



STUDY OF PUBLIC AND PRIVATE SECTOR BANKS IN INDIA- CORPORATE GOVERNANCE PRACTICES AND FINANCIAL PERFORMANCE

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Abstract

Corporate governance was a naïve concept until the existence of corporate scams in the industry. The scams arose questions on the ethical working of these big corporate entities. The ever-evolving concept of “Corporate governance” implied transparency and accountability in the board structure, its independence, committees, director’s contracts, and the role of non-executive directors. The paper extends its scope of study to the corporate governance mechanism in the Indian banking system. It highlights the practice in the banking Arena along with its impact on profitability of banks measured on the parameters which include Return on Asset, Return on Equity and Net Interest Margin considering the NPA profile of the banks. The study is quantitative in nature and applies multiple regression analysis to study the impact of corporate governance on the performance of banks. The paper analysis is the result of the study conducted on 6 banks which concluded that corporate governance has an impact on Bank performance with little insignificant effect on private sector banks.

Introduction

Corporate governance gained importance in the form of formal study all over the world after the global crisis and various big corporate scams like Maxwell, Enron, WorldCom, Tyco, Sunbeam, Global Crossing, etc. “Regulators and governance advocators argued that the stock price collapse of such former corporate stalwarts as Adelphia, Enron, Parmalat, Tyco, and WorldCom was due in large part to poor governance” (Brown & Caylor, 2004, p.3). Governance of a firm is one of the reasons for accounting fraud and firms with weak governance are more vulnerable to accounting frauds (Berkman, Zou & Shao Feng, 2009). All recent corporate scams pose the question of whether the companies actually working for their shareholders or owners. Corporate governance codes, Cadbury Committee, and Oxley Act come as the consequence of these corporate scams. Cadbury (1992) emphasized the importance of transparency and accountability in the area such as board structure, board independence, board committees, director’s contracts, and the role of nonexecutive directors.

Objectives of the Study

Considering the need importance of corporate governance mechanism in the Indian banking sector, this study focuses on the following objectives:

General Objectives

To study the impact of corporate governance on bank performance.

Specific Objectives

- To study corporate governance practices in public sector banks and private sector banks.
- To examine the relationship between corporate governance and the profitability of banks based on the following parameters:
 - Return on assets (ROA)
 - Return on equity (ROE)
 - Net interest margin (NIM)



- To examine the relationship between corporate governance mechanism and nonperforming assets in banks.

Hypotheses

There is no significant relationship between corporate governance and return on assets (ROA) in banks.

Background of the study

Corporate Governance and Financial Performance - Arora & Sharma (2016) examined the impact of corporate governance on firm performance. The sample size of the study was 1922 firms from 20 different industries which listed in BSE. This study considered ROA, ROE, Net Profit Margin (NPM), Tobin's q, and stock returns as firm performance measures and board size, board activity intensity, the proportion of outside directors CEO-duality, and institutional ownership as corporate governance measures. This study found that board size is negatively related to ROA, board meetings are positively related to firm performance and CEO-duality is not related to firm performance.

Research design

The research design of this study is quantitative in nature. The approach of multiple regression analysis was applied to study the impact of corporate governance on bank performance. The equation of the model is:

$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \dots + \beta_nX_n + \epsilon$ Where, Y = the dependent variable

α = the intercept of the regression equation

$X_1 \dots X_n$ = the independent variable

$\beta_1 \dots \beta_n$ = the beta coefficient of the independent variables ϵ = Random error variable

Bank performance measures including return on assets, return on equity, nonperforming assets, and net interest margin. Whereas board size, percentage of independent directors, percentage of woman directors, board meetings and board committees are independent variables. The multiple regression model is chosen because it distinguishes between dependent variables and independent variables as compare to other statistical analysis to study the relationship between variables like correlation analysis, simple linear analysis, ANOVA, etc. In multiple regression stepwise method is applied to analyze the data. In the stepwise method, the entry of variables in the equation is in order of highest t-statistic any variable having significant values less than 0.05 excludes from the equation.

Selection of the sample

The convenient sampling is used for the selection of the sample. The top three public sector banks and top three private sector banks were selected on the basis of the size of their assets. These six banks comprised State Bank of India (SBI), Punjab National Bank (PNB), Canara Bank, HDFC Bank, AXIS Bank, and ICICI Bank.

Data collection sources

The data required to examine the impact of corporate governance on bank performance has been extracted from corporate governance reports included Annual Reports of the sample bank from bank website. The data required to measure the bank performance has been extracted from Annual Reports of the sample bank.



The variables of corporate governance and bank performance

Return on Assets (ROA) ROA is an accounting measure which shows the net income of a company relative to its total assets. ROA shows the investment performance of the company. ROA explains how well a company uses its total assets. ROA indicates the profitability and efficiency of total assets. In corporate governance literature, many studies used ROA as performance measure (Harmalin & Weitach, 1991; Yarmark, 1996; Bhagat & Black, 2002; Daily & Delton, 2003; Abdulla, 2004; Lam & Lee, 2008; Vo, 2014; Azeez, 2015;).

Return on Equity (ROE) ROE is an accounting measure which shows net the income of a company relative to equity investment. ROE indicates the financial performance of a company. ROE indicates how well a company utilizes its equity capital to generate income. It measures the profitability and efficiency of equity capital. In corporate governance literature, many studies used ROE as a performance measure. (Harmalin & Weitach, 1991; Yarmark, 1996; Bhagat & Black, 2002; Daily & Delton, 2003; Abdulla, 2004; Lam & Lee, 2008; Vo, 2014; Azeez, 2015;).

Net Interest Margin (NIM) NIM is the difference between interest income earned and interest income paid by bank divided by average earning assets. NIM shows the average earning assets. NIM shows the effectiveness of financial decisions of bank or other financial institutions. NIM reflects the financial stability of the bank.

Board Size (BS) Board size means the number of directors included on the board (Lanrau & Van den Berghe, 2007). Board of directors is considered as an important element to monitor and control management and protect shareholder's interest (Fama & Jhonson, 1983). Large board size increases group dynamics, and create communication and coordination problem (Day & Chauhan, 2009; Jensen, 2012). When board size is big, some directors may act as a free rider (Velnampy, 2013). The small board can function more effectively and its easier for the CEO to control (Jensen, 1993). Dalton (1998) argued that a large board is more efficient in the decision-making process because they comprise more skill knowledge and expertise.

Independent directors (ID) Board independence is a percentage of independent directors on the board (Waqer, Rasid & Jadoon, 2013; Pratiniguish, 2009; James & Joseph, 2015; Vo, 2014). According to agency theory the presence of more independent directors on the board of directors, reduce the agency cost and make it easier to control senior management (Fama & Jensen, 1983). Pfeffer (1972) stated that the higher proportion of independent directors on the board of directors' able firm to attract more outside capital and enhance firm performance. Berger & Bourman (2013) argued that independent directors have access to information from other firms and able to use favorable opportunities for the firm.

Board Meeting- Board meeting refers to the number of board meetings held during a year. Conger, Finegold & Lawler (1998) argued that timely board meeting is an effective element to improve board effectiveness and decision making. More frequency of board meeting enhances the quality of monitoring senior manager and improve performance (Liption & Lorsch, 1992; Mangena & Tauringama, 2008; Ntim, 2009). Vafeas (1999) argued that higher the frequency of board meetings attached more cost as director's fees, managerial time, traveling cost and other resources.



Board Committees -Board Committees refer to the committees formed by the board of directors. These committees help in board functioning and decision making.

Woman Director- Woman director means the percentage of women directors on the board presence of women directors is the indicator of gender diversity.

Data analysis

After collecting all relevant data from annual reports of banks, the SPSS statistical software program was used to analyze the data. There was a total of 8 multiple regression equations formed to analyze the data. The multiple regression equations of public sector banks are:

$$ROA = \alpha_0 + \beta_1BS + \beta_2ID + \beta_3WD + \beta_4BM + \beta_5BCOM + \epsilon$$

$$ROE = \alpha_{10} + \beta_6BS + \beta_7ID + \beta_8WD + \beta_9BM + \beta_{10}BCOM + \epsilon$$

$$NPA = \alpha_{20} + \beta_{11}BS + \beta_{12}ID + \beta_{13}WD + \beta_{14}BM + \beta_{15}BCOM + \epsilon \quad NIM = \alpha_{30} + \beta_{16}BS + \beta_{17}ID + \beta_{18}WD + \beta_{19}BM + \beta_{20}BCOM + \epsilon$$

The multiple regression equations of private sector banks are:

$$ROA = \alpha_{40} + \beta_{21}BS + \beta_{22}ID + \beta_{23}WD + \beta_{24}BM + \beta_{25}BCOM + \epsilon$$

$$ROE = \alpha_{50} + \beta_{26}BS + \beta_{27}ID + \beta_{28}WD + \beta_{29}BM + \beta_{30}BCOM + \epsilon$$

$$NPA = \alpha_{60} + \beta_{31}BS + \beta_{32}ID + \beta_{33}WD + \beta_{34}BM + \beta_{35}BCOM + \epsilon$$

$$NIM = \alpha_{70} + \beta_{36}BS + \beta_{37}ID + \beta_{38}WD + \beta_{39}BM + \beta_{40}BCOM + \epsilon$$

Where, α_0 = the intercept of the regression equation $\beta_1 \dots \beta_{40}$ = the beta coefficient of the independent variables ϵ = Random error variable ROA = Return on assets ROE = Return on equity NPA = Non-performing assets NIM = Net interest margin BS = Board size ID = Percentage of independent directors on the board WD = Percentage of women directors on the board BM = Number of board meetings BCOM = Number of board committees ROA, ROE, NPA and NIM were used as dependent variables and BS, ID, WD, BM and BCOM were used as independent variables.

Descriptive Statistical Analysis of Sampled Public and Private Sector Banks This section represents the descriptive statistics of sampled banks by mean, range, minimum, maximum and standard deviation of bank performance measures including ROA, ROE, NPA, and NIM. This section also shows averages of corporate governance variables board size, percentage of independent directors, percentage of woman directors, number of board meetings, and number of board committees.

- State Bank of India (SBI) -SBI is the largest public sector bank in India with about 23% market share in assets. The total assets of SBI were Rs 34,54,752 crores and total share capital was Rs 89,246 crores. The average ROA of SBI was 0.5712% with a standard deviation of 0.36045%. The highest ROA of SBI was 0.97% and the lowest ROA was -0.19%. So, the range was 1.16%. The average ROE was 9.5012% with a standard deviation of 6.14743%. The highest ROE was 15.94% and the lowest ROE was -3.78%, So the range was 19.72%. The average NPA was 2.9363% with a standard deviation of 1.39485%. The highest NPA was 5.73% and the lowest NPA was 1.63%. So the range was 4.1%. The average NIM was 2.6363% with a standard deviation of 0.33479%. The highest NIM was 3.24% and the lowest NIM was 2.16%, so the



range was 1.08%. The average board size was about 13 members. Around 7.53% of members of the board were women. However, the average independent director on the board was more than 40%. On average there were about 9 committees to support the board in the decision-making process. About 12 board meetings were held in a year.

- Punjab National Bank (PNB) -Punjab National Bank is the second largest public sector bank on the basis of total assets acquired. The total assets of PNB were Rs 7,65,830.10 crores and total capital share was 552.11 on 31st March 2018. The average ROA of PNB was 0.3350% with a standard deviation of 0.99804%. The highest ROA of PNB was 1.34% and the lowest ROA was 1.60%, So the range was 2.94%. The average ROE was 7.6812% with a standard deviation of 17.44886%. The highest ROE was 22.13% and the lowest ROE was -32.80%, So the range was 54.93%. The average NPA was 4.9113% with a standard deviation of 3.81097%. The highest NPA was 11.24% and the lowest NPA was 0.85%. So, the range was 10.39%. The average NIM was 3.1312% with a Range Minimum Maximum Mean Std.Deviation -5 ROA (%) ROE (%) NPA (%) NIM (%) 0 5 10 15 20 25 Bank Performance standard deviation of 0.67885%. The highest NIM was 3.96% and the lowest NIM was 2.16%, so the range was 1.8%. The average board size was about 11 members. Around 9.0525% of members of the board were women. However, the average independent director on the board was more than 42%. On average there were about 19 committees to support the board in the decision-making process. About 14 board meetings were held in a year.
- Canara Bank -Canara Bank is the largest public sector banks in India. It is the third largest public sector bank on the basis of total assets acquired. The total assets of Canara Bank were Rs 6,16,886.10 crores and total share capital was Rs 733.24 crores on 31st March 2018. The average ROA was 0.3950% with a standard deviation of 0.73003%. The highest ROA of Canara Bank was 1.42% and the lowest ROA was -0.75%. So, the range was 2.17%. The average ROE was 7.4263% with a standard deviation of 14.89024%. The highest ROE was 28.26% and the lowest ROE was -16.74%, So the range was 45%. The average NPA was 3.7013% with a standard deviation of 2.58293%. The highest NPA was 7.48% and the lowest NPA was 1.11%. So the range was 6.37%. The average NIM was 2.4225% with a standard deviation of 0.30170%. The highest NIM was 3.12% and the lowest NIM was 2.19%, so the range was 0.93%. The average board size was about 11 members. Around 12% of members of the board were women. However, the average independent director on the board was more than 33%. On average there were about 5 committees to support the board in the decision-making process. About 14 board meetings were held in a year.
- HDFC Bank HDFC Bank is the largest private sector bank in India on the basis of total assets acquired. The total assets of HDFC Bank were Rs 10,63,934.31 crores and total share capital was Rs 519.02 crores on 31st March 2018. The average ROA was 1.9638% with a standard deviation of 0.23385%. The highest ROA of HDFC Bank was 2.50% and the lowest ROA was 1.77%. So, the range was 0.73%. The average ROE was 19.1263% with a standard deviation of 1.53250%. The highest ROE was 20.88% and the lowest ROE was 16.52%, So the range was 4.63%. The average NPA was 0.3138% with a standard deviation of 0.20311%. The highest NPA was 0.80% and the lowest NPA was 0.18%. So, the range was 0.62%. The average NIM was 4.2875% with a standard deviation of 0.15526%. The highest NIM was 4.50% and the lowest NIM was 4.00%, so the range was 0.50%. The average board size was about 11 members.



Around 12% of members of the board were women. However, the average independent director on the board was more than 51%. On average there were about 9 committees to support the board in the decision-making process. About 7 board meetings were held in a year.

- ICICI Bank- ICICI Bank is the second largest private sector bank in India on the basis of total assets acquired. Total assets of ICICI Bank were Rs8,79,189.16 crores and total share capital was Rs 1285.81 crores on 31st March 2018. The average ROA was 1.4813% with a standard deviation of 0.31073%. The highest ROA of ICICI Bank was 1.86% and the lowest ROA was 0.87%. So, the range was 0.99%. The average ROE was 11.2250% with a standard deviation of 2.48697%. The highest ROE was 14.30% and the lowest ROE was 6.60%, So the range was 7.70%. The average NPA was 2.0938% with a standard deviation of 1.81398%. The highest NPA was 4.89% and the lowest NPA was 0.62%. So, the range was 4.27%. The average NIM was 3.1575% with a standard deviation of 0.31869%. The highest NIM was 3.49% and the lowest NIM was 2.64%, so the range was 0.85%. The average board size was about 12 members. Around 14% of members of the board were women. However, the average independent director on the board was more than 56%. On average there were about 9 committees to support the board in the decision-making process. About 8 board meetings were held in a year.

Results-

Impact of percentage of independent directors, percentage of women directors, and board meetings, and board committees on ROE Since percentage of independent directors, percentage of women directors, and board meetings, and board committees were excluded from the regression analysis because these variables were insignificantly explanatory power. Therefore, we cannot explain the impact of percentage of independent directors, percentage of women directors, and board meetings, and board committees on ROE.

- Impact of board size, percentage of independent directors, percentage of women directors, and board committees on NPA Since board size, percentage of independent directors, percentage of women directors, and board committees were excluded from the regression analysis because these variables were insignificantly explanatory power. Therefore, we cannot explain the impact of board size, percentage of independent directors, percentage of women directors, and board committees on NPA.
- Impact of board meetings on NPA f distribution and ANOVA supported the rejection of the null hypothesis which state that there is no significant relationship between corporate governance and NPA. Beta value of board meetings was 0.322
- Relationship between Corporate Governance Mechanisms and NIM in Private Sector Banks The regression equation for NIM as the dependent variable and corporate governance mechanisms independent variables is: $NIM = \alpha_0 + \beta_1 BS + \beta_2 ID + \beta_3 WD + \beta_4 BM + \beta_5 BCOM + \epsilon$.
- In stepwise regression variable, entry is based on their largest zero-order correlation (Andy field). Variables with weak correlation are excluded from the regression analysis. The correlation matrix shows that none of the corporate governance mechanisms has a significant amount of correlation with NIM. Therefore, we could not apply further inferential statistics to check the hypothesis. We could conclude that there is no significant relationship between corporate governance and NIM.



Conclusion

The analysis exhibits that corporate governance has an impact on bank performance but this impact is insignificant in the case of private sector banks. Further not all the corporate governance mechanisms found to be statistically significant.

The summary of findings is as follow

- I. Result between Corporate Governance and ROA for Public Sector Banks I.
The relationship between board size and ROA was positive but insignificant.
- II. The relationship between the percentage of independent directors and ROA was negative but insignificant.
- III. The relationship between the percentage of woman directors and ROA was negative but insignificant.
- IV. The relationship between board meetings and ROA was significantly negative.
- V. The relationship between the percentage of board meetings and ROA was negative but insignificant.

Result between Corporate Governance and ROA for Private Sector Banks

- I. The relationship between board size and ROE was positive but insignificant.
- II. The relationship between the percentage of independent directors and ROE was negative but insignificant.
- III. The relationship between the percentage of woman directors and ROE was positive but insignificant.
- IV. The relationship between board meetings and ROE was significantly negative.
- V. The relationship between board meetings and ROE was negative but insignificant.

Result between Corporate Governance and ROE for Public Sector Banks

- I. The relationship between board size and ROA was positive but insignificant.
- II. The relationship between the percentage of independent directors and ROA was negative but insignificant.
- III. The relationship between the percentage of woman directors and ROA was negative but insignificant.
- IV. The relationship between board meetings and ROA was significantly negative.
- V. The relationship between the percentage of board meetings and ROA was negative but insignificant.

Result between Corporate Governance and ROE for Private Sector Banks

- I. The relationship between board size and ROE was but negative but insignificant.
- II. The relationship between the percentage of independent directors and ROE was negative but insignificant.
- III. The relationship between the percentage of woman directors and ROE was negative but insignificant.
- IV. The relationship between board meetings and ROA was negative but insignificant.
- V. The relationship between the percentage of board meetings and ROA was positive but insignificant.



Result between Corporate Governance and NPA for Public Sector Banks I. The relationship between board size and NPA was significantly negative.

- I. The relationship between the percentage of independent directors and NPA was positive but insignificant.
- II. The relationship between the percentage of woman directors and NPA was negative but insignificant.
- III. The relationship between board meetings and NPA was positive but insignificantly.
- IV. The relationship between the percentage of board meetings and NPA was negative but insignificant.

Result between Corporate Governance and NPA for Private Sector Banks

- I. The relationship between board size and NPA was positive but insignificant.
- II. The relationship between the percentage of independent directors and NPA was positive but insignificant.
- III. The relationship between the percentage of woman directors and NPA was positive but insignificant.
- IV. The relationship between board meetings and ROA was positive but insignificant.
- V. The relationship between the percentage of board meetings and ROA was positive but insignificant.

Result between Corporate Governance and NIM for Public Sector Banks I. No significant relationship was found between board size and NIM.

- I. No significant relationship was found between the percentage of independent directors and NIM.
- II. No significant relationship was found between the percentage of woman directors and NIM.
- III. No significant relationship was found between the percentage of board meetings and NIM.
- IV. No significant relationship was found between board committees and NIM.

Result between Corporate Governance and NIM for Public Sector Banks I.No significant relationship was found between board size and NIM.

- I. No significant relationship was found between the percentage of independent directors and NIM.
- II. No significant relationship was found between the percentage of woman directors and NIM.
- III. No significant relationship was found between the percentage of board meetings and NIM.
- IV. No significant relationship was found between board committees and NIM.

Interpretation of Results

Research question: Is there any relationship between corporate governance and ROA?

The analysis found the relationship between corporate governance and ROA exists but not all the corporate governance mechanisms have a significant impact on corporate governance. This study found a negative relationship between board size and ROA in case of public sector banks only. Since increase



in the board size can increase group dynamics, communication and coordination problem (Dey & Chauhan, 2009; Jensen, 2012). This is one of the reasons for negative relationship between board size and ROA in public sector banks. Yermack, 1996; Hermaline & Weisbach, 2003; Haniffa & Hudaib were found negative relationship between board size and firm performance.

There was no significant evidence found to explain the relationship between corporate governance practices and ROA in private sector banks.

Scope for Further Research

This study focused on public sector banks and private sector banks only.

1. Future research can include foreign banks and other financial institutions to study the impact of corporate governance practices on firm performance.
2. This study has taken a few corporate governance mechanisms namely board size, percentage of independent directors, percentage of women directors, board meetings and board committees. Future research can make it more comprehensive by including more corporate governance variables.
3. The present study measured the bank's performance by ROA, ROE, NPA, and NIM. Future research can take other performance measures to evaluate bank performance.
4. Future studies can take a longtime period to study the impact of corporate governance on bank performance.
5. This study completely base on secondary data. Future studies can supplement the secondary data by primary data to make it more reliable.

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