. A., & Rehman, R. U. (2014). Role of board size in corporate governance and firm performance applying Pareto approach, Is it cultural phenomena? *The Journal of Applied Business Research*, 30(5), 1395–1406.
- Matta, R., Kochhar, K., Mohapatra, A. K., & Mohanty, D. (2022). Board characteristics and risk disclosure quality by integrated reporters: Evidence from Indian banks. *Prabandhan: Indian Journal of Management*, 15(5), 27–42. <https://doi.org/10.17010/pijom/2022/v15i5/169579>
- Mbanye, W. (2020). Do busy directors impede or spur bank performance and bank risks? Event study evidence from Brazil. *SAGE Open*, 10(2). <https://doi.org/10.1177/2158244020933594>
- Montgomery, C. A., & Wernerfelt, B. (1988). Diversification, Ricardian rents, and Tobin's q. *The RAND Journal of Economics*, 19(4), 623–632. <https://www.jstor.org/stable/2555461>
- Moreno-Gómez, J., Lafuente, E., & Vaillant, Y. (2018). Gender diversity in the board, women's leadership and business performance. *Gender in Management*, 33(2), 104–122. <https://doi.org/10.1108/GM-05-2017-0058>
- Ofoeda, I. (2017). Corporate governance and non-bank financial institutions profitability. *International Journal of Law and Management*, 59(6), 854–875. <https://doi.org/10.1108/IJLMA-05-2016-0052>
- Orazalin, N., & Mahmood, M. (2019). The financial crisis as a wake-up call: Corporate governance and bank performance in an emerging economy. *Corporate Governance*, 19(1), 80–101. <https://doi.org/10.1108/CG-02-2018-0080>
- Pathan, S., & Faff, R. (2013). Does board structure in banks really affect their performance? *Journal of Banking & Finance*, 37(5), 1573–1589. <https://doi.org/10.1016/j.jbankfin.2012.12.016>
- Patton, A., & Baker, J. C. (1987). Why won't directors rock the boat? *Harvard Business Review*, 65, 10–12. <http://www.sciencedirect.com/reference/93558>
- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford University Press.
- Raithatha, M., & Haldar, A. (2021). Are internal governance mechanisms efficient? The case of a developing economy. *IIMB Management Review*, 33(3), 191–204. <https://doi.org/10.1016/j.iimb.2021.08.004>
- Reserve Bank of India. (2021a). *Notifications on corporate governance practices in banks*. <https://rbidocs.rbi.org.in/rdocs/notification/PDFs/24CORPORATE68CA91B159A2408DB3EBC479471DD2B4.PDF>

- Reserve Bank of India. (2021b). *Annual report 2020–21*. https://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/0RBIAR202021_F49F9833694E84C16AAD01BE48F53F6A2.PDF
- Saleh, M. W., Latif, R. A., Bakar, F. A., & Maigoshi, Z. S. (2020). The impact of multiple directorships, board characteristics, and ownership on the performance of Palestinian listed companies. *International Journal of Accounting, Auditing and Performance Evaluation*, 16(1), 63–80. <https://dx.doi.org/10.1504/IJAAP.2020.106774>
- Sardana, V., & Shukla, A. (2020). Deposit insurance coverage limit: How much is enough? Evidence from India. *Indian Journal of Finance and Banking*, 4(4), 66–83. <https://doi.org/10.46281/ijfb.v4i4.912>
- Sardana, V., & Singhania, S. (2018). Digital technology in the realm of banking: A review of literature. *International Journal of Research in Finance and Management*, 1(2), 28–32. <https://www.allfinancejournal.com/article/view/12/1-2-8>
- Sardana, V., & Singhania, S. (2022). Fifty years of research in deposit insurance: A bibliometric analysis and review. *FIIB Business Review*. <https://doi.org/10.1177/23197145221116455>
- Sarpal, S. (2015). Antecedents of corporate board independence in simultaneous equation framework: Evidence from India. *Prabandhan: Indian Journal of Management*, 8(9), 35–46. <https://doi.org/10.17010/pijom/2015/v8i9/77191>
- Sharma, D., & Dey, K.S. (2020). Do board attributes influence firm performance? Evidence from Indian public sector banks. *The Indian Journal of Commerce*, 73(3), 27–38.
- Shukla, A., Narayanasamy, S., Ayyalusamy, K., & Pandya, S. K. (2020). Influence of independent directors on the market risks of Indian banks. *Journal of Asia Business Studies*, 15(1), 31–49. <https://doi.org/10.1108/JABS-01-2020-0010>
- Shukla, A., Sivasankaran, N., Singh, P., Kanagaraj, A., & Chakraborty, S. (2021). Do Women directors impact the risk and return of Indian banks? *IIM Kozhikode Society & Management Review*, 10(1), 44–65. <https://doi.org/10.1177/2277975220938013>
- Singh, A. K., Kota, H. B., Sardana, V., & Singhania, S. (2021). Does gender diversity on board promote corporate social responsibility? An empirical analysis of sustainable development goals. *Australasian Accounting, Business and Finance Journal*, 15(5), 22–40. <http://dx.doi.org/10.14453/aabfj.v15i5.3>
- Singh, A. K., Singhania, S., & Sardana, V. (2019). Do women on boards affect firm's financial performance? Evidence from Indian IPO firms. *Australasian Accounting, Business and Finance Journal*, 13(2), 53–68. <https://doi.org/10.14453/aabfj.v13i2.4>
- Singh, J., Singhania, S., & Aggrawal, D. (2021). Gender diversity on corporate boards: Review and future research agenda through bibliometric mapping. *Corporate Governance & Sustainability Review*, 5(3), 57–72. <https://doi.org/10.22495/cgsrv5i3p5>
- Singh, J., Singhania, S., & Aggrawal, D. (2022). Does board gender diversity impact financial performance? Evidence from the Indian IT sector. *Society and Business Review*, Vol. ahead-of-print. <https://doi.org/10.1108/SBR-09-2021-0164>
- Singhania, S., Singh, J., & Aggrawal, D. (2022). Board committees and financial performance: Exploring the effects of gender diversity in the emerging economy of India. *International Journal of Emerging Markets*, Vol. ahead-of-print. <https://doi.org/10.1108/IJOEM-03-2022-0491>

- Singhania, S., Singh, R. K., Singh, A. K., & Sardana, V. (2022). Corporate governance and risk management: A bibliometric mapping for future research agenda. *Indian Journal of Corporate Governance*, 1–33. <https://doi.org/10.1177/09746862221126351>
- Sitaraman, S., Borde, N., & Desai, P. H. (2022). Analyzing the gender gap in patents: A lesson from startups. *Prabandhan: Indian Journal of Management*, 15(9), 8–24. <https://doi.org/10.17010/pijom/2022/v15i9/172192>

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