Business Group Ownership of Banks: Issues and Implications

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Abstract

The paper for the first time provides a theoretical framework for the conduct of business group owned banks. It introduces the phenomenon of business groups in the theory of financial intermediation by banks developed by Diamond (1984) with a view to analyze their impact on the result of financial intermediation. Two kinds of business groups are distinguished depending on the relationship between the firms and the bank comprising the group. It is argued that result of financial intermediation depends on the type of business groups. Diverse historical experiences relating to India and Japan are found to be in line with the theoretical formulation. The contemporary experience in India analyzed in the paper in the form of three case studies is also found to be in agreement with the above theory. The theory developed in the paper and the evidence in its favor through case studies leads to rejection of the idea of business group owned banks in India.

The paper made a pioneering attempt to econometrically examine the impact of group ownership on conduct of a bank in an emerging economy like India. The paper substantiates the findings from case studies through estimating a logit model using panel data with the help of a Generalized Estimating Equation. The results clearly show that group banks differ in their conduct from non group banks. Firstly, group exploits the bank by getting larger funds to augment the group's fund position. It is also evident that the group bank is subjected to higher risk. A hypothesis that the group cross subsidizes its activities through owning a bank is found to be true. Some of the obvious corporate governance issues like collusion with the auditor do not come out very sharply.

Key words: bank, business groups, corporate governance.

JEL Code: G21, G3.

Section I: Introduction

Banks perform the critical role of financial intermediation between the households (savings surplus economic units) and the firms (savings –deficit units) whereby they mobilize and aggregate the small savings and package and deliver the same in the form of structured or securitized funds to the firms. Deposits mobilized from the households comprise banks' liabilities and the advances made to the firms comprise assets. The difference between the interest charged from the firms and the interest provided to the depositors comprise "spread" which is an element of profitability. There is a two-way endogenous relationship between banks' liabilities and assets: on the one hand banks' ability to create credit is dependent upon deposits; on the other hand quality of the assets has a direct bearing on their solvency. Should the banks have an extraneous consideration in their lending operation for whatsoever reason; it potentially can temper the effectiveness of their role as a financial intermediary as well as their profitability and solvency situation. However, what if such a situation is perpetually prevails in cases where the banks are owned and controlled by the business groups or the banks own the businesses? Does not it result in usurpation of the role of financial markets? Does not it create possibility of deliberate manipulation of bank's performance to suit the underlying business interests and thereby step up the governance related risks, more so in view of the dominant economic position that the business groups occupy owing to pyramidal structures and cross-holding of investments? Is it not that because of these potential hazards of nexus between banks and the borrowing businesses, the regulators world wide have from time to time sought to check this nexus?

It may be pointed out that diversified business groups, consisting of legally independent firms, along with some commonality of ownership and management by family members, operating in multiple markets, are ubiquitous in emerging markets and even in some developed economies. Business groups are commonly looked upon by Western observers as a prime example of "crony capitalism." Corruption in the business world is usually prevented by the urgent prudential motives of financial analysts, shareholders, regulators, and banks. Some forms of business groups, such as commercial banks owning construction companies, are absolutely forbidden under U.S. Regulation. Likewise, the Glass-Steagall Act of 1933 banned certain types of business associations in financial services. The object was to create “firewalls" between certain financial functions, so that banks may be prevented from replacing financial markets with money laundering scams. It is argued that intra-group lending that helped inflame the 1997 Asian Financial crisis. Relational banking was considered to be essential glue of opaque, inefficient and unfair crony capitalism which led to establishment of the superiority of Anglo-Saxon arm’s length financial system.

India restricts industrial conglomerates from owning more than 5 per cent of equity in banks. However, a few of Indian business groups own a bank as a legacy from past. Tarapore Committee on Capital Account Convertibility has favored ownership of banks by industrial groups, which is endorsed by two leading business groups. Government is facing increasing pressure, particularly from US financial groups, which like other foreign institutions presently cannot acquire domestic banks and are subject to tight restrictions on the number of new branches they can open each year. Clearly, there exists a controversy around ownership of banks by industrial houses. The paper seeks to contribute to the debate

drawing from theory, diverse historical experiences drawn from India and Japan and lastly from three current case studies.

Section II of the paper provides the theoretical framework of the paper Section III provides support to the theoretical framework drawing diverse examples from India and Japan. Section IV focuses on the case studies drawn from current Indian experience. Section V develops the hypothesis and describes the data and methodology used in the empirical exercise. Results are contained in section VI. Lastly, summary and conclusions of the study are contained in section VII.

Section II: Theoretical Framework of the Study

One of earliest theories of banking intermediation is provided by Diamond (1984). This section analyses the theory to examine if it provides any clue to for ownership of banks by business groups. In the traditional neo-classical approach, borrowers and lenders interact through the perfect and complete market and there is no role for banks. This means that firms and the households don't need financial intermediaries in order to trade with each other more efficiently. Freixas and Rochet (1997) use a general equilibrium model of resource allocation a la Arrow-Debreu under the assumption of perfect and complete financial markets. With perfect and complete markets there are no transaction costs and information is symmetric. Hence, this general equilibrium model, with complete financial markets, can not rationalize the existence of banks, which have no role in the efficient allocation of the resources.

The Arrow-Debreu paradigm is at odds with reality because banks have clearly played a central role in the transformation of savings from the households into investments for the firms since the ancient times. Such an unrealistic result from the model is due to the unrealistic assumptions used in the model relating to complete and perfect financial markets. Any market is plagued persistently by presence of information asymmetry and transaction costs, and this is more so for a financial market.

Scholars trying to rationalize the existence of bank have begun by giving up the unrealistic assumptions of perfect and complete markets. Theory of transaction cost explains firms but an explanation of existence of a bank has to be to more involved, which takes care of peculiarities of a financial market over and above an ordinary market. Presence of transaction cost is characteristics of all markets including goods market, and it does not distinguish between a goods market from a financial market. What distinguishes a financial market from an ordinary market is the peculiar nature of exchange characterizing it. What are exchanged are not goods for money, but money itself is traded in financial market in return for a mere promise for return of the amount after the stipulated period along with the agreed rate of interest. The issue of trust gains more relevant in a financial market as opposed to an ordinary market. Information asymmetry manifesting in adverse selection and moral hazard are typical features of a financial market. Thus, any attempt to rationalize the existence of banks has to demonstrate how banks solve the problems relating to information asymmetry.

The much celebrated model of Diamond (1984) gives an asymmetric information explanation for the existence of banks. The basic idea is that lenders can directly trade with entrepreneurs the market. However, because of the asymmetric information, lenders cannot observe the output of the firm's projects. Entrepreneurs wouldn't have the incentive to reveal their true efforts and would like to keep the benefits to themselves. An appropriate solution would be a contract between the two parties that involves penalties to entrepreneurs if they don't deliver the agreed payments to the lenders. However, this could bring losses to the entrepreneurs if their projects aren't so successful. Hence, such a solution is not efficient. Another way would be that investors observe the output of firm's projects and control the payments that they have to get. The costs of doing so are called monitoring costs and they would be too high if there was only one lender to each entrepreneur. However, these expenses increase with the number of investors and for this reason it would be optimal if only one firm would monitor the borrowers on behalf of the others. Therefore, a financial intermediary is introduced who lowers these costs by assuming the job of delegated monitoring. Financial intermediaries such as banks can centralize costly monitoring and avoid the duplication of effort of the monitoring of borrowers by small investors.

The downside is that along with cost advantage, delegated monitoring causes an agency incentive problem as well. However, this time it is between entrepreneurs and intermediary. The person doing the monitoring as agent now has private information. It is not even verifiable whether the monitoring has been undertaken. In simple words, costs of delegation arise due to collaboration between intermediary and entrepreneurs. The cost incurred in solving the agency-incentive problem between the monitor and the entrepreneur is called

cost of delegation. Delegated monitoring leads to delegation costs and the costs of financial intermediation includes, the cost of delegation over and above the cost of monitoring.

In contracting situations involving a single lender and a single borrower, one compares the physical cost of monitoring with the resulting savings of contracting costs. Let K be the cost of monitoring and S the savings from monitoring. When there are multiple lenders involved, either each must be able to monitor the additional information directly at a total cost of m×K, where m is the number of lenders per borrower, or the monitoring must be delegated to someone. Let D denote the delegation cost per borrower. A complete financial intermediary theory based on contracting costs of borrowers must model the delegation costs and explain why intermediation leads to an overall improvement in the set of available contracts. That is, delegated monitoring pays when $(K + D) < \min [S, m \times K]$ where $K + D$ is the cost using an intermediary, S is the cost without monitoring, and $m \times K$ is the cost of direct monitoring.

The law of large numbers implies that if the bank gets sufficiently diversified across independent loans with expected repayments in excess of the face value of bank deposits, then the chance that it will default on its deposits gets arbitrarily close to zero. In the limit of a perfectly diversified bank, the bank would never default. The delegation cost for the bank approaches zero, and the only cost of intermediation is the (unavoidable) cost of monitoring. Therefore, diversification within the intermediary can be seen as the main reason to understand the intermediary theory with asymmetric information. The delegation cost from excessively limited diversification leads to increased probability of bank failure, which may also have contributed to the historical political pressure for deposit insurance. Anything that

limits bank diversification removes much of the technological advantage of the banking contract.

The above theoretical framework developed by Diamond may be restated in brief before introducing complications. It is shown that lenders can not directly trade with entrepreneurs in the financial market because of information asymmetry and prohibitive costs of monitoring. However, a financial intermediary called bank can make such trade possible because of lower cost of monitoring and insignificant delegation costs made possible through diversification.

In theory, there exist two independent entities: bank and the entrepreneur. The only link between the two in the theory is that banks has lent to the borrower. This standard scenario will change in the presence of any other relationship, apart from the borrowing relationship. It is clear that introduction of any additional relationship will be made to influence the act of return of debt to the bank. It will tilt the balance in favor of either party: bank or the entrepreneur. Two scenarios of complications in the simple banking model may be introduced. In the first scenario, the borrowing firm seeks to control the bank either directly through direct ownership, or indirectly through a third entity which owns and control both the borrowing firm and the bank. In second scenario, the bank gets a considerable control and influence over the borrowing firm, in exchange for long term security and support. Both these scenarios are at variance with the bank in the standard theory of banking, where a stand alone bank lends money to a company in which it has no direct ownership,

involvement, or commercial interaction. The actual scenario regarding the relationship between bank and the borrower firm depends on the institutional[1] specificities.

The two scenarios envisaged above have fundamentally different implications for the bank. In the first case, the bank is an entity, whose interest is subservient to the group interest and the second is a symbiotic relationship, mutually beneficial to both firm and bank. It is possible to visualize two types of business groups, involving two different types of relationship between bank and firm. In the first scenario, a bank is basically treated as a means to further the interests of the firms comprising the group. In such a case, the private interest is promoted at the cost of public interest because a bank, however it is owned, remains a public financial institution. In the second case, the interests of the bank and the firms in the group go together. The bank will benefit only if the group firms it is lending to returns the debt as per the contract. The control of the bank over the firm ensures the return of the debt. Thus, both the bank in the group and the group firms gain leading to a Pareto superior situation for both the entities. In the case of a stand alone bank in banking theory, return of loan to the borrowing firm depends on how efficiently the bank rides over the problem of adverse selection and solves the problem of moral hazard through delegated monitoring, given the institutional specificities. The ultimate outcome of financial intermediation depends on rules, beliefs, and norms which influences repayment of loan.

Let us discuss the scenario of a business group owning a bank. It may be argued that group ownership and control of bank produces adverse impact of the functioning of a bank. The

[1] An institution is a system of rules, beliefs, norms and organization that together generate a regularity of behavior (page 30, Greif, 2006).

objective of control of a group is to secure maximization of the profit for the whole group, which is likely to be at the cost of the bank There is no rationale for a group to own a bank unless it can use the services of the bank, which is either not available to the group, or available to it at higher cost. To the extent that these benefits of group ownership of banks extend to the group without external diseconomy, the economy will reach a Pareto superior point through group ownership of banks. It will be argued below that benefits accruing to a group due to ownership and control of bank will either come at the cost of the bank or agents not related to the group.

It may be argued that group ownership will not allow a bank to function in the appropriate fashion. While a stand alone will be able to screen the potential borrowers independently to solve the problem of adverse selection, same is not likely for a group owned bank. It has to accept the dictates of the agents in control of the group in selection of its borrowers, a part of which are likely to group companies. Lending to group companies provides an important rationale behind ownership and control of banks by business groups, particularly when financing from financial intermediaries is not easy because of the group risk or project risk that it entails. But such a loan transfers the risk of the group firms to the banks.

Financing of a group firm by a group bank is not likely to occur at a rate of interest justified by the risk profile of the project. This has adverse implication for the depositors and other borrowers, who will be subsidizing the group through receipt of lower rate of interest and payment of higher rate of interest respectively[2]. In such case, flow of deposit into the bank

[2] It may be possible to visualize the impact of a presence of high proportion of group owned banks in the industry. When all the banks owned by business groups provide costly service to ordinary customers, it is

and flow of advances out of the bank will suffer, which will adversely influence the basic function of financial intermediation. The spread of the bank also may suffer depending on the situation relating to elasticity of demand for deposit and lending. However, given competitive pressures exerted by stand alone banks in the deposit and loan market, it may not be possible for the group owned bank to reduce interest rates on deposits and raise the interest rate for borrowers. In such a case, letting the group borrowers borrow at less than market rates will lead to a squeeze in the spread for the bank. With fall in spread adversely impacting profitability, the stock price of the bank is likely to fall and it will be difficult for the bank to raise resources from the stock market. In such a case, the group may prop up the stock prices artificially by using group firms to buy stock of the bank, transmitting a perverse signal to the ordinary stock holders of the bank.

When the bank is forced to lend to its group companies at rates not reflecting the risk profile of the loan, it is facing an additional risk not faced by a stand alone bank. There may be an extreme situation where the loan does not get returned at the behest of those in group control. The money from the bank will be transferred in a group firm, where the productivity of its use is highest and it is easiest to be appropriated by controlling interest. This will lead to formation of NPAs, which will further adversely influence the risk bearing capacity of the bank through erosion of its capital base. This will impact profitability of the bank leading to loss by minority shareholders, not in control of the bank.

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likely that non group bank also raise their price, not justified by the risk profile. This may encourage more default and defeat the purpose of financial intermediation.

The all important function of monitoring a loan to tackle the problem of moral hazard does not arise when a group owned bank lends to a group firm, simply because the interest of the bank gets superseded by the controlling interest of the group. Lastly, unlike a stand alone bank, which will attempt to get sufficiently diversified across independent loans, a group owned bank can not obtain maximum diversification due to compulsion to lend to group firms. Theory of banking has pointed out that maximum diversification is the key to safety of the deposits. The more the group firms are financed by the group bank; it compromises diversification of its lending portfolio exposing itself to more risks. This may have implications for stability of the group owned banks.

It is known that banks are the major institutions that are responsible for siphoning funds from depositors (who spend less) to investors (surplus spenders).In this manner, banks are allocators of funds. Hence the responsibility that devolves upon the banking system is that it must allocate funds efficiently. If deposits collected by the bank are used to serve controlling interests, the banks' autonomous monitoring roles is compromised. Thus, group membership will have adverse impact on corporate governance in a bank and consequently lead to allocative inefficiency in the economy. It may be interesting to draw a distinction between a firm and bank in this context. Profits of a firm belonging to a group is likely to be over stated or understated depending on the impact of cross subsidization within the group leading to perverse signal for resource allocation. Similar things also happen to bank when it is part of a group. However, an additional adverse impact on resource allocation is generated in case of a group owned bank. This is not likely to happen to a stand alone bank because it screens the applicants to get rid of the problem of adverse section and monitors

the projects of the borrowers to tide over moral hazard. Clearly, there exists a double edged adverse impact of group ownership on a bank.

There may be other parallel motives behind group ownership of firms. A group might like to own a bank so that it can provide the group firms underwriting facilities at less than market fees. When closed group firms go public for the first time by floating an IPO, it entails additional risks, which is unlikely to be borne by stand alone bank, adding more reasons why groups seek to own banks. Thus, a group may derive certain benefits from owning a bank which are either not available to it at all, or available only at higher price. If the loss in dealing with group firms is not compensated by dealing with non group firms, the bank will have to take a knock in its profitability with all its adverse consequences. It is argued in the literature that a bank loan is unique and issuance of loan from a bank as opposed to on banking financial creates a favorable impact on the stock prices of the firm borrowing from the bank[3].

Recent literature has argued that financial intermediaries like banks accelerate economic growth by improving the probability of successful innovation. Growth of an economy may be driven by an endogenous impulse when financial intermediaries evaluate prospective entrepreneurs, mobilize finance the most promising productivity enhancing activities, diversifying the risks associated with these innovative activities and reveals the expected profits from engaging in innovation rather than producing existing goods with existing methods. Financial sector distortions reduce the rate of growth by reducing rate of

[3] Calomiris and Kahn (1991), Flannery (1994), and Diamond and Rajan (2001) showed that the fragile capital structure in banks and, hence, their vulnerability to deposit runs serve important economic functions. Deposit runs represent a powerful disciplining device that limits banks' incentives for risk-taking and misallocation of resources. This provides some degree of quality assurance in banks' loan portfolios. Because non-bank lenders that cannot issue demand deposits do not have the "benefits" of a fragile capital structure, they are less credible in their loan portfolio quality commitment. This may explain why a loan approval by non-bank lenders does not carry the same "good news" weight, as does a loan approval by banks.

innovation. Clearly, group owned bank with its compulsion to serve group companies will raise distortions in the financial sector.

It is argued by Eric Tsai (2007-09) that risk may transfer to the banking components of non-financial, family-run groups primarily through two channels. First and foremost, it has to do with reputational risk. The banking industry survives and thrives on trust, and depositors' faith in a bank is a prerequisite for sustaining the bank's safe and sound operation. Therefore, for a bank affiliated with a family-run group displaying a low degree of transparency and complex organization and financial operation, negative financial information originating from the group's non-bank members will easily make depositors' trust in the bank evaporate, causing a bank run. Second, there is also a transactional aspect of the risk transfer phenomenon within a family group. Even absent non-arm's length transactions or bad faith conduct siphoning off bank funds for family members' personal interests, in the pursuit of maximizing the interest of the group as a whole as opposed to that of its banking component per se, it is not an unusual practice for a family group to put depositor's funds towards making up the group's non-bank member's losses so as to have the losses shouldered by the banking component, which is protected and subsidized by national deposit insurance and other protective measures.

To summarize, all the standard functions of a bank which justify the existence of bank including screening in order to meet adverse selection problem , monitoring to take care of moral hazard problem and maximum diversification of loan portfolio to ensure safety of the deposits suffer in case of group ownership of banks. The risk profile of the bank increases

when it provides certain facilities to the group, which are either not forthcoming from other banks or are available at a higher cost. A rise in risk profile of the bank is likely to have an adverse impact on its stability. If the loss incurred though transaction with the group companies can be compensated by transaction with non group entities, non group entities transacting with the bank will suffer. If it is not possible, the profitability of the bank will suffer, price of stock will be adversely affected and resource mobilization through stock market will take a hit. The maximum adverse impact will be generated if money loaned out to group companies does not get returned to the bank. Cleaning the balance sheet will wipe away capital, reducing capital adequacy ratio while adversely affecting the risk bearing capacity of the bank. Apparently, no benefit occurs to the bank as a result of being owned by a group. Group ownership will have adversely impact of transparency and the trust that needs to be reposed by the public in a public financial institution. A bank is owned by a group to benefit the group firms and not otherwise. As a result of group ownership, a dual adverse impact impinges allocative efficiency in the economy.

The above example of relational financing relates to crony capitalism, where collusion between agents in an economy impedes free operation of the market forces. However, there exist instances of another form of relational financing, conceptualized as "bank-based relational-contingent governance" in the comparative governance literature (Aoki, 2001).This leads one to appreciate the second scenario where a business group is so constituted that a bank is at the centre stage. As opposed to earlier example of a bank owned by a firm belonging to a business group, the bank in this case is generally a major shareholder in the corporation and provides its corporate client with loans as well services related to bond issues, equity issues, settlement accounts, and related consulting services.

The symbiotic relationship between the bank at the centre and the firms around ensures convergence of their interests and mutual growth.

Section III: Cross country historical experience.

Pre-independence banking experience in India

It is necessary to draw from country specific experience in support of the theoretical framework developed in section II. We begin with a historical analysis of Indian experience of business group owned banks in India. India provides a very interesting example, where an economic activity as risky and basic as banking emerged with hardly any regulation regarding their formation and operations. During the first phase of development of banking, the English agency houses[4] in Calcutta and Bombay began to conduct banking business, besides their commercial business, on the basis of unlimited liability. The primary concern of these agency houses was trade, but they branched out into banking as a sideline to facilitate the operations of their main business. Thus, banking activity originated in India as a part of group activity. One often witnessed a run on the bank whenever there occurred a problem with the related firm. The banking industry in the colonial period continued to be ravaged by combination of banking with trading in the form of acquisition of control of non banking companies as well as interlocking of bank and other concerns. It may also be pointed that the managing agency managing non-banking and banking business simultaneously were the early incarnations of group owned banks in India[5].

[4] A type of business organization recognizable as managing agency took form in a period from 1834 to 1847. Managing agency system came into existence when an agency house first promoted and acquired the management of a company. This system, with no counterpart in any other country functioned as an Indian substitute for a well organized capital market and an industrial banking system of western countries.

[5] It is argued in the literature that managing agency system in colonial India, like business groups originated as a response to institutional voids and entrepreneurial scarcity (Majumdar, 2008).

A costly lesson from the turmoil in banking during the pre-independent banking era has been separation of banking from non-banking activity. This led to passage of regulation preventing banks to participate in non-banking activities. The idea was to prevent instability in the non-banking business from adversely impacting the business of banking and making it unstable. Soundness of a financial system has been elevated to a status of a public good. This implies that extreme caution and restraint has to be hallmarks of any policy regime for banks. It may be argued that impact of ownership of banks by business groups will be similar to allowing a bank to do non-banking business. When banks are owned by business groups, it is already argued in section II, then at least some amount of risk faced by the group firms will have to be borne by the bank, making it more unstable compared to a stand alone bank, which has to deal with risk emanating only from the business of banking.

Pre-nationalization banking experience in India

It is worth examining pre nationalization phase of banking where banks were owned by groups, in order to derive lessons relevant to the issue being examined. It is perhaps useful to re-visit the arguments put forward in defense of nationalization of such group owned banks. Before several banks were nationalized in 1969, the Tatas were reported to be actively involved with the Central Bank of India. Thapar group controlled Oriental bank of Commerce. In the pre-independence days, there were strong links visible and invisible links between the captains of the industry and trade and who ran the banking system. The advantages flowing from these links far outweighed the disadvantages and it was important that some methods were devised to bring about a delinking. Some of the changes were introduced as part of social control scheme, in the form of passing necessary legislations and

amendment of present laws. They succeeded in snapping the visible links but the invisible links remained.

It appears that Hazari came across instances of invisible link between industry and banks in his celebrated attempt to analyzer ownership and control pattern of business groups in India. He observed banks to be holding large blocks shares in many companies including some private companies. It is an open secret that 90% of such holding do not belong to banks as beneficial owners, but are held in various capacities on behalf of their clients. Registration of shares in the names of banking companies is widely used for concealing the ownership and control of companies. The mystery of ownership and control in business groups has forced a painstaking researcher like Hazari to concede that analysis of control in quantitative terms is rendered more difficult than analysis of ownership. This is because a deliberate effort is made to conceal proportion of capital held by controlling interest. It is clear that a very complex and opaque issue like ownership and control of business houses in India is rendered more obscure by invisible link between industry and bank. Over the years the endeavor of the government has been to ensure that both visible and invisible links are eliminated, so that the banks support all productive endeavors strictly on the basis of merits as opposed to links. Failure of social control led to nationalization. People in favor of group ownership of banks have to provide a counter argument to the adverse impact of visible and invisible link between industry and banking to establish their view point.

The deregulated regime in India

In the current deregulated regime, nature of banking has become very complicated as it has to grapple with a number of risks. It is simply out of question to expose a bank to new kinds of risk, when the social rationale of Business group owned bank is far from clear. It is clear that business group owned banks leads to visible and invisible links between industry and bank and creates a financial system which does not favor an entrepreneur willing to take new risk, so fundamental to growth of the economy. It hinders free operation of market forces, creates crony capitalism and goes against the spirit of deregulated regime[6].

Japanese experience of keiretsu and main bank

To understand invisible link between the remarkable strength and success of Japanese companies today, it is necessary to examine the functions of the "keiretsu", or business group in terms of role of main bank at its core, and its impact on the present and future strength of Japanese firms. Before World War II several large industrial groups dominated Japanese economic activity. They were centrally owned and controlled with common interlocking directorships. After the war the United States forced Japan to dissolve these groups as they contravened anti- monopoly and anti-combine regulations. Since that time a number of major groups, or keiretsu, have reformed. Today each group is clustered together

[6] There are two instances relating to group ownership of banks from Russia and Taiwan. Family group control of commercial banks continues to characterize Taiwan's banking industry, being a legacy from the past. A regulatory issue in Taiwan's banking regulatory system that urgently needed to be addressed relates to the risk transfer problem flowing from the traditional family-owned group's mode of operation that befalls the group's banking component. In Russia, a substantial no of 100 agent banks, created since 1990 by enterprises or groups of enterprises are captured by interests of parent enterprises, leading to exposure of their credit to idiosyncratic risks. Lastly, Industrial groups in Korea were prohibited from acquiring commercial banks, partly in order to increase the government's leverage over the banks in areas such as credit allocation. The Park regime nationalized the banks of South Korea and could channel scarce capital to industries**,** in accordance with national priorities.

in voluntary association with a central bank at the core. An example of these powerfully related companies is the Mitsui Group, vying with Mitsubishi as one of the two largest keiretsu. Mitsui is representative of the key characteristics in these associations which include a large industry range, ostensible independence of member companies, central role of a major bank, nebulous definition of membership and dynamic nature of relationships. The integrating mechanisms of the keiretsu which holds its affiliated companies together include cross-shareholding, commercial transactions, personnel movement, and strategic coordination.

The main bank system and the *keiretsu* are two different, yet overlapping and complementary elements of Japanese model of corporate governance. Almost all Japanese corporations have a close relationship with a main bank. The bank provides its corporate client with loans as well services related to bond issues, equity issues, settlement accounts, and related consulting services. The main bank is generally a major shareholder in the corporation. In Japan, the bank acts as a virtual guarantor of the long term liability of the companies, which belongs to its own group. The phenomenon describes a long term supportive relationship that is rarely found in our own society. Support from the bank during trouble and the resulting bank control over the firm are the two features of institution of keiretsu, which are analyzed below.

In case of financial difficulties surrounding a company, when it cannot meet its interest and principle repayments, the bank will allow deferment of repayment and will continue making new loans to that company. The bank does not foreclose the loan, even when a company is no longer financially viable. On the contrary, it engineers a merger and draws the ailing

company under the wing of one or more of the other members in the family. Human resources are absorbed within the other companies and physical assets are also incorporated into other operations. The main bank will ensure that all creditors are paid off in full, if there are losses to creditors, while it will absorb the losses itself. The opposite situation exists when a Japanese company does not belong to a keiretsu and has no main bank relationship. In such a case, no obligation exists on the part of the Japanese bank.

In exchange for long term security and support, the bank at the core of the keiretsu gets a considerable control and influence over the firm. Traditionally, numerous Japanese companies have been financed almost exclusively by bank loans. The bank participates directly in corporate management decisions, and has implicit veto power.

An important difference between Japanese *Keiretsu* and Indian business groups in India is that *Keiretsu* are characterized by a main bank providing both equity and debt capital to its members They tend to be run by professional mangers rather than members of an extended family, and are considerably less tightly controlled than typical Indian Business group. In Japan, the main bank has an incentive to protect the loans it has provided to a low performing *Keiretsu* firm.

Section IV: Case studies of banks owned by business groups in India

A glance on the ownership of private banks in India reveals that very few of them belong to a group. These banks include Bank of Rajasthan, erstwhile Centurion bank of India, IndsInd Bank and Kotak Mahindra Bank. They exhibit two types of bank based relational financing: a firm (financial or non-financial) owns a bank and a holding company owning both bank

and firms. Bank of Rajasthan and erstwhile Centurion Bank provides examples of the former while IndsInd Bank exemplifies the later type. While bank of Rajasthan has passed into the hands of Tayals from Bangurs, IndsInd Bank is controlled by the NRI Hinduja group through a holding company based in Mauritius. The third bank was promoted by a listed Twentieth Century Finance Corporation known as Twentieth Century Finance Corporation. It needs to be empirically examined to what extent group membership has produced an adverse impact on corporate governance in these banks. We discuss in detail the first three banks and leave out Kotak Mahindra Bank, as unlike the rest, it is of a very recent origin.

Established in 1943, Bank of Rajasthan (BOR from now on), the state's oldest private sector bank began getting enmeshed in controversies in the 1990s. It was one amongst the top five private banks in the country till 1997 in terms of market share. It provides a very interesting example of an adverse impact on a public financial institution exerted by group ownership on the one hand and a squabble between two business groups for cheap public money on the other. An account of corporate governance in the bank is complicated enough to merit a detailed discussion. An analysis of affairs in the bank is conducted in terms of certain points to facilitate easy comprehension.

A discussion of corporate governance in bank is generally subsumed under a general discussion of corporate governance in firms, which revolves around presence of conflict between owners who own but do not control the firm and management, who control the firm but do not own it. However, literature of corporate governance (Murthy, 2009) in bank refers to existence of conflicts of interest at a multiple levels. Corporate governance in banks refers to resolution of conflicts between shareholder and regulators on the one hand and

between shareholder and depositors on the other. It also refers to resolutions of conflict between majority and minority shareholders as well as between equity holders and debt holders. The analysis of the affairs in BOR is conducted in terms of the above conceptual framework to reveal how group ownership has led to creation of conflicts at the levels mentioned above. We start with a discussion of how conflict between the promoter and regulator was shaped in BOR. This is followed by examples depicting how promoter develops conflict with depositors, employees, minority shareholders and debt holders on the other. Lastly, it was shown how presence of independent directors was of no consequence in resolution of the above conflicts.

Diversion of funds from the bank to the group/front companies of former BOR promoter Bangurs

The RBI has severely indicted the then management of BOR led by the Bangurs for fund diversion and mismanagement, after inspecting the accounts of the bank in 1998. The RBI had removed Keshav Bangur and SN Bangur from the board of directors of BOR. They were also debarred from holding directorship in any banking company for five years. In August 2000, Central Bureau of Investigation revealed diversion of Rs. 69.155 crore to the group/front companies of former BOR promoter Bangurs. The enquiry was ordered by the Rajasthan High Court following allegations of fund diversion to the tune of Rs. 277 crore by the former promoters. In its interim report submitted to the High Court, CBI said ``funds were sanctioned by BOR to front companies of Keshav Bangur from where they were further diverted to Bangur Finance through various intermediaries. The report has listed five front companies of Keshav Bangur: Commodity Exchange Corporation, Xitiz Exim, Shanoo

Exports, Gangaur Nirman and SM Commercial which got Rs 29.50 crore by way of packing credit. Moreover, Rs 15.105 crore was sanctioned as ICD/short-term loan to front companies of Bangur by Rajasthan Bank Financial Services, a subsidiary of BOR. Besides, nine companies were sanctioned Rs 14.255 crore, part of which was transferred to front companies of Bangur. The bulky report has given details of fund diversion and how it reached various Bangur companies through various transactions. According to the probe report, Bangur and his family members had substantial shareholding in many of these front companies. ``Most of the funds transferred to Bangur Finance were stated to be towards repayment of ICDs and investment in stock market.... no exports were made against packing credit limits by most of the companies. In the case of packing credit limits, the amount was not utilised for the purpose for which it was sanctioned and the entire amount is outstanding," it said. The probe also touched on the acquisition of stake by the Bangurs in BOR. In January 2003, however, based on a writ petition filed by bank employees, Bangur was arrested for defrauding the bank of Rs 300 crore. The case is still being heard in the Rajasthan High Court and the Central Bureau of Investigation (CBI) is yet to submit its final report.

Dubious means of securing control by Tayals

Bangur had enabled Tayal to take a loan of Rs 25 crore from the BOR. Tayal used Rs 7.50 crore from this to buy BOR shares. The finance ministry's Central Economic Intelligence Bureau (CEBI), located within the department of revenue, ministry of finance, found prima facie evidence of dubious transfers from the Tayal Group of Companies to various fictitious

companies that were owned by Tayal himself. According to CEIB, Rs 300 crore was transferred to Shree Krishan Polyester Ltd, Shree Krishna Petroyarns Ltd, Shree Krishna Texport Industries Ltd and Shree Krishna Knitwear. This amount was raised by siphoning-off funds from banks, financial institutions and public money raised through public issues. The funds transferred to these companies were then lent to other fraudulent firms that existed only on paper. According to CEIB, Rs 210 crore was transferred in this manner. The intent of this second transfer was to enable these firms to purchase shares of BOR. These firms then gave proxies in favor of Tayal. In this manipulative and strategic manner - misusing public funds - Tayal ousted Bangur from the post of part-time chairmanship of BOR and was appointed non-executive chairman of the bank. The ministry of finance acknowledges that there are "complaints about irregularities committed by Tayal through BOR." The ministry's department of economic affairs, banking division, stated the following: "The allegations related to acquisition of shares of the Bank by the Tayal group by having benami transactions, delay in remittance of allotment money by the Tayal group, as a result of which the bank lost an amount of Rs 28.80 lakhs towards interest, irregularities in the issue of right shares, forged proxies and carrying out transactions using forged stock invest." Apart from the loss of Rs 28.80 lakhs, there exist other allegations as well.

RBI had informed the ministry that "in the matter of acquisition of shares of Bank of Rajasthan by Tayal group, SEBI had observed violation of its Regulations 3(4) and 7 and the same was referred for adjudication." The adjudication proceedings regarding the violation of Regulation 3(4) were completed and a mere penalty of Rs 1 lakh was imposed by SEBI on the Tayal group of companies, with a turnover of Rs 2500 crore to legalize their control of the bank. The adjudication proceedings regarding the violation of Regulation 7 are still in

progress by SEBI. Apart from SEBI, the role of Shri Tayal in the malfunctioning of the BOR is also being enquired into by various other agencies like RBI, CBI etc. This led to refusal of IDBI to sanction its application for a term loan of Rs 500 million and a direct subscription to equity of Rs 300 million for partial financing of expansion scheme of one of the Tayal group of companies.

Violation of the RBI directive of arms-length relationship between the bank and its promoter

A confidential note issued by the RBI regarding the role of directors and part-time chairmen of private banks clearly states that "part-time chairman as well as directors should distance themselves from activities which are inconsistent with their role…the objective in allowing the appointment of part-time non-executive chairman in a banking company is to enable it to have the benefit of association of eminent persons of valued experience." Tayal's record is certainly not "eminent". He has violated the RBI's directive that there should be an "arm's length" relationship organizationally and operationally between the Bank and its promoter. A few examples of violations follow.

Tayal shifted the regional office of the bank in Mumbai from Grant Road Mumbai to his own premises at Raghuvanshi Mills Compound, Lower Parel Mumbai immediately after his induction on the Board[7]. To tighten his grip on the bank further, the promoter established the bank's corporate office in Mumbai, although it was headquartered outside Maharashtra. All the significant departments viz., the departments of credit, investment, treasury, recovery as

[7] It is stated in a confidential letter dated November 23, 2002, despatched by a bank officers' association, affiliated to Bhartiya Mazdoor Sangh, to the former RBI governor, Bimal Jalan

also the board secretariat, the office of the managing director as well as deputy managing director and executive director were right behind the administrative offices of the non-bank businesses run by the promoter.

Conflicting interest of depositors, employees and small shareholders with promoter

The Apprehension of the depositors was communicated by an M.P. to the then CBI director. Two delegations of bank officers' also voiced concerns before the finance minister Jaswant Singh. The delegation requested Singh to initiate an investigation of the bank's functioning under section 36D (IV) of the Banking Regulations Act 1949 without delay. Representation has also been received from a small shareholder[8] of the bank in September 2003. He had leveled allegations about the connivance of the officers of the Reserve Bank of India in helping Shri PK Tayal in the malfunctioning of the affairs of the Bank of Rajasthan. Tayal acquired 90 lakh shares in a completely illegal manner by making a payment of Rs 2 per share instead of Rs 10 per share.

Passive independent directors and nominee directors from RBI

In accordance with RBI and SEBI, no promoter can run a bank or any business arbitrarily because it is run by a board of directors. This view owes it to the fact that the board is comprised of independent directors. But the actual issue is how 'independent' these directors can be when they are related to the promoter. There were two nominee directors from the RBI. It is very surprising that such directors did not raise any concern about the goings on in the bank.

[8] Shri Ram Prasad Somani of Bhilwara

The episode of the bank may be very briefly summed up as follows. While the Bangurs diverted funds form the bank to his group, Tayals used controversial, manipulative and illegal means to acquire control. Tayals ran the bank with scant regard for RBI's norms, harming the interest all the stakeholders in the bank: depositors, employees and small shareholders. While this happened, independent directors and directors appointed by RBI watched from the sidelines. Apprehensions of subjugation of interest of debt holder's interest to the promoters led to refusal of IDBI to sanction a term loan to a company belonging to the Tayal group. It may be justly said that the goings on in the bank is a mockery of corporate governance. Group interest was promoted at the cost of the interest of the bank. As will be seen later, similar is the situation with group owned new banks.

Centurion Bank and IndsInd Bank are the only banks with group affiliation among the new banks. Centurion Bank was promoted by Twentieth Century Finance Corporation (TCFC) and later merged into CBL in 1995. Similarly, Ashok Leyland Finance Ltd, a group company was amalgamated with IndusInd Bank in 2004.A major portion of TCFC's assets are doubtful in nature owing to its large exposure to equipment leasing[9]. After merger, the capital adequacy ratio (CAR) of the bank has come down to 4.16 per cent, less than half the Reserve Bank of India norm of 9 per cent.

With significant asset addition also in the corporate finance segment, it was expected that merger will establish CBL as a major player in the consumer finance market. The strong access to low-cost funding that Centurion Bank coupled with the high growth-high margin retail financing business that TCFC is involved in, shall provide a strong foundation for a

[9] There are a number of detailed descriptions relating to the anomalous nature of the merger, which is avoided due to space constraint.

consolidated operation. It as also expected that the merger will also result in other synergies including reduction in cost of funding, achievement of economies of scale, elimination of duplication of businesses and an all-India presence for the bank. However, it may be convincingly argued that these were not the real reasons. 20th Century Finance, once highly rated on its deposit schemes, had taken a tumble, with the rating agencies rapidly downgrading it[10]. Instead of tackling a sick NBFC, the promoters chose the route of a reverse merger with a new entity promoted by them. The strategy obviously was to ensure an adequate performance by the new bank that could nullify the effects of the troubled promoters' past. In this case, the underlying objective of the promoter in promoting the bank was to salvage itself through de-merger route. The ratio of exchange of shares of the bank and the finance company was fixed at 1:1. The rationale behind such an exchange in terms of benefit of the bank is not clear. Such an exchange has obvious adverse implications for non-promoter shareholding, which had to suffer because of cleaning of the balance sheet of the new entity due to bad assets carried over from the finance company.

IndsInd Bank belongs to Hinduja group of companies. IndsInd Bank merged with Ashok Leyland Finance Ltd in 2004. The impact of the merger, as in the case of the earlier will be examined in a subsequent section. However, it is well known that the group is controversial[11] and it is also alleged[12] that the public shareholders of the bank have been

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[10] Other than the troubled legacy of its promoter, the bank has provided for Rs. 76.65 crores of non-performing assets of which Rs. 32 crores represent loans made to share brokers. In this aspect at least Centurion has a lot in common with another private bank the Global Trust Bank. The latter's promoter directors stepped down after the bank's involvement with certain unscrupulous brokers came to be known.

[11] One may talk about Bofors scandal, 2001 Hinduja Affair in UK and 2005 Ashok Leland export contract affair

[12] Rao (2008), page 44.

shown to include corporate bodies which are possibly related to its promoters. If promoters' share is hidden amongst non-promoter shareholding, transparency of a public financial institution like bank will suffer. Moreover, promoter share revealed by the data will be an underestimate of the actual promoter share. Promoter share is very critical variable in any econometric analysis of corporate governance. Use of an understated promoter share in an empirical analysis will provide misleading results. This does not augur well for research on corporate governance in the country. This calls for extra vigilance on the part of the researchers in using the data provided by a group owned company on promoter shareholding. One has to adjust the data in order to arrive at a figure of promoter shareholding close to actual shareholding.

Section V: Hypotheses, data and methodology

The section will construct the hypotheses of the paper relating to a number of variables. The definitions of the variables are provided below in table I.

(1) The dependant variable is 'bg' is a dummy which represents business group ownership of banks, such that '1' stands for group owned banks and '0' stands for non-group banks.

(2) There is sufficient ground to say that we have to differentiate between old and new banks in terms of conduct. We therefore have included a dummy –'ond', which stands for old and new banks. New banks are treated as '1' and old banks are treated as '0'.

(3) The notion of asset turnover is that banks create deposits and advances through their assets. Therefore, if the sum total of the two represents the total output of banks, when stated as a proportion of assets it measures the asset turnover. This represents an agency

variable. If the managers are efficient, they would employ the assets more effectively, which favor the interests of shareholders.

(4) While the turnover is based on output, spread represents the income. The variable 'spread' represents the earning based on funds. Group banks would try to have higher earnings so that they can cross subsidize such that group profits are optimized.

(5) The significance of borrowing in the case of a bank is that banks take deposits but invest these deposits and convert them into assets. When deposits are converted into long term assets the bank needs current liquidity to meet short term demands for repayment of deposits. We expect such a tendency to be higher for group owned banks.

(6) Director's remuneration may be expected to be high in the case of group owned banks because the directors would belong to the controlling group. Since they would have a greater say in fixing the remuneration, they would be in a position to have significantly higher salaries.

(7) Payments to auditors are likely to be high because business groups might want to camouflage decisions and transactions that unduly favor their own business group as against the interest of the bank.

(8) The proportion of demand deposits represents the potential for the group to raise short term funds for themselves for working capital needs. Similarly the proportion of term deposits serves the same purpose for long term funds.

(9) By investing a small equity base, the owners of equity capital are able to leverage their position because banks have a high equity to deposit ratio. These deposits are converted into assets, so that there is a large asset base with the result that equity to asset base will

turn out to be low. Group banks are able to enhance the asset base because of their assured demand for loans and advances arising from the group.

(10) Group banks are likely to have less of unsecured loans because the controlling group would have a large asset base of its own, which can be sued as collateral. They also have an interest in the solvency of the bank and hence would not jeopardize the bank. This caution may also extend non group borrowers. On the whole, unsecured loans are likely to be less.

Table I: Definition of conduct variables used

Variable	Definition
Bg	Dummy representing ownership by a business group vs. non-group
Ond	Dummy for old or new banks
Asturn	(Deposit+advance)/asset
Spread	(Interest earned- interest expended)/asset
Borrow	Borrowing/liability
Dir	Remuneration of director/operational expenditure
Audit	Payment to auditors/operational expenditure
Dd	Demand deposit/total deposit
Td	Time deposit/total deposit
Equity	Equity capital/asset
Unsec	Unsecured advances/total advances
Ltladv	Terms loan/advance
Car	Capital adequacy ratio

(11) Group banks have an assured group of industries where long term advances can be extended because of adequate security and demand for long term funds.

(12) Capital adequacy ratio may be low in the case of group banks because the groups wants to take advantage of the bank by investing own capital. In addition, it is likely that the denominator would be large because of more investment in risky assets.

We use a logit model with the help of a Generalized Estimating Equation, (GEE) by fitting a population averaged panel regression for generalizing the findings of discriminant analysis. GEE models are used in cross-sectional time-series models. In particular, GEE models estimate generalized linear models and allow for the specification of the within-group correlation structure for the panels, which are also known as population-averaged panel-data models.

They allow for correlation without explicitly defining a model for the origin of the dependency, hence they are most suitable when the random effects and their variances are not of direct interest. The focus is on estimating the average response over the population ("population-averaged" effects) rather than the regression parameters that would enable prediction of the effect of changing one or more components of X on a given individual. GEEs are usually used in conjunction with Huber-White standard errors.

Huber-White standard errors are standard errors that are adjusted for correlations of error terms across observations, especially in panel and survey data as well as data with cluster structure. This type of adjusted errors is also called sandwich, robust or empirical standard errors. Once obtained, these estimated errors should be used instead of traditional standard error estimates for inferences and hypothesis testing of the econometric model.

In the marginal mean model we assume the marginal regression model:

$$g\,(E\,[Yij \mid xij]) = X'ij\,\beta \qquad (4)$$

Where Xij is a p times 1 vector of covariates, consists of the p regression parameters of interest, g (.) is the link function, and denotes the jth outcome (for j=1,..., J) for the ith subject (for i=1,., N).

The link function is:

$$g\,(a) = \log\,(a/\,(1-a)) \qquad (5)$$

[g (.) is a Logit link for binary data on old and new banks], where 'a' is the probability of being a new bank. We use a population averaged model not a random effects model.

Random-effects estimators (or other cluster-specific estimators) fit the model

$$\Pr\,(Y_{ij}=1 \mid X_{ij},\, u_i) = F\,(X_{ij}\,b + u_i) \qquad (6)$$

whereas population-average estimators fit the model:

$$\Pr\,(Yij=1 \mid Xij) = G\,(Xij\,b^*) \qquad (7)$$

The population-averaged model does not fully specify the distribution of the population. The subtle point is that b and b* are different population parameters. Hence, the estimators are estimating different things. In practice, however, b and b* are often very close.

The subtle difference between b and b* is explained below. We are looking at:

Outcome: (Yij) [New Bank vs. Old Bank] w.r.t.

A set of predictors X_{ij}: [spread, car, dd, td…]

Then, under the cluster-specific model (random effects model)

$$\text{logit Pr}(Y_{ij}=1 \mid X_{ij}, u_i) = a + X_{ij}\, b + u_i \qquad (8)$$

the odds ratio

$$OR_{cs} = \frac{\Pr(Y_{ij}=1 \mid X_{ij}=1, u_i)/\Pr(Y_{ij}=0 \mid X_{ij}=1, u_i)}{\Pr(Y_{ij}=1 \mid X_{ij}=0, u_i)/\Pr(Y_{ij}=0 \mid X_{ij}=0, u_i)} = \exp(b) \qquad (9)$$

represents the odds of the bank being a new bank if the predictors take certain values compared with the odds of the same bank being an old bank.

Under the population-averaged model

$$\text{Logit Pr}(Y_{ij}=1 \mid X_{ij}) = a + X_{ij}\, b^* \qquad (10)$$

the odds ratio

$$ORpa = \frac{\Pr(Yij=1 \mid Xij=1)/\Pr(Yij=0 \mid Xij=1)}{\Pr(Yij=1 \mid Xij=0)/\Pr(Yij=0 \mid Xij=0)} = \exp(b^*) \qquad (11)$$

represents the odds of an ‘average’ bank being a new bank compared with the odds of an ‘average’ being an old bank.

Rather than saying "average", sometimes we speak loosely and say the odds of a bank "picked at random" being new compared with the odds of another bank "picked at random" being old.

The main equation that we shall be estimating using a Generalized Estimating Equation, with a logit link function, a binomial family (pdf) and no intercept term is given below:

$$\text{Logit Pr}\,(Y_{ij}=1 \mid X_{ij}) = a + X_{ij}\, b^{*} \qquad (12)$$

Where;

Y_{ij}=1 stands for new banks

X_{ij} = bg, ond, asturn, spread, borrow, dir, audit, dd, td, equity, unsec, ltladv, car.

The intercept term is interpreted as the proportion of the group in the total industry. In this case it does not affect the odds of being a new bank. That would be the case only if there are network economies.

Data used in the study is collected from RBI Publications including "Statistical tables relating to banks" as well as "Report on Trends and Progress of banks for different years covered by the study.

Section VI: Results of the study

The GEE shows that the two groups differ on account of all variables used in the exercise, excepting one. All these variable show statistically significant p-values. The estimated equation is:

*Logit Pr (Yij=1 | Xij) = 10.72*ond + 0.0002 *asturn* + 1.71E+50**spread* +
(P-values) (0.00) (0.025) (0.016)
*6.92E-17*borrow+2.60E+201 *dir* + 1.33E-53*audit + 8844825*dd+46161*td
(.009) (.024) (.659) (0.057) (0.71)
5151*ltladv+3.72E-38 *equity+ 1.47E-09*unsec+.6991*car
(0.00) (.054) (.002) (0.00)

The above equation appears to be an ordinary regression equation; however, the interpretation is not straight forward. Exp (b), which is the odds ratio for a given independent variable, represents the factor by which the odds (event) change for a one-unit change in the independent variable. Put another way, Exp (b) is the ratio of odds for two groups where each group has a values of Xj which are one unit apart from the values of Xj in the other group. An Exp (b)>1 means the independent variable increases the logit and therefore increases odds (event). If Exp (b) = 1.0, the independent variable has no effect. If Exp (b) is less than 1.0, then the independent variable decreases the logit and decreases odds (event). If those variables increase then the odds are against an old bank behaving like a new bank. The odds ratio, which is Exp (b), is the factor by which odds (event) changes for a 1 unit change in X. The change factor is not Exp (b)*ΔX. Rather, odds (event) changes by a factor of Exp (b)*$^{\Delta X}$. That is, odds (event) changes by a factor of Exp (b) raised to the power of the number of units change in X.

Table II: Results of GEE equation

GEE population-averaged model		**Number of obs =**		**264**
Group variable:	gcode	Number of groups =		22
Link:	logit	Obs per group: min =		12
Family:	binomial	avg =		12
Correlation:	independent	max =		12
		Wald chi2(12) =		37.22
Scale parameter:	1	Prob > chi2 =		0.0002
Pearson chi2(264):	196.36	Deviance =		119.51
Dispersion (Pearson):	0.7437735	Dispersion =		0.4527
bg	Odds Ratio	Std.Err.	z	P>z
ond	10.72507	6.720493	3.79	0
asturn	0.0002244	0.0008431	-2.24	0.025
spread	1.71E+50	8.21E+51	2.41	0.016
borrow	6.92E-17	9.89E-16	-2.6	0.009
dir	2.60E+201	5.30E+203	2.25	0.024
audit	**1.33E-53**	**3.66E-51**	**-0.44**	**0.659**
dd	8844825	7.44E+07	1.9	0.057
td	46161.84	274119.2	1.81	0.071
equity	3.72E-38	1.66E-36	-1.93	0.054
unsec	1.47E-09	9.77E-09	-3.06	0.002
ltladv	5151.63	12062.34	3.65	0
car	0.6992408	0.0653898	-3.83	0

Hypothesis predicted a higher than one odds ratio for the variable asset turnover in banks owned by business groups, as they are presumed to have a lower agency problem. But, this is not borne by results. However, the result relating to spread is in accordance of the hypothesis. Taken together, it means that the managers in group owned banks are not able to raise the output; they are nevertheless more efficient, as they are able to generate more earnings from funded activity. Further, our results show that group banks have higher earnings, which are possibly used for cross subsidization of profits of the group. The result relating to directors' remuneration emerged in favor of the hypothesis. However, this is not so with regard to payments to auditors. This may be explained by the fact that the controlling interest of the bank may bargain the fees of the auditor at a lower rate since the audit is being offered for the whole group. It is also possible that auditors are given certain benefits in implicit form. The results relating to demand as well as time deposit are also in line with hypotheses. It appears that the group companies are maintaining their current deposits with bank owned by the group. In the case of time deposits, group owned banks display a higher proportion of time deposit to total deposit because the group would be parking its long term funds with the bank. This would be unlike other banks that are likely to have a high proportion of saving deposits, which are usually owned by households. Equity to asset ratio for group owned banks have emerged lower compared to other banks. This confirms that group owned banks use a lower level of equity to get hold of deposits and convert it into assets leading to low equity to asset ratio. In the case of unsecured loans, our results verify hypothesis. The long term advances are higher for group owned banks signifying sustained demand for long term funds of the bank by the group firms. One of the most important result relates to capital adequacy ratio. A lower ratio for group owned banks

may be explained in terms of small equity capital coupled with higher risky assets. This result confirms a very important implication of the riskiness of group owned banks.

Section VII: Summary and conclusion

The paper looks into the theory of banking intermediation by Diamond and examines the impact of introducing business groups on the result of financial intermediation through banks. It argues that impact on banking intermediation depends on the type of business group: bank centric or firm centric. The theoretical analysis is supported by cross-country historical experiences from India and Japan. Detailed case studies related to business-group owned bank in India point out to the chaotic nature of the corporate governance in these banks.

The paper made a pioneering attempt to econometrically examine the impact of group ownership on conduct of a bank in an emerging economy like India. The paper substantiates the findings from case studies through estimating a logit model using panel data with the help of a Generalized Estimating Equation. The results clearly show that group banks differ in their behavior from non group banks. Firstly, group exploits the bank by getting larger funds to augment the group's fund position. It is also evident that the group bank is subjected to higher risk. A hypothesis that the group cross subsidizes its activities through owning a bank is found to be true. Some of the obvious corporate governance issues like collusion with the auditor do not come out very sharply.

Given such a situation, it is apparent that that a beneficial role in corporate governance, as been the case of keiretsu and main banks in Japan is simply beyond group owned banks in

India. Group ownership has exposed the banks to risks, which can not be rationalized from the stand point of the society. While stand alone private banks in the country have been compared to Augean stables[13] in the literature there are additional adverse influences on corporate governance in a bank emanating from group ownership. Group owned banks create crony capitalism, hampers transparency and goes against the spirit of the current deregulated regime. Lastly, succession squabbles currently observed in the country militates against the idea of putting a public financial institution at the centre of a private family feud. The regulatory framework is perfectly justified in not allowing a bank to be controlled by an industrial house.

[13] In Greek mythology, Augeas was king of Elis and is best known for his stables, which housed the single greatest number of cattle in the country and had never been cleaned.

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