



Corporate Governance, Board Characteristics and Performance of Indian Banks: An Empirical Study

Brahmaiah Bezawada, Sager Reddy Adavelli*

Department of Finance, ICFAI Business School (IBS), IFHE, Hyderabad, India. *Email: sager@ibsindia.org

Received: 04 February 2020

Accepted: 14 April 2020

DOI: <https://doi.org/10.32479/ijefi.9536>

ABSTRACT

The paper examines the corporate governance, board characteristics, performance and asset quality of Indian banks and investigates the impact of a set of board characteristics on performance and asset quality of banks. We use a sample of 34 scheduled commercial banks, for ten years from 2009 to 2018, accounting for about 90% of the total banking assets and banking business India. We measure bank performance by return on assets (ROA) and asset quality of banks by ratio of net non-performing assets (NNPA) and document evidence on the role of the board characteristics on performance and asset quality of banks. The study finds that the board size and percentage of independent directors have significantly positive impact on ROA. The percentage of executive directors is having significantly negative relationship with the ROA. The board size and percentage of independent directors have significantly negative relationship with banks' NNPA. The research suggests that the board of directors play a significant role in bank governance in India. The paper contributes to the literature on the corporate governance of banks in India, which is one of the emerging economies of the world. The research results provide some insights of corporate governance to the RBI for considering appropriate policy guidelines on corporate governance to banking industry in India.

Keywords: Corporate Governance, Board Characteristics, Performance of Banks, Non-Performing Assets

JEL Classifications: G21, G28, G32

1. INTRODUCTION

The global financial crisis of 2008 attracted more attention on the corporate governance of banks. The Basel Committee on Banking Supervision on corporate governance reported that effective and sound corporate governance practices are critical to the efficient functioning of the banking sector in particular and the economy as a whole in general. The primary objective of corporate governance is to safeguarding stakeholders' interest in conformity with public interest on a sustained basis (BCBS, 2015). India has the largest number of banks in the world after the US. Presently there are 84 scheduled commercial banks (SCBs) in India consisting of 19 public sector banks (PSBs), 18 private sector banks (PVBs) and 47 foreign banks (FB).¹ These banks account for about 90% of the

total banking assets and business in India. In the post reforms era, the Indian banking experienced tremendous growth in deposits mobilization, sanctions of loans and overall banking business. Corporate governance deals with the organizational structure through which the objectives of the banks are achieved. An effective board has become increasingly important for Indian banks. However, the market for corporate control is still underdeveloped. Hence, the board of directors might be a key mechanism to monitor and advise bank management. Risk management and corporate governance in banking firms have become an important issue since the global financial crisis. Banking institutions operate on a higher leverage. Non-banking institutions operate with a low leverage (debt to equity ratio) of 3 to 4, whereas banks and financial institutions operate at a leverage of about 18 times (RBI, 2018).

1 In addition, there are regional rural banks, small finance banks and payment banks, local area banks and cooperative banks operating India. All these banks account for less than five percent of total banking business in India

The Securities and Exchange Board of India (SEBI) has introduced a sound corporate governance system not only to improve the

functioning of the banking system, but also to ensure transparency in the banking industry. The boards of directors of banks are responsible and accountable for operations and performance of the banks and to monitor and advise the banks' top management as well as operational management. Most of the literature on corporate governance is related to the developed countries and only a few papers focus on banks' corporate governance.

The paper is organized as follows. Section 2 provides literature review on corporate governance and bank performance. Section 3 presents the data and research methodology. Section 4 discusses the empirical results and the last section concludes the paper.

2. LITERATURE REVIEW

Most of the previous research studies focus on non-bank firms and many of studies are on corporate governance with reference to the developed countries. There is little work carried out on the corporate governance in the banking sector of emerging economies in general and in India particular. The role of the board of directors in the banking sector is not adequately explored even in the developed countries. The existing literature on bank corporate governance in India mainly focuses on the impact of ownership structure on bank performance. There are many studies on corporate governance, yet only a few studies concentrate on corporate governance of banks (Levine 2004; Adams and Mehran 2012; Liang et al., 2013; Yermack 1996; Eisenberg et al., 1998; Pathan, 2009) provide support by showing that firms with small boards have better financial performance. However, other researchers (Adams and Mehran 2012; Malik et al., 2014) argue that larger boards improve firm performances by facilitating manager supervision.

Fu and Heffernan (2009) study the relationship between market structure and performance in China's banking structure for the period 1985 to 2002 and find that the private sector banks have higher efficiency and better profitability than the public sector banks. Pathan (2009) examine a sample of 212 large US bank holding companies from 1997 to 2004 and finds that small, less restrictive boards positively affect bank risk-taking. Nguyen and Nielsen (2010) observe that the stock price drops following the sudden death of independent directors. Rowe et al. (2011) use a sample of 41 banks and examines the impact of board size, percentage of shares held by the directors, percentage of executive directors and independent directors, on Chinese's bank performance. They find that the percentage of executive directors in the boards has a significantly negative impact and the percentage of shares owned by the board has a significantly positive impact on bank performance. Adams and Mehran (2012) use a sample of 35 publicly traded in US for the period 1986 to 1999 and investigate the relationship between board governance and its performance. The study finds that board size is positively correlated with performance. Francis et al. (2012) find that a board with strong independent directors shows positive and significant relationship with firm performance.

Francis et al. (2013) find that better corporate governance reduces the dependence of emerging market firms on internally generated

cash flows, and lowers financing costs that would otherwise affect prudential and efficient allocation of investments and destroy firm value. Liang et al. (2013) study a sample of 50 large Chinese banks, and find that the proportion of independent directors has a significant impact on both bank performance and asset quality. Malik et al. (2014) using a sample of 14 listed commercial banks of Pakistan and report significant positive relationship between board size and bank performance. Muniandy and Hillier (2015) examine the impact of board independence on firm performance and find positive relationship between firm performance and independent directorship. Liu et al. (2015) find that independent directors have an overall positive effect on firm operating performance in China. Fuzi et al. (2016) study a sample from different countries and report a mixed association between the proportions of independent directors and firm performance. The study reports that mere regulatory compliance by appointing more independent directors will not enhance firm performance. The efficacy of independent directors in mitigating managerial opportunism and serving shareholder interests. Independent directors have incentives to promote and protect the interests of shareholders and to be effective monitors of managers. Empirical evidence on board independence and firm performance is inconclusive with respect banks (Hermalin and Weisbach 1991; Agrawal and Knoeber, 1996; Bhagat and Black, 2002), some studies find no effect (Adams and Mehran, 2012) whereas some studies find a positive effect (Liang et al., 2013). In view of the extant literature gap on board characteristics, banks' performance measures and asset quality, we undertake this study to examine the board characteristics and investigate its impact on banks' profitability and assets quality.

3. DATA AND METHODOLOGY

3.1. Sample Selection and Data Collection

We use a sample comprises 34 scheduled commercial banks consisting of 19 public sector banks (PSBs) and 15 private sector banks (PVBs) including 6 new generation technology oriented banks (NPVBs) and 9 old private sector banks (OPVBs) for the period from 2009 to 2018. The study has balanced panel data of 34 banks' variables for 10 years and data is built with 340 bank-year observations. The sample banks account for about 90% of total assets size, loans and advances and 92% of investments (RBI, 2018). Data on board characteristics such as board size (number of directors), proportion of independent directors, proportion of busy director, proportion of executive directors and number of meetings held are mainly collected from CMIE database. We use return on assets (ROA), as the performance measure and net non-performing assets (NNPAs) ratio as assets quality measure. These are taken from Statistical Tables Relating to Banks (STRB) from RBI.

3.2. Description of Variables

The variables used for the study are three broad categories: performance variables, board variables and control variables (Table 1). Performance variables are used as the proxy for dependent variables, and board variables as the proxy for independent variables. The control variables are used to control the potential effects on performance. We use return on assets (ROA) as measure of bank performance. We measure ROA as the income before interest and taxes (EBIT), divided by the total

assets. Asset quality is measured by net non-performing assets ratio (NNPA) as NNPA is divided by the net advances. The board characteristics variables include the number of directors serving on the board (Board Size, bs); the percentage of independent directors in the board (Indep Director, pid), percentage of busy directors on the board (Busy Director, pbd) where the busy director is defined as the director who serves on three or more boards, percentage of executive directors,(Exe Director, ped), and number of meetings held per year (no of meetings, nom). We use total bank assets in billion to measure banks size (bank size), and capital strength by capital adequacy ratio (CAR) as the control variables for the study.

3.3. Regression Model

$$ROA_{i,t} = \beta_0 + \beta_1 BSize_{i,t} + \beta_2 BMeeting_{i,t} + \beta_3 Exe Director_{i,t} + \beta_4 InDirector_{i,t} + \beta_5 BuDirector_{i,t} + \sum_j \gamma_j Control Variables_{i,t} + \epsilon_{i,t}$$

$$NNPA Ratio_{i,t} = \beta_0 + \beta_1 BSize_{i,t} + \beta_2 BMeeting_{i,t} + \beta_3 Exe Director_{i,t} + \beta_4 InDirector_{i,t} + \beta_5 BuDirector_{i,t} + \sum_j \gamma_j Control Variables_{i,t} + \epsilon_{i,t}$$
(1)

Where, *BSize* = Board Size
BMeeting = Number of board meetings
Exe Director_{i,t} = Percentage of executive director
InDirector_{i,t} = Percentage of independent directors
BuDirector_{i,t} = Percentage of directors who serve on more than or equal to 3 other boards.

Control variables used in the above equation are:

Bank Size = Natural log of total asset of the bank

Capital Ratio = Equity/total assets

where *i* denotes individual bank from 1 to bank 36 and *t* represents the time period from 2009 to 2018.

The β parameters capture the potential impacts of various board characteristics on bank performance.

Since the OLS regression omits the unobservable characteristics of the variables used in the study for the sample firms, to represent the common and unbiased procedure to control the omitted and unobservable characteristics in the variables considered for the study, we employed fixed effects model and random effects models based on Hausman’s test statistics, which reveals the fixed effects model is appropriate for dependent variable NNPA and Random effects model is used for ROA as another dependent variable. Hence, our final model is fixed effects model for NNPA and random effect model for ROA.

4. ANALYSIS AND DISCUSSION

Table 2 presents descriptive statistics on all the variables. Panel A, Panel B and Panel C report bank performance variables, board characteristics variables and control variables respectively.

Table 1: Description of variables

Nature of variables	Description of variable
Panel A: Dependent Variables: Bank performance variables	
2 Return on assets (ROA)	EBIT is divided by total assets
4 Assets’ quality(NNPA)	Net NPAs divided by net advances
Panel B: Independent Variables: Board characteristics variables	
6 Board Size	Number of directors in the board
7 Indep Director	Percentage of independent directors in the board
8 Executive director	Percentage of executive directors in the board
9 Busy Director	Percentage of directors who are on more than three boards
10 Meetings	Number of board meetings held during the year
Panel C: Control variables	
11 Bank Size	Total assets of the bank
12 Capital Ratio	Equity divided by total assets

Table 2: Descriptive statistics

Variables	N	Mean	STD	Min	Max
Panel A: Bank performance variables					
ROA	340	0.7	0.88	-2.46	2.02
NNPA	340	2.63	3.04	0.01	16.69
Panel B: Board Characteristics variables					
Board Size	340	14.33	2.9	8	24
Meetings	340	12.33	4.11	4	28
IndpDirector(%)	340	36.77	19.2	0	75
BusyDirector(%)	340	14	17	0	64
ExeDirectors(%)	340	24.21	11.31	0	61.9
Panel C: Control variables					
Bank Size (Assets in INR Billion)	340	2571.3	3619.76	56.43	34500
Capital Ratio	340	13.32	2.32	8.67	22.04

The average of ROA is 0.70%; the ratio of NNPA is 2.63% of our sample banks for the 10-year period 2009-2018. The average board size of our sample Indian bank boards is 14, which are smaller compared to those in developed countries. The average number of meetings per year is 12 which is higher as compared to developed countries.

Table 3 presents the correlation matrix for dependent variables, independent variables and control variables. We find that there was neither positive nor negative significant correlation among the variables used in the study. However, we do observe that there is positive correlation between performance measure ROA (dependent variable) and NNPA (dependent variable). We find that there is weak positive correlation between CAR (control variable) and NNPA. We conclude that there is neither serial correlation nor autocorrelation among variables, and conclude that there is no multicollinearity among the variables used for study.

We use OLS regressions at the bank level. We regress each ROA and NNPA variables on board variables, (board size, number (percentage) of executive directors, number (percentage) of independent directors, and number (percentage) of busy directors,

Table 3: Correlation matrix

	Board Size	Independent Directors	Meetings	Executive Directors	Busy Directors	Bank Size	Capital Ratio	NNPA	ROA
Board Size	1								
Independent Directors	-0.262	1							
Meetings	0.280	-0.154	1						
Executive Directors	0.251	-0.157	0.083	1					
Busy Directors	-0.062	0.201	-0.457	-0.013	1				
Bank Size	0.392	-0.246	0.005	0.622	0.161	1			
Capital Ratio	0.001	0.177	-0.062	-0.037	-0.014	-0.123	1		
NNPA	-0.066	-0.230	0.043	0.209	0.012	0.219	-0.498	1	
ROA	0.073	0.160	-0.027	-0.147	-0.077	-0.183	0.664	-0.818	1

Table 4: OLS Estimators

Variables	ROA	NNPAs
Intercept	-2.931 (0.000)	13.836 (0.000)
Independent Variables		
Board Size	0.048 (0.000)	-0.230 (0.000)
Percentage of Independent Directors	0.005 (0.034)	-0.029 (0.001)
Number of Meetings	-0.010 (0.299)	0.025 (0.496)
Percentage of Executive Directors	-0.008 (0.012)	0.044 (0.001)
Percentage of Busy Directors	-0.312 (0.194)	-0.360 (0.697)
Control Variables		
Total Assets	0.000 (0.019)	0.000 (0.000)
Capital Adequacy Ratio	0.241 (0.000)	-0.652 (0.000)
R-Squared	0.483	0.35
F-Statistics	43.59	23.03
No of observations	340	340

Table 5: Regression results with fixed and random effects

Model	Fixed Effect Model	Random Effect Model
Variables	NNPAs	ROA
Intercept	15.306 (0.000)	-2.931 (0.000)
Independent Variables		
Board Size	-0.218 (0.000)	0.048 (0.000)
Independent Directors	-0.039 (0.000)	0.005 (0.034)
Meetings	0.017 (0.651)	-0.010 (0.299)
Executive Directors	0.049 (0.000)	-0.008 (0.012)
Busy Directors	-0.715 (0.457)	-0.312 (0.194)
Control Variables		
Asset Size	0.000 (0.000)	0.000 (0.019)
Capital Ratio	-0.748 (0.000)	0.241 (0.000)
R ²	0.229	0.477
F-statistics	19.62	236.48
Number of observations	340	340

number of meetings). The panel data analysis is used since the sample data is a mixture of time series and cross-sectional data. The study tests the model to choose the model that fits the analysis. Table 4 provides the results of the OLS estimations. We find that board size and board independence are positively related to bank performance, as measured by a proxy for ROA whereas percentage of executive directors negatively contributed to the performance measure of ROA. The control variables such as size of the bank (total assets) and CAR are positively associated with ROA. We find that percentage of executive directors is negatively significant with bank performance of ROA. Board size and percentage of independent directors are negatively associated significantly with NNPA (at 1% level) whereas percentage of executive directors is positively associated with NNPA (at 1% level). Assets (bank) size is positively associated with NNPA, CAR is negatively associated with NNAs, and both are significant at one percent. The regression results of NNPA on all five board variables and two control variables. Board size, percentage of independent directors, and number of meetings are negatively associated significantly with NNPA and percentage of executive directors is positively associated with NNPA (at 1% level). Number of meetings is negatively associated significantly with NNPA and percentage of executive directors is positively associated with NNPA (at 1% level).

Table 5 presents fixed effect model using NNPA as dependent variables and board size, percentage of independent directors, percentage of executive directors, percentage of busy directors, and number of board meetings as independent variables. Bank assets size and CAR as control variables. Board size and percentage of independent directors are positively significant with performance measure of ROA and percentage of executive directors is associated negatively with performance measure of ROA significantly. (Adams and Mehran, 2012; Andres and Vallelado, 2008). The results support the hypothesis that a large board contributes for better bank performance. The results report that board size, and percentages of independent directors are having negative association with NNPA significantly (at 1% level) and number of meetings held is associated positively with NNPA at significantly (at 1% level). The effectiveness of the board meetings depends on the number of decisions taken in them in the larger interest of the bank but implementation of these decisions is weak. This result is consistent with previous studies (Andres and Vallelado 2008; Liang et al., 2013). The results report that board size, percentage of independent directors is having negative association with NNPA significantly same as Rowe et al. (2011).

5. CONCLUSIONS

We use a panel data of the 34 scheduled commercial banks from public and private sectors for the period of ten years from 2009 to 2018, a recent period of major changes in terms business environment in the Indian banking sector. We examine a set of board characteristics (such as size of the board, composition of board in terms of independent directors, executive directors and busy directors and number of board meetings) and analyze the impacts of the board characteristics on bank performance and asset quality. Overall, the results regarding board size and composition support the existence of a trade-off between the monitoring (independence) and advisory (information) functions of the board. In sum, banks boards efficiently assume the challenge of improving bank governance. The findings of this paper have important policy implications. The results of our empirical analysis suggest that while board size plays an insignificant role in bank performance and board independence plays a significant role.

The research findings have some policy implications for banks, RBI and SEBI to review the corporate governance framework in the banking industry. Our results conclude that corporate governance mechanisms such as board independence and busy directors contribute for the better performance and executive directors contribute negatively to the performance of the banks. The paper contributes to the literature on the corporate governance in India, which is one of the major emerging economies of the world.

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.
- Agrawal, A., Knoeber, C.R. (1996), Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31(3), 377-397.
- Andres, P.D., Vallelado, E. (2008), Corporate governance in banking: The role of the board of directors. *Journal of Banking and Finance*, 32, 2570-2580.
- Bhagat, S., Black, B.S. (2002), The non-correlation between board independence and long-term firm performance. *Journal of Corporation Law*, 27, 231-273.
- Eisenberg, T., Sundgren, S., Wells, M.T. (1998), Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, 48, 35-54.
- Francis, B., Hasan, I., Song, L., Waisman, M. (2013), Corporate governance and investment-cash flow sensitivity: Evidence from emerging markets. *Emerging Markets Review*, 15, 57-71.
- Francis, B.B., Hasan, I., Wu, Q. (2012), Do corporate boards matter during the current financial crisis? *Review of Financial Economics*, 21, 39-52.
- Fu, X.M., Heffernan, S. (2009), The effects of reform on China's bank structure and performance. *Journal of Banking and Finance*, 33, 39-52.
- Fuzi, S.F., Halim, S., Julizaerma, M.K. (2016), Board independence and firm performance. *Procedia Economics and Finance*, 37, 460-465.
- Hermalin, B.E., Weisbach, M.S. (1991), The effects of board composition and direct incentives on firm performance. *Financial Management*, 20(4), 101-112.
- Levine, R. (2014), *The Corporate Governance of Banks: A Concise Discussion of Concepts and Evidence*. World Bank Policy Research Working Paper.
- Liang, Q., Xu, P., Jiraporn, P. (2013), Board characteristics and Chinese bank performance. *Journal of Banking and Finance*, 37, 2953-2968.
- Liu, Y., Miletkov, M.K., Wei, Z., Yang, T. (2015), Board independence and firm performance in China. *Journal of Corporate Finance*, 30, 223-244.
- 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.
- Muniandy, B., Hillier, J. (2015), Board independence, investment opportunity set and performance of South African firms. *Pacific-Basin Finance Journal*, 35, 108-124.
- Nguyen, B.D., Nielsen, K.M. (2010), The value of independent directors: Evidence from sudden deaths. *Journal of Financial Economics*, 98, 550-567.
- OECD. (2015), *OECD Principles of Corporate Governance*. Paris: OECD Publishing.
- Pathan, S. (2009), Strong boards, CEO power and bank risk-taking. *Journal of Banking and Finance*, 33, 1340-1350.
- RBI. (2018), *Trend and Progress of Banking in India 2017-18*. Mumbai: Dr. Snehal S. Herwadkar, Reserve Bank of India.
- Rowe, W., Shi, W., Wang, C. (2011), Board governance and performance of Chinese banks. *Banks and Bank Systems*, 6(1), 26-40.
- Yermack, D. (1996), Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40, 185-211.