Board Committees and Financial Performance: Evidence from select Indian Banks

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Abstract

The purpose of this study is to explore the relationship between board committees as a special yet largely under-researched component of board structures, and financial performance of select Indian commercial banks. The study has been conducted on 36 banks operational in India in the time period of ten years (2007-2016) through an unbalanced panel employing fixed effects model amidst statistical evidence of its suitability. Financial performance of banks is found to share a statistically significant relationship with the number of committees of the board. This relationship is confirmed for its non-linear effect on both Return on Assets (ROA) and Return on Equity (ROE). This relationship establishes the pertinent role of board committee structures in shaping the financial performance of struggling Indian banks. The present research assumes practical significance in transitional times in which the banking industry of emerging economies are striving to find their foothold. Board committees emerge as an important component of corporate governance prodding regulators for steering necessary reforms through this component. Board committee as the primary variable in context of banking entities, which generally are excluded from governance studies, lends originality to the study. The results of this research draw renewed attention of insiders and outsiders of banks and call for policy decisions to incorporate board committees both as a measure to strengthen governance and improve profitability.

Keywords: *Board committees, Commercial banks, Corporate governance, Fixed effects model, Indian banks, Panel regression*

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Banks work as building blocks of an economy and as the epicentre of economic growth and prosperity. Complexity and lack of transparency in banking operations lend them distinctiveness and also pose unique governance challenges (Andres & Vallelado, 2008). Governance issues of financial firms inherently differ from those of non-financial entities in the light of atypical characteristics of financial firms. These characteristics include accentuated challenges of information asymmetry, intensive regulation, and complex and highly leveraged business model leading to opacity of operations (Shleifer & Vishny, 1997; Adams et al., 2010). Governance of financial institutions has been documented to be of paramount importance for growth and development of any economy, more so for a developing economy like India.

Governance of these financial entities has assumed renewed significance in the light of governance gaffes melting down into debilitating financial crises and upheavals across the globe (Haan & Vlahu, 2016). Troubles emanating in banks have been identified to transmit across the entire banking sector and across the global economy as a whole (BCBS, 2015) and thus, unravelling the riddle of governance performance has become pertinent. Boards have been recognized as an essential part of bank governance by international agencies like Basel Committee for Banking Supervision, European Union and Organisation for Economic Cooperation and Development (OECD). Questions have been raised on performance of the banks from all corners seeking explanations through board structures, board composition, quality and capabilities of people at the helm, decision making abilities, etc. However, recent literature emphasizes that board of directors operate through board committees and highlights the indispensable contribution of these subordinate board structures in governance of firms and board effectiveness. Explanations to performance and board structures seem to be incomplete without reflecting on board committees where all major board decisions are practically taken as they are constituted to focus on specific aspects of governance. Klein (1998) documented that study of board committees and their membership should lead to a more accurate test of the relationship between board composition and board effectiveness as information on committee membership provides a more accurate picture of role of a director on the board.

Governance of banks is an immensely relevant issue, especially in emerging markets, as these markets present very different governance practices and mechanisms than the developed markets (Black, 2001; Bebchuk & Hamdani, 2009). Scores of studies on governance have been largely focused on non-financial firms in developed markets keeping the literature on financial firms limited and for financial entities in emerging markets rather scant. Also, literature pertaining to governance is replete with studies on relationship of firm performance to board composition, but a glaring gap exists as to functioning of these boards and the influence of organizing these boards into committees on performance. With banks assuming the centre-stage and banking performance being accepted as the pivot of economic performance, a scientific analysis of performance of banks as influenced by governance methods is an appropriate study in present times driven by excellence through performance. Efforts on explaining performance of banks through governance mechanisms are limited and effect of board committees on performance is almost non-existent. With global limelight on emerging economies like India and their financial entities making news for all good and bad reasons, the present study is an attempt in the direction of filling the gap. In times when economies of all statures and strengths are exploring performance mantras for that coveted market glory, an analysis of bank performance with respect to less talked about board committees is not just relevant, but necessary. Results of the study can guide the corrective actions of policy makers in emerging as well as developed economies to grow financially and compete efficiently.

The present study examines the impact of committees on board on firm value for banking entities in India with support from the literature, which emphasizes the role of board committees in board functioning (Adams, 2005; Adams et al., 2010; Guo & Masulis, 2015) and corporate governance (Green & Homroy, 2018). The study attempts to examine the contribution of delegation of authority by board of directors to various sub-committees (subordinate board structures) in financial performance of banks after controlling for bank characteristics in India. Relevance of the study emanates from the growing clout of the Indian economy and of the Indian banking industry. Indian banking sector has been surging high amidst strong economic growth, rising disposable incomes, increasing consumerism, easier access to credit, digital payments revolution and innovative banking models. Amongst emerging economies, India holds a strong fourth position in retail credit market and the banking sector is poised for robust economic growth. Up-gradation of the technological infrastructure and massive changes through digitalization lent Indian banks the coveted competitive edge which is home to the second largest number of banks in the world. The limelight, however, is not just for positive developments. On the flip side, Indian banks continue to wage a losing battle against the asset quality issues and the need to maintain capital adequacy in the light of piling bad loans. Financial tsunamis and fugitives have got India in the eye of a financial storm with global attention on how India strikes a balance.

This work is an essential update to the governance literature in general and Indian in specific, pertaining to banks and resolving performance conundrums through governance mechanisms. The study relates to a period of ten years (2007-2016) for 36 commercial banks operating in India. Selection of banks is based on availability of data for all years and continuity of operations. This time period can be identified as a phase of unprecedented developments in banking activities riding on technological advancements and radical rejig to catch up with global regulations and standards. The research in hand intends to capture the governance-performance relationship in the wake of new developments. Also, boards have become increasingly important for Indian banks in the face of fragility and regulatory forbearance and hence, a study on furtherance of the role of boards through their subordinate structures is well timed. The issue addressed in the study is immensely relevant in the light of its implications for soaring banking numbers restricted by degrading asset quality, futuristic regulators and enlightened stakeholders. In pervasive times of marred performance of financial entities, explanation of performance of these complex institutions through a little explored mechanism of board structures, i.e. board committees, makes this study an essential checkpoint for regulators and policy makers globally. It is not just the boards but the real decision-making centres within the boards, and the board committees that need to be studied to understand the patterns of financial performance.

Literature Review

Board committees are appointed by the board of directors and are accountable to the board of directors and shareholders. These committees are regarded as subordinate board structures which are put in place to improve the objectivity, independence, expertise and effectiveness of the boards. Corporate governance literature dates back to the early argument of Berle & Means (1932), though it was the regulatory dictums in different countries which gave impetus to research in this field. All through, the board of directors has remained the central corporate governance mechanism and research has focused on their roles, responsibilities and relationships to financial and non-financial measures. In recent years, affairs of large corporates have come under increasing scrutiny and criticism propelled by instances of corporate scandals, bankruptcy, industrial pollution, violation of human rights and increasing evidences of gross corporate irresponsibility. Researchers have been incessantly working to establish the linkage of corporate governance and its mechanisms in diluting such effects, especially in the Indian context (Shukla, 2020). This got the role and contribution of directors under

the scanner resulting in efforts towards bringing structural changes in boards and bringing attention towards committee structures of the boards (Harrison, 1987). There remains relatively little understanding of internal organization of boards and a lot remains to be explored in this context.

A better understanding of the role of boards and their optimal structuring is possible with an insight into board committees, their role, structuring and contribution. Board committees are important because as Kesner (1988) and Klein (1998) suggest, committee meetings, and not board meetings, are where most board activity actually takes place. Anderson et al. (2004), Beasley (1996), Carcello et al. (2011), Hadani et al. (2011), find that board committees play an effective monitoring role. Board committees have been documented to enhance the board's responsibility and effectiveness by alleviating communication and coordination problems (Reeb & Upadhyay 2010); enhancing quality of monitoring (Anderson et al. 2004; Faleye et al. 2011; Hadani et al. 2011) and more efficient decision-making by dividing tasks among board members (Reeb & Upadhyay, 2010). Harrison (1987) suggested that these board committees help handle problems of poor attendance of directors who have a specific task and responsibility which they cater to through closer monitoring and better attendance. With smaller size and more explicitly specified roles (Klein, 1998), board committees can be argued to instil accountability for specific directors thereby mitigating problems associated with free-riding by directors.

Board committees came to be recognized as an element of board structure only after the mid-1990s with the mandate from regulators carrying the onus of good governance practices in different economies. Initial handful of contributions primarily investigated the composition of board committee structure e.g., the presence and the role of women on board committees (e.g., Kesner, 1988; Bilimoria & Piderit, 1994; Green & Homroy, 2018). Research also pointed to the contributions of these committees with focus on specific and most common types of committees which came from the mandated guidelines. Audit committees remain the most important of the board committees and managed to gather the focus of researchers. Audit committees, their composition, contribution and relationship to performance aspects have been captured by many researchers (Klein, 2002; Anderson et al., 2003; Xie et al., 2003; Anderson et al., 2004; Defond et al., 2005) leading to constructive contributions and inputs, both for regulators and researchers. Agrawal and Chadha (2005), Karamanou and Vafeas (2005), Bronson et al. (2009), Benjamin & Karrahemi (2013) focused on the composition of audit committees and tried to capture their influence on important financial parameters like earnings management, free cash flow and earnings forecasts.

Compensation committee which was included as a mandatory committee by guidelines in Indian lands following traditions in the developed countries, also caught attention of the governance researchers by virtue of its critical responsibilities (Anderson & Bizjak, 2003). Gerety et al. (2001) and Kuo & Yu (2013) studied the impact of nomination and remuneration committee on the directors' pay and board composition in furtherance of literature on committee constitution as subordinate board structures.

Literature documents works pertaining to these committees addressing different dimensions and employing varying methods and unit of analysis (Kesner, 1998; Laux & Laux, 2009; Reeb & Upadhyay, 2010). Adams et al. (2015) utilize textual analysis of proxy statements to study delegation of work to committees by corporate boards, and they conclude that “board committees are important for board functioning and can no longer be ignored.” Faleye et al. (2011) find that the quality of monitoring improves when independent directors serve on at least two of the three principal monitoring committees. In an intensive effort on reviewing literature on board committees, Kaczmarek & Nyuur, (2016) examined relevant literature on audit, compensation and nomination committees as part of corporate

governance research in general, over the period of 1988 to 2011 to conclude that audit committee is the most researched committee and the prevalence of quantitative research methods with dominance of agency theory.

Amidst the evident benefits of specialization, efficiency in task division and enhancing accountability of individual directors, board committees generate administrative costs for companies, as well as costs in directors' time and dedication to committee work leading to information segregation for the directors. In a profit-maximising strategy, companies have to balance the costs and benefits of committees, and create them only when they can add value (De Andrés, 2017). Zajac & Westphal (1994) state that the optimal number of committees will be the result of balancing the costs and benefits of this organisational structure. With global developments and latest mandates as per Basel III, researchers and thinkers have been working on the cost benefit analysis for banks and the road to financial as well as governance excellence (Shukla & Patel, 2018).

The literature pertaining to board committees is undoubtedly limited in its scope and coverage. Evidences of literature pertaining to the most promising emerging economy, India, and relating to commercial banks, are non-existent. The present study, thus, is the critical link in the direction of existing research gap and the growing clout of the Indian economy in general and banking sector specifically. It is an attempt to extend the governance literature in finding explanations to bank performance to this hitherto less investigated component of board composition. The specific research question pertaining to the study is whether board committees as a component of board structures influence performance of Indian banks.

Data, Methodology and Variables

Data

In order to analyse the effect of board committees on bank performance, a sample of 36 commercial banks operating in India has been studied on the basis of historical performance of ten years covered in the study. The study covers banks having active operations record from 2007 to 2016 which marks a phase of significant developments in the banking sector driven by mandatory compliance to global banking standards and information technology generated digital invasion in the banking space. This period also highlights an era of unprecedented reforms in the Indian banking landscape triggered by the financial upheavals of grave dimensions. The sample consists of 21 public sector and 15 private sector banks to capture the distinct structural differences. The present study has been associated with limitations of data availability during 2007-2016 which reduces the number of banks in the sample and the total bank years available for panel data analysis. Amidst the challenges of years of operation and data availability, the final sample comprises of 360 bank year observations forming an unbalanced panel.

Data on board characteristics and that pertaining to bank characteristics and financial performance has been hand collected mostly from individual banks' annual reports and additionally from the ACE Equity database. The reports of banks were accessed from their respective websites. However, for the annual reports pertaining to earlier years which were not available on bank websites and some additional financial information, ACE Equity database was used. ACE Equity offers comprehensive and analytical statistical information for Indian companies which extensively covers both financial and non-financial information as published by companies in their annual reports.

Methodology

Panel data analysis has been employed for analysis of the data as data has both time and cross-section dimension. Panel data analysis takes care of the imperceptible effects and constant heterogeneity arising from the distinctive characteristics of each bank in addition to capturing the time and individual effect. Adoption of panel regression is also to address

the problem of simultaneity which implies the simultaneous determination of some of the independent variables with the dependent variable to handle the challenge of endogeneity. The methodology adopted also addresses the unobservable fixed effects associated with each unit of analysis (banks in this case) and its correlation with the explanatory variables.

Model and Variables

Pooled OLS estimation method fails to produce unbiased and consistent estimations when the unobserved effect is correlated to the independent variable(s). Fixed effects (within) estimators help to overcome this econometric challenge. Fixed effects model assumes each cross section has different intercept and also that the cross section is correlated with other independent variables. If this fixed effect is not incorporated, it shall lead to biased estimates for the slope coefficients and will result in omitted variable bias. Fixed effects model, however, with the incorporation of dummy variables for time and cross-section, may lead to noise which dampens the efficiency of estimates. If individual specific effect is known to be uncorrelated with other independent variables, then random effects model can be used, or else, proceeding with the fixed effects model is the only choice. The choice between fixed effects and random effects can be statistically made using the Hausman specification test. On the basis of diagnosis from LM test and Hausman specification test, the results of fixed effects panel model have been found to be suitable for the present study.

The model tested in the study through panel data analysis is:

$$(PERFORMANCE)_{i,t} = \beta_0 + \beta_1 . BDSZ_{i,t} + \beta_2 . IDs_{i,t} + \beta_3 . DUAL_{i,t} + \beta_4 . BDMEET_{i,t} + \beta_5 . BOARD\ COMMITTEE_{i,t} + \beta_6 . (BOARD\ COMMITTEE)^2_{i,t} + \beta_7 . CONTROL\ VARIABLES_{i,t} + \varepsilon_{i,t}$$

where *i* goes from bank 1 to 36 and *t* takes values of the years from 2007 to 2016. The β parameters are the estimated coefficients for the constant and each of the variables included in the model and ε denotes the disturbance term.

Table 1: Definition of variables of study

Classification	Variable	Description
Dependent variable	ROA	Return on average assets: net income after tax as a percentage of average book-value of total assets
	ROE	Return on average equity: net income after tax as a percentage of average book-value of total equity
Independent variable	BDSZ	Board size: Total number of members on the board of the company
	IDs	Independent directors: Proportion of independent directors on the board
	DUAL	Duality: Dummy variable with value 1 if Chairman and CEO are the same person, 0 otherwise
	BDMEET	Board meetings: Total number of board meetings held in a year
	BDCOMM	Board committees: Total number of board committees constituted for board functioning
Bank control variable	CAR	Costs to assets ratio: Operating costs to total assets
	NPGR	Growth rate of net profit: Estimated annual increase in Net Income generated by the investment in each year of the holding period.
	NIM	Net interest margin: Net interest income divided by average assets.

The empirical model incorporates ROA and ROE as the performance measures for the banking entity drawing support from previous studies. Board committees, measured as the total number of board committees constituted for board functions, is the variable of interest and is incorporated together with its squared term so as to check its linear as well as non-linear impact on financial performance (the dependent variable). Variables included in the study pertain to three broad categories: Dependent variable - the measure(s) of financial performance of banks; independent variable – board committees and the control variables. The control variables are those pertaining to governance and bank specific variables. The nature and meaning of these variables have been summarized in Table 1.

Bank performance has been measured using return on assets (ROA) which has been calculated as the ratio of net income for the year to the total value of its assets. ROA has been widely used in many previous studies as a dependent variable to research board effectiveness (e.g. Andres & Vallelado, 2008; Liang and Jiaporn, 2013; Pathan & Faff, 2013). Another measure of performance used to test the robustness of the analysis is ROE. ROE is the amount of net income returned as a percentage of shareholders equity. ROE is a reflection of a firm's profitability as it reveals the profit which the firm generates with the money invested by the shareholders.

Independent variables have been included to provide comprehensive corporate governance mechanisms and capture the holistic effect of governance (in addition to the variable of interest, i.e. Board committees) which have been documented to affect the performance. Board size represents the total number of directors on the board of the bank in a specific year represented by BDSZ. Board independence (IDs) represents the proportion of IDs on the board. DUAL implies duality which represents a dummy variable which takes value 1 if the same person assumes the position of CEO and Chairman and 0 otherwise. Frequency of board meetings is denoted by BDMEET. The variable of interest BD COMM is represented by number of board committees constituted to assist the board members.

Control variables relating to bank characteristics capture the influence on factors affecting performance of banks other than governance parameters. These include: Costs/assets ratio (CAR) which measures costs in relation to the size of a bank represented by operating costs to average total assets. Cost to asset ratio is more of an indicator of a bank's business mix; it shows less variation and might thus be seen as a better basis for bank performance assessment. NPGR represents the growth rate of net profits, which reflects the expected increase in net income for the bank, a representative of the growth potential of the bank, and has been incorporated to control the potential effect on financial performance. Net interest margin (NIM) is a measure of the difference between interest income generated by banks and the amount of interest paid out relative to the amount of their assets. This measure indicates the interest generation capacity of banks and has been controlled.

Results And Analysis

Descriptives

Descriptives of the study highlight a positive ROA on an average for the sampled banks (details presented in Table 2). The reported resilience of the Indian banking industry amidst the dilapidating crises of the West also supports this number. Positive ROE on an average and a higher median value (15.47) also speak about the financial health of the banks during the sample period. The higher return on equity is also attributed to the buoyancy of the Indian equity market which witnessed exemplary vibrancy in the period covered in the study (2007-2016). Banking boards are larger, on an average, than the non-financial entities owing to the complexity of business operations, compliance pressures and financial intricacies. Boards of these Indian banks met almost 12 times during the sample period, which again comes from the complex business decisions to be made and regulatory requirements and filings, which calls for directors to convene frequently and take

timely appropriate decisions. The multiplicity of operations and financial details call for a larger number of board meetings. Extending these banking activities, their quantum, complexity and operational complexities, banks also work with a larger number of board committees on an average. Board committees are instituted to assist the board members and induce focus in strategic decision making, and they seem to be very pertinent to boards of Indian banks especially in the phase of tremendous growth calling for diverse decisions and frequent board interventions.

Table 2: Descriptive Statistics

Variable	Mean	Median	Min.	Max.	Std. Dev.	N
ROA	0.86	0.90	-1.77	1.93	0.62	359
ROE	13.79	15.47	-34.35	31.60	9.99	359
BDSIZE	10.81	11.00	5.00	17.00	1.87	350
IDs	65.08	66.67	14.29	92.86	14.92	349
Duality	0.56	1.00	0.00	1.00	0.50	350
BDMEET	11.96	12.00	4.00	29.00	4.19	350
BDCOMM	10.59	11.00	3.00	22.00	3.32	348
CAR	1.73	1.61	0.73	4.17	0.52	358
NPGR	18.42	14.70	-46.89	128.39	20.61	358
NIM	2.57	2.50	0.55	5.65	0.64	358

For bank specific characteristics, the growth in net profits has been phenomenal, which justifies the need for a study to explore connectivity of growth to board characteristics in general and board committees specifically. The study is well timed in the phase of remarkable growth of the banking sector in India and role of board diligence in explaining this performance.

Univariate analysis

The central idea of the study is to understand the role of board committees in financial performance of Indian banks. As a preliminary, the sample was bifurcated in two sub-samples on the basis of median value of board committees. Bank year observations with number of board committees less than and equal to 11 (median value) was categorized as LESS and those with committees more than 11 were put under the head MORE. The difference in means together with their significance (independent t-test) was explored for these two samples and significance across variables of study was noted. This analysis was used as a precursor to the panel data analysis to understand the effect of board committees on financial performance of banks.

Table 3: Differences in variables across committee dummy

VARIABLE	BD COMM	N	Mean	Std. Deviation	t-value	Sig Value
ROA	LESS	170	1.00	0.51	3.944	0.000
	MORE	176	0.74	0.70		
ROE	LESS	170	15.80	7.05	3.630	0.000
	MORE	176	11.96	12.06		
CAR	LESS	169	1.83	0.62	3.890	0.000
	MORE	176	1.62	0.38		
NPGR	LESS	169	36.24	95.03	1.893	0.060
	MORE	176	-70.08	738.86		
NIM	LESS	169	2.60	0.76	.777	0.438
	MORE	176	2.55	0.50		
BDSZ	LESS	171	10.90	1.89	.779	0.437
	MORE	176	10.74	1.85		
IDs	LESS	171	63.66	15.46	-1.766	0.078
	MORE	175	66.50	14.41		
DUAL	LESS	171	0.46	0.50	-3.646	0.000
	MORE	176	0.65	0.48		
BDMEET	LESS	171	11.20	4.87	-3.427	0.001

Results compiled in Table 3 indicate that bank variables - bank specific and board specific significantly vary across the two sub-samples which have been classified on the basis of number of board committees. The banks which have a larger number of board committees meet more frequently than those with fewer committees. Proportion of independent directors is also higher (on an average) for banks with more committees indicating better quality of decision making resulting from division of work and assignment of responsibilities among directors through constitution of these specific committees. The sub-groups created on the basis of committee dummy differ significantly with respect to the variables of financial performance measured through ROA and ROE and also across operating cost to assets ratio (CAR) and the growth in net profit (NPGR). Performance and governance variables of commercial banks in India differ significantly with the number of board committees constituted in these banks. ROA and ROE are found to be lower for those banks which have more board committees, indicative of the administrative costs associated with these committees. Board committees have their associated costs and benefits which need to be balanced for effective utilization of financial and intellectual resources. To validate these relationships and gauge the effect on performance of these board committees while controlling for bank characteristics and governance attributes, further analysis is conducted using panel regression.

Panel Data Analysis

For the present study, panel data method for analysis has been used employing GRETL software which is an open source statistical package mainly for econometrics used largely by academicians globally. Initially, to test for existence of random effects and decide between simple pooled OLS regression and fixed effects regression, Breusch-Pagan Lagrange

multiplier (LM) test was used. The LM test checks for the variances across entities to be zero (pooled regression) in favour of the alternate that fixed effects model is suitable for the data. Results of LM test lead to the fixed effects model in case of both dependent variables when checked separately. Essentially the test looks to see if there is a correlation between unique errors and regressors in the model and if correlation exists, the GLS (generalized least squares) model, i.e. fixed effects model is the most suitable. The results of Hausman specification test establish the suitability of fixed effects model over the random effects as the null hypothesis is rejected.

The present study aims to explore the effect of board committees on the performance of commercial banks in India measured through ROA and ROE. Panel data analysis has been used with three different models to bring out the effect of governance variables generally and board committees specifically. Model 1 highlights the explanatory power of the bank specific variables, Model 2 adds the governance variables included in the study to the initial model and Model 3 checks out for the non-linear relationship of board committees to bank performance using the squared term of the variable board committees. The same set of models are then run for the other dependent variable, i.e. ROE which has been incorporated to check for the robustness and validity of empirical results.

Table 4: Board committees and bank performance: Fixed effects model with ROA

Dependent variable (ROA)	MODEL 1	MODEL 2	MODEL 3
Constant	0.881**	0.601	0.1115
	(0.3933)	(0.4720)	(0.4928)
CAR	**-0.8450***	**-0.8427***	**-0.8267**
	(0.1922)	(0.1762)	(0.1734)
NPGR	**0.0002***	**0.0038***	**0.003649**
	(0.0000)	0.0013	(0.001293)
NIM	**0.5619***	**0.5608***	**0.5352**
	(0.1077)	(0.1059)	(0.1068)
BDSIZE		0.0133	0.01000
		(0.01892)	(0.01858)
IDs		**0.0086***	**0.008425**
		(0.0022)	(0.002235)
DUALITY		**0.2524***	**0.2702***
		(0.1441)	(0.1387)
BDMEET		-0.0023	-0.003208
		(0.0126)	(0.01229)
BD COMM		**-0.0575***	0.04987
		(0.0119)	(0.04590)
SQ BD COMM			**-0.004551**
			(0.001922)
N	357	344	344
Adj. R2	0.3055	0.4772	0.4967
F-statistic	**20.037***	**13.868***	**13.609***

*Standard errors in parentheses; * indicates significance at the 10 percent level; ** indicates significance at the 5 percent level; indicates significance at 1 percent level of significance*

Table 4 and Table 5 present the results of panel data analysis using the fixed effects model with ROA and ROE as the dependent variables respectively. Models are established as statistically valid models validated by significant F-ratios. Fixed effects and Arellano standard errors take care of the issue of clustered measurement errors at bank level emerging from problems of heteroskedasticity.

Table 4: Board committees and bank performance: Fixed effects model with ROA

Dependent variable (ROE)	MODEL 1	MODEL 2	MODEL 3
Constant	17.492***	14.466	5.438
	(5.502)	(8.680)	(9.291)
CAR	**-12.674*****	**-12.432*****	**-12.14****
	(2.871)	(2.555)	(2.522)
NPGR	**0.005*****	**0.0939*****	**0.09125****
	(0.002)	(0.0253)	(0.02430)
NIM	**7.127*****	**6.719*****	**6.247****
	(1.892)	(1.703)	(1.716)
BDSIZE		0.2688	0.2080
		(0.3774)	(0.3726)
IDs		**0.1636*****	**0.1608****
		(0.0470)	(0.04665)
DUALITY		**5.984****	**6.312****
		(2.749)	(2.649)
BDMEET		-0.1262	-0.1434
		(0.2689)	(0.2605)
BD COMM		**-1.284*****	0.6958
		(0.2473)	1.0567
SQ BD COMM			**0.8389***
			(0.0473)
N	357	344	344
Adj. R2	0.2003	0.4565	0.4737
F-statistic	**21.043*****	**11.674*****	**10.32*****

*Standard errors in parentheses; * indicates significance at the 10 percent level; ** indicates significance at the 5 percent level; indicates significance at 1 percent level of significance*

Cost to assets ratio (CAR), growth rate of net profit (NPGR) and Net Interest Margin (NIM) are found to share a significant relationship with ROA and together explain almost 30% (20% for ROE) of the total variations over the ten years' time period chosen for the study. CAR shares a significant negative relationship with the dependent variable emphasizing that lower this ratio, higher would be the return on assets. With regard to these control variables, a similar relationship is deciphered for the market-based performance measure of ROE. The only point of difference is noticed with respect to the adjusted $R^{2,}$ which reflects the amount of variations explained by the variables included in the model. This is attributed to the fact that market-based measures are affected by varied factors which are both specific to the banking entity and other market wide factors and thus, effect of these firm variables is limited in comparison to ROA. Building the model further, board specific variables pertaining to board composition (independence,

duality), size, meetings and structure (board committees) are added to the model and Model 2 is checked for its relationship to ROA and ROE. Statistically significant positive relationship of board independence is noted emphasizing how independence of boards and their decisions translates into better performance. Independent boards are purported to take unbiased, strategically sound decisions which contribute to the growth of banks in terms of ROA and ROE. In context of financial entities like banks, characterized by multitude of complex decisions and bound by stringent legal mandates, independent decisions hold the key to financial and sustainable performance. Likewise, when roles of chairman and CEO are vested in different persons in contrast to one person assuming the dual roles is also found to have a significant positive impact on the performance, whether measured through accounting performance (ROA) or market performance (ROE). Largely debated issue of duality, seen as a threat to effective decision making, stands true in the case of commercial banks as well, which make multitude of diverse decisions on a daily basis tangled in the challenges of compliance and financial pressures. Both ROA and ROE share a negative relationship with number of board meetings held by the bank in a year, though statistical significance is not established. Larger number of board meetings can drain the resources of the bank and also delay the decision making process. Unending debate on more/less and ideal number of meetings is far from being settled and hence, keeps the issue open to further discussion. Board committees, reflecting the subordinate board structures, created to assist the board members, reflect a strong negative relationship with financial performance of banks, both for ROA and ROE. Board committees are constituted for their potential monitoring benefits and pay-offs in terms of specialization and efficient decision making, but the associated administrative and monitoring costs exceed the promised rewards. Profound effect of board structures on ROA and ROE cannot be ignored, as reflected in the incremental adjusted R^2 (17% in case of ROA and more than 25% with respect to ROE). Governance aspect of banks, focusing on board specific variables has a significant influence on the financial performance of banks and strengthening these can make these financial entities more competitive in terms of profitability. Board committees, undoubtedly, are a significant factor affecting the board structures, overall corporate governance and performance of commercial banks, which is evident in a growing and vibrant economy like India.

Probing this relationship further, an attempt is made to check for the non-linear relationship of board committees to performance and hence, the squared term is introduced in Model 3. Results manifest more dimensions to this relationship and undeniable contribution, which reflects in almost 2% increase in adjusted R^2 keeping the robustness of model and statistical significance intact. Board committees do entail significant monitoring and coordination costs reflected in negative relationship, but this relationship turns positive after a certain point. There on, benefits accruing from stronger and focussed internal structures in the form of board committees exceed the costs and what sustains is the positive relationship to performance. This draws its argument from legal mandates with regard to the compulsory committees pertaining to audit, compensation/nomination and grievance redressal. Compliance with these mandates necessitates infrastructural provisions, administrative facilities and processes which entails financial and intellectual resources enhancing financial costs. These costs dwarf the potential gains of committee structures and hence, negative relationship to performance variables. Once the legal mandates are fulfilled, the banking companies have a freeway in structuring the boards in terms of committees and this translates into positive effect on ROA and ROE as reflected by the squared term of board committees in the model.

Data analysis leads to the conclusion that board committees are an important component of board structures which have a significant bearing on the

accounting and market performance. Banks, the atypical financial entities by their very nature of complex and huge transactions, intensive regulations and financial eminence for the economy, are hugely influenced by their board structures and components. The hitherto, less explored component of board committees has emerged as an important variable affecting performance which becomes pertinent in present times when Indian banking is struggling with challenges of financial performance amidst stiff competition from domestic and foreign counterparts. This relationship is not just a linear relationship but the existence of non-linear relationship is established indicating that after necessities are fulfilled, rewards from board committees surpass their costs, and this is translated into positive performance with increasing number of board committees. Attention needs to be paid to board committees as their organization can be steered effectively for sustainable gains for banks competing on fleeting sands.

Conclusion

The growing importance of banks and more so in emerging economies like India prods researchers to investigate factors affecting performance. The growing clout of corporate governance and more specifically, the board structures amidst the growing noise of scams and financial crises remains the motivation of this study. Putting together the strands of banking and governance, this study focuses on board committees which have not gathered much limelight as an essential ingredient of board structures. Subordinate board structures, as they are referred to, are explored for their influence on bank performance as measured through the common measures of ROA and ROE. These performance measures encompass both the financial and market performance and hence, lend robustness to results providing broader base for interpretation.

The present study includes select commercial banks operating in India as the sample, being critical components of India's growth story and making news for their phenomenal growth, challenges of asset quality and being financial entities which are generally excluded in governance studies. With panel data of 36 banks across ten years, analysis works on the unbalanced panel for lack of data on certain variables. Following the preliminary statistical diagnosis, panel data analysis has been employed using the open source software GRETL. Fixed effects model after the panel diagnostics reflects board committees as an important board variable which affects the performance and shares a non-linear relationship with ROA and ROE. As the number of board committees increases on the bank's board, ROA and ROE decrease significantly initially, but after a certain level, both surge ahead reflecting a significant positive relationship. Board committees, after initial costs and setting up challenges, make positive contribution, which is reflected in higher ROA and ROE. This study draws its uniqueness from the investigation of board committees as an element of board structures in the context of commercial banks, the building blocks of the fastest growing economy in the world. In the pervasive debate of enhancing bank performance and effectiveness of bank operations, the study highlights the eminence of mandatory board requirement which reaps benefits in a positive way after fulfilling the legal mandates. Results of the study can provide important input for legal guidelines and policy decisions in this matter.

Research Implications

The present study sheds light on a very specific, yet potent but under-researched component of board structure, the board committees in context of banking entities through the example of Indian banks. There is no denial to the fact that governance mechanisms have established themselves as an indispensable ingredient to accentuate performance for both financial and non-financial firms. With its focus on Indian banks, the study highlights how the board committees can be structured maintaining a fine balance between costs and benefits to bolster performance. Results of the present study which denote the significant influence of board committees on performance with indications of non-linear

relationship, unravel usability for all developing economies battered by financial constraints, competitive pressures and global compliances. Banking entities universally shoulder the responsibility of economic growth and financial sustainability, and hence, the need to explore all possibilities for enhancing performance. With all countries committing resources and attention for strengthening corporate governance and looking for means to enhance performance, insights into the contribution of board committees to performance of banks can be a real game changer. Regulators and policy makers worldwide have acknowledged board committees as a necessary component of boards through various public and legal documents. With an understanding of the purported curvi-linear relationship of board committees and performance (specifically in case of financial entities), strategists and regulators can issue mandates in this light. Individual firms and countries have been ignoring this component as an influencer and incorporating it more as a legal requirement. The study has critical implications for individual firms and economies that can leverage the number, composition and working of mandated committees to contribute to financial performance and build strengths.

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