Board Conduct in Banks

Abstract

We examine the minutes of Indian banks' board meetings and offer insights into the issues

tabled and discussed in bank boards. We find that risk issues account for only 10% of the issues

tabled with regulation and compliance accounting for the most (41%), followed by business

strategy (31%). Majority of the issues are not deliberated in detail. We interpret the evidence

as suggestive of under-investment in risk and over-investment in regulation and compliance by

bank boards.

Key Words: Banks, Bank Failure, Board of directors, Board minutes, Corporate governance,

Risk, Risk-taking

JEL Classification: G30, L20

1 Introduction

The global financial crisis called into question the role played by board oversight in ensuring effective governance of banks and financial institutions. Several multilateral and national reports have highlighted the failure of bank boards in effectively assessing risks and have suggested that a key reform should be in the area of positioning risk management as a central responsibility of the board.¹ Therefore, it becomes important for academics and policymakers to observe and understand the internal operations of bank boards (Adams et al. (2010)).

Prior academic research has concentrated on how board *structure* affects governance in banks (see Mehran et al. (2011); Nguyen et al. (2016)). However, board conduct in banks has not received attention, which is not an accident as board-level discussions are typically private. While minutes of board meetings are recorded, they are not shared publicly. Despite the importance of board oversight as highlighted by various policy reports analyzing the global financial crisis, no academic study examines board conduct in banks. To shed light on board conduct in banks, we obtain one instance of confidential board meeting minutes of a majority of Indian banks. Although this data naturally creates limitations with respect to generalizability, it nonetheless offers the first detailed look into board conduct in banks, which has hitherto remained private and confidential.

Using this new data, we explore the following research questions: What percentage of issues tabled in a bank's board meeting is focussed on strategy, risk, financial reporting, compliance, and human resources (HR)? Does this allocation correlate with the performance outcomes of the bank? Do bank boards deliberate issues at length, or do they resort to plain "box-ticking"? Due to the constraints on the external validity of our analysis, this paper is primarily descriptive in nature. Nevertheless, we are able to extract several patterns from this data that provide preliminary insights into these important questions.

As Schwartz-Ziv and Weisbach (2013) highlight through their analysis of the board minutes of a sample of industrial firms from Israel, an analysis of minutes of board meetings provide several advantages. First, while board structure captures de jure aspects of the board, board minutes capture the de facto working of the board. The de facto workings of the board can differ substantially from the de jure aspects due to the interpersonal interactions and relationships of

¹For a select few, see Senior Supervisors Group (2014); Walker (2009); UNCTAD (2010); Sheifer (2011); Group (2012). Specifically, Walker (2009) recommends that "board-level engagement in risk oversight should be materially increased, with particular attention to the monitoring of risk and discussion leading to decisions on the entity's risk appetite and tolerance."

board members. Board minutes come closer to capturing these interpersonal relationships than board structure. Second, board minutes enable us to understand the complexity and nuanced details of the topics brought up in the board meetings. The examination of board minutes helps identify issues such as "box-ticking" by bank boards, which would otherwise be difficult to deduce.

We follow the methodology of Schwartz-Ziv and Weisbach (2013) to analyze the board minutes. We transform the minutes into a quantitative database, which enables us to draw inferences about the quality and quantity of discussions relating to the various functions in a bank. We classify the issues that are tabled in these meetings into five categories: risk, business strategy, financial reporting, regulation and compliance, and human resources. For each issue, we record the category to which the issue belongs and whether the board deliberated in detail on the issue or not. We record an issue as having been deliberated in detail if the board (i) asked for more information, (ii) elaborately discussed the issue, and/or (iii) the board rejected a proposal or modified it.

We report the following key findings. We find that the average number of issues brought forth before a bank board is 50 as compared to 8.5 in boards of industrial firms, as shown in Schwartz-Ziv and Weisbach (2013).² Regulatory and compliance-related issues account for the most (41%) of the issues tabled, followed by issues relating to business strategy (31%). Issues relating to risk account for 10% of the total issues. Overall, in our sample, we find that the regulatory and compliance issues form the largest percentage of issues tabled, followed by business strategy issues, while risk issues tabled are lesser than both of them. Statistical tests of differences in means and medians as well as first-order stochastic dominance among the respective distributions, confirm this ordinal ranking.

To test if the boards resort to "box ticking" or deliberate on the issues in detail, we examine the proportion of issues deliberated. Most of the issues that are tabled are not deliberated in detail. A natural question to ask would be whether boards do not consider risk issues much due to such issues being handled by the risk management committees (RMCs) of the boards. In this context, it is important to note that boards cannot outsource dealing with the risk issues to the RMCs. RMC is a mechanism, much like the internal audit, which provides detailed inputs to the board about risk-related issues. Further, there are board sub-committees on other topics

²We are grateful to Miriam Schwartz-Ziv for suggesting that the length of board meetings could be an explanation for this observation. Typically the bank boards in our sample meet for an entire day as opposed to the boards of industrial firms in their sample, which meet for a few hours.

such as compensation, audit, etc. Thus, there is no reason to expect the board to focus less on risk due to the presence of RMCs.

Next, we investigate the association of our conduct measures with bank level outcome variables. We find that the percentage of risk issues tabled is positively associated with the return on assets and return on equity, while it is negatively related to the proportion of non-performing assets to advances. However, we do not find any significant associations of most other categories of issues tabled with bank-level outcome variables, an exception being the positive relationship between the percentage of financial reporting issues tabled with the proportion of non-performing assets to advances.

Having established that board conduct is correlated with performance, we examine the association of board structure with that of board conduct. We examine this association in order to complete the loop on board structure influencing board conduct and, in turn, the bank's performance. We find that prior board experience is positively associated with the percentage of risk issues tabled and negatively associated with the percentage of human resources (HR henceforth) and financial reporting issues tabled. We also find that having board members with international experience and private sector experience is positively associated with the percentage of risk issues tabled. Further, board size is positively associated with the percentage of financial reporting issues tabled and negatively with the percentage of HR issues tabled. Finally, we find that financial qualifications, prior management level experience, and independence of directors are negatively associated with the percentage of HR issues tabled. Overall, our findings suggest that our measures of board conduct are related to board characteristics and measures of bank performance.

To enable interpretation of our key findings, we construct a simple model of multi-tasking in effort by the board. The model predicts the ordinal ranking of issues tabled across three main categories — strategy creation, risk mitigation, and in complying with laws and regulations — and enables us to infer if the effort invested by the bank board in a particular category is efficient or not. A multi-task setting represents a natural choice given the multiple stakeholders—shareholders, depositors, other creditors, and the regulator—that banks have to contend with.

We obtain the following predictions. First, irrespective of the regulatory pressure faced by a bank board, the board would invest the least effort in risk mitigation. Specifically, the effort in strategy creation and that in regulation and compliance would be strictly greater than the effort by the board in risk mitigation. Second, if regulatory pressure faced by bank boards is high,

the board would invest more in regulation and compliance than in strategy creation. Thus, the model generates predictions for how the ordinal ranking of the efforts in strategy creation, risk mitigation, and compliance varies with the intensity of regulatory pressure. The model also generates predictions about how over-or under-investment (compared to the optimal level) in each of the three categories varies with regulatory pressure.

We compare the model-predicted ordinal ranking of effort as a function of regulatory pressure with the ordinal ranking observed in our sample. This comparison first seems to suggest that bank boards under-invest in risk mitigation when compared to the economically optimal level; this finding is independent of the regulatory pressure faced by the banks in our sample. Second, this points in the direction of higher regulatory pressure being present in the environment in which the banks in our sample operate. The above two conclusions seem to covey that bank boards in our sample over-invest in matters pertaining to regulation and compliance. Our model also hints at depression in firm value, i.e., the value available to all claimants of banks, due to the current portfolio allocation of effort that bank boards in our sample choose—low effort in risk mitigation, moderate effort in strategy creation, and high effort in regulation and compliance.

Collectively, our study provides important insights into the conduct of bank boards. First, our findings support the concern voiced in the report of the G-30 on the financial crisis that "boards that permit their time and attention to be diverted disproportionately into compliance and advisory activities at the expense of strategy, risk, and talent issues are making a critical mistake" (Group (2012)). To be precise, we only show evidence supporting the concern that boards may be permitting their attention to be diverted disproportionately into compliance at the expense of strategy and risk issues.

To our knowledge, ours is the first study to examine the conduct of the bank boards. Our study thus complements research that focuses on how the structure of bank boards — board size, board independence, and characteristics of the board members, including their financial expertise — affects bank governance (see Mehran et al. (2011) and the studies cited therein). For instance, Nguyen et al. (2016) study the association between the structure of the board and CEO misconduct. Our work also relates to the literature examining the structure of risk management in banks (Ellul and Yerramilli (2013), Aebi et al. (2012), Mongiardino and Plath (2010a)). Our study closely resembles Schwartz-Ziv and Weisbach (2013), who examine board conduct in non-financial firms and relate their evidence to various theories by carefully analyzing board minutes of Israeli government-controlled companies. In contrast to these studies, we focus

on board conduct in banks and financial institutions.

Finally, although we study a snapshot of the issue by looking at one country, our findings are along the lines of several high-level committee reports that highlight similar findings in different countries. For example, the Walker (2009) report for UK banks and UNCTAD (2010) report for US banks underscore the need to materially increase the attention being paid to risk issues by bank boards. These findings suggest that the problem of under-investment in risk issues may not be peculiar to the particular country we study. We add to the literature by reporting systematic evidence beyond anecdotal evidence available in the form of these reports.

2 Differences between Boards in Banks and in Industrial Firms

Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment (Shleifer and Vishny (1997), Giroud and Mueller (2010)). In the corporate governance setting, board of directors provide a mechanism to mitigate conflicts of interest between managers and shareholders.

2.1 Fiduciary duty towards multiple stakeholders

In non-financial firms, it is generally accepted that the board of directors owe fiduciary duties towards shareholders while bondholders have other mechanisms such as covenants to protect their interests. However, corporate governance in banks is much more complex due to the relevance of banks in the economic system and the nature of banking business (Adams (2010)).

Three key differences distinguish the governance of banks from that of industrial firms (e.g., Ciancanelli and Reyes, 2001; Levine, 2004; Macey and O'Hara, 2003; Prowse, 1997). First, the capital structure of banks differs substantially from that of industrial firms. Banks' capital structure comprises almost 90% debt (as opposed to an average of 40% for industrial firms). A significant proportion of these debtholders are depositors who, therefore (collectively) constitute an important stakeholder. Second, partly because of the unique capital structure of banks, but also for other reasons, banks have many more stakeholders than industrial firms (Macey and O'hara (2003), Adams and Mehran (2003)). A bank's insolvency has negative consequences for the financial system as a whole, and these spillovers need to be regulated and/or particular banks need to be bailed out. As a result, the regulator becomes a key stakeholder in the bank.

The deposit insurance authority also has an interest in the bank's health, as its insurance will be called upon in the case of insolvency. The presence of multiple stakeholders can lead to diverging interests, especially with respect to risk. Shareholders may prefer volatility and may myopically focus on profits, while debtholders and regulators are likely to prefer low volatility and focus more on the long-term health of the bank.

Finally, banks' business is opaque and complex. Risks in a bank can change rapidly (Levine (2004)). For lending decisions, banks use soft information, which a third-party would find hard to verify (Bhowal et al. (2021)). Banks also get involved in technically complex trading activities, which are hard for lay investors or lay depositors to understand. Since these risks are hard for investors and depositors to assess and monitor, oversight of the management is delegated to the board of directors and to the regulators. In stark contrast to industrial firms, regulators play a critical role in overseeing management and in bank governance.

All three features—a capital structure dominated by debt, multitude of stakeholders, and opacity and complexity of operations—play a role in the governance of banks. These affect the interaction between the board and management, on the one hand, and the relationship between the bank and its regulators, on the other hand. In fact, because of the special nature of banking and the spillover effects that banks create on other parts of the economy, the duty of care owed by the board of a bank is substantially more expansive when compared to the duty of care owed by the board of an industrial firm. In other words, a clear case can be made for bank boards being held to a broader, if not a higher, standard of care than boards in industrial firms. In particular, bank boards owe fiduciary duties to fixed claimants, i.e., the depositors and other debtholders, the regulator, as well as to equity claimants.

2.2 Role of regulation

Regulation presents several challenges in corporate governance. Even though regulation can be considered an additional mechanism of corporate governance, it may reduce the effectiveness of other mechanisms in coping with problems in corporate governance. The main aim of the regulator, which is to reduce systemic risk, might come into conflict with the main goal of shareholders, which is to increase equity value. The conflicting goals could also introduce a new agency problem. For example, while a regulator may focus on bank survival, 'appropriate' behavior, and acceptable performance, shareholders would focus on equity value. As well, regulators may be more risk-averse than shareholders (Kim and Prescott (2005)). Regulators may

discourage competition and discipline banks by imposing restrictions on ownership structures (Prowse (1997); Macey and O'hara (2003)). Regulators may also limit the power of markets to discipline the banks (Ciancanelli and Reyes-Gonzalez (2001)). Regulators may even pursue their own interests, thereby creating agency problems in the process of regulation (Boot and Thakor (1993); Santomero (1997)).

3 The Indian Banking System

To provide an overview of the institutional background, we describe the banking system in India briefly. Banks in India dominate the financial landscape. Accounts of the flow of funds into the Indian economy show that banking flows account for more than 50% of the total financial flows in the economy.³ The Indian banking system is divided into the following categories: (i) government-owned banks, called public sector banks, (ii) private-sector banks, and (iii) foreign banks (Tantri (2020)). All public sector banks are listed and hence have a significant minority stake. Government stake in the public sector banks varies between 55% and 85%.⁴ Foreign banks are fully owned subsidiaries of non-Indian banks and are registered as foreign banks in India. The banking system is regulated by the banking regulator—The Reserve Bank of India (RBI).

Corporate governance in public sector banks and privately owned banks differ significantly. The Ministry of Finance, Government of India, effectively exercises the powers of a majority shareholder in public sector banks. Laws that govern public sector banks lay down rules regarding corporate governance—the SBI Act of 1955 for the State Bank of India and the Nationalization Acts of 1967 and 1980 for the other public sector banks. The respective acts applicable to public sector banks specify the types of directors to be chosen and the way such directors are to be chosen. These different categories of directors include representatives of the Government and the RBI, qualified finance professionals, and employee representatives. After listing, the respective acts have been amended to include shareholder elected directors on the board. The positions of the Chairman of the board and that of the CEO are held by a single individual. As a majority shareholder, the Government gets to appoint the CEO, and the same is done through a bureaucratic process.

Private-sector banks, on the other hand, follow corporate law with respect to their corporate

³Source: http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15440

⁴Source: http://financialservices.gov.in/banking/Shareholding

governance. Private bank boards comprise of both executive as well as independent directors in accordance with corporate law. Private-sector banks follow international best practices in matters pertaining to the appointment of the CEO and directors on the board. The process starts with the appointment of a search committee comprising of experts in banking and related areas and culminates with shareholder nod for the proposed appointment.

3.1 Responsibilities of the Board

The board of a bank has the overall responsibility for the bank, including risk management, culture, governance framework, and approving as well as overseeing management's implementation of the bank's strategic objectives. The central bank's guidelines on bank governance clearly state that the board is responsible for overseeing a strong risk governance framework. The board is required to take responsibility for the bank's risk-taking activities, assessing risks and issues independently. Furthermore, it is in charge of defining the risk appetite of the bank and ensuring the bank's adherence to the risk policy and risk limits. Other responsibilities of the board involve taking responsibility for the bank's business strategy, financial soundness, key personnel decisions, and internal organization.

The board meets these responsibilities by setting agenda for its meetings and actions emanating therefrom as recorded in minutes of the meetings. The board is required to maintain appropriate records of their proceedings at each meeting, including minutes of meetings, summaries of matters reviewed, main discussions, dissenting opinions, decisions taken, recommendations made, and board resolutions. The minutes of meetings are required to be prepared in accordance with the guidelines issued by the Institute of Company Secretaries of India (ICSI).

To fulfill its responsibilities, the board has to define certain governance structures; one such structure is the formation of committees such as the risk management committee (RMC), audit committee, nomination committee, etc. For example, the nomination committee feeds in information regarding possible candidates for appointment to the board, but the final decision of who to appoint (keeping in mind the candidates' skill, experience, and regulatory requirements) lies with the board. These committees only aid the board in carrying out its responsibilities but do not have the final responsibility, which lies with the board. Since the board oversees the risk profile of the bank, it is also required to consider issues not raised by the RMC that could affect the risk profile of the bank. Furthermore, boards are not limited by the reports submitted by any sub-committees such as the RMC. They are required to robustly review the

findings and to challenge the assumptions behind any recommendations. The minutes that we study are of board meetings only. The issues tabled and discussed in various board committees are not considered in our analysis.

4 Data and Methodology

Our data are based on the minutes of bank board meetings (hereafter "board minutes" for brevity) obtained from a committee instituted by the Reserve Bank of India (RBI) in January 2014 to review the governance practices of boards of Indian banks. To fulfill its mandate, the committee requested all major banks in India to provide detailed minutes of their latest board meeting. The request was sent to 24 public sector banks and 17 privately owned banks. The request was sent during the second week of February 2014. By then, not all banks had completed the board meeting for the third quarter (ending December 2013). Hence, the committee requested banks to share the minutes for the board meetings in their second quarter (ending September 2013). 17 public sector banks and 12 private banks provided the required data. The banks that provided the data are all listed and account for 70% of market capitalization and 65% of revenues of all banks in India.

Representative data from the minutes of a board meetings contain the following information: name of the bank, date and venue of the meeting, names of the directors who attended the meeting, names of the bank executives (other than directors) who were invited to the meeting, agenda for the meeting and the way the agenda items were deliberated and resolved. The document further provides information about each item on the agenda. A brief explanation is provided about the agenda item.

The document then records the views expressed by the members of the board on that agenda item, though the identity of the individuals expressing the view is not mentioned.⁵ This recording of views goes beyond just noting down whether an issue was discussed or not, rather the document contains details related to concerns expressed by board members over certain issues, or expression of dissent, rejection of a policy, requests for clarification, and direction to management for further action including seeking expert opinion—all of which are noted down as an issue being deliberated.

Unfortunately, the minutes do not capture the tone of a view expressed but do capture the

⁵An example of one such view is as follows: "Some of the Directors expressed their concern over accretion of NPA levels despite very good recovery made by Bank during the quarter"

opinions expressed. The description of a deliberated issue ends with a note about how the chair decided to close the issue. A closure usually takes one of the following forms: (i) voting; (ii) seeking clarification from the management and a discussion on what the clarification should be; (iii) postponement of the issue for further consideration in subsequent meetings; (iv) issuing instructions to the management regarding further action; (v) seeking expert opinion on technical matters; (vi) recording of dissent; and (vii) providing advice to the management. Finally, the document records the resolution that was passed by the board.⁶

We recognize that some straightforward issues may not need deliberations. Thus, even an agenda item being tabled provides information regarding the focus and interests of the board. However, deliberations capture another dimension of board behavior. Our interest in recording whether the agenda item was deliberated or not stems from trying to identify whether board members are active in challenging the assumptions and policy decisions taken by a particular executive or a group of executives. We consider an issue being deliberated as a positive signal because it suggests that there was an open debate regarding the issues, and the decisions were not driven by one or a group of powerful board members.

In particular, the existence of active deliberations precludes the existence of executive group-think, which is known to lead to sub-optimal outcomes for the banks. The Walker report (2009) finds that one of the main characteristics of failed bank boards is the failure of the board to "challenge the executive on substantive issues as distinct from a conventional relatively box-ticking focus on process." The report further notes that this lack of challenge can show up as diffidence when discussing complex issues by not asking clarificatory questions or conforming to the opinions and decisions of stronger members to not appear disruptive, non-collegial, and even as disloyal. Thus, a board involved in box-ticking is unlikely to deliberate on issues in detail and ask uncomfortable questions to the management.

4.1 Agenda and Resolutions

The board meetings do not use prepared resolutions. The resolutions are prepared during the meeting. The company secretaries use standard formats for resolutions but do not fill them up before the meeting. After the discussion on an agenda item, they fill up the relevant fields

⁶Details of the contents of board meeting minutes are based on extensive discussions with company secretaries. Company secretaries are the members of a professional body known as the Institute of Company Secretaries of India. The body is constituted by law. Only the members of the institute can serve as secretaries to companies. They manage the process of minute writing.

just before a resolution is taken up for voting. In a meeting conducted in its true spirit, there is no way anyone can be sure whether an agenda item will be passed in the meeting. Thus, resolutions cannot be prepared in advance.

Furthermore, from our reading of the board meetings, it does not appear that they come with prepared resolutions. The board is sometimes offered new and pertinent information during the meetings rather than before, which precludes prior preparation. For example, the meeting minutes in one of the banks stated that the Reserve Bank of India (India's central bank) had commented on the lack of policy for general provisions and reserves during its annual financial inspection (AFI). This was clearly an important point of consideration, which was only brought forward in the board meeting.

The chairperson circulates the draft agenda before the meeting. The members can suggest the inclusion of additional agenda items or exclusion of a proposed agenda item from the meeting. The chair does not have discretion regarding mandatory issues such as consideration of financial statements, consideration of management decisions that need the board's approval, etc. The chair eventually decides about inclusion or otherwise of other issues.

4.2 Data On Financial Performance

The data pertaining to bank-level variables such as the proportion of non-performing assets, return on assets, net interest income, etc. are from the Prowess database maintained by the Center For Monitoring Indian Economy (CMIE). CMIE is a leading Indian policy research organization, which specializes in the collection and dissemination of Indian corporate data.

4.3 Summary Statistics

Our sample consists of 17 government-owned and 12 private Indian banks. Due to confidentiality agreements, we cannot identify individual banks in our sample. However, all 29 banks are among those listed in Table 1. Summary statistics on the performance of Indian banks coinciding with the second quarter of 2013-14, for which the board minutes are analyzed, is presented in Table 1.

A potential concern with our sample is the extent to which these banks are comparable to other banks across the world. Some of the large banks compare well with their global peers in terms of size. HDFC Bank, the largest Indian bank by market capitalization, is ranked 52^{nd} in

the world with a market capitalization in excess of \$32 billion.⁷ This compares well with the market capitalization of some of the well known banks in the world such as Deutsche Bank AG of Germany (\$45.69 billion), Society Generale of France (\$47.62 billion), Credit Suisse group of Switzerland (\$51.51 billion) and Standard Chartered Bank of U.K. (\$51.58 billion). ICICI Bank, the second-largest private-sector bank by market capitalization and the largest private sector bank by book value of assets, is ranked 66th in the world with a market capitalization in excess of \$25 billion. The largest public sector bank—State Bank of India—is ranked 68th. It is also important to note that three Indian banks are a part of the top 100 in the world in terms of market capitalization. This is comparable to industrial economies such as U.K. (5), Canada (5), Japan (4), Australia (4), France (3), Germany (2), and Brazil and South Korea (1 each).

Using metrics for operational and financial performance as of the second quarter of 2013-14, Indian banks compare well with their global peers. Indian banks maintain a capital adequacy ratio of 13.2, which is 65% higher than the Basel II norms. These numbers compare well with the average capital adequacy ratio of 15.46 maintained by American Banks.⁸ In terms of operational parameters such as return on assets (ROA), the proportion of non-performing assets (NPA), net interest margin (NIM), Indian banks' performance is comparable to global standards. However, consistent with the political economy literature (Cole (2009)), private banks outperform public sector banks in almost all parameters. Panel B of Table 1 shows that for private-sector banks average ROA is 1.33%, Gross NPA to assets ratio is 1%, and NIM is 2.75%. The same numbers for public sector banks turn equal 0.72%, 2.2% and 2.30% respectively.

We further compare Indian banks with banks in developing economies. Table A.1 in the online appendix provides comparative information about the five largest banks in Brazil, Russia, China, and India as of FY 2013-14. We find that Indian banks compare well with other developing markets in terms of critical operational parameters such as Non-performing assets (NPA) to advances ratio, Net interest margin (NIM), and Capital adequacy ratio (CAR). However, in terms of size, Indian banks are closer to Brazilian and Russian banks but are smaller than their Chinese counterparts.

⁷http://www.relbanks.com/worlds-top-banks/market-cap

⁸http://www.newyorkfed.org/research/banking_research/QuarterlyTrends2013Q2.pdf"

4.4 Methodology

Since the data is qualitative in nature, it is important to describe the methods used to convert the qualitative database into a quantitative one. We use content-analysis methodology as mentioned in Krippendorff (2012) and Lieblich et al. (1998), which specifies the procedures to reduce words of text into fewer content categories. This methodology involves constructing a quantitative database by categorizing or coding different aspects of a qualitative data set.

This categorization is done in two stages. In the first stage, we perform a preliminary examination of data from a small number of government-owned and private-sector banks to establish the list of categories—a method known as emergent coding, under which categories are established following initial examination of the data (Stemler (2001)). The first step was done independently by two of the authors; after comparing notes and reaching a consensus, they established five categories—risk, business strategy, regulation and compliance, financial reporting, and human resources.

The second stage involves categorizing issues tabled in board meetings into one of the five categories. One of the two authors involved in the first stage categorized the various issues into the above-mentioned five groups, and the second author validated the categorization. In cases of disagreement, the two authors discussed and agreed on the best classification. Similar to Schwartz-Ziv and Weisbach (2013), we used the same code for all the board meetings, which helps maintain consistent application of coding principles. Our unit of analysis is at the issue level. We outline the classification process below:

First, for each issue, we note down the name of the bank and the date of the meeting. Second, we classify each issue into one of the five categories. A brief overview of each of the categories is provided below. Table 2 provides more examples of issues in each category.

- 1. Risk: Risk management plays a critical role in the banking business (Ellul and Yerramilli (2013)). Therefore, we analyze matters relating to risk separately. These include reviewing large foreign exchange exposures, fixing exposure ceilings across different sectors and products, adherence to exposure norms, and reviewing policies pertaining to credit risk management, market risk management and operational risk management.
- 2. Business Strategy: These include forward-looking issues relating to business strategy that have long-term consequences for the bank. We consider only those issues that are not mandated by the regulator as a business strategy issue. Representative examples would

be a proposal to enter the insurance business by forging a joint venture with a foreign collaborator, initiating a promotional campaign, and approval of large investments.

- 3. FINANCIAL REPORTING: These involve regular stock-taking of financial results. These issues are generally based on the management's presentation of financial results for the quarter. These include, for example, a discussion of quarterly performance, a review of the growth of deposits, and peer-level performance reviews.
- 4. Regulation and Compliance: Under this category, the first set of issues are generally tabled and discussed in response to either a specific instruction or a general guideline by regulators. A representative issue in this category would be a discussion on Anti-money Laundering Guidelines issued by the RBI or on meeting the KYC (Know Your Customer) norms issued by the RBI. This category also includes issues that must receive the formal approval of the board, such as granting the authority to sign a contract or financial reports, the nomination of a trustee, power of attorney, etc.
- 5. Human Resources: This includes issues such as appointments and approvals of directors, perks and perquisites for employees, incentive schemes for employees, promotion policies for employees, training, and skill development of employees.

Third, if an issue is just presented before the board and the related resolution is deemed to be passed without discussion, then we code such an issue as just presented or tabled without it being deliberated.

Finally, as mentioned in section 4.1, we are interested in capturing whether an issue was discussed at length to pin down the presence of challenge and open debate in the board meetings. If the tabling of an issue is followed by a discussion on the same, then we code the issue as deliberated. Before coding an issue as deliberated, we make sure that a discussion on the issue is found in the minutes. Specifically, we define an issue as deliberated if the board discusses the issue in detail and takes any of the following actions:

- 1. directs management for further action
- 2. demands more information
- 3. expresses concern over relevant existing processes, data, performance indicators, etc.
- 4. rejects a new policy or proposal.

An issue where the minutes just mentions that the issue was deliberated without providing details of the discussion is not considered as deliberated

5 Results

5.1 Tabling of Issues Across Categories

Table 3 shows the total number of issues tabled in a board meeting for each category. Panel A shows the summary statistics for the number of issues tabled in a board. The summary statistics for the percentage of issues are shown in brackets. Note that the percentage figures in brackets need not add up to a hundred as they represent summary statistics of the percentage of a category of issues tabled. For instance, the figure in brackets in row one is the mean percentage of risk issues tabled out of all issues by bank boards.

Panel B shows the detailed distribution of issues tabled in each category. On average, bank boards table 50 issues, which is significantly greater than the 8.5 tabled in the boards of industrial firms, as shown in Schwartz-Ziv and Weisbach (2013). The bank boards in our sample table significantly more issues because they meet for an entire day, in contrast to a few hours as in the case of Israeli firms in Schwartz-Ziv and Weisbach (2013).

On average, bank boards in our sample table 18 issues in business strategy and 19 issues in regulation and compliance. In contrast, they only table six issues in risk, five in financial reporting, and three in human resources. Examining the numbers in the brackets in Panel A, we see that boards table issues relating to regulation and compliance the most, which takes up 40.88% of the total board attention. Issues relating to business strategy are next in importance as they receive 30.63% of the board's attention. In comparison, issues relating to risk only account for 10.31% of the board's attention.

In tables A.2 and A.3 of the online appendix, we formally test if the percentage of risk issues tabled is dominated by the percentage of strategy issues tabled and the percentage of regulation and compliance issues tabled. In table A.2, we find strong evidence that the percentage of risk issues tabled is dominated by the percentage of strategy issues tabled. The difference in means is statistically significant at the 99% level. In table A.3, we similarly find strong evidence that the percentage of issues tabled pertaining to regulation and compliance dominates the percentage of strategy issues tabled. The difference in means here is statistically significant at the 95% level. Overall, we find that regulation and compliance issues are tabled the most, followed by business

strategy issues. The percentage of risk issues tabled is lesser than both of these categories.

5.2 Robustness of Findings on Issues Tabled

We now examine the robustness of the above findings. To do so, we inspect the distribution of various categories of issues tabled. We also examine whether the categories of issues tabled vary with the ownership and size of the bank. Finally, we look at whether our measures of board conduct are associated with bank-level outcome variables.

5.2.1 Examining the entire distribution

In Panel B of table 3, for each of the categories, we examine the distribution of the number and percentage of issues tabled in a board meeting. Specifically, we show the 10th, 25th, 50th, 75th, 90th percentiles together with the mean for the number and percentage of issues tabled in a board meeting across the various categories. This table displays the distribution by the number of issues tabled while the values in brackets display the distribution for the percentage of issues tabled. In this table, we observe that the distributions for the number and percentage of business strategy issues tabled first-order stochastically dominate the distributions for the number and percentage of risk issues tabled. Similarly, we observe that the distributions for the number and percentage of regulation and compliance issues tabled first-order stochastically dominate the distributions for the number and percentage of regulation and compliance issues tabled.

Finally, we observe that the number and percentage of regulation and compliance issues tabled are strictly greater than the number and percentage of strategy issues tabled at the 10th, 25th, 50th percentiles. However, the reverse is true for the 75th and the 90th percentiles. Thus, we cannot conclude that issues pertaining to regulation and compliance first-order stochastically dominate the issues pertaining to strategy.

5.2.2 Effect of state versus private ownership

Table 4 shows how the number and percentage of issues tabled across various categories vary with the nature of bank ownership. Since the Indian banking sector comprises primarily of public sector (government owned) banks and privately owned banks, we make this important distinction. While the number of issues tabled is about 30% higher in private-sector banks than in public sector banks, the fraction of issues tabled across the various categories is similar for the private sector banks and the public sector banks.

5.2.3 Association with bank size

We now examine if the above inferences vary with the size of the banks in our sample. Figure A.1 in the online appendix shows the correlation of the fraction of issues tabled in a particular category with bank size. From this figure, we can infer very clearly that the fraction of issues tabled in a particular category does not vary with bank size. Thus, a key bank characteristic such as bank size does not seem to drive the above inferences.

5.2.4 Association with bank-level variables

To examine if our measures of board conduct are indeed meaningful, we examine their relationship with various bank-level variables that capture bank-level outcomes. In table 5, we examine the relationship between various categories of issues tabled in bank board meetings with various bank-level variables. The outcome variables considered return on assets, return on equity, net non-performing assets to net advances ratio, and gross non-performing assets to gross advances ratio.

We regress a bank-level outcome variable such as return on equity on the proportion of issues of a particular category tabled in a meeting. Among the various categories of issues tabled in board meetings, we find that the percentage of issues pertaining to risk is significantly related to all the proxies for bank performance. Specifically, a higher percentage of risk issues tabled in board meetings associates positively and significantly with return on assets and return on equity and negatively and significantly with the proportion of non-performing assets to advances. However, the other categories, such as business strategy, regulation, and compliance, financial reporting, etc., do not seem to be related to bank performance. One exception to this is the positive association between the proportion of financial reporting issues tabled and the proportion of net non-performing assets to net advances. The proportion of financial reporting issues tabled is negatively related to net non-performing assets to net assets ratio. Figures 1, A.2, and A.3, which show the scatterplot as well as the linear fit, provide the same inferences.

The regressions control for ownership type and bank size by including indicator variables representing government ownership and above median size. We further examine whether the above associations vary with the type of ownership—Government versus private-owned by including the interaction of the binary variable representing government ownership with the proportion of issues tabled in that category. Results in Table A.4 of the online appendix show that the interaction between the government bank dummy and the proportion of risk issues is statis-

tically indistinguishable from zero for all outcomes except the return on assets (ROA). Thus, the relationship is not any different for government-owned banks. When it comes to the ROA, the association is relatively lower for government banks when compared to private banks. The coefficient of the interaction term is negative and statistically significant. However, the overall positive association between the proportion of risk issues tabled and the ROA is higher than the interaction term in terms of absolute magnitude (9.765 Vs. 7.909). Thus, there is a positive association between the proportion of risk issues tabled and the ROA, even for government banks.

5.2.5 How Does Board Conduct Influence Bank-Level Outcomes?

A reader may wonder how can an active board influence a bank's operating performance. An active board member is likely to impact bank operating performance by influencing the functioning of the executives. An active board questions past performance, highlights the areas of improvement, and suggests course correction. More importantly, such boards are likely to monitor the performance of the executives concerning course corrections agreed and question them further if the progress is not satisfactory.

For instance, consider a situation where a bank presents low delinquency numbers by resorting to restructuring of loans. Under regulations prevalent during our sample period, banks could show a low level of default and higher profits by resorting to loan restructuring as the provisioning required on restructured loans was lower (Chopra et al. (2021)). By carefully examining the borrower fundamentals and through penetrating questions to the executive, an alert board could recognize that most of the restructuring transactions are evergreening transactions in disguise. Boards also could monitor such transactions carefully. Such monitoring could reduce evergreening transactions and make the bank balance sheet healthy in a true sense. Such banks are less likely to see a sudden run or a crash when the evergreening is revealed through a regulatory audit or spiraling of defaults. Thus, an active board could contribute to transparency and stability.

Similarly, boards can also detect instances of enjoying a quiet life or lazy banking upon examination of lending policies, turnaround times for loan processing, investments in government securities and cash, sectoral allocation of credit, etc. Such monitoring could increase lending to profitable sectors, and hence, contribute to the income and profits of the banks. Given the lack of data, we cannot pinpoint the exact channel at work.

5.3 Quality of Deliberation in Bank Boards

The Walker Report (2009), which reviewed corporate governance in UK banks, mentions that the sequence in board discussion should start with an idea being presented, followed by the idea being challenged. To examine whether bank boards follow this sequence, we investigate the level of deliberations in bank boards. Specifically, we investigate whether any board member participates beyond merely giving approval or agreeing with the items tabled in the meeting. Actions such as seeking further information or updates, expressing concerns, modifying a proposal, and dissenting with the management qualify as identifiers of deliberations on the issue. It is crucial to capture the presence of active participation and challenge in the board meetings as this was noted as one of the reasons for the failure of bank boards (Walker (2009)).

Table 6 shows the total number of issues that are deliberated in detail across each category. Panel A shows the summary statistics for the number of issues deliberated in detail in the board. The summary statistics for the percentage of issues deliberated in detail are presented in brackets. Panel B shows the detailed distribution for the number of issues deliberated, with the distribution of the percentage of issues deliberated in detail being presented in brackets. On average, bank boards in our sample deliberate four issues in business strategy and three issues in regulation and compliance. In contrast, they only deliberate one issue in each of risk, financial reporting and human resources.

The numbers in brackets in Panel A show that bank boards deliberate issues relating to business strategy the most, which accounts for close to 30% of the issues deliberated. Issues relating to regulation and compliance are next in importance as they account for close to 25% of the issues deliberated. Issues relating to risk account for less than 10% of the issues deliberated.

5.3.1 Robustness of Findings on Issues Deliberated

We now examine the robustness of the findings relating to the issues that are deliberated. To do so, we inspect the distribution of various categories of issues deliberated. We examine whether the categories of issues deliberated vary with ownership and size of the bank. Finally, we look at whether our measures of board deliberations are associated with bank-level outcomes.

5.3.2 Examining the entire distribution

Panel B of Table 6, which shows the distribution of the number and percentage of issues deliberated (presented in brackets) in detail across the various categories, suggests that the above

findings remain robust when we examine the entire distribution rather than just the means. In this table, we observe that the distributions for the number and percentage of business strategy issues deliberated in detail first-order stochastically dominate the distributions for the number and percentage of regulation and compliance issues that are deliberated. Similarly, we observe that the distributions for the number and percentage of regulation and compliance issues that are deliberated, in turn, first order stochastically dominate the distributions for the number and the percentage of risk issues that are deliberated.

5.3.3 Effect of State versus Private ownership

Table A.5 in the online appendix shows how the number and percentage of issues deliberated across various categories vary with the nature of bank ownership. The number of issues that are deliberated in detail equal 10 for both private-sector banks and public sector banks. Further, the percentage of issues that are deliberated in detail is no different between the private sector banks and the public sector banks. As a percentage of the number of issues that are tabled in each category, the fractions are different for the private sector banks and the public sector banks. However, this is primarily because of the differences in the number of issues tabled between the public sector banks and the private sector banks, as we saw in table 4.

5.3.4 Association with bank size

We now examine if the above inferences vary with the size of the banks in our sample. Figure A.4 shows the correlation of the fraction of issues deliberated in detail in a particular category with bank size. From this figure, we can infer that the percentage of risk issues deliberated in detail decreases with bank size, albeit at a very low rate. However, the deliberation of issues that are related to business strategy and regulation and compliance do not vary with bank size.

5.3.5 Association with future bank level variables

To examine if our measures for deliberation in the board are indeed meaningful, we examine their association with several bank level variables using a regression framework. In table 7, we examine the association of the various categories of the fraction of issues deliberated in detail with return on assets, return on equity, net non-performing assets to net advances, and gross non-performing assets to gross advances. We regress a bank-level outcome variable such as return on equity on the proportion of issues of a particular category deliberated in a meeting.

We include binary variables to control for differences between Government-owned and private banks, and for the size of the bank.

In line with the results relating to tabling of issues presented in table 5, we find that the percentage of issues pertaining to risk is related to most of the proxies for bank performance. Specifically, the percentage of risk issues deliberated in board meetings associates positively with return on assets and return on equity, and associates negatively with the proportion of non-performing assets to advances. While these relationships are economically significant, none of them are statistically significant. We think that the primary reason for the weakening of the results is the loss of statistical power. As noted before, less than a fifth of the issues are deliberated. Hence, most of the values for the key dependent variable and the interaction term are zeros. With only 29 observations available for the test, the variation reduces significantly. Therefore, even where there is an economically meaningful relationship, it is hard to establish statistical significance.⁹

Overall, our results of low level of deliberations support the findings in the Walker Report (2009), which identifies "absence of challenge in the board room" as one of the principal deficiencies in bank boards.

5.4 Determinants of Tabling of Risk Issues

It is possible that the reason we see fewer risk issues being discussed is due to safer banks tabling fewer issues. To address this concern, we run a determinants model to understand the drivers of propensity to discuss risk issues. We consider two types of determinants: risk-related drivers and other bank characteristics; both these drivers are calculated as average values in the three quarters prior to the second quarter of 2013—the quarter which covers our sample period. We present the results using risk-related drivers (other bank characteristics) in table 8 (table 9).

We use standard measures of risk used in the literature: volatility of equity returns, volatility of earnings, capital adequacy ratio, provision coverage ratio, net NPA by net advances, and gross NPA by gross advances (Laeven and Levine (2009); Delis Kouretas (2011); Shehzad. de Haan,

⁹We further examine whether these associations vary with the type of ownership—Government versus privateowned banks. We use a binary variable Government Owned Bank, which takes the value of 1 for governmentowned banks and zero otherwise. We also interact the above binary variable with the proportion of issues deliberated in each category. We present the results in Table A.6 of the online appendix. The relationships between various categories of issues deliberated, and bank-level variables do not appear to be different for government banks when compared to private banks.

Scholtens (2010)). The measures of profitability used are return on assets (ROA), return on equity (ROE), and net interest margin. We use total assets to proxy size, loan growth to measure activity levels, and the proportion of government ownership to capture differences arising from ownership. The dependent variable in this regression is the percentage of risk issues tabled as a proportion of the total number of issues tabled in the board meeting in column (1), while the dependent variable in column (2) is the percentage of risk issues deliberated as a proportion of the total number of issues deliberated in the board meeting.

As seen Tables 8 and 9, we do not find any significant association between prior risk-profile or bank characteristics and the propensity to discuss risk issues. This suggests that the findings related to a lower proportion of risk issues being tabled and deliberated are not driven by safer banks tabling fewer risk issues. The lack of association offers another takeaway: since boards of riskier banks are not tabling more risk issues, it is possible that even in riskier times, boards may not change their behavior to take into account the increased risk.¹⁰

A second concern regarding the results pertains to the uniqueness of the time period. Since we only have data for one quarter, it is important to understand whether this quarter was any different from other time periods and whether this difference could be driving the results we observe. Since we do not have data for board meetings of other periods, we do the next best thing, which is to compare the performance of the banks across different parameters over time. We graphically plot the average values of several bank characteristics for the four quarters of the year 2012-2013, which includes Q2 of 2013—our sample quarter. Examining the figures A.5 to A.10 in the online appendix, we do not observe any major differences in our sample period and the other quarters. Particularly, the measures of risk—NPA by advances and net provision ratio—do not seem to be different for our sample quarter. The result suggests that the results we observe are not driven by idiosyncrasies of the chosen time period.

5.5 The relationship between board structure with board conduct

A large literature has carefully examined the association between board structure and performance and found equivocal results (Hermalin and Weisbach (1991); Yermack (1996); Bebchuk et al. (2009); Eisenberg et al. (1998); Bhagat and Black (2002); Ferris et al. (2003); Hillman (2005)). Various dimensions of board structure examined include the size of the board, stock

¹⁰We thank our anonymous referee for suggesting the extension of these results to offer insights about riskier periods.

ownership of the board members, whether the board members are insiders or outsiders, educational background of board members, other engagements of board members, etc. Plausible endogeneity involved in board selection and lack of data pertaining to board conduct have been major stumbling blocks in relating board structure to corporate performance via board conduct.

Although Vafeas (1999) find that a higher frequency of board meetings is associated with better operational performance, they do not observe the actual board conduct, which should influence performance. It has also been observed that it is not apt to generalize the findings from studies on general corporate boards to banks, which are complex and opaque by nature (Aebi et al. (2012); Coles et al. (2008); Haan and Vlahu (2016)). Further, literature has also found that monitoring and advising by boards captured by proxies of board structure help to reduce misconduct (Nguyen et al. (2016)).

Motivated by the above findings and by the lack of consensus in the literature, we examine the association between board structure and conduct in our sample of banks. The structural dimensions we examine are quite comprehensive. These include the size of the board, age of board members, professional experience, prior board experience, educational background, political connections, corruption charges, among other things. We first identify the attributes for each board member and then calculate the average for a bank. As mentioned earlier, our board minutes cover the meeting conducted for the July-September quarter of 2013. Therefore, we collect information about directors on bank boards as of 30^{th} September 2013. As before, the issues tabled in the board are classified into five categories; financial reporting, risk, human resources, business strategy and regulation and compliance. We then regress the percentage of issues tabled as a proportion of total issues tabled in a given category on the various board characteristics. We also include binary variables to capture Government ownership and size of the bank.

The results, which are presented in table 10, show some board attributes are related to the types of issues tabled in board meetings. First, prior board experience, which captures the cumulative experience of board members, is positively associated with the percentage of risk issues tabled and negatively associated with the percentage of HR and financial reporting issues tabled. This finding is not surprising because board members with significant board experience may be in a position to appreciate the importance of risk better than others and hence spend considerable time on these issues.

Second, boards with high private sector experience seem to focus more on risk-related issues.

This association could be driven by the directors being aware of the perils of neglecting risk (Westphal and Milton (2000); Cohen et al. (2008)) based on their own experience/ expertise gained through their private networks.

Third, international experience is positively associated with the percentage of risk issues tabled. This is conceivable because board members with international experience may have a better understanding of risk issues to exposure to other risk management systems and awareness of other risk management procedures. Therefore, it is likely that they give priority to risk-related issues.

In addition, we find that attributes such as board size, age, financial sector experience, managerial experience, and independence are associated with a lower focus on HR related issues.

These findings, together with the correlation of board conduct with bank level variables, therefore, highlight the importance of examining the actual conduct of boards.

5.5.1 Comparing with a benchmark bank

To validate our inferences on the level of discussion on risk matters in the board, we employ as a benchmark a bank that has won multiple awards in the last decade for having the best risk management practices in India. The RMC of this bank meets seven times a year, as opposed to the average of four for the entire sample. In this bank, the percentage of risk issues tabled equals 22%, which is double the average of 10% for the entire sample. The risk committee of this bank ratifies 67% of the issues put forth, while the average for the entire sample is only 26%. These factoids, therefore, lend credence to our findings that the average level of focus on risk in bank boards is quite inadequate.

6 Concluding Thoughts

Prior academic research on bank governance has mostly concentrated on the role of board structure. However, board conduct and its relationship to governance in banks have not received attention. In this paper, we fill this gap by analyzing the minutes of board and RMC meetings of 29 banks in India. We find that risk issues account for 10% of the board's attention, with compliance and regulation accounting for the most (41%) followed by business strategy (31%). Using a simple theoretical framework to enable the interpretation of our empirical results and to

highlight the incentive mechanisms, we infer that bank boards under-invest in matters relating to risk and over-invest in matters pertaining to compliance.

It is important to keep in mind some important caveats and redeeming features relating to our study. Our sample is restricted to the minutes of one board meeting and one board-level committee meeting for each bank. Thus, despite the empirical findings being consistent with the predictions provided by a simple theoretical model, we urge caution in generalizing our findings.

Yet, some features may help in redeeming these weaknesses. Government ownership of banks is pervasive across the world (La Porta et al. (2002)). Therefore, our results may extend better to several emerging economies where governments own banks when compared to studies that focus on banks in the U.S. or U.K. Given the worldwide concerns about corporate governance in banks, it helps to have an analysis of board conduct that includes both private-sector and government-owned banks.

As our study explores the conduct of bank boards for the first time, subsequent work can build on our study along several dimensions. First, given the significant limitations that we have articulated, we hope that subsequent work would overcome these limitations. Specifically, follow-up work can employ larger samples and exogenous shocks to identify how the conduct of bank boards affects bank governance, on the one hand, and how the structure of bank boards affects their conduct and, in turn, bank performance.

Second, could one explanation for the low level of attention paid to risk be the difficulty in understanding and evaluating risk in a bank? Risks assumed by banks may be quite complex because of lending based on soft information, which by its very nature is unverifiable and complex (Petersen (2004)). Also, banks indulge in technically complex trading activities, which make it possibly difficult for even directors in a board to comprehend. In contrast to risk, activities falling under categories such as performance or compliance are easy to comprehend. To what extent does the complexity of the task influence the attention paid by the board to the particular task? Understanding this question can guide banks to recruit appropriate experts as directors to grapple with the complexities involved.

Third, though we have examined the distinctions in board conduct between private banks and public sector banks, we did not throw light on how the influence of bureaucrats in public sector banks affects board conduct. As government ownership of banks is pervasive across the world (La Porta et al. (2002)), such differences between private banks and public sector banks

deserve attention.

Finally, the board conduct in banks may be influenced by the role that regulators play. However, little is known about the agency problems created by regulators in the financial sector, in general, and their impact on bank boards, in particular.

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Gross NPA/Gross Advances Net NPA/Net Advances vo. 4 CM en. Bank Level Variables CVI .2 .05 .15 0 .05 .15 .2 ROA ROE 8 9 Ŧ Ŗ .2 .2 .05 .15 .05 .15

Figure 1: Correlation of Risk Issues Tabled with bank-level variables

Figure shows the correlation of fraction of risk issues tabled with bank level outcome variables. ROA is measured by ratio of net income to yearly averaged assets. ROE is measured as ratio of net income to equity. NPA refers to Non-performing assets. The data for bank level variables are obtained from the RBI website. Fraction of issues is obtained by deflating issues in a given category by total number of issues. All variables are winsorized at 95 percent

Fraction of Risk Issues Tabled

Table 1: Statistics For Indian Banks

This table reports summary statistics pertaining to operating performance, ownership and market capitalization of Indian banks. The Market Capitalization is calculated based on closing share price as on 31st March-2014. Government ownership is also calculated as on 31st March 2014. Other operating metrics are averaged over 2005-06 to 2013-2014. CAR refers to Capital Adequacy Ratio, NIM stands for Net Interest Margin, NII refers to Net Interest Income, NPA refers to Non Performing Assets, ROA refers to Return on Assets and finally P/B ratio refers to Price to Book Ratio.

Panel A: Government-Owned Banks									
Bank	Market Cap	CAR	NIM	NII Growth	Net NPA	ROA	P/B ratio	Profit	Govt
	(In Rs. Billion)							Growth	Stake
Allahabad Bank	49.5	12.662	2.525	0.185	1.148	1.129	1.024	0.144	0.55
Andhra Bank	37.7	12.836	2.758	0.181	0.548	1.273	1.177	0.151	0.580
Bank of Baroda	309.5	13.544	2.428	0.188	0.690	1.000	1.148	0.276	0.550
Bank of India	146.7	11.906	2.265	0.196	1.328	0.841	1.253	0.383	0.640
Bank of Maharashtra	33.2	12.229	2.535	0.176	1.263	0.599	0.872	0.623	0.810
Canara Bank	121.9	13.313	2.275	0.132	1.297	1.060	1.151	0.144	0.680
Central Bank of India	67.3	11.539	2.309	0.158	1.921	0.508	0.990	0.291	0.850
Corporation Bank	29.2	13.713	2.266	0.157	0.630	1.166	1.081	0.180	0.09.0
Dena Bank	32.5	11.770	2.402	0.180	1.902	0.810	0.826	0.455	0.550
IDBI Bank Ltd	104.7	13.358	0.934	0.572	1.262	0.692	0.848	0.278	0.720
Indian Bank	53.4	13.446	3.106	0.171	0.807	1.388	1.089	0.199	0.800
Indian Overseas Bank	62.8	13.349	2.691	0.144	1.329	0.937	1.102	0.044	0.740
Oriental Bank of Commerce	8.99	12.151	2.316	0.163	1.138	1.092	0.939	0.058	0.580
Punjab and Sindh Bank	12.4	12.589	2.656	0.147	1.796	0.774	0.593	-0.101	0.800
Punjab National Bank	269.3	13.160	3.016	0.182	0.812	1.200	1.452	0.187	0.580
State Bank of India	1431.7	12.957	2.703	0.163	1.881	0.906	1.776	0.188	0.620
State Bank of Travancore	21.0	11.335	2.708	0.122	1.30	0.875	0.459	0.072	0.620
Syndicate Bank	09	12.138	2.524	0.169	0.968	0.843	1.009	0.256	0.99.0
Uco Bank	74	12.257	2.094	0.178	2.052	0.578	0.936	0.169	0.690
Union Bank of India	9.98	12.316	2.517	0.184	1.220	1.030	1.304	0.172	0.580
United Bank of India	17.4	13.113	2.369	0.152	1.812	0.627	0.720	0.120	0.820
Vijaya Bank	34.3	12.356	2.264	0.102	1.040	0.763	0.991	0.251	0.550

Panel B: Private-Sector Banks								
Bank	Market Cap	CAR	NIM	NII Growth	Net NPA	ROA	P/B ratio	Profit Growth
	(In Rs. Billion)							
Axis Bank Ltd	686.2	13.538	2.453	0.390	0.581	1.433	2.754	0.411
City Union Bank Ltd	24.3	12.780	2.861	0.245	1.182	1.549	1.282	0.287
Development Credit Bank	18.7	12.742	2.373	0.221	2.490	-0.523	1.637	0.573
DCB Bank	15.3	10.698	2.925	119.4	1.887	-0.394	1.392	0.095
Federal Bank	81.8	15.625	3.72	0.187	0.583	1.255	1.179	0.334
HDFC Bank Ltd.	1796.2	14.769	3.779	0.320	0.343	1.507	4.052	0.314
ICICI Bank Ltd	1437.2	15.836	2.048	0.233	1.307	1.307	2.034	0.271
Indusind Bank Ltd	263.7	13.288	2.244	0.286	1.338	0.976	2.252	0.478
ING Vyasya Bank	118.3	11.918	2.432	0.208	0.831	0.644	1.639	1.303
Karnataka Bank	27.3	12.709	2.139	0.218	1.467	1.037	1.020	0.130
Karur Vyasya Bank	50.9	14.501	2.720	0.214	0.459	1.570	1.353	0.233
Kotak Mahindra Bank LTD.	601.6	16.448	4.074	0.420	1.162	1.461	6.031	0.461
Lakshmi Vilas Bank	12.6	12.332	2.244	0.195	2.269	0.508	0.970	1.119
South Indian Bank	36.6	13.318	2.530	0.229	1.094	0.890	1.034	0.967
The Dhanalakshmi Bank	9.0	11.068	2.270	0.206	1.712	0.201	1.169	-0.750
Yes Bank Ltd.	149.3	16.923	1.996	1.009	0.063	1.436	3.186	-1.420

Source: CMIE Prowess and Authors' Calculations; Annual Reports

Table 2: Category-Wise Examples of Issues in Board Minutes

Category	Examples
	At one meeting, the Board reviewed country risk management of the bank. The Board took note of
	country-wise exposures, their causes and steps taken to mitigate the risks.
Risk	Following the advice of RBI from its Annual Financial Inspection, another board discussed a study con-
	cerning the implementation of a mechanism for evaluating concentration risk amongst Cash In Transit
	(CIT) agencies empanelled by the bank. The Board was briefed on the salient features relating to the CIT
	agencies on concentration risks identified, appointment, annual appraisal, recommendations etc.
	In another meeting, the Board was presented with the annual review of Market Risk & Derivative Policies
	covering various risk limits, monitoring and reporting arrangements of Market Risk, Treasury activities
	which was thereby approved. At one bank, the management sought approval for ratification for the introduction of a new retail loan
	product and also for delegation of powers for this specific product to branch managers from zonal managers.
	The Board ratified the proposals followed by specific directions regarding collection and verification of
	customer
Business Strategy	One board undertook a strategic review of the areas like, Business Plan, Capital Planning, Performance
	under Priority Sector advances, Performance under Lead districts, Non-fund business and prospective
	business/product lines and closure of existing ones.
	In another bank, the senior management presented the strategy on liability and asset to the Board. The
	Board also stressed to improve the turnaround time on credit to enhance customer service.
	The Board reviewed the banks' credit/debit/prepaid card operations. The Board was briefed on the
	industry snapshot, product and portfolio update, customer service indicators, KPIs, new initiatives and
	strategy going forward.
Financial Reporting	All banks reviewed the financial statements for previous quarter end.

Category	Examples
	Following RBI directions for reporting on monthly basis on overseas regulatory violations, the Board of a
Regulation and Compliance	bank reviewed the same for the banks' overseas branches. In one instance, the Board of a bank considered a note on appointment of designated director under PML
	Act, 2002 who will be responsible to ensure overall compliance by the bank with the provisions of the Act. The Board of one bank was updated on the progress made by the bank in lending to the Micro and Small
	(MSE) sector in the current financial year.
Human Resources	One of the directors of a bank in a meeting requested for the continuation of the guidelines regarding the
	appointment of Part-time Sub-staff and absorption of the PTS as Sub-staff which was thereby approved.
	At another meeting, approval was accorded for Performance Appraisal System (PAF) ratings & marks of
	officers in SMG Scale-IV to TEG Scale-VI be made accessible to the concerned officers. The Board however
	desired that, (i) TEF Scale-VII officers are to included in the proposal, and (ii) the reviewing authority
	gives opportunity to the officer to explain, if his/her marks are below the cut-off level for promotion and
	such an opportunity will be given in prospective cases.

Table 3: Issues Tabled in Board Meetings

Issues Tabled in Board Meetings

	Max	17.00(25.00)	38.00(50.88)	33.00 (80.00)	14.00(37.50)	11.40 (17.46)
	Min	0.00 (0.00)	0.00 (0.00)	4.00(21.31)	1.00(2.53)	0.00 (0.00)
Panel A	SD	4.40 (6.18)	$11.85\ (12.07)$	9.17 (14.38)	3.30(8.74)	3.71 (5.56)
	Mean	5.69 (10.31)	17.66(30.63)	18.52 (40.88)	5.48 (13.10)	3.07 (5.08)
	Z	29.00	29.00	29.00	29.00	29.00
		Risk	Business Strategy	Regulation and Compliance	Financial Reporting	Human Resources

			Panel B	В			
	Z	N 10th Percentile	25th Percentile	50th Percentile	Mean	75th Percentile 90th Percentile	90th Percentile
Risk	29.00	0.00 (0.00)	3.00(5.97)	4.00(10.39)	$5.69\ (10.31)$	8.00(13.04)	12.00 (20.00)
Business Strategy	29.00	2.00(11.76)	7.00(26.09)	17.00(31.58)	17.66 (30.63)	29.00(39.76)	33.00 (42.86)
Regulation and Compliance	29.00	5.00(26.09)	12.00(30.16)	18.00(37.97)	18.52 (40.88)	24.00(49.25)	32.00 (62.50)
Financial Reporting	29.00	1.00(4.23)	3.00(7.02)	5.00(10.53)	5.48 (13.10)	7.00 (17.39)	10.00(29.03)
Human Resources	29.00	0.00 (0.00)	0.00 (0.00)	1.00(2.94)	3.07 (5.08)	$(6.77)\ 00.9$	9.00(14.75)

number of issues tabled in a board meeting and the percentage of total issues tabled across categories. The percentages are in brackets. Panel B shows the distribution of issues tabled across categories in terms of numbers and percentages. The distribution of issues tabled in a category as a percentage of the This table shows the summary and the distribution of issues tabled in board meetings across different categories. Panel A provides the summary for the total number of issues tabled is in brackets.

Table 4: Summary of Issues tabled by bank ownership

		Private			Government (Owned
	N	Mean Number of issues	As a % of total issues tabled	N	Mean Number of issues	As a % of total issues tabled
Risk Business Strategy Regulation and Compliance Financial Reporting Human Resources	12.00 12.00 12.00 12.00 12.00	8.00 20.00 22.00 7.00 2.00	13.56 33.90 37.29 11.86 3.39	17.00 17.00 17.00 17.00 17.00	4.00 16.00 16.00 5.00 4.00	8.89 35.56 35.56 11.11 8.89

This table shows the distribution of issues tabled by ownership. We obtain ownership data from RBI website.

Table 5: Relationship Between issues tabled (as a fraction of total number of issues) across categories with bank-level variables

	ROA	ROE	Net NPA/Net Advance	Gross NPA/Gross Advances
		Panel A		
Risk	4.464**	59.035*	-7.472**	-8.165*
	(2.291)	(1.881)	(-2.393)	(-1.862)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.421	0.174	0.440	0.440
		Panel B		
Human Resources	1.003	37.999	-3.326	-4.001
	(0.466)	(1.153)	(-0.971)	(-0.860)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.306	0.105	0.337	0.381
		Panel C		
Business Strategy	0.287	5.669	0.228	1.777
	(0.290)	(0.366)	(0.142)	(0.831)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.302	0.062	0.312	0.379
		Panel D		
Regulation and Compliance	-0.039	-4.849	-0.383	-1.578
	(-0.045)	(-0.356)	(-0.273)	(-0.841)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.300	0.062	0.314	0.380
		Panel E		
Financial Reporting	-1.981	-23.847	4.689**	5.045
	(-1.422)	(-1.077)	(2.189)	(1.684)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.352	0.099	0.422	0.427

Each panel of the table reports the results of a regression of a bank-level variable on the proportion of a category of issues tabled in a meeting. We control for ownership (size) by including a dummy variable that takes the value of one for government-owned banks (banks having above the median value of assets) and zero otherwise. All bank-level variables are obtained from the RBI website, and the values are as of 31^{st} March, 2014. All variables are winsorized at 95 percent. t-statistics is in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 6: Deliberation of Issues in Board Meetings

Issues Deliberated in Board Meetings

	Z	Mean	SD	Min	Max
Sisk	29.00	0.86(8.18)	$1.09\ (10.36)$	0.00 (0.00)	4.00(40.00)
Business Strategy	29.00	3.55(29.82)	3.99(21.91)	(0.00)	15.00 (66.67)
Regulation and Compliance	29.00	2.59(24.81)	2.71 (24.25)	0.00 (0.00)	8.00(100.00)
inancial Reporting	29.00	$1.31 \ (18.68)$	1.31 (22.07)	(0.00)	4.00(100.00)
Iuman Resources	29.00	0.69(4.71)	1.26(7.74)	(0.00)(0.00)	5.00(25.00)

			Panel B	В			
	Z	V 10th Percentile	25th Percentile	50th Percentile	Mean	75th Percentile	90th Percentile
Risk	29.00	0.00 (0.00)	0.00 (0.00)	1.00(5.56)	0.86(8.18)	1.00(12.50)	3.00(25.00)
Business Strategy	29.00	0.00 (0.00)	0.00 (0.00)	3.00(37.50)	3.55 (29.82)	5.00(47.37)	9.00(53.57)
Regulation and Compliance	29.00	0.00 (0.00)	0.00 (0.00)	2.00(21.43)	2.59 (24.81)	4.00(40.00)	7.00(50.00)
Financial Reporting	29.00	0.00 (0.00)	0.00(0.00)	1.00 (11.43)	1.31 (18.68)	2.00(25.00)	4.00 (50.00)
Human Resources	29.00	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.69(4.71)	1.00 (10.00)	3.00(20.00)

This table shows the summary and the distribution of issues deliberated in board meetings across different categories. Panel A provides the summary for the number of issues deliberated in a board meeting and the percentage of total issues deliberated across categories. The percentages are in brackets. Panel B shows the distribution of issues deliberated across categories in terms of numbers and percentages. The distribution of issues deliberated in a category as a percentage of the total number of issues tabled is in brackets.

Table 7: Relationship Between issues deliberated (as a fraction of total number of issues) across categories with bank-level variables

	ROA	ROE	Net NPA/Net Advance	Gross NPA/Gross Advances
		Panel A		
Risk	0.895	15.177	-3.521	-4.031
	(0.616)	(0.668)	(-1.560)	(-1.303)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.310	0.074	0.373	0.403
		Panel B		
Human Resources	0.517	21.904	-3.067	-4.720
	(0.309)	(0.848)	(-1.165)	(-1.337)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.302	0.084	0.347	0.405
		Panel C		
Business Strategy	-0.276	-2.560	0.375	0.781
	(-0.509)	(-0.301)	(0.427)	(0.661)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.307	0.061	0.317	0.373
		Panel D		
Regulation and Compliance	-0.524	-13.425	0.518	0.436
	(-0.946)	(-1.601)	(0.573)	(0.355)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.324	0.145	0.320	0.365
		Panel E		
Financial Reporting	-0.038	4.119	0.900	0.117
	(-0.055)	(0.382)	(0.816)	(0.077)
Govt Bank and Size Controls	Yes	Yes	Yes	Yes
Observations	29	29	29	29
R-squared	0.300	0.063	0.329	0.362

Each panel of the table reports the results of a regression of a bank-level variable on the proportion of a category of issues deliberated in a meeting. We control for ownership (size) by including a dummy variable that takes the value of one for government-owned banks (banks having above the median value of assets) and zero otherwise. All bank-level variables are obtained from the RBI website, and the values are as of 31^{st} March, 2014. All variables are winsorized at 95 percent. t-statistics is in parentheses. **** p<0.01, *** p<0.05, ** p<0.1

Table 8: Standard Risk Measures And Risk Issues

The table presents the relationship between standard measures of bank risk and the proportion of risk issues tabled and deliberated. The data are organized at a bank level. Column 1 (2) of every panel shows the results of a regression where the proportion of risk issues among all issues tabled (deliberated) is regressed on a measure of bank risk. We consider the average values of bank characteristics over three quarters before the second quarter of the year 2013. ***, ***, and * represent significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable	Risk Issues Tabled	Risk Issues Deliberated
	Panel A	
Capital Adequacy Ratio	-0.002	0.056
Cook Book and Cook Controls	[-0.067]	[1.457]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.171	0.349
	Panel B	
Provision Coverage Ratio	0.023	-0.001
	[1.030]	[-0.041]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.204	0.294
	Panel C	
Net NPA by Gross Advances	-0.022	0.009
	[-0.884]	[0.234]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.196	0.295
	Panel D	
Gross NPA by Gross Advances	-0.027	0.018
	[-1.057]	[0.469]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.206	0.300
	Panel E	
Volatility of Earnings	0.022	0.033
	[0.968]	[1.007]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.200	0.321
	Panel F	
Volatility of Equity Returns	-0.028	-0.024
	[-1.281]	[-0.737]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.222	0.309

Table 9: Bank Characteristics And Risk Issues

The table presents the relationship between bank characteristics and the proportion of risk issues tabled and deliberated. The data are organized at a bank level. Column 1 (2) of every panel shows the results of a regression where the proportion of risk issues among all issues tabled (deliberated) is regressed on a measure of bank characteristic. We consider the average values of bank characteristics over three quarters before the second quarter of the year 2013. ***, ***, and * represent significance at the 1%, 5%, and 10% levels, respectively.

Dependent Variable	Risk Issues Tabled	Risk Issues Deliberated
	Panel A	
Total Assets	0.039	0.041
	[0.945]	[0.662]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.199	0.306
	Panel B	
ROE	-0.012	0.009
	[-0.439]	[0.230]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.177	0.295
	Panel C	
ROA	0.010	0.035
	[0.349]	[0.887]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.175	0.315
	Panel D	
Net Interest Margin	0.021	-0.019
	[0.997]	[-0.586]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.202	0.303
	Panel E	
Government Holding	-0.001	-0.001
	[-0.646]	[-0.876]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.184	0.315
	Panel F	
Loan Growth	0.020	-0.000
	[0.903]	[-0.001]
Govt Bank and Size Controls	Yes	Yes
Observations	29	29
R-squared	0.197	0.294

Table 10: Association Between Board Structure and Conduct

This table reports the association between board structure and conduct. Each panel reports the results of a regression of the percentage of a particular type of issues out of total issues tabled in a bank board meeting on a bank board attribute. Financial Reporting, Risk, HR, Business Strategy, and Regulation and Compliance are the categories considered. Board size is measured as the number of members in the board, Age is calculated as the average age of the board members, Financial Exp is the average experience of the board in the finance domain expressed in terms of number of years, Banking Exp is the average experience of the board in any bank expressed in terms of number of years. Similarly, Prior Board Exp, International Exp, and Private Sector Exp is the average experience of the board in sitting on any other board, working outside of India, and working in non-government companies, respectively. Political Connections is the average of political connectivity of all the board members, where political connectivity = 1 if a board member has political association mentioned in his/her cv. Financial Qualifications is the average of a binary variable that takes a value of 1 if a board member has received a degree in finance. Managerial experience is the average of a binary variable that takes a value of 1 if a board member has held a managerial position in any other firm in the past. Independent Directors is the average of a binary variable that takes a value of 1 if a board member is an independent director. We control for ownership (size) by including a dummy variable that takes the value of one for government-owned banks (banks having above the median value of assets) and zero otherwise. ***, ** and * represents significance at 1%, 5%, and 10% respectively.

Dependent Variable	Financial Reporting	Risk	HR	Business Strategy	Regulation and Compliance
			Panel A		
Board Size	0.013*	-0.004	-0.008*	-0.010	0.009
	[1.820]	[-0.849]	[-1.846]	[-0.992]	[0.705]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.148	0.194	0.151	0.099	0.083
			Panel B		
Age	0.010	0.001	-0.012**	-0.015	0.016
	[0.898]	[0.159]	[-2.122]	[-1.037]	[0.904]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.045	0.166	0.189	0.103	0.097
			Panel C		
Financial Exp	0.001	-0.001	-0.006**	-0.005	0.011
	[0.202]	[-0.409]	[-2.327]	[-0.768]	[1.431]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.008	0.172	0.218	0.082	0.147
			Panel D		
Banking Exp	-0.000	-0.003	-0.003	-0.002	0.008
	[-0.040]	[-0.845]	[-1.222]	[-0.371]	[1.089]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.007	0.194	0.075	0.061	0.113
			Panel E		
Prior Board Exp	-0.016*	0.011*	-0.014**	0.009	0.010
	[-1.783]	[1.868]	[-2.770]	[0.669]	[0.587]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.143	0.289	0.282	0.075	0.076

Dependent Variable	Financial Reporting	Risk	HR	Business Strategy	Regulation and Compliance
			Panel F		
Managerial Positions	-0.040	0.039	-0.039*	-0.000	0.040
	[-1.094]	[1.641]	[-1.936]	[-0.004]	[0.643]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.063	0.264	0.163	0.055	0.079
			Panel G		
Independent Directors	-0.049	0.010	-0.038*	0.005	0.073
	[-1.377]	[0.386]	[-1.916]	[0.109]	[1.190]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.093	0.171	0.160	0.055	0.122
			Panel H		
International Experience	0.012	0.025**	-0.012	-0.008	-0.017
	[0.725]	[2.428]	[-1.249]	[-0.336]	[-0.594]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.032	0.355	0.078	0.060	0.076
			Panel I		
Private Sector Exp	-0.003	0.021**	-0.000	-0.003	-0.014
	[-0.227]	[2.347]	[-0.001]	[-0.162]	[-0.567]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.009	0.345	0.006	0.056	0.075
			Panel J		
Political Connections	-0.012	0.248	-0.044	-0.183	-0.008
	[-0.029]	[0.931]	[-0.188]	[-0.335]	[-0.012]
Govt Bank and Size Controls	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.007	0.200	0.008	0.060	0.060
			Panel K		
Financial Qualifications	-0.094	0.046	-0.138*	-0.132	0.318
•	[-0.715]	[0.516]	[-1.933]	[-0.743]	[1.493]
Govt Bank and Size Dummy	Yes	Yes	Yes	Yes	Yes
Observations	24	24	24	24	24
R-squared	0.031	0.176	0.163	0.080	0.154
I	5.551				

Appendix - A simple model to interpret the results

In this section, we provide a stylized model of multi-tasking in efforts made by bank boards. The objective of this section is to guide the interpretation of and intuition for our empirical results.

Bank boards exert effort along three dimensions: (i) regulation and compliance; (ii) strategy creation; and (iii) risk management. Efforts in compliance and regulation includes complying with all the regulations and legal requirements faced by banks. Because regulators would be concerned about systemic risk in the banking sector, regulations would focus on limiting risk as well. However, by modelling efforts in regulation and compliance, on the one hand, and risk mitigation, on the other hand, we distinguish between risk mitigation in *letter* done by the board to satisfy the regulator, i.e. efforts that primarily focus on "box ticking," and risk mitigation in *spirit*. Specifically, dimensions of effort in risk mitigation that the bank board undertakes as part of compliance and regulation correspond to risk mitigation in *letter* as opposed to risk mitigation in *spirit*, which the board's effort in risk captures.

6.1 Setting

Consider a single period principal-agent setting where there are two principals and one agent. The collection of shareholders of the bank represent the first principal. The regulator represents the second principal. The board of directors of the bank represent the agent. The board provides unobservable effort e_i on three tasks indexed by i = C, S, R, where e_C, e_S and e_R represent efforts in regulation and compliance, strategy creation, and risk management respectively. Greater e_C and e_S enhance the bank's regulation & compliance and its strategy respectively. In contrast, greater e_R reduces the bank's risk. Effort exerted by the board in task i costs the board $0.5e_i^2$.

We assume firm value of the bank V, which equals the sum of bank's equity E and its debt D, is given by:

$$V = E + D = e_S + e_R + e_C. \tag{1}$$

Assumption 1: As residual claimants, equityholders' payoff E is convex and, therefore, increases disproportionately more with board effort in strategy creation than with efforts in compliance and risk. We capture this dependence by specifying the equityholders payoff as follows:

$$E = \alpha e_S + \beta (e_C + e_R),$$

$$0 < \beta < \alpha < 1$$

$$(2)$$

Assumption 2: In contrast to the equityholders' payoff, debtholders' payoff is concave and so increases disproportionately more with board efforts in risk mitigation and compliance than board effort in strategy

creation:

$$D = (1 - \alpha) e_S + (1 - \beta) (e_C + e_R). \tag{3}$$

Assumption 3: We assume that boards have finite time and resources. Therefore, the cumulative effort in strategy creation, risk mitigation, and compliance is bounded:

$$e_S + e_R + e_C \le a, a > 0. \tag{4}$$

6.2 Prudential supervision by the regulator

Because all governments provide some form of a safety net for the banking system, whether it is explicit or implicit, they need to take steps to limit the moral hazard and adverse selection that the safety net creates. Otherwise, banks will have such a strong incentive to take on excessive risks that the safety net may do more harm than good and promote banking crises rather than prevent them. Prudential supervision involves (i) the regulator establishing regulations to reduce risk-taking, and (ii) supervising banks to ensure that they are complying with the regulations. Thus, as part of the prudential supervision undertaken by the regulator, the regulator requires a minimum level of compliance with the laws and regulations.

Assumption 4: We therefore assume that the bank board's effort in compliance and regulation has to be above a minimum threshold:

$$e_C \ge \underline{e}$$
. (5)

6.3 First-best

We specify the first-best benchmark level of efforts, e_S^{FB}, e_R^{FB} and e_C^{FB} as one where the bank board maximizes firm value.

Proposition 1 (First-best level of efforts) Under the first-best benchmark, where the bank board chooses to maximize firm value V, the bank board exerts equal efforts in strategy creation, risk mitigation and in compliance.

$$e_S^{FB} = e_R^{FB} = e_C^{FB} = \frac{a}{3}.$$
 (6)

Because the bank's firm value is equally sensitive to the efforts in each of the three dimensions and the costs of efforts are identical, the first-best level of efforts are identical across the three tasks.

6.4 Analysis of the second-best

Ideally, the board would maximize shareholder value subject to keeping the regulator happy and ensuring that the debtholders break even.

However, debtholders in a bank primarily comprise of depositors who are quite dispersed. As a result, monitoring by the debtholders suffers from the free-rider problem, where the marginal benefit of monitoring by any individual debt holder is significantly dominated by the marginal cost incurred in doing the same. Moreover, deposit insurance – implicit or explicit – reduces the incentives of depositors to monitor banks. As well, deposit insurance induces banks to rely less on uninsured creditors with incentives to monitor and more on insured depositors with no incentives to monitor. Finally, unlike debtholders in industrial firms that can impose a check on the firm's shareholders and managers by exercising their covenants, debtholders in a bank do not contract on any covenants ex-ante that they can exercise ex-post.

Therefore, under the second-best, we assume:

Assumption 5: Ex-post, i.e. once liabilities are already created, the board can costlessly violate the constraint that the debtholders have to break even.

Under the second-best, the objective function of the bank board can be stated as:

$$\max_{(e_C, e_S, e_R)} E \quad \text{such that} \tag{7}$$

$$e_C \ge \underline{e},$$
 (8)

$$e_S + e_R + e_C \le a. \tag{9}$$

To solve this optimization problem, we set up the Lagrangian as follows:

$$\mathcal{L} = E + \lambda_C \left(e_C - \underline{e} \right) + \lambda_e \cdot \left(a - e_S - e_R - e_C \right), \tag{10}$$

where λ_C and λ_e denote respectively the shadow prices associated with violating the regulators' constraint and the effort boundary.

Proposition 2 (Second-best level of efforts) The bank board's efforts in strategy creation, risk mitigation and compliance are given by:

$$e_S^* = e_S^{FB} + \frac{2(\alpha - \beta) - \lambda_C}{3},$$
 (11)

$$e_R^* = e_R^{FB} - \frac{(\alpha - \beta) + \lambda_C}{3}, \tag{12}$$

$$e_C^* = e_C^{FB} + \frac{2\lambda_C - (\alpha - \beta)}{3}.$$
 (13)

See appendix for the proof. The next three propositions characterize under- and over-investments by the board, when compared to the economically optimal levels, in strategy creation, risk mitigation and compliance.

6.5 Results from the model

Proposition 3 (Both compliance & strategy always dominate risk-mitigation) Irrespective of the level of regulatory pressure, bank boards always exert lower effort in risk mitigation than in strategy creation or in compliance:

$$e_S^* > e_R^*; e_C^* > e_R^* \ \forall \alpha, \beta, \lambda_C \tag{14}$$

The proof is easily obtained by using equations (11) to (13) and using $\alpha > \beta$ and $\lambda_C > 0$. This result is quite intuitive given the assumption that bank boards can costlessly violate the debtholders' break-even constraint while maximizing shareholder value and ensuring a minimum level of effort in compliance.

Proposition 4 (Under-investment in risk-mitigation) A bank board always under-invests in risk mitigation when compared to the efficient level. Formally:

$$e_R^* < e_R^{FB}. \tag{15}$$

Intuitively, first, shareholders care more about the upside, which is created by efforts in strategy creation, than about the downside, which is created by efforts in risk mitigation in its spirit. Second, the cost of violating the debtholders constraint is low in banks. Third, the regulator emphasizes compliance, which may result in "box ticking" with those aspects of regulation that deal with risk. As a result, the costs from the board investing in risk mitigation in its spirit significantly dominate the benefits, which causes the under-investment when compared to the optimal.

Proposition 5 (Compliance and regulation versus strategy creation) If the regulatory pressure is high, then bank boards exert greater effort in regulation and compliance than on strategy creation. Formally:

$$\lambda_C \geq (\alpha - \beta) \Rightarrow e_C^* \geq e_S^*$$
 (16)

$$\lambda_C < (\alpha - \beta) \Rightarrow e_C^* < e_S^* \tag{17}$$

The proof is easily obtained by using equations (11) to (13). Because bank boards maximize shareholder value subject to the constraint that the regulator is kept happy, bank boards exert greater effort in compliance and regulation than on strategy creation only if the regulatory pressure is high.

Proposition 6 (Under- or over-investment in strategy and in compliance) (i) If regulatory pressure is low, i.e. $\lambda_C < 0.5 (\alpha - \beta)$, the board over-invests in strategy creation but under-invests in compliance and regulation:

$$\lambda_C < 0.5 \left(\alpha - \beta\right) \Leftrightarrow e_S^* > e_S^{FB}; e_C^* \le e_C^{FB}; \tag{18}$$

(ii) If regulatory pressure is moderate, i.e. $0.5(\alpha - \beta) \le \lambda_C < 2(\alpha - \beta)$, the board over-invests in strategy creation and in compliance and regulation:

$$0.5 (\alpha - \beta) \le \lambda_C < 2 (\alpha - \beta) \Leftrightarrow e_S^* > e_S^{FB}; e_C^* > e_C^{FB}; \tag{19}$$

(iii) If regulatory pressure is high, i.e. $\lambda_C > 2(\alpha - \beta)$, the board under-invests in strategy creation and over-invests in compliance and regulation:

$$\lambda_C \ge 2\left(\alpha - \beta\right) \Leftrightarrow e_S^* \le e_S^{FB}; e_C^* > e_C^{FB}. \tag{20}$$

The marginal benefit of an increase in the effort in any task stems directly from an increase in equity value. In addition, the marginal benefit of an increase in the effort in compliance and regulation also stems from keeping the regulator happy as captured in assumption 4 (equation 5). Apart from the direct costs of effort $(=0.5e_i^2)$, indirect costs of effort in a task stem from the efforts being substitutes at the margin. The effort in regulation and compliance increases with regulatory pressure, which we define as the cost of not meeting the minimum level of compliance and regulation. Therefore, when regulatory pressure is very low, the board under-invests in regulation and compliance and thereby over-invests in strategy creation. Conversely, when regulatory pressure is very high, the board over-invests significantly in compliance and regulation and thereby under-invests in strategy creation. When regulatory pressure is moderate, the board over-invests in regulation and compliance as well as in strategy creation.

As the combined value of all stakeholders V represents the best proxy to capture economic efficiency, we examine how it varies with differing levels of regulatory pressure.

Proposition 7 (Effect of regulatory pressure on value of all stakeholders) If regulatory pressure is low, i.e. $\lambda_C < 0.5 (\alpha - \beta)$, an increase in regulatory pressure increases the aggregate value to all stakeholders. However, if regulatory pressure is not low, i.e. $\lambda_C \geq 0.5 (\alpha - \beta)$, an increase in regulatory pressure decreases the aggregate value to all stakeholders:

$$\lambda_C \leq 0.5 (\alpha - \beta) \Leftrightarrow \frac{dV}{d\lambda_C} \geq 0.$$
 (21)

Figure A.11 in the online appendix combines the results from all the propositions above and describes the ordinal ranking of the efforts in the various tasks and their implication for economic efficiency in four regions of regulatory pressure:

1. If regulatory pressure is very high, i.e. $\lambda_C \geq 2 (\alpha - \beta)$, then bank boards will devote maximum attention to issues pertaining to compliance and regulation. Strategy creation would receive the next level of attention. Risk mitigation would receive the minimum level of attention among these three categories. Thus, the ordinal ranking would be compliance and regulation, strategy creation followed by risk mitigation.

In this case, bank boards under-invest both in strategy creation and in risk mitigation and over-invest in compliance and regulation and firm value decreases with an increase in regulatory pressure.

- 2. If regulatory pressure is moderately high, i.e. $(\alpha \beta) \leq \lambda_C < 2(\alpha \beta)$, then again the ordinal ranking would be compliance and regulation, strategy creation followed by risk mitigation. In this case, however, bank boards under-invest in risk mitigation and over-invest both in strategy creation and in compliance and regulation and firm value decreases with an increase in regulatory pressure.
- 3. If regulatory pressure is moderately low, i.e. $0.5 (\alpha \beta) \leq \lambda_C < (\alpha \beta)$, then the ordinal ranking is would be strategy creation, compliance and regulation followed by risk mitigation. In this case as well, bank boards under-invest in risk mitigation and over-invest both in strategy creation and in compliance and regulation and firm value decreases with an increase in regulatory pressure.
- 4. If regulatory pressure is very low, i.e. $\lambda_C < 0.5 (\alpha \beta)$, then again the ordinal ranking would be strategy creation, compliance and regulation followed by risk mitigation. In this case, however, bank boards underinvest both in risk mitigation and in compliance and regulation and over-invest in strategy creation. Only in this case firm value *increases* with an increase in regulatory pressure.

6.6 Interpreting our key empirical findings

6.6.1 Relating the ordinal ranking to the theoretical predictions

The theoretical model suggests that board effort in risk mitigation is always dominated by its efforts in strategy creation and in regulation and compliance. This is consistent with our key empirical finding: bank boards pay high attention to matters relating to compliance and regulation but pay low attention to matters relating to risk. This pattern is observed both with respect to tabling of issues as well as the detailed deliberation of the tabled issues. The model throws light on the incentive mechanisms that explain this finding. Among their various stakeholders, bank boards care least about the depositors due to the combination of (i) free-rider problem in monitoring by dispersed depositors, (ii) deposit insurance and the resultant moral hazard, and (iii) absence of contractual mechanisms for depositors, such as loan covenants. In contrast, bank boards do not want to be on the wrong side of regulators. Given the limited time and attention that bank boards have to devote across strategy creation, risk mitigation and compliance and regulation, the skewed incentives of bank boards motivate them to invest lower effort in risk mitigation than in strategy creation and in compliance and regulation.

The model suggests that a bank board exerts more effort in regulation and compliance than in strategy creation when the pressure exerted by the regulator on compliance is high. Conversely, a bank board exerts lower effort in compliance and regulation than in strategy creation when the pressure exerted by the regulator on compliance is low. Our test of means for the issues tabled revealed that the attention paid by bank boards to compliance and regulation is on average greater than the attention paid to strategy creation. This pattern

is also observed when we examine the medians. Based on the means and medians of the issues tabled, we can infer that bank boards in our sample may be paying greater attention to compliance and regulation than to strategy creation.

6.6.2 Interpreting under- or over-investment

Because the (first-best) optimal level of effort cannot be observed empirically, inferences about under- or over-investment by bank boards in the various categories (strategy creation, risk mitigation, and regulation and compliance) can only be inferred by appealing to the theoretical arguments above. The model suggests that bank boards under-invest in risk mitigation. However, whether the bank board over- or under-invests in compliance and regulation and strategy creation depends upon the level of regulatory pressure. As regulatory pressure is not directly observed either, we infer under- or over-investment by relating the predictions to the observed ordinal ranking.

As figure A.11 shows, the ordinal ranking that we find seems to convey that the bank boards in our sample under-investing in risk mitigation and over-investing in compliance and regulation. These results are consistent with anecdotal evidence in several multilateral and national reports, which have highlighted failure of bank boards in effectively assessing risks as well as in excessively conforming with laid down procedures.

The under-investment in risk related matters is especially pertinent given policymaker concerns following the financial crisis that bank boards did not assess risks effectively. Walker (2009) mentions that "the over-riding strategic objective of a bank/financial institution is the successful management of financial risk." The supervision manual of the Federal Reserve states that "The board of directors is responsible to the bank's depositors, other creditors, and shareholders for safeguarding their interests" (see section 5000.1). Moreover, although the penalties from losses in shareholder value is immediate, they are not as severe as in the case of losses arising from poor risk management (Mongiardino and Plath (2010b)).

However, following figure A.11, we cannot use the ordinal ranking that we find to infer whether the attention paid by bank boards in our sample to matters pertaining to strategy is consistent with over- or under-investment (compared to the optimal level). This is because while the ordinal ranking is consistent with regulatory pressure being either moderately high or very high, using this ranking, we cannot distinguish between regimes where regulatory pressure is extremely high and those where regulatory pressure is moderately high. Overinvestment in strategy creation is obtained only if the regulatory pressure is extremely high. Therefore, we cannot infer whether the attention paid to strategy creation in our sample is consistent with over- or under-investment by bank boards in strategy creation.

Appendix - Proofs

PROOF OF PROPOSITION 1: Since greater effort adds to firm value, the constraint (4) would be binding. Else, the firm value can be increased without violating the constraint. Therefore, the maximization problem

transforms into

$$\max_{(e_S, e_R, e_C)} a - 0.5 (a - e_S - e_R)^2 - 0.5 e_S^2 - 0.5 e_R^2$$
(22)

The first-order conditions for e_S^{FB}, e_R^{FB} are therefore given by:

$$(a - e_S^{FB} - e_R^{FB}) = e_S^{FB} \tag{23}$$

$$\left(a - e_S^{FB} - e_R^{FB}\right) = e_R^{FB} \tag{24}$$

Therefore,

$$e_S^{FB} = e_R^{FB} = e_C^{FB} = \frac{a}{3}. \diamondsuit \tag{25}$$

PROOF OF PROPOSITION 2: Using the fact that constraint (4) would be binding in the equation for the Lagrangian (10), we get

$$\mathcal{L} = \alpha e_S + \beta (a - e_S) + \lambda_C (e_C - \underline{e}) - 0.5e_S^2 - 0.5e_C^2 - 0.5(a - e_S - e_C)^2$$
(26)

The first-order conditions for e_S^*, e_R^* are therefore given by:

$$2e_S^* + e_C^* = \alpha - \beta + a \tag{27}$$

$$e_S^* + 2e_C^* = \lambda_C + a \tag{28}$$

Therefore using equations (25) and solving, we get:

$$e_S^* = e_S^{FB} + \frac{2(\alpha - \beta) - \lambda_C}{3} \tag{29}$$

$$e_R^* = e_R^{FB} - \frac{(\alpha - \beta) + \lambda_C}{3} \tag{30}$$

$$e_C^* = e_C^{FB} + \frac{2\lambda_C - (\alpha - \beta)}{3}$$
 (31)

 \Diamond

PROOF OF PROPOSITION 7: Differentiating equation (1) after using equation (4), we get

$$\frac{dV}{d\lambda_C} = (\alpha - \beta) - 2\lambda_C$$

Online Appendix

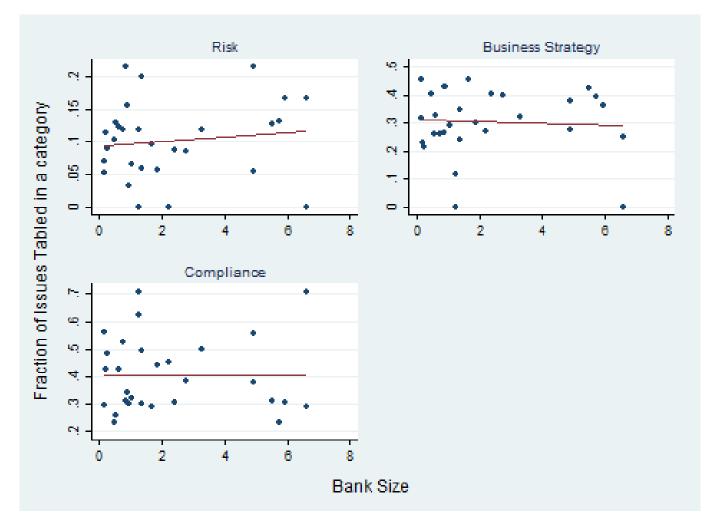
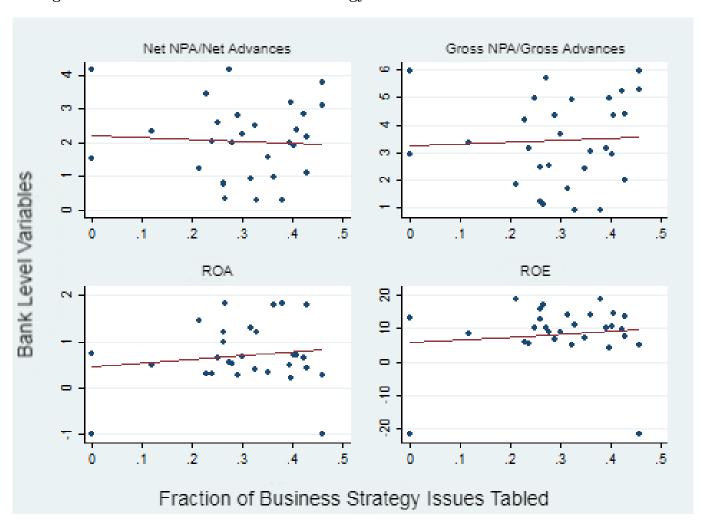


Figure A.1: Correlation of Issues Tabled with Bank Size

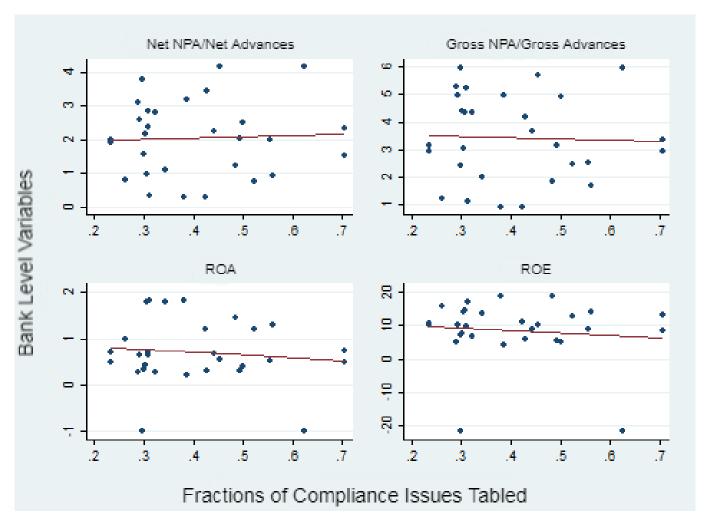
The figure shows the correlation of the fraction of issues tabled across categories with bank size. Bank size is measured by total assets in Trillion Rupees. Fraction of issues is obtained by deflating the number of issues in a given category by the total number of issues. All variables are winsorized at 95 percent.

Figure A.2: Correlation of Business Strategy Issues Tabled with Bank Level Variables



The figure shows the correlation of the fraction of business strategy issues tabled with bank-level outcomes. ROA is measured by the ratio of net income to yearly averaged assets. ROE is measured as the ratio of net income to equity. NPA refers to Non-performing assets. The data for all bank-level variables are obtained from the RBI website. Fraction of issues is obtained by deflating issues in a given category by the total number of issues. All variables are winsorized at 95 percent.

Figure A.3: Correlation of Regulatory and Compliance Issues Tabled with Bank Level Variables



The figure shows the correlation of the fraction of compliance issues tabled with bank level outcome variables. ROA is measured by the ratio of net income to yearly averaged assets. ROE is measured as the ratio of net income to equity. NPA refers to non-performing assets. The data for all bank-level variables are obtained from the RBI website. Fraction of issues is obtained by deflating issues in a given category by total number of issues. All variables are winsorized at 95 percent.

Risk Business Strategy

Compliance

Compliance

Figure A.4: Correlation of Issues Deliberated with Bank Size

The figure shows the correlation of the fraction of issues deliberated across categories with bank size. Bank size is measured total assets in INR(Trillion) and obtained from the RBI website. Fraction of issues is obtained by deflating issues deliberated in a given category by the total number of issues deliberated across all categories. All variables are winsorized at 95 percent.

Bank Size

Figure A.5: Average Deposits by Advances

The figure plots the average of deposits to advances ratio of all banks during the four quarters of the financial year 2012-2013. The y-axis in the figure represents the quarter average of the ratio for all banks, while the x-axis represents the quarters.

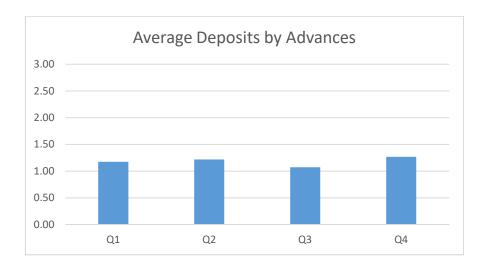


Figure A.6: Average Return on Assets

The figure plots the average of return on assets (ROA) of all banks during the four quarters of the financial year 2012-2013. The y-axis in the figure represents the quarter average of ROA for all banks, while the x-axis represents the quarters.

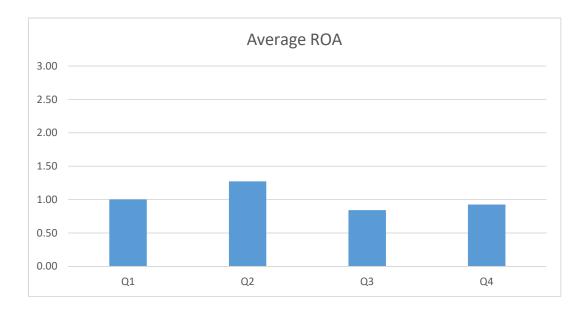


Figure A.7: Average Return on Equity

The figure plots the average of return on equity (ROE) of all banks during the four quarters of the financial year 2012-2013. The y-axis in the figure represents the quarter average of ROE for all banks, while the x-axis represents the quarters.

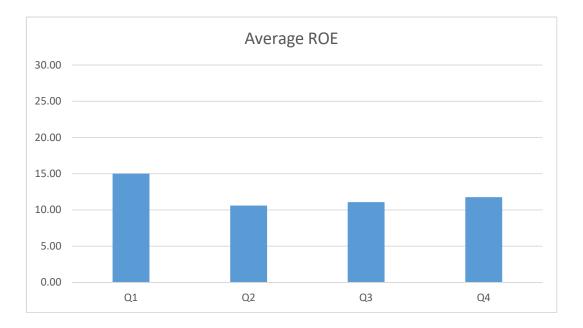


Figure A.8: NPA RATIO

The figure plots the average of NPA ratio of all banks during the four quarters of the financial year 2012-2013. The y-axis in the figure represents the quarter average of NPA ratio for all banks, while the x-axis represents the quarters.

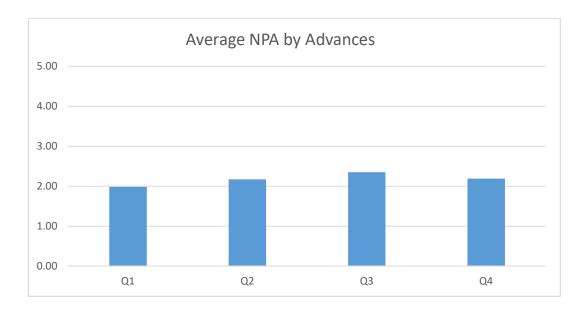


Figure A.9: NET INTEREST MARGIN

The figure plots the average of net interest margin (NIM) of all banks during the four quarters of the financial year 2012-2013. The y-axis in the figure represents the quarter average of NIM ratio for all banks while, the x-axis represents the quarters.

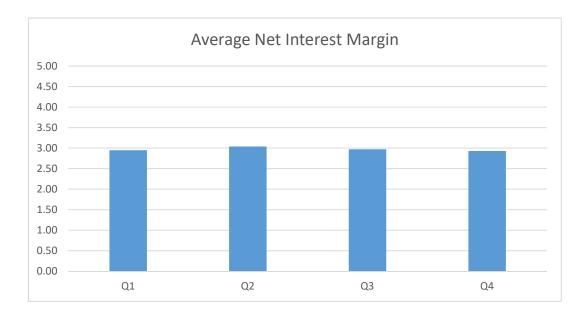


Figure A.10: Provision Coverage Ratio

The figure plots the average of provision to NPA ratio of all banks during the four quarters of the financial year 2012-2013. The y-axis in the figure represents the quarter average of the ratio for all banks, while the x-axis represents the quarters.

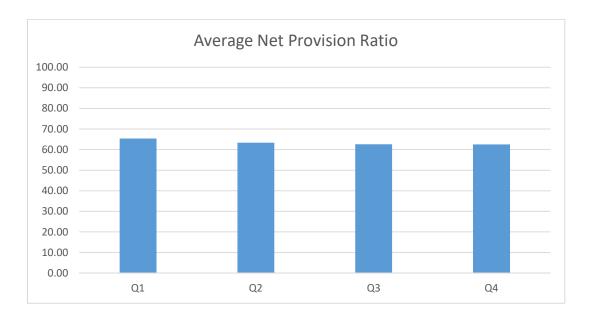


Figure A.11: Menu to observe attention given to various issues by the board and make inferences from the same

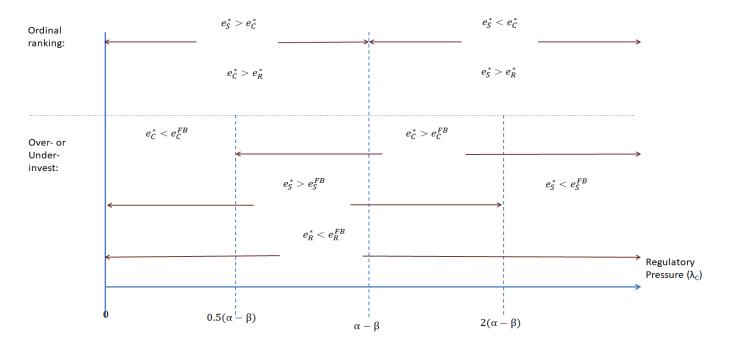


Table A.1: Comparison Between Indian Banks and Banks from Comparable Countries

reports the numbers for Brazil, panel B covers China, Panel C covers Russia, and Panel D reports the numbers for India. Market Capitalization is computed as In this table, we compare the five largest banks of Brazil, Russia, and China with the five largest banks in India. We use Net Interest Margin (NIM), Non Performing Assets (NPAs) to Total Assets Ratio, Total NPAs, Capital Adequacy Ratio (CAR), Market Capitalization, Net Profit, Deposits and Loans. Panel A of the end of the year 2013. All other variables are averaged over five years. All values other than ratios are reported in billion US dollars.

			Panel A: Brazilian Banks					
Bank Name-Brazil	NIM	NPAs to total assets	Total non performing assets	CAR	Market Cap	Net Profit	Deposits	Loans
ITAU UNIBAN-PREF	19.0	3.2	5.20	17.0	27.87	2.47	62.61	56.07
BRADESCO SA-PREF	17.0	2.8	5.22	16.3	24.18	2.17	43.77	49.22
BANCO DO BRASIL	16.8	4.5	10.24	15.1	14.93	2.35	101.52	80.32
BANCO SANTA-UNIT	19.4	3.8	3.68	19.3	12.37	1.02	40.38	34.27
GRUPO BTG-UNIT	24.0	0.2	0.08	16.9	5.69	0.51	62.07	20.54
Country Average	19.2	2.9	4.89	16.9	16.70	1.71	62.07	44.39
			Panel B: Chinese Banks					
Bank Name-China	NIM	NPAs to total assets	Total non performing assets	CAR	Market Cap	Net Profit	Deposits	Loans
IND & COMM BK-A	39.7	1.1	19.19	13.3	264.66	27.03	2058.78	1108.21
AGRICULTURAL-A	27.7	2.9	32.79	11.5	149.43	15.53	1715.73	841.11
CHINA MERCH BK-A	35.3	0.7	2.37	11.3	50.97	4.91	370.97	230.89
CHINA MINSHENG-A	29.6	0.7	2.21	10.3	29.26	3.55	369.27	170.93
CHINA EVERBRIG-A	32.7	1.2	2.02	0.6	23.77	2.36	294.51	124.74
Country Average	33.0	1.3	11.72	11.0	103.62	10.68	961.86	495.18
			Panel C: Russian Banks					
Bank Name-Russia	NIM	NPAs to total assets	Total non performing assets	CAR	Market Cap	Net Profit	Deposits	Loans
SBERBANK	27.1	2.6	5.13	14.9	27.71	3.23	200.76	133.70
VTB BANK PJSC	16.0	4.8	5.06	15.7	11.07	0.62	72.33	63.94
BANK OTKRITIE FI	24.7	2.0	0.31	15.8	1.66	0.12	14.61	8.45
BANK ST PETERSBU	23.9	2.2	0.11	14.3	0.36	0.52	5.05	3.13
BANK VOZROZHDENI	13.0	4.7	0.14	15.1	0.32	0.25	2.68	1.91
Country Average	21.0	3.3	2.15	15.2	8.22	0.81	59.09	42.23
			Panel D: Indian Banks					
Bank Name-India	NIM	NPAs to total assets	Total non performing assets	CAR	Market Cap	Net Profit	$\mathbf{Deposits}$	Loans
STATE BANK IND	17.6	2.2	6.17	12.9	20.18	1.89	195.51	158.67
ICICI BANK LTD	15.6	1.8	1.67	17.8	17.26	1.02	43.83	44.86
HDFC BANK LTD	26.2	9.0	0.45	15.8	16.15	0.73	34.11	27.40
AXIS BANK LTD	29.0	0.7	0.29	14.4	7.20	0.55	27.81	21.92
KOTAK MAHINDRA	18.5	1.0	0.14	19.0	60.9	0.24	5.03	5.88
Country Average	21.4	1.3	1.75	16.0	24.33	0.89	61.26	51.75

Table A.2: Comparison of fraction of Risk Issues Tabled with Business Issues Tabled

Variable	Obs	Mean	S.E	S.D	95% C.	I.
D:-1- T-11-1/T-4-1 T-11-1	20	0.10	0.10	0.06	0.07	0.10
Risk Tabled/Total Tabled	29	0.10	0.10	0.06	0.07	0.12
Strategy Tabled/ Total Tabled	29	0.30	0.02	0.12	0.26	0.35
Difference	29	-0.20	0.02	0.12	-0.24	-0.15
mean(diff) = mean(risk - busstrategy)						t = -9.3643
Ha: $mean(diff) < 0$		Ha: $mean(diff) ! = 0$			Ha: me	$\operatorname{can}(\operatorname{diff}) > 0$
Pr(T < t) = 0.0000		$\Pr(T > t) > 0.0000$			Pr(T >	>t) = 1.0000

This table shows the test of means of risk issues tabled with business strategy issues tabled. Since we are testing whether risk issues tabled is lesser than that of business strategy issues tabled, we are interested in the first alternate hypothesis of Pr(T < t).

Table A.3: Comparison of fraction of Business Strategy Issues Tabled with Regulation and Compliance Issues Tabled

Variable	Obs	Mean	S.E	S.D	95% (C.I.
Strategy Tabled/Total Tabled Compliance Tabled/ Total Tabled	29 29	$0.3 \\ 0.4$	0.02 0.02	0.12 0.14	0.26 0.35	0.35
Difference	$\frac{29}{29}$	-0.1	0.02	0.14	-0.19	
mean(diff) = mean(strategy - compliance)						t = -2.2137
Ha: $mean(diff) < 0$		Ha: $mean(diff) ! = 0$			Ha: n	nean(diff) > 0
Pr(T < t) = 0.0176		$\Pr(T > t) > 0.0352$			$\Pr(T$	>t) = 0.9824

This table shows the test of means of business strategy issues tabled with compliance issues tabled. Since we are testing whether risk issues tabled is lesser than that of business strategy issues tabled, we are interested in the first alternate hypothesis of Pr(T < t).

Table A.4: Bank Level Outcome Variables And Risk Issues Tabled- Government Banks And Others

The table presents the relationship between bank characteristics and the proportion of risk issues tabled. The data are organized at a bank level. Each column presents the results of a regression where a bank characteristic is regressed on the proportion of a category of issues among all issues tabled. In Panel A, we consider the proportion of risk issues among all issues tabled as the main explanatory variable. Similarly, we consider human resources, business strategy, and regulation and compliance in subsequent panels, as shown in the Table. The data for all bank-level variables are obtained from the RBI website. The data pertain to the year ending 31^{st} March, 2014. All variables are winsorized at 95 percent. Government-Owned Bank is a dummy variable that takes the value of one for government-owned banks and zero otherwise. ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	ROA	ROE	Net NPA/Net Advance	Gross NPA/Gross Advance
		Panel A		
Risk	9.765***	99.228*	-11.849**	-13.673*
	(3.170)	(1.913)	(-2.301)	(-1.851)
Government Owned Bank	0.404	5.530	0.110	0.443
	(0.835)	(0.679)	(0.136)	(0.382)
Risk x Government Owned Bank	-7.909**	-60.837	6.964	9.147
	(-2.068)	(-0.945)	(1.089)	(0.997)
Observations	29	29	29	29
R-squared	0.488	0.201	0.460	0.437
		Panel B		
Human Resource	-1.565	32.356	0.232	-3.310
	(-0.417)	(0.567)	(0.040)	(-0.411)
Government Owned Bank	-0.866**	-5.139	1.566***	2.039***
	(-2.756)	(-1.077)	(3.216)	(3.025)
Human Resource x Government Owned Bank	3.150	2.840	-5.357	-1.891
	(0.688)	(0.041)	(-0.755)	(-0.193)
Observations	29	29	29	29
R-squared	0.283	0.091	0.351	0.370
		Panel C		
Business Strategy	-2.468	-65.327*	2.987	6.337
	(-1.108)	(-2.057)	(0.826)	(1.307)
Government Owned Bank	-1.816**	-32.104**	2.330*	3.655*
	(-2.213)	(-2.743)	(1.748)	(2.045)
Business Strategy x Government Owned Bank	3.506	88.265**	-3.369	-5.464
	(1.417)	(2.501)	(-0.838)	(-1.014)
Observations	29	29	29	29
R-squared	0.326	0.246	0.329	0.389
		Panel D		
Regulation and Compliance	1.384	22.812	-1.902	-2.700
	(0.791)	(0.860)	(-0.681)	(-0.711)
Government Owned Bank	-1.953	-37.175	0.482	1.373
D 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(-0.966)	(-1.214)	(0.366)	(0.768)
Regulation and Compliance x Government Owned Bank	0.055	10.561	2.004	1.403
	(0.067)	(0.846)	(0.621)	(0.320)
Observations	29	29	29	29
R-squared	0.294	0.109	0.323	0.366
		Panel E		
P: 11P ::	4 00 5	0.050	0.000	0.271
Financial Reporting	-4.635	-9.976	8.220	6.674
C + O - I P - I	(-1.377)	(-0.188)	(1.618)	(0.916)
Government Owned Bank	-1.083**	-1.834	1.720**	2.034*
E' 'ID '' C 'O ID '	(-2.128)	(-0.228)	(2.239)	(1.847)
Financial Reporting x Government Owned Bank	3.197	-16.902	-4.283	-2.004
01	(0.863)	(-0.289)	(-0.766)	(-0.250)
Observations	29	29	29	29
R-squared	0.341	0.096	0.434	0.410

Table A.5: Summary of Issues deliberated by bank ownership

		Priv	Private			[Public	
	Z	Mean Number of issues	As a % of total issues deliberated	As a % of issues tabled in that category	Z	Mean Number of issues	As a % of total issues deliberated	As a % of issues tabled in that category
Risk Business Strategy Regulation and Compliance Financial Reporting Human Resources	12.00 12.00 12.00 12.00 12.00	1.00 4.00 3.00 2.00 0.00	10.00 40.00 30.00 20.00 0.00	22.20 17.10 13.40 21.00 2.08	17.00 17.00 17.00 17.00 17.00	1.00 4.00 3.00 1.00 1.00	10 40 30 10	12.4 20.3 15 35.5 23.9

This table shows the issues deliberated in board meetings across different categories, split by ownership. Ownership classification is obtained from RBI website.

Table A.6: Bank Level Outcome variables And Risk Issues Deliberated- Government Banks And Others

The table presents the relationship between bank characteristics and the proportion of risk issues deliberated. The data are organized at a bank level. Each column presents the results of a regression where a bank characteristic is regressed on the proportion of a category of issues deliberated. In Panel A, we consider the proportion of risk issues deliberated as the main explanatory variable. Similarly, we consider human resources, business strategy, and regulation and compliance in subsequent panels. The data for all bank-level variables are obtained from the RBI website. The data pertain to the year ending 31st March, 2014. All variables are winsorized at 95 percent. Government-Owned Bank is a dummy variable that takes the value of one for government-owned banks and zero otherwise. ***, ***, and * represent significance at the 1%, 5%, and 10% levels, respectively.

	ROA	ROE	Net NPA/Net Advance	Gross NPA/Gross Advances
		Panel A		
Risk	0.728	11.777	-4.497*	-5.915
	(0.416)	(0.440)	(-1.709)	(-1.632)
Government Owned Bank	-0.649*	-3.390	0.668	1.020
	(-1.849)	(-0.631)	(1.265)	(1.402)
Risk x Government Owned Bank	0.291	10.264	3.418	$6.279^{'}$
	(0.088)	(0.202)	(0.686)	(0.915)
Observations	29	29	29	29
R-squared	0.277	0.068	0.383	0.407
		Panel B		
Human Resource	-0.632	27.300	-2.905	-6.328
	(-0.195)	(0.553)	(-0.578)	(-0.928)
Government Owned Bank	-0.785***	-5.049	1.405***	2.013***
	(-2.863)	(-1.211)	(3.312)	(3.497)
Human Resource x Government Owned Bank	1.571	-7.532	-0.229	2.194
	(0.412)	(-0.130)	(-0.039)	(0.274)
Observations	29	29	29	29
R-squared	0.275	0.078	0.345	0.389
		Panel C		
Business Strategy	-0.906	-19.588	0.289	1.518
	(-0.963)	(-1.392)	(0.191)	(0.741)
Government Owned Bank	-1.047**	-12.152*	1.205*	2.125**
	(-2.522)	(-1.958)	(1.808)	(2.353)
Business Strategy x Government Owned Bank	1.102	26.316	0.167	-0.868
	(0.961)	(1.535)	(0.090)	(-0.348)
Observations	29	29	29	29
R-squared	0.297	0.135	0.316	0.363
		Panel D		
Regulation and Compliance	0.456	1.642	0.061	0.540
	(0.510)	(0.124)	(0.042)	(0.269)
Government Owned Bank	-0.393	0.520	1.097*	1.875**
	(-1.069)	(0.096)	(1.832)	(2.273)
Regulation and Compliance x Government Owned Bank	-1.389	-22.568	0.763	0.077
	(-1.230)	(-1.353)	(0.415)	(0.030)
Observations	29	29	29	29
R-squared	0.324	0.189	0.324	0.350
		Panel E		
Financial Reporting	0.786	1.321	0.065	0.003
	(0.623)	(0.178)	(0.049)	(0.002)
Government Owned Bank	-0.321	0.613	1.128*	1.786**
	(-1.12)	(0.086)	(1.832)	(2.123)
Financial Reporting x Government Owned Bank	-1.112	-12.163	0.712	0.067
	(-1.112)	(-1.353)	(0.425)	(0.031)
Observations	29	29	29	29
R-squared	0.312	0.168	0.421	0.459