
Corporate Governance, Board of Directors and Financial Performance: Evidence from Indian Listed Banks

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The last decade has witnessed empirical evidences and causal relationships in the field of corporate governance, specially its linkage to the financial aspect of both financial and non-financial companies wherein, various researches have provided mixed results. The momentous role of banks in the Indian economy, which works as a crucial arm of the government initiates the study of corporate governance in the banking industry and explore empirical evidences therein. The present study is an endeavor to analyze how different aspects of corporate governance influence the financial aspect of the Indian banking industry over the period 2009-10 to 2014-15, post the global financial crisis of 2008. Using panel data techniques on the listed public and private Indian banks, the results of OLS regression revealed that in general, duality is highly prevalent and NPA's are poorly managed in case of public sector banks. Whereas, the private sector banks in India encourage more independence on the seat of chairman. The audit committee size and duality are significantly related to corporate governance variables, higher board size is a preferred form of working in these banks with lower number of non-executive members on board. An independent chairman is linked to a negative impact on the financial aspect of banks and on the other hand higher CAR ratio brings significant improvement in the financial health. Hence, it may be stated that improvement in governance is as important as improving financial performance and banks should strive to improve their performance along corporate governance indicators as neglecting it may have severe repercussions on the financial health of a bank and long term survival or sustainability.

Keywords: Corporate Governance, Bank Performance, Long term Survival

INTRODUCTION

The inadequacy aspect of corporate governance practices in the financial crisis has been observed all over the world both in literature and in practice. The subjective evidence provided by prior research provides that the corporate governance mechanism at banks were not sufficient to deter the global financial crisis. The spread of contagion effect emphasize on the need to dig down the status of corporate governance in banks at present and to clearly make out the role of contributing variables for better corporate governance. The researchers have primarily acknowledged few common factors like lack of business ethics, shady accounting practices, in short failure in terms of corporate governance. There has been many studies undertaken to find the relationship/ impact of corporate governance on firm's financial performance (Robinson and Brown, 2004; Gompers et al., 2003) but the area of corporate governance in banks is lesser researched than the aforementioned. Adams (2003) is of the opinion that banks governance deserves to be studied more extensively and deeply as a bank's failure negatively affects the respective country's economy. The unique structure of governance in banks is due to its requirement for more accountability and transparency as they have a special role in taking care of others money.

In early 1990's corporate governance was in a

dismissal state in India. Corporate governance was driven by conference of Indian industry (CII) in 1995 by releasing a code of conduct. Due to economic liberalization and deregulation the concept of corporate governance came into light as there was need for more accountability towards various stakeholders. Between 1998 and 2000 many big companies voluntarily followed the code. In 1999, in a defining moment in India's corporate-governance history, the Indian Parliament created the Securities and Exchange Board of India (SEBI) to "protect the interests of investors in securities and to promote the development of, and to regulate the securities market." SEBI set up a committee under Kumar Mangalam Birla to design a code for listed companies which were approved in December 2000. Companies act, 1956 was modified to incorporate specific provisions regarding independent directors and audit committees and Clause 49 was introduced into the Listing Agreement of Stock Exchanges. Clause 49 outlines requirements vis-a-vis corporate governance in exchange-traded companies. In 2003, SEBI as part of its Endeavour to improve the standards of corporate governance in line with the needs of a dynamic market, constituted another Committee on Corporate Governance under the Chairmanship of Shri N.R.Narayana Murthy instituted the Murthy Committee to scrutinize India's corporate-governance framework further and to make additional recommendations to enhance its effectiveness, to review the performance of Corporate Governance and to determine the role of companies in responding to rumor and other price sensitive information circulating in the market in order to enhance the transparency and integrity of the market. In a dynamic environment, system of Corporate Governance needs to be continually evolved. SEBI has since incorporated the recommendations of the Murthy Committee, and the latest revisions to Clause 49 became law on January 1, 2006.

After the subprime crisis, a number of acts and codes like Clause 49 in India, Sarbans-Oxley Act in U.S., and New Combined Code on Corporate Governance

in U.K. were seen to be getting into discussion over imbibing good corporate practices worldwide in various organizations forms. One such form is the banks. Banks being the right arm of the economy, its corporate governance is a challenging subject. It is crucial to study the role of corporate governance practices adopted by the banks on their financial health and this is the focus of the study.

SIGNIFICANCE OF THE STUDY

The semblance of banks in the economy and regulatory environment makes its governance a critical subject. They play an acute role in running the financial system by acting as an intermediary between lenders and borrowers and are an imperative component of the economy. They are rightly called as the right arm of an economy as they are responsible for the efficient allocation and mobilization of funds in the economy. This feature of banks sets them apart from the other entities. Any failure occurring in the working of the banks is bound to have a systemic and contagion on the whole economy's financial system. Hence, higher regulations and market discipline in bank's governance are important for overall growth of the economy. Numerous studies have emphasized the importance of corporate governance for banks (Adams and Mehran, 2003). After the economic liberalization in 1992, steps were taken to enhance the efficiency and transparency of the banks. Due to heavy loss incurred to the federal and Government exchequer the ownership structure of Indian banks undergone a significant change, which was also to facilitate the new economic policy. On the other hand, even after two decades of liberalization in Indian banking sector, occurrence of the financial crisis in the United States (which was mainly due to the excessive risk taking of U.S. banks), brought forward the fact that the sustainability of the banking sector is pivotal. Hence, after the crisis insistent and profound research has been done in this area to know whether banks unlike other entities have a framework which enables them to handle such crisis situation.

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On the international front, many regulations on banks supervision exist. For instance, Basel committee lays down the capital adequacy norms so that the excessive risk taking by the banks could be curtailed. Basel committee in its 1999 report stated that “The board of directors should ensure that senior management implements policies that prohibit (or strictly limit) activities and relationships that diminish the quality of corporate governance, such as: conflicts of interest; leading to offices and employees and other forms of self-dealing, and providing preferential treatment to related parties and other favored entities”. Furthermore, “The board of directors is ultimately responsible for the operations and financial soundness of the bank”. This brings the significance of board’s role to the forefront. The report also highlighted that including qualified non-executive directors on board could increase objectivity in decisions. It stated that good corporate governance is necessary to guarantee a fit financial system. Practicing good corporate governance can bring a paramount change in the ethical and financial area of any organization. A lot of initiatives are required for corporate governance to have any impact on the growth of an entity. For instance, separation of supervisory board and management functions is believed to lead to more efficient operations and reduction in self-dealing practices in the bank’s operations.

Banks are those special entities which attract the laws which apply to normal entities and in addition have an added responsibility of being an integral part of an economy. They hold illiquid assets and issue liquid liabilities in form of deposits. Failure to adhere to the regulatory norms like Basel can pose a serious threat to bank’s credibility. Directors of the bank should be ready to take responsibility for their actions as if they know about the fraud happening in the bank, it means they are a part of it too and if they state no knowledge of the same then it questions their ability to be a director. In emerging economies, banks carry an additional social responsibility of leading and developing financial sector apart from being an intermediary. Before 1991, there was

dominance of public sector banks. With 80% of the banks in India being public, it makes the head accountable to various government institutions leading to inefficient governance. After 1991 with the dilution of public sector banks a larger number of private banks came into being. Existence of private sector banks forced the public banks board to take higher responsibility and to provide better services to customers. They were provided with large autonomy and interests of private shareholders brought impact on strategic decisions, listing requirements of SEBI enhanced disclosure. The Ganguly Committee report brought structural reforms in form of board’s role and responsibilities, training facilities etc. Effective corporate governance is critical to proper functioning of banks and the whole economy. The Basel committee provides guidelines in which management of banks should operate to obtain higher level of results and still promote public confidence. The Basel committee on banking supervision was established in 1975. The committee introduced the concept of CRAR in 1988 @ 8% which was later replaced in 2003 known commonly as Basel II. It is based on – minimum capital requirement, supervisory review process and market discipline. It promoted the sound corporate governance practices by banks in their countries. The guidelines include-

- Guiding on risk management
- Role of board on effective risk management
- Recognize the compensation system as a key component of governance
- Providing guidelines on selection of management team

However, regulations can just promote corporate governance but cannot replace it. The board of directors of banks should set their corporate objectives while taking into consideration the interest of various stakeholders. It should function in a safe manner while complying with the laws and regulations. It can be achieved through a set of legal, economic and financial rules while uniform

standards of governance in both public and private sector are pressed upon. Banks shall move forward with changing times and focus on corporate governance restructuring. A qualified set of individuals with integrity who meet regularly to discuss long term strategy is the need of hour in banks. A code of ethics should be formed for the top management and more of independent directors if employed on various committees can ensure lesser bias and fraud occurring. Boards of banks and financial institutions have to be conscious of their obligation towards public interest against their own profit motive.

Post crisis, there is a large debate going on the extent corporate governance failure has been responsible for it. In fact, the post-crisis verdict on corporate governance of banks is quite damning. The Institute of International Finance, an association of major international banks, has concluded after an examination of board performance of banks in 2008 that, "events have raised questions about the ability of certain boards to properly oversee senior managements and to understand and monitor the business itself". As per an OECD report, nearly all of the eleven major banks reviewed by the Senior Supervisors Group (an informal group of senior supervisors under the auspice of the Financial Stability Board - FSB) in 2008 failed to anticipate fully the severity and nature of the market stress. On the positive side, there is some early evidence that banks with stronger corporate governance mechanisms moderated the adverse impact of the crisis on them, had higher profitability in 2008 and provided substantially higher stock returns in the immediate aftermath of the market turmoil. After crisis many a countries came up with structural changes to improve transparency but the most notable one Dodd-Frank Act in U.S. which aims to increase transparency in the working of board, their compensation and roles. In case of India the impact of crisis largely escaped its banking sector. But there have been provisions made by the Banking Regulation Act and Basel committee to keep the reasons like excessive compensation of banks at bay.

In July 2010, RBI issued draft guidelines on 'Compensation of whole time directors/CEO' inviting public comments. It was done to institute a claw back mechanism and prudent risk taking. Ganguly committee and Basel committee gave recommendations on separation of duties-CEO duality in public sector banks. Regulation can only help till a certain extent but in the end it's the spirit with which corporate governance is implemented that matters. Mere adherence to the rules and regulations might lead to faulty corporate governance practices.

OBJECTIVES OF THE STUDY

The present study aims to find evidence of causal relationship between corporate governance variables and banks long term sustainability. For this purpose, the objectives of the study are:

- To identify the dimensions that represents essence of corporate governance in financial organizations especially in banks.
- To find whether there is any major difference in corporate governance structure in Indian public and private sector banks listed in major stock exchanges of the country.
- To identify the relationship between corporate governance in banks and financial variables of banks in India.
- To unearth whether corporate governance has any impact on the financial variables of Indian banking sector or not? Hence, in order to answer this research question there are other questions to be answered, which are the focus of this study:
 - Is there any impact of board related and audit committee related variables like board size, board composition, board attendance rate, duality, chairman's independence, audit committee size, audit event, capital adequacy ratio on return on assets, net non-performing assets, net worth, earnings per share, profit after tax of listed Indian banks while controlling for banks size, liquidity and leverage?

- Which of the above corporate governance variable is/are significantly related to bank's performance variables?

METHODOLOGY

Underneath are the details regarding the methodology followed for selection of data, collection of data and type of analysis done in the present study. It also provides in-detail information of the variables used with a brief on their definitions etc. The proposed research is based exclusively on secondary data and is empirical in nature. The data was gathered for thirty two listed Indian banks on various stock exchanges. Out of them, four banks had either missing annual reports or had insufficient/ inconsistent data. So analysis was held forward on the remaining twenty eight listed banks (out of which twenty one are public sector banks and seven are private sector banks). The exploration period is of six years i.e. from 2009-10 to 2014-15. Hence, it granted a total panel data set of 168 bank observations. The source used for culling the banks is Prowess database, created by the Centre for monitoring Indian Economy (CMIE) and respective bank's website, it's published audited financial statements and annual reports are used to collect the data and SPSS software has been used to analyze the data. This research endeavors to establish the relationship between financial variables and corporate governance variables of the selected Indian banks. The secondary and cross-sectional data collected for the study is analyzed using IBM-SPSS statistics software, employing the statistical tools of descriptive statistics, correlation, F-test and multiple regressions (sequential/hierarchical regression technique). In accordance with the underlying assumption (the main drivers of profitability of an entity are- earnings, leverage, and efficiency and liquidity conditions) the impact has been studied on the monetary aspect of the banks while controlling for asset tangibility, bank size and banks leverage (all explained later in the succeeding section).

Variables Used

In this study, under regression analysis, the performance/financial variables of the banks are taken as the dependent variables. For its measurement, the conventional measures like return on assets, profit after tax, net worth, earnings per share and net non-performing assets are used. These variables have been used in many recent prominent researches as core variables (Mohan (2014); Waseem.et.al (2011); Narwal& Jindal (2015)). The independent variables meanwhile are divided into two categories- first, related to the corporate governance aspect of the bank which is divided into- board size, board composition, board duality, board attendance rate, chairman's independence, audit committee size, audit event, capital adequacy ratio and second, other set of related variables which are indeed the control (financial) variables like- banks size, leverage, liquidity. Hereunder, given in table I are the variables and measurement thereof as corporate governance variables and financial variables.

We postulate, variables such as bank size, asset tangibility and financial leverage being taken as exogenous variables. In the hierarchical regression analysis, these variables are fed in the first step so that their effect on the dependent variables could be controlled.

Formation of Hypothesis

The unique structure of governance in banks is due to its requirement for more accountability and transparency as they have a special role in taking care of others money. Grove et al. (2011) studied 236 U.S. banks and found that board size, duality both hold a negative relationship with banks performance. Comparative studies of banks and other firms like Adaam and Mehran (2003) have brought the fact the board sizes are generally higher in case of banks and have positive impact on banks performance. Ajanthan et al. (2013) in their study of Sri Lanka's banks found a strong positive relationship between board size and private sector

banks return on assets but negative in case of public sector banks. Fama (1980) and Jensen and Ruback (1983) consider board as a crucial part of corporate governance framework and they acknowledged the role of non-executive directors as a critical one in imparting relevant knowledge. According to the revised clause 49, the 33% board should comprise of independent directors in case the chairman is a non-executive director and it should be 50% if the chairman is an executive director. According to Brown and Caylor (2004) board composition is the most driving factor for better performance. There has been no conclusive result found in this aspect of corporate governance variable. A few studies have constituted that higher level of non-executive directors on board increases the value whereas, researchers like Lu and Lin (2012) found a negative relation on bank's earnings. Board meetings results in costs in form of travel expense, administrative support, time spent, meeting fees etc. So authors like Jensen (1993) argue that firms which are functioning well should be holding lesser meetings and exhibit fewer conflicts. But it's less costly than revising the board itself. It is also said that increased board activity leads to better strategy planning. The linkage between the same remains unclear. So, either there can be a positive or negative relationship between board attendance rate and financial performance. Utama and Musa (2011); Naceur and Kandil (2009) are of the same opinion that CRAR helps increase the banks performance. In many a studies duality is generally seen to have a negative impact on bank's performance (Bhagat and Bolton, 2008; Lu and Lin, 2012). But in studies like Coles (2011) where no significant relationship was established, a recent study (Mohammad, 2015) has seen a positive impact on GCC regional bank's performance.

Similarly, the role of audit committee cannot be undermined. So, two audit committee related corporate governance variables namely- audit committee size and audit event are also included in the study. Like board size, increase in audit committee size can also lead to coordination

problems. Kaid (2012) found a positive relationship between audit event and bank's performance. In the light of the aforementioned, the hypothesis created for the objective of this research used in regression is mentioned underneath:

H₀₁:: The return on asset is not significantly affected by corporate governance variables in Indian banks.

H₀₂:: The profit after tax is not significantly affected by corporate governance variables in Indian banks.

H₀₃:: The net worth is not significantly affected by corporate governance variables in Indian banks.

H₀₄:: The earnings per share is not significantly affected by corporate governance variables in Indian banks.

H₀₅:: The net non-performing assets is not significantly affected by corporate governance variables in Indian banks.

Hereunder, the hypothesis of the study have been tested using the three methods of SPSS software i.e. descriptive statistics, Pearson's correlation and hierarchical multiple regression analysis. The descriptive analysis brings forward the statistical difference between public and private sector banks. The Person's correlation checks for the existence of relationship between the dependent financial variables and independent corporate governance variables. The impact of the independent variables is tested using the regression analysis by controlling for certain variables and the results obtained are discussed thereof.

Descriptive Analysis

Under this section various variables used in our study are presented, discussed and analyzed based on two categories- data collected of public banks and data collected of private banks. It is further divided into two parts:

- Corporate governance variables
- Financial variables

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The descriptive analysis of the corporate governance data in table II and III shows that the mean size of board is 11.3 in these public banks whereas; the mean size in private banks is 10.6. 11 on an average is considered a very large size of board. Normally it is observed that the range is 6-16. Whereas, in case of public banks here it ranges from 6 to 18 and in private banks the range is 7-17.

Almost 6 out of every 11 board members in public banks and 7 out of 11 board members in private banks are independent satisfying the clause 49 the requirement of 50% and 33% of independent executives on board. The only difference being is that the chairman is almost never independent in public banks but have a higher chances of being independent in case of private banks with a mean of 0.67. It points to the fact that the non-executive directors are not provided with the opportunity to represent or chair the board in Indian public sector banks. In most of the cases the chairman and managing director is the same in public banks with a 0.9 mean leading to higher chances of duality which shows that Indian public banks have a dominant CEO performing in its banks structure due to the concentration of power in the hand of a single man. Whereas, in case of private sector banks, there is hardly any chance for duality taking place as can be inferred on the basis of the mean value of 0.07. Public sector banks should take care of this issue as suggested in the Ganguly Report. The attendance rate of board is higher in case of private banks on an average but it should be noted that in both the bank types the attendance of the board of directors have never fallen below 60% which is a good indication about board's directors monitoring and supervising the operations of the banks. Similarly, the involvement of audit members on an average calculated on the basis of event i.e. number of audit members meetings is higher than the prescribed 4 every year in both bank types. None of the banks had lesser meetings than 5 over the studied periods. The size of the audit committee, on an average, is 6 in case of public sector banks and 4 in case of private sector banks. As can be seen the CRAR requirements are

met by both types of banks. none of them had total CRAR below 9%.

It is interesting to note that the public sector banks never promote independence on the seat of chairman of the board. Similarly, with its high duality, the power is concentrated in one hand and dominant CEO leadership structure exists as in contrast to private banks which provide more opportunities in this case (Ganguly committee, Basel committee) and also has very low level of duality. In both the public sector banks and private sector banks, the leadership and monitoring can said to be high on the basis of good attendance rates and the range of board committee size is higher than the usual. Furthermore, there seems to be a huge liquidity problem in case of public sector banks in India as per the net NPA ratio. It is thrice in case of public sector banks than the private sector banks. Private sector banks on an average have twice the return on asset ratio and it also register the highest and lowest level of ROA. Hence, Public sector banks even with their large asset base are still lagging behind private sectors banks when it comes to return on asset, profit after tax and Net Worth.

The descriptive analysis of the financial data shows that most of the financial variables- the Return on asset, net worth and net profit are higher in private companies. The average rate of net non- performing assets in public banks is more than triple of private banks which show it is not managed properly in public banks. It could lead to a problem in banking operations which would badly effect the banks liquidity position. Whereas, the pointer like EPS is higher in case of public banks.

Correlation analysis

As discussed earlier, Pearson Correlation Matrix is performed in Table IV to find out the correlation between the corporate governance variables with other financial variables. Table IV below provides in a nutshell how these variables are related to each other and it also shows the significance of those relationships.

It can be observed that board size show a significant relationship with only EPS, it is mostly positively related with all dependent financial variables except ROA and PAT. It means board size is a crucial element in the financial well-being of a bank mainly in the EPS ratio. Similar to board size, the results related to including non-executive independent chairman on board it is mostly negatively related to financial variables but no significant relationship is found as such. It is in tandem with Coles (2001) who found no significant relationship with financial variables. In contrast to the board size, higher audit size is significantly related to most of the factors at 5% level of significance. It shows a negative relationship with only ROA and PAT. Apart from that, it is strongly positively related to other variables. So, it can be said that size of the audit committee can have a significant impact on the financial aspect of banks.

The test on AE and BE shows whether the regular supervising and monitoring of the bank's operations which can be estimated on the basis of how often the meetings are held and attended by the audit committee and board members is actually co-related to the financial variables and if yes, then significantly or not. It can be seen that higher board event is found to have a negative relationship with all the variables and positively related to the problematic net non-performing asset. But the relationship is never found to be significant in any case. The number of meetings happening in a year of the audit committee also shows a no significant relationship. It can be suggested that higher involvement of the board might be due to the lower values or deteriorating financial variables or vice-a-versa. There might be some trouble in the finances which brings together the board members so frequently or the higher meetings level which leads to conflicts while decision making might be the cause of lower financials. A peculiar result is that, both duality and chairman's independence variables show a significant result with ROA, net worth and NPA. In case of chairman being independent the relationships are generally negative except for ROA

whereas, in case of duality it is positively related with all the variables except ROA. In terms of NPA, it can be said that a single man should not handle the positions of chairman and CEO and the chairman should be an independent director. It can be considered to have a good impact on the bank's financials by reducing the NPA. The significant positive association between chairman's independence and ROA can be attributed to the private banks (as shown in descriptive statistics), who let the non-executive members of the board chair the committee and bring fairness to the working of the bank's operations which might be the reason of higher ROA and lower NPA correlation.. The impact of all the variables is judged and the relationship is checked further by running regression.

Regression Analysis and Results

Multiple regression models has been applied on the relevant data to assess the relationship degree between the bank's dependent variables (PAT, ROA, NW, EPS, NPA) and corporate governance predictors which has been exhibited in table V. In order to find out existence of relationship between corporate governance variables taken and financial variables (as per conventional methods) of the company while controlling for leverage, bank's size and liquidity, the data is submitted for multiple regression analysis in hierarchical sequential method. The regression equation used for this purpose as follows:

$$Y = a + b_1x_1 + b_2x_2 + \dots + b_nx_n (\text{corporate governance variables}) + X_{it}y (\text{control variables}) + \sum_{it}$$

Where,

Y= independent variable

B_i = coefficients of predictors

X_{it} = control variables

\sum_{it} = difference between predicted and observed value.

Under sequential/hierarchical regression model, variables are entered in two stages. In the first stage, the independent variables which are to be controlled for are entered and in the second those independent variables whose relationship is to be examined are entered. A statistical test of the change in R^2 is evaluated to find the importance of second set of variables. Under this model we check for:

- Ratio of cases to independent variables criterion – it should not be less than 5:1 whereas, the preferred ratio is 15:1
- Probability of ANOVA test of regression- should be less than /equal to the level of significance
- Probability of F test for change in R^2 should be less than /equal to the level of significance. R Square is the amount of variance explained in the dependent variable by the predictors.
- Calculating adjusted R square- the adjusted R Square increases if the added variable improves the model more than would be expected by chance.
- Interpretation of the B value and checking the level of significance. The beta value shows that the positive or negative relation between the dependent and independent variable. Whereas, the level of significance shows if its probably true that the null hypothesis is correct or not. To check, the significance value is compared with the 0.05. If it is less than /equal to 0.05 the null hypothesis is rejected.
- Checking for multi co-linearity- it is said that if regression predictors are correlated than the variance of an estimated regression coefficient increases and is poorly estimated (Montgomery and Peck, 1982). Multi co-linearity is checked using the following two methods:
 - o Tolerance value – is used to check existence of multi-co linearity (whether a variable under consideration is a perfect linear combination of independent variables in the equation). If $TV < 0.20$ it indicates multi co linearity.

- o VIF value- it is also used to check existence of multi-co linearity (whether a variable under consideration is a perfect linear combination of independent variables in the equation). If $VIF > 10$ it indicates multi co linearity exists.

We posit:

- There is no problem with missing data
- Level of significance is 0.05
- Ordinal level variables are treated as metric variables.
- B values are assumed as zero i.e. flat regression line and no relationship.

The equations formed for various hypotheses are:

- Equation for hypothesis 1:- $ROA = a + (b_1*BS + b_2*BI + b_3*BE + b_4*CI + b_5*DL + b_6*AS + b_7*AE + b_8*CAR) + X_{it}Y + \sum_{it}$
- Equation for hypothesis 2:- $PAT = a + (b_1*BS + b_2*BI + b_3*BE + b_4*CI + b_5*DL + b_6*AS + b_7*AE + b_8*CAR) + X_{it}Y + \sum_{it}$
- Equation for hypothesis 3:- $NW = a + (b_1*BS + b_2*BI + b_3*BE + b_4*CI + b_5*DL + b_6*AS + b_7*AE + b_8*CAR) + X_{it}Y + \sum_{it}$
- Equation for hypothesis 4:- $EPS = a + (b_1*BS + b_2*BI + b_3*BE + b_4*CI + b_5*DL + b_6*AS + b_7*AE + b_8*CAR) + X_{it}Y + \sum_{it}$
- Equation for hypothesis 5:- $NPA = a + (b_1*BS + b_2*BI + b_3*BE + b_4*CI + b_5*DL + b_6*AS + b_7*AE + b_8*CAR) + X_{it}Y + \sum_{it}$

The valid cases are 168 and the independent variables (including control variables) are 11. So, the ratio of cases to independent variables is 15:1, which is the preferred ratio. The inferences drawn on the basis of five hypothesis stated through equation 1 to equation 5 and their results presented in table V have been concluded in the following para.

Board size is seen to have a positive impact on the financial health of Indian banks under study. It

significantly impacts the net worth and earnings per share of the listed banks. Hence, it can be inferred that the size of the board should be larger to ensure better returns in case of banking organizations (Adams and Meharn, 2001). In contrast to Basel committee expectations, it is found that increase in the number of on executive members on the board lead to negative impact on all the financial variables. It is in tandem with the research of (Adams and Mehran, 2001), of having a reverse impact and is having a significant impact on the net non performing assets. No significant result is found in case of board attendance rate but higher attendance rate is found to have a full negative impact on financial health of the banks. It can be said that the costs of these meetings are higher than the returns provided. Similarly, it can be further noticed that like board attendance rate, having an independent chairman on the board is not helping the Indian banks in any way. An independent chairman has less access to the facts; day to day involvement is lesser and may lack the respect of the management. One thing which could be partially accepted on basis of most of the cases with significant results to support the argument was that both the positions of CEO and chairman of the board should be held by two different individuals for the betterment of the banks. The conflict of interests which could arise out of duality position could put the banks in a bad situation (Jensen and Meckling, 1976; Millstein and MacAvoy 1998). Contrary to the highly advisable belief that it is better to have an independent chairman on the board, the result was more in tune with the findings of Sudeepta (2011) who suggested it negatively impacts the earnings and performance. In banking sector it might be correct to say that not having a non-executive chairman on board might be beneficial for the banks, but at the same time the results might be skewed in favor of public sector banks as the observations under study are more from these banks instead of private banks.

Duality is not preferable for growth of Indian banking sector (Millstein and MacAvoy (1998) and this can be supported by the significant results

obtained in case of ROA, NPA and net worth. There are greater chances of problems in transparency if power is concentrated in a few hands. No conclusive result is obtained regarding audit committee size and higher frequency of audit committee meetings is seen to have no significant conclusive result. Though higher ratio of capital adequacy may lead to growth and financial well-being. It has provided statistically significant results in most of the variables. A higher CAR shows high asset quality and it increases the investor's confidence. It can be concluded though all the corporate governance variables taken were of importance to any organization, chairman's independence, board attendance rate and audit event have no significant impact on any of the financial parameters of the banking sector. The results obtained are supported by correlation statistics. The results are found to be in tandem with prior studies regarding existence of connection between corporate governance variables and financial aspect of banks (Grove et al 2011). All the variables have VIF and tolerance value within tolerable limits showing no cause for multi co linearity. The R square statistic shows the variance in independent variable that can be predicted from the corporate governance variables. Whereas, the adjusted R square values are a better tool in estimating effect of predictors on ROA. The difference between R square and the Adjusted R square depicts the small shrinkage depicting that if the model were derived from the population rather than from the sample, it would account for that much amount of lesser variance. The probability of F statistic for the change in R square associated with the addition of the predictor variables is <0.001 in all the cases i.e. less than level of significance 0.05 which means model is a significant fit for data, as exhibited in table V. Similarly, using the significance value in ANOVA table the null hypotheses mentioned earlier may be rejected and accept the alternate hypotheses. There is statistically significant relationship between all independent variables and the dependent financial variables of Indian banking industry.

In banking sector it might be correct to say that not

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having a non-executive chairman on board might be beneficial for the banks, but at the same time the results might be skewed in favor of public sector banks as the observations under study are more from these banks instead of private banks. The safety net provided by the increase in CAR ratio increases both the opportunities and risks of the banks. It is proved in the significant results obtained in mostly favor of CAR. Higher audit committee size though has a negative impact mostly (Al-Swidi, 2012) but

the higher number of its meetings can't be inferred to better financial health due to lack of significant results. None of the variables have a multi co linearity problem based on the results of VIF and TV values. They are always found to be in range, the VIF values never crossed more than 10 and TV values were always greater than 0.20. Hence, the corporate governance variables must be engrossed in the corporate control system to deliver long term sustainability of corporate with excellence.

Figures and Tables

Table I.: Methods and Symbols used for various variables		
Variables used:	Method applied	Symbol used
Board size	The company's articles of association provide the details concerning the total number of directors which should exist on the board of the bank. In general, the size ranges from 5 to 30 members.	BS
Board composition	The total number of independent non-executive directors on the board is stated. Generally it has been found that firm's performance is not affected by board composition (Al-Musalli, 2012; Weir and Laing, 2000).	BI
Board duality	It shows whether the CEO and the chairman are the same or not. It is given a binary value 1 if both of them are the same and binary value 0 if both positions are held by different individuals. Some studies show that a dominant CEO may constrain board independence (Carcello et al., 2002).	DL
Board attendance rate	It is the number of times the board members turn up for their meetings as opposed to the total numbers of meetings which were supposed to be attended by them.	BE
Chairman's independence	An independent chairman is considered to be a smart investment. It is given a value 1 in the study if the chairman is found to be independent and 0 if he is found to be not independent.	CI
Audit committee size	It shows the total number of members on the audit committee board. The size of this committee generally ranges from three to six members.	AS
Audit event	An event is defined as the total number of meetings held by the audit committee in a year. An active audit committee is more likely to influence the decisions taken by board. As per the rules the audit committee should meet at least four times a year.	AE
Capital adequacy ratio	It is a measure of a bank's capital. According to the Basel II norms the minimum CAR was 9%.	CAR
Financial variables: Accounting-based measures of financial performance have been chosen because the audited accounting data tends to provide true and fair view of company and is not influenced by market perceptions and is thus considered less noisy in comparison to market based indicators.		
Return on asset	It is an indicator of how profitable a company is relative to its total assets i.e. the assets at disposal is efficiently used or not. It is calculated as net income divided by average total assets.	ROA
Profit after tax	As a true assessor of firm's earnings because of its tax free nature, it is gained using the value from the annual reports. Since, the data values collected are very high (i.e. in Lacs rupees), the log has been taken for the purpose of regression analysis.	PAT
Earnings per share	It shows the earnings allocated to each share. It is calculated by dividing the net income by total number of shares outstanding.	EPS

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Variables used:	Method applied	Symbol used
Net worth	For a company, this is known as shareholders' (or owners') equity and is determined by subtracting liabilities on the balance sheet from assets. The log has been taken for the purpose of regression analysis.	NW
Net non-performing assets	Net non-performing asset ratio is considered to be the best performance indicator where banks are concerned. As they indicate the credit risk which banks bear, the success of a bank depends upon the management of this inevitable burden. It has negative relation with the bank's profitability and efficiency.	NPA
Control variables: There are other factors operating through the product and capital market which can influence the banks financials. It is vital to control for such variables to avoid any spurious relationship.		
Bank size	It is defined as total assets of the bank. It also shows the power a bank holds as a possible entry barrier due to its broader capital base. Here, a log has been taken of the total assets given in the balance sheet of the respective banks.	SIZE
Asset tangibility	It reflects the efficiency of a firm. It is calculated as a ratio of net fixed assets to total assets at end of respective years.	AT

Source: Researcher's input (2015)

Table II: Descriptive statistics of Corporate Governance Variables								
VARIABLES	PUBLIC BANKS				PRIVATE BANKS			
	MEAN	MAX	MIN	\STD DEV.	MEAN	MAX	MIN	SSTD DEV.
BS	11.15	18	6	2.18	10.62	17	7	2.08
BI	5.23	12	2	1.97	6.95	14	5	1.96
CI	0	0	0	0	0.67	1	0	0.48
DL	0.96	1	0	0.17	0.07	1	0	0.26
BE	0.87	0.99	0.60	0.12	0.85	1	0.62	0.09
AS	6.34	13	4	1.39	4.23	7	3	0.89
AE	9.46	15	5	2.01	7.74	15	5	2.37
CAR	12.57	17.77	10.11	1.21	16.35	20.60	12.09	2.11

Source- Researcher's computation (2015)

Table III .-Descriptive statistics of Financial Variables								
VARIABLES	PUBLIC BANKS				PRIVATE BANKS Figures of Net Profit and Net Worth are in Lacs Rs			
	MEAN	MAX	MIN	\STD DEV.	MEAN	MAX	MIN	SSTD DEV.
NP	233370.8	4512800	-126284	472084.1	264271.1	1117500	-7845	292994.1
ROA	0.71	1.67	-0.99	0.38	1.51	2.30	-1.3	0.56
NW	1533393	16138754	39200	2160344	2036037	31916505	19998.5	5050604
NPA	1.93	7.18	0.17	1.26	0.60	3.11	0.01	0.59
EPS	37.82	210.06	-28.68	42.54	34.87	132.56	-4.25	31.43

Source- Researcher's computation (2015)

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Table IV: Correlation analysis

Financial variables	Independent corporate governance variables	
	+	-
PAT	DL (in), CAR (in)	BS (in), BI (in), CI (in), BE (in), AS (in), AE (in)
ROA	BI (in), CI (s), CAR (s)	BS (in), DL (s), BE (in), AS (s), AE (in)
NW	BS (in), DL (s), AS (s), AE (in)	BI (in), CI (s), BE (in), CAR (s)
EPS	BS (s), CAR (in), DL (in), AS (in), AE (in)	CI (in), BE (in), BI (in)
NPA	BS (in), BI (in), DL (s), BE (in), AS (s), AE (in)	CI (s), CAR (s)

Source- Researcher's computation (2015)
S=significant, IN= insignificant

Table V: Coefficients statistics and model summary

Variables	HYPOTHESIS 1		HYPOTHESIS 2		HYPOTHESIS 3		HYPOTHESIS 4		HYPOTHESIS 5	
	Beta value	Sig. Value	Beta value	Sig. Value	Beta value	Sig. Value	Beta value	Sig. Value	Beta value	Sig. Value
BS	0.022	.182	-0.093	.197	0.022	.044	0.070	.001	-0.060	.207
BI	-0.029	.093	-0.040	.591	-0.015	.188	-0.041	.067	0.172	.001
BE	-0.304	.419	-0.271	.105	-0.437	.081	-0.803	.109	1.544	.157
CI	-0.066	.586	-0.381	.481	-0.034	.678	-0.198	.223	0.420	.238
DL	-0.288	.014	0.460	.370	0.242	.002	-0.165	.284	0.782	.021
AS	-0.033	.165	-0.040	.707	0.042	.008	0.010	.742	0.042	.546
AE	0.008	.532	-0.055	.359	0.009	.302	0.021	.235	0.038	.331
CAR	0.120	.000	0.125	.153	-0.028	.036	0.116	.000	-0.235	.000
R square	0.607	0.166	0.802	0.299	0.362					
Adj R Square	0.579	0.107	0.788	0.249	0.317					
F value	21.907	2.821	57.335	6.038	8.057					
ANOVA sig value	0.000	0.002	0.000	0.000	0.000					

Source- Researcher's computation (2015)

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