Large Shareholder Activism in Corporate Governance in Developing Countries: Evidence from India

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Abstract

Most of the existing evidence on the effectiveness of large shareholders in corporate governance has been restricted to a handful of developed countries, notably the UK, US, Germany and Japan. This paper provides evidence on the role of large shareholders in monitoring company value from a developing and emerging economy, India, whose corporate governance system is a hybrid of the outsider-dominated market-based systems of the UK and the US, and the insider-dominated bank-based systems of Germany and Japan. The picture of large-shareholder monitoring that emerges from our case study of Indian corporates is a mixed one. Like many of the existing studies, while we find blockholdings by directors to increase company value after a certain level of holdings, we find no evidence that institutional investors, typically mutual funds, are active in governance. We find support for the efficiency of the German/Japanese bank-based model of governance; our results suggest that lending institutions start monitoring the company effectively once they have substantial equity holdings in the company and that this monitoring is reinforced by the extent of debt holdings by these institutions. Our analysis also highlights that foreign equity ownership has a beneficial effect on company value. In general, our analysis supports the view emerging from developed country studies that the identity of large shareholders matters in corporate governance.

1. Introduction

The effectiveness of large shareholding in the corporate governance of enterprises, whereby the equity of an enterprise is concentrated in blocks in the hands of a small number of individuals and institutions, has been the subject of much theoretical and empirical research. The issue has gained increasing importance in view of some recent research providing evidence that concentrated ownership of corporations is much more prevalent across countries than is generally believed, and that the "Berle and Means image" of the modern corporation being widely held by dispersed shareholders "has begun to show some wear" (La Porta, *et al.*, 1999).

The literature on blockholders focuses on the extent to which these shareholders are in a better position to make the management accountable as opposed to dispersed shareholders. A scanning of the existing theoretical and empirical literature on the role of block shareholders, however, reveals conflicting predictions and evidence on the role of such shareholders in enhancing corporate value (see the survey by Shleifer and Vishny, 1997 and the references therein).

The benefits of large shareholding highlighted in the theoretical and empirical literature may be summarized in terms of the "convergence-of-interest" hypothesis and the "efficient-monitoring" hypothesis. According to these hypotheses, large shareholders are likely to be more efficient than small and dispersed shareholders in monitoring company management since they have substantial investments at stake as well as significant voting power to protect these investments (Berle and Means, 1932; Jensen and Meckling, 1976; Fama and Jensen, 1983; Shleifer and Vishny, 1986). In addition, large shareholders are likely to mitigate the collective action problem that is present among dispersed shareholders in disciplining inefficient management especially if management stands in the way (Dodd and Warner, 1983), and are also likely to engage in relational investing and be more committed to a company in the long run (Black, 1998; Blair, 1995), all of which are likely to have a positive impact on company value.

The potential costs arising from the presence of large shareholders may be set out in terms of the "conflict-of-interest" hypothesis and the "strategic-alignment" hypothesis. Conflicts can arise between the interests of the blockholders vis-à-vis those of the minority shareholders through the pursuit of personal, non-profit maximizing objectives by the former; through the straightforward expropriation of minority investors; and through the incentive effects of such expropriation on other stakeholders, all of which are likely to have a negative impact on company value (Fama and Jensen, 1983; Schmidt, 1996; Shleifer and Summers, 1988; Burkart *et al.*, 1997). Under the strategic alignment hypothesis, different types of blockholders like institutional investors and managers may often find it mutually advantageous to collude in a way that reduces company value and hurts the interests of minority investors (Brickley *et al.*, 1988; Pound, 1988).

Most of the existing theoretical arguments and evidence on the pros and cons of large shareholder activism, has, however, been restricted to a handful of countries, notably the US, UK, Germany and Japan,[1] and very little is known outside these countries. In particular, very little information is available with respect to developing countries (Shleifer and Vishny, 1997; Singh, 1995) where corporate ownership is found to be heavily concentrated (La Porta *et al.*, 1999). At a time when several emerging and transition economies are in the process of designing appropriate corporate governance mechanisms and are evaluating the relative merits of adopting bank-based governance systems of Japan and Germany vis-à-vis market-based governance systems of US and UK (Aoki and Kim, 1995), an investigation of corporate governance by different types of shareholders in some of the more mature developing economies will unarguably be highly relevant in shedding insights into the structures of corporate governance that could be conducive to or could inhibit industrial development in these countries. Further, such an investigation will have information value for developed countries which are increasingly participating in developing country private sector development through foreign direct investment.

The objective of this paper is to provide evidence from a large developing and emerging economy, India, on the role of large shareholders in monitoring the performance of company management. This, we believe is among the few comparable studies that have been conducted using developing or transition country data to empirically analyze corporate governance systems in these countries and one which will add to the growing pool of scattered cross-country evidence, some other studies being those with respect to Russia (Blasi and Shleifer, 1996), Czech and Slovak Republics (Claessens, 1997; Claessens *et al.*, 1996), China (Xu and Wang, 1997), a cross-section of transition economies (Aoki and Kim, 1995; Gray and Hanson, 1993), and India (Chhibber and Majumdar, 1999; Khanna and Palepu, 1998; Sarkar and Sarkar, 1999).

Several of the costs and benefits arising from the presence of large shareholders as highlighted in developed country studies could be equally relevant in the context of developing countries like India. However, some of the institutional specificities of developing countries, such as a less developed capital market, a less active takeover market, greater involvement of government-owned financial institutions in

[1] For a comprehensive account on the literature on corporate governance mainly with respect to the triad, namely, Europe, USA and Japan, see Hopt *et al*. (ed.) (1998), and the four-volume collection of published papers on corporate governance edited by Keasey *et al*. (1999)

corporate financing through development banks, higher dependence on external sources of financing, and the absence of a well developed managerial market, could impact the costs and benefits of block shareholding in these countries in some unique ways, so that mechanically extrapolating the experiences of corporate governance systems in developed countries may not yield the necessary answers.

One of the typical features of developing countries which stands in sharp contrast to that of developed countries is that while developed countries in general rely mostly on internal sources of finance and go to the capital market as the last resort, developing countries, despite having relatively underdeveloped equity markets, low investor protection, and weak bankruptcy regulations, rely heavily on banks and equity markets to finance long-term projects (Singh, 1995). Thus, both equity governance and debt governance are of particular significance in these countries. In this context, the role of lending institutions like development banks acquire particular significance given the fact that these institutions often hold blocks of equity alongside with debt contracts.

Another key feature of developing countries and many transition economies is the strong "evolutionary tendency towards insider control" (Aoki, 1995) as many state-owned companies are being privatized and existing family-owned companies are becoming highly diversified industrial groups. In view of the fact that the disciplinary role of markets on managers and owners are weaker in developing countries, expropriation incentives by insiders can be expected to be particularly strong. The countervailing force to this would however be the benefits flowing from insider dominated systems in terms of lower contractual costs as has been identified in the context of German and Japanese companies (Kester, 1992). Such benefits would be especially relevant in developing countries where implicit contracting founded upon trust-relationships is the norm, and where legal systems to enforce explicit contracts are weak and cumbersome.

Finally, in the absence of an active takeover market at par with those in the US and UK, it is likely that voice rather than exit would be the residual option in disciplining faltering management in developing countries. However, the fact that many of the governing institutions are state-owned with their own bottomlines de facto protected by the government may generate less incentives for them to govern, thereby making them passive monitors. Under such institutional conditions, bank-based corporate governance could be caught in a double bind whereby neither the exit option nor the voice option can be effectively used to discipline inefficient management thereby aggravating the problem of institutional passivity that is often found in the context of developed countries.

The advantage of undertaking a case study of India to address some of the governance issues specific to developing and emerging countries lies in the fact that vis-à-vis other developing and transition countries, market and non-market institutions of corporate governance in India have evolved over a sufficiently long time,[2] are relatively stable, and are quite advanced among developing countries with respect to the range and depth of existing statutes and legal framework regulating corporate activities. By Aoki's (1995) classification of corporate governance regimes in transition economies, India can be considered to be in the "post-transition regime" with a well-defined and stable corporate governance structure, and where the management of enterprises is chosen through due process defined by the corporate law. India is also representative of many developing countries in terms of its reliance on external sources of finance as well as the prevalence of insider-dominated family businesses. Thus, an analysis of the effectiveness of different blockholders in the corporate governance of emerging country enterprises becomes highly meaningful with Indian data.

Some of the issues addressed in this paper within a multivariate framework have also been analyzed with Indian data in some recent publications, namely those by Chhibber and Majumdar (1999) and Khanna and Palepu (1998). Also, a univariate analysis of the governance of Indian corporates by major blockholders is found in Sarkar and Sarkar (1999). Among the multivariate analyses, the one by Chhibber and Majumdar (1999) analyze the relation between foreign ownership and company performance using the accounting measures of rate of return on assets and return on sales, but does not focus on the larger issue of the role of other major shareholders in corporate governance. Khanna and Palepu (1998), on the other hand, examine the relative efficiency of domestic financial institutions and foreign financial institutions in governing business group-affiliated companies and non-group companies and is somewhat closer in focus to our research. Like their paper, we too undertake an integrated analysis of the impact of major shareholders in the governance of Indian corporates. However, some of the questions that we seek to answer in our analysis are different from earlier work and attempt to offer insights into some unaddressed issues of governance in developing countries.

Specifically, we consider two governance issues of interest. First, in analyzing the impact of blockholders on company value, we build into our framework the possibility that effective monitoring by owners of companies in countries like India may also depend on the level of ownership, as is often found in several research work with respect to the US. Some insights on this issue, but with respect to only foreign ownership, can be found in Chhibber and Majumdar (1999). By adopting a spline

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[2] For instance, the history of the capital market in India dates back to more than hundred years with the establishment of the Bombay Stock Exchange in 1875, and the origins of the existing Companies Act, 1956, by

methodology akin to several papers in the corporate governance literature, we inquire as to whether there is any significant non-linearity in the relationship between ownership and company performance and whether the interests of the owners and the company converge as ownership stakes increase. Indeed, our results for each type of blockholders indicate that the incentives for monitoring change significantly with ownership stakes beyond a particular threshold. Such changing incentives are likely to remain uncaptured or at best show up in a weak form under a linear specification as is the case in Khanna and Palepu (1998).

Second, in the course of analyzing the role of domestic financial institutions in governance in emerging economies like India, we address the issue of whether there could be differences in monitoring among different *types* of domestic financial institutions. Domestic financial institutions in India are state-owned and comprise of the development financial institutions (DFIs), and the institutional investors, viz., mutual funds and insurance companies. Although one may be inclined to assume that DFIs and institutional investors in India are likely to act as a single block in decision-making as well as in monitoring by virtue of being state-owned (Khanna and Palepu, 1998), it is crucial to realize that the type of holdings, and hence the resultant incentives to monitor, may be quite different between these two groups.

DFIs in India, like financial institutions in the bank-based governance systems of Germany and Japan, hold both equity and debt, while institutional investors only hold equity. This could lead to significant differences in costs as well as incentives for monitoring, and hence to a difference in influence that each group has on company value. As Prowse (1990) argues in the context of comparing institutional investment patterns and corporate financial behavior in the US and Japan, dual holdings of equity and debt in Japan could reduce the “inherent principal-agent conflict” between shareholders and debtholders of a company relative to the case when financial institutions do not have such dual positions as in the case of US. Similarly, Mulbert (1998) argues extensively in the context of German banks, that banks both as lenders and blockholders are not in the same position as “pure” investors like funds, and will associate corporate control with objectives that are different from that of well-diversified shareholders.[3] We indeed find support to such arguments in our analysis, and in the process, provide some fresh evidence on the empirical question of the joint impact of debt and equity holding by financial institutions on corporate

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which the activities of the companies are regulated in India, has its roots in the Indian Companies Act of 1916.

[3] For instance, in view of the findings with respect to Japanese banks that higher the default risk of a bank, the higher the bank’s equity holdings, Miyajima (1995, p. 395) argues, that “the purpose of a bank’s investment was not to maximize the dividend or to realize portfolio profitability in the normal sense, but to maintain close relations with borrower companies …to prevent an opportunistic action by a large borrower.”

governance, an issue that has remained largely unresolved in the existing literature.[4] Further, our analysis of institutional investors, separated from the DFIs, also enable us to comment specifically on the role of mutual funds in governance in developing countries, an issue that has received considerable attention in the developed country literature (see for example, Black, 1998), and is increasingly coming under scrutiny in India.

Finally, some observations on the qualitative differences of our work with earlier work with respect to the data set that we use. While the data source is similar to that used in earlier works, namely the Corporate Information on Magnetic Medium or the CIMM[5] database created by the Center for Monitoring Indian Economy (CMIE), the period and coverage of companies is different in the present paper. For one, our analysis is for the mid-nineties, 1995-96[6], a full four year period into the structural reforms and deregulation program that was initiated in July 1991, whereas existing work focuses on the early nineties. Our work would, therefore, in all likelihood, capture an emerging economy scenario much more succinctly given the fact that the industrial and financial deregulation and structural reforms in India have taken place in a phased manner (see Ahluwalia, 1995). Second, our sample is likely to be more reflective of the Indian corporate sector because of the changing characteristics of the CIMM database itself. The coverage of the CIMM database has increased significantly over the years as more and more companies were added to the database. However, inclusion of companies in the database is based mainly on availability of the Annual Accounts of companies rather than on any formal procedure. A formal statistical analysis of the distribution of companies in the database, based on three segmentation variables, viz. size, ownership group, and industry classification, shows that the characteristics of the CIMM database has changed significantly over the years with stability emerging only from the year 1994-95 onwards (Choudhury, 1999). Thus an analysis using post 1994-95 data is likely to be more predictive of the emerging behavior of the corporate sector in the Indian economy. Our choice of the year 1995-96, and not a later year, is guided by the fact that, at the time of our analysis, it was the year for which ownership information on most number of companies was available in the CIMM database.

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[4] Some related empirical analysis in this area are Aoki and Kim (1995), Edwards and Fischer (1994), Gorton and Schmid (1996), and Mulbert (1998).

[5] The CIMM database contains detailed information on the financial performance of companies in India. The information is compiled from the Profit and Loss Accounts and the Balance Sheet of companies. In addition to the financial information, the database also contains background information such as ownership pattern, product profile, plant location, new investment projects, etc. of the companies. Daily stock-price data of companies which are publicly traded in India are also reported in the database. The CIMM database was originally developed on the MS-DOS platform. Subsequently, it was upgraded for use on the Windows platform and the database was renamed as the PROWESS database.

The rest of the paper is organized as follows. Section 2 describes the institutional characteristics of the corporate governance structure in India. Section 3 describes the data source, sample, variables, and the estimation methodology used in the empirical analysis. Section 4 presents the empirical findings and Section 5 concludes.

2. Institutions of Corporate Governance in India

As is the case in many developing countries, the Indian corporate sector is characterized by the co-existence of public, private, and foreign enterprises. Among private and foreign enterprises are the large business groups and stand-alone companies. In our empirical analysis we consider only private and foreign companies operating in the manufacturing sector. As stated above, the data for our analysis is drawn from the CIMM database and pertains to the year 1995-96. Of the 3217 private and foreign manufacturing companies for which financial data are available in the database for the year 1995-96, ownership information for the year 1995-96 is available for 1567 companies[7]. These 1567 companies constitute the sample for our analysis. Our sample is representative in that it includes nearly half of the private manufacturing companies listed in the database and closely mirror much of the population characteristics.[8]

Table 1 throws some interesting insights into the ownership pattern of our sample of Indian corporates and the potential channels of governance. As the Table shows, the principal holders of corporate equity are (i) directors and their relatives (ii) corporate bodies (iii) foreign investors (iv) the term lending

[6] The year 1995-96 refers to the period between April 1995 and March 1996. The period between April to March represents the financial year followed by all companies in India for accounting purpose.

[7] Under the rules of the Bombay Stock Exchange, the major stock exchange of India, all publicly traded companies are required to furnish to the Exchange their equity holding pattern at regular intervals. However, since many companies are not regular in following this procedure, the equity holding pattern available with the Exchange for different companies do not relate to the same time point. The CIMM database, which documents this information, therefore reports the latest available equity holding pattern for each company and the date of reporting of that information. In our search of the ownership data we found quite a number of companies for which ownership information was available in the database, but that was not for the year 1995-96. These companies were dropped from the analysis.

[8] For the sample (1567 companies), the mean values of some of the variables that describe company characteristics are: sales: 1138 (Rs. million), age: 19.6 (years), advertising expense to sales ratio: 0.57 (%), exports to sales ratio: 11.61 (%), depreciation expense to sales ratio: 6.48 (%), debt-equity ratio: 92.37 (%), proportion of group companies: 32.50 (%). For the population (3217 companies), the corresponding figures are:- sales: 1641 (Rs. million), age: 19.6 (years), advertising expense to sales ratio: 0.55 (%), exports to sales ratio: 13.33 (%), depreciation expense to sales ratio: 6.20 (%), debt-equity ratio: 80.21 (%), proportion of group companies: 32.40 (%).

institutions primarily comprising of the three government controlled/promoted development financial institutions (DFIs)[9] and the State Finance Corporations (v) institutional investors, namely the government-owned mutual fund--the Unit Trust of India, and three government owned insurance companies, and (vi) the public. Of the six groups, the first five can be considered as blockholders. Table 1 also shows that manufacturing companies in India can be broadly classified into several ownership groups, namely (i) private companies belonging to business groups (ii) private stand-alone companies (iii) foreign companies belonging to business groups, and (iv) foreign stand-alone companies.

It is evident from the Table that corporate bodies are on the average substantial blockholders in private companies belonging to business groups, and 42.5 percent of all sample companies have equity ownership by corporate bodies in excess of 25 percent. Directors and relatives hold on the average 20 percent of equity ownership in private stand-alone companies and have more than 25 percent equity ownership in 26.6 percent of sample companies. The relatively high proportion of concentrated shareholding by directors and relatives and inter-corporate holdings is on account of the predominance of family owned business either in the form of stand-alone companies or business groups, a feature that is typical of corporates in many developing countries. Foreign companies, both stand-alones and those belonging to business groups, almost definitionally have foreign investors as substantial blockholders. Among the other blockholders, institutional investors, nearly monopolized by the Unit Trust of India, have substantial holdings in group companies, both domestic and foreign. Term-lending institutions on the average hold lower blocks of equity in comparison to institutional investors.

While cross-country comparisons are somewhat difficult given that the reporting of equity ownership data is not uniform, some broad comparisons with the two main prototype governance systems in the world, as shown in Table 2, suggest that the Indian corporate governance system is by and large a hybrid of the “outsider systems” of the US and UK characterized by diversified equity ownership and less involvement of lending institutions, and the “insider systems” of continental Europe and Japan characterized by a greater concentration of shareholder power residing with banks, families and other corporates. Equity holdings by non-financial corporations in India, which are primarily inter-corporate cross-holdings, are much higher than that in the US and UK and are more comparable to Germany and Japan. However, at the same time, the participation of the small investor in corporate equity in India is at comparable levels

[9] The three major DFIs are the Industrial Development Bank of India (IDBI) with 72 percent government ownership, the Industrial Credit and Investment Corporation of India (ICICI) promoted by the government owned mutual fund and insurance companies with a combined share of 32 percent, and the Industrial Finance Corporation of India (IFCI) promoted by the government owned financial institutions and insurance companies with a combined share of 42 percent.

with the US with India having the largest number of listed companies in the world. Further, data on the 10 largest non-financial corporates reveal that the average concentration of shareholding among the top three shareholders is at 40 percent, which is much higher compared to US, UK and Japan, but closer to that in Germany and to the world average of 46 percent (La Porta *et al.*, 1998). While different types of financial institutions in India separately hold much smaller blocks in comparison to those in other countries, given that nearly all of these institutions are government controlled and fall under the aegis of the Ministry of Finance, together they form a much bigger homogeneous block than that in other countries. The participation of institutional investors like mutual funds and insurance companies which are nearly monopolized by the government in India, is also significant, and comparable to the extent of their participation in Japan and Germany, but much less in scope than that in the US and UK.

The formal institutions of corporate governance in India have been in place for a large number of years. Compared to many developing countries, corporate governance mechanisms in India are much more institutionalized. However, in spite of such institutions, corporate governance has not been an important issue until the adoption of the structural adjustment and globalization policy by the Government of India in July 1991. Since then, with India becoming more integrated with the world market and more and more companies tapping external sources of finance from the debt and capital markets, public concerns have become more focussed on the effective protection of investor interest, especially those of the small investor, the promotion of transparency of operations within business and industry, and the need to move towards international standards in terms of disclosure of information by the corporate sector. Most importantly, the role of large blockholders like banks and institutional investors has increasingly come under scrutiny in view of their reportedly passive role in the corporate governance of companies (see for example, CII, 1998).

In India, there are primarily three avenues through which both the “exit” and “voice” options of outside debt holders and equity holders in corporate governance are sought to be institutionally ensured in order to make company management accountable. These are through the Companies Act, 1956, (Bharat, 1998) the market for corporate control, and through the participation of public financial institutions and institutional investors in the board of management of companies.[10]

The activities of Indian companies are regulated through the Companies Act, 1956, which is by far the largest legislation enacted by the Indian Parliament. The Act, besides aiming to ensure that the interests

[10] For a more detailed discussion of institutions of governance and recent developments, see Sarkar and Sarkar (1999).

of creditors and shareholders are adequately protected and that shareholder voice is adequately represented in the management of companies[11], has provided for a greater measure of Government control over the affairs of joint stock companies that was deemed desirable in public interest. As many analysts have noted in their research on corporate governance, the most important legal right that shareholders have is the right to vote on important corporate matters such as mergers and liquidations, as well as in the elections of boards of directors. Among the key legal rights that Indian shareholders have under company law to make management accountable are proportional voting rights and voting through proxies[12], and the right to remove a director before the expiry of his period of office by ordinary resolution, subject to certain tenurial clauses like life time employment. A comparative study of minority shareholder rights across the world reveals that these rights in India are at par with the other common law countries, namely the US and the UK (Table 2), although the enforcement of these rights as reflected in the efficiency of the judicial system and the rule of law are somewhat weaker in India (La Porta *et al*., 1998).

The exercise of the exit option by shareholders in case of an under-performing company in India is through the market for corporate control which although rather inactive by US and UK standards, is certainly more active relative to the markets in Japan and Germany. Takeovers in India are currently regulated by the *Substantial Acquisitions of Shares and Takeovers Regulations*, first promulgated in 1994 by the Securities Exchange Board of India (SEBI), and then replaced by a more comprehensive act in 1997. Under current regulations, the acquisition of 10 percent of shares triggers a minimum public offer of 20 percent. Important respects in which takeover regulations in India are different from that in the US and UK are that leveraged buyouts (LBOs) are not permitted. Banks and other financial institutions are not permitted to finance takeovers and takeover defense mechanisms as poison pills and buy back provisions for incumbent management are not permitted. The efficiency of equity governance through the market for corporate control has considerably improved in the recent years due to capital market reforms and development. With detailed disclosure requirements, greater investor protection, screen-based trading, and move towards integrated markets, investors are becoming increasingly well informed about true company performance and are also being able to respond quickly to any market offer. Thus,

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[11] Currently, a revised version of the Companies Act, namely the Companies Bill 1997, is awaiting the approval of the parliament. This Bill, seeks to streamline the existing Act by reducing 658 sections and 15 schedules to 458 sections and 3 schedules, and ensuring that the new provisions provide flexibility and greater disclosure and self-regulation of Indian companies operating currently in a liberalized, fast changing and highly competitive environment.

[12] According to Section 176 of the Companies Act, 1956, “any member of a company entitled to attend and vote at a meeting of the company shall be entitled to appoint another person (whether a member or not) as his proxy to attend and vote instead of himself.” The Section specifies the conditions that are applicable to proxy voting.

while 121 takeovers and mergers occurred between 1988 and 1992, 166 companies were acquired between 1993 and 1997, with nearly 85 percent of the acquisitions taking place between 1995 and 1997.

Finally, a key feature of corporate governance mechanism in India that is akin to the bank-dominated insider systems of Germany and Japan is that financial institutions (FIs) and institutional investors such as mutual funds (MFs) and insurance companies (INCs) are substantial equity holders in Indian corporates, with FIs being also major debt-holders. Trends in equity holding patterns indicate that these blockholding institutions generally hold their positions for extended periods of time particularly in major corporates.

The government owned mutual fund, the Unit Trust of India, which controls nearly 85 percent of the mutual fund industry, generally has nominees on company boards by virtue of being a substantial equity holder. Similarly, FIs, being either a major equity or debt holder, also have their nominees typically represented in corporate boards as is the case in Germany and Japan. Almost all FI debt contracts carry a covenant that it will be represented on the board of the debtor company via a nominee director (CII, 1998). Thus FIs and MFs have significant voting rights as well as the potential power for “jawboning” company management. Since all of these institutions are either owned or promoted by the Government, they can potentially act as a single blockholder and, through their nominees, collectively block resolutions detrimental to their interests. They can also as a block decide on whether to support incumbent management in the case of a hostile takeover threat or to sell off their interests to a raider. However, as has been with many an instance in Germany and Japan, FIs in India have been perceived by and large to be extremely passive in corporate governance. As in other countries, this perception of institutional passivity in India both with respect to debt governance and equity governance is largely based on anecdotal evidence, mostly in the form of newspaper reports, rather than on formal empirical analysis. Attention to this problem has also been drawn by several committees, including the Committee on Takeover Regulations appointed by the SEBI and the Committee on Corporate Governance instituted by the Confederation of Indian Industry (CII).

3. Performance Measures and the Empirical Model

The variables used in our empirical analysis can be grouped into three categories, (i) *performance variables*: variables that are used to measure company performance; (ii) *variables of interest*: variables that describe the extent of equity ownership of different types of blockholders and as such reflect the ownership mix of the company's equity; and (iii) *control variables:* variables that describe the characteristics of the company which might also affect its performance. These three sets of variables are described below.

3.1 Performance Variable

We use two measures namely, market to book value ratio (MBVR), and a proxy for Tobin's Q ratio (PQ-Ratio) to measure company performance. MBVR is calculated as the ratio of the product of the number of equity shares and the closing price of the share on the last day of the financial year to the book value of equity and reserves[13]. Tobin's Q is defined as the ratio of market value of equity and market value of debt to the replacement cost of assets. However, in India, as in many developing countries, the calculation of Tobin's Q is difficult primarily because a large proportion of the corporate debt is institutional debt that is not actively traded in the debt market. Also, most companies report asset values at historical costs rather than at replacement costs. We, therefore, calculated a proxy for Tobin's Q by taking the book value of debt and the book value of assets in place of market values[14].

Each of our two measures has its strengths and weaknesses. MVBR is empirically a cleaner measure than the PQ-Ratio, has been used as an alternative to Tobin's Q for developing country studies (e.g. the study by Xu and Wang on China (1997)) as well as other studies (Capon, Farely, and Hoenig, 1996, pp. 54), and is more aligned to the objective of the shareholders. However, it excludes debt. In this respect, PQ-Ratio is a more comprehensive measure of company performance, and has also been used for developing country studies (e.g. the study by Khanna and Palepu (1998) on India). However, in the Indian context, PQ-Ratio is also likely to be more noisy given that institutional finance forms a significant proportion of external finance for Indian companies and that such institutional lending in many cases is guided by social objectives so that market and book values of debt may diverge significantly. We, therefore, use both these measures in our empirical analysis to check for the robustness of the results to alternative measures of performance.

We deliberately avoid using accounting measures like return on equity and return on assets to measure performance as companies in India do not follow uniform accounting standards. In the US, standards are set by the Accounting Standards Board and it is mandatory for corporate bodies to conform to these

[13] For each company we checked the closing price of the share during the last seven trading days of the financial year to see if there were any unusual changes in the share price on the last trading day. In no case did we find any significant changes.

[14] We calculated another measure of company performance by dividing the market value of the company (calculated by the market value of equity plus the book value of debt) by total sales instead of total assets. However, we found the correlation of this measure with MBVR and PQ-Ratio to be extremely low and therefore analyzed this measure in some detail. Our analysis revealed that "market value/sales" was not a good measure of company performance in the Indian case because of inefficient asset utilization by many small and young firms, though this measure might certainly have merit with respect to other countries. We, therefore, did not use this measure in our analysis.

standards. A recent ranking of the quality of accounting standards on a scale of 0 -100 across 49 countries gives India a score of 57 which is below the global average of 60.9 and significantly below the US score of 78 (La Porta, *et al*., 1998, Table 5)[15].

3.2 Variables of interest

Our main variables of interest are the extent of equity ownership by different types of blockholders. These are:

DIR_S = defined as the fraction of equity shares held by directors and relatives. This is the extent of shareholding by the managers of the company and as such reflects the extent of "direct" insider holdings.

CORP_S = defined as the fraction of equity shares held by Indian corporate bodies. As discussed in Section 2, for group companies a large part of these holdings may be holdings by other companies in the group. For such a company, a part of CORP_S reflects the extent of "indirect" insider holdings. Unfortunately, the breakup of holdings by group and non-group companies is not available in the CIMM database.

IINV_S = defined as the fraction of shares held by government owned insurance companies and government sponsored mutual funds and reflects the extent of shareholding by institutional investors.

DFI_S = defined as the fraction of shares held by all government owned development financial institutions, including banks and other state financial corporations.

GOV_S = defined as the sum of IINV_S and DFI_S and reflects the extent of holdings by the government.

FOR_S = defined as the fraction of shares held by foreign entities. This includes holdings by foreign corporations as well as holdings by foreign institutional investors. Again, the breakup between these two types of foreign entities is not available from the CIMM database.

3.3 Control Variables

Apart from its ownership structure, the performance of a company is also influenced by other external factors that operate through both the product and the capital market. In the empirical literature it is customary to control for the effect of these external factors to avoid any spurious relation between performance and ownership structure. In keeping with earlier work we include standard measures of

[15] Developing countries like India usually adopt suitably modified standards and practices set by the International Accounting Standards Committee (IASC). In India, the adoption of these accounting standards is not as yet mandatory and it would suffice for a company to disclose its accounting policies by way of a note in its audited accounts. Auditors of companies in India are concerned only if the company exhibits a lack of consistency in following these standards between one financial year and another. The lack of uniform standards makes measures like return on equity and return on asset subject to the influence of the specific accounting practices followed by the company and as such these measures may not present a true picture of a company's financial performance.

leverage (LEVRG), size (LSALES), intangible assets (ADVINT), diversification (DIV), capital intensity (DEPINT), and age effects (AGE) in our analysis. In addition, all regressions are controlled for industry effects through the incorporation of industry specific dummy variables (IND-DUMMY_i), The list of control variables along with their description and possible effects is given in the Appendix.

3.4 The Empirical Model and Estimation

As stated in the introduction, we adopt a spline specification in estimating the relationship between company value and equity holdings by blockholders. Such a specification allows for the effect of holdings to change at specific threshold points known as spline nodes[16]. This approach has been used, among others, by Morck, Shleifer and Vishny (1988), and by McConnell and Servaes, (1990). We adopt a similar approach for our estimation on the ground that a non-linear relationship between company value and equity ownership is consistent with the theoretical literature on conflicting shareholder incentives that depend on the extent of shareholding. We find no *prima facie* justification that would potentially rule out the presence of such non-linearities in the context of an emerging economy like India. In addition, adopting a spline methodology also enables us to compare more meaningfully the results obtained in the context of an emerging economy with existing results obtained in the context of developed countries.

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[16] Spline is a commonly used technique in empirical analysis to allow for a piecewise linear relation between two variables. Specifically, the spline technique allows the slope of the regression equation to change at certain points which are known as spline knots or spline nodes. The technique ensures that the regression line is continuous at the different spline nodes which is unlikely to be the case if one uses a slope dummy instead.

Suppose, one postulates that the relation between y and x is piecewise linear, with the linear relation changing at two knots say x_1 and x_2, with $x_1 < x_2$. Then, under the spline technique, three spline variables (the number of spline variables is always one more than the number of knots) are defined as follows:

$$\text{Spline1} = \begin{cases} x_1 & \text{if } x \geq x_1 \\ x & \text{if } x < x_1 \end{cases}$$

$$\text{Spline2} = \begin{cases} x_2 - x_1 & \text{if } x \geq x_2 \\ x - x_1 & \text{if } x_1 < x < x_2 \\ 0 & \text{if } x \leq x_1 \end{cases}$$

$$\text{Spline3} = \begin{cases} x - x_2 & \text{if } x > x_2 \\ 0 & \text{if } x \leq x_2 \end{cases}$$

A piecewise linear relation between y and x is then be obtained by running a linear regression with the three spline variables.

Thus the empirical model that we estimate takes the form:

MBVR = f(spline(holdings by different types of blockholders), control variables) + error

We estimated the model by the ordinary least squares (OLS) after checking whether the procedure was subject to the presence of influential observations and undertaking a specification test for heteroskedasticity. While some papers have approached the problem of influential observations by re-estimating the regressions after somewhat arbitrarily truncating the distribution of the dependent variable at the low and the high end of the distribution, we adopted the procedure suggested by Belsley, Kuh, and Welsch (1980) of using the *DFFITS* statistics for identifying influential observations and the magnitude of their influence[17]. Once the influential observations were identified, we computed the bounded-influence (BI) estimates using the Weighted Least Squares technique suggested by Welsch (1980). The BI estimates were not significantly different than the OLS estimates and did not lead to any qualitative changes in the results. We carried out a specification test for heteroskedasticity because ours is a cross-section regression based on a sample that includes companies which differ significantly in size. The

[17] The DFFITS statistics looks at the change in the fitted or predicted value $\hat{y}_i$, measured in terms of standard error of $\hat{y}_i$, when the ith observation is omitted from the dataset. In particular, it looks at the difference in the fitted value of $\hat{y}_i$, measured in terms of its standard error, when the regression is run with and without the ith observation. The DFFITS statistics is given by:

$$DFFITS_i = \frac{\hat{y}_i - \hat{y}_{-i}}{s_{-i}\sqrt{h_{ii}}}$$

where $\hat{y}_i$ is the predicted value of y evaluated at x_i
$\hat{y}_{-i}$ is the predicted values of y evaluated at x_i but with the ith observation excluded while computing the regression coefficients
s_{-i} is the estimated standard error of the regression calculated by excluding the ith observation
h_{ii} is the ith diagonal element of the hat matrix $X(X'X)^{-1}X'$

The value of $DFFITS_{-i}$ tends to be high if either the observation is an outlier or the observation has a large influence or leverage on the estimated coefficients. Belsley, Kuh, and Welsh suggest a cut-off point of $2\sqrt{k/n}$, where k is the number of regressors and n the number of observations to identify influential observations. Observations which exceeds this value are deemed influential.

Once the presence of influential observations is detected, an appropriate way to handle it is to use the one-step-bounded-influence estimator suggested by Welsch (1980). The bounded-influence estimator is a weighted least squares estimator with the weights on each observation given by specification test was done for each regression in line with the methodology suggested by White (1980). The value of the chi-squared statistics is reported for each regression in the tables. The specification tests did not detect any significant presence of heteroskedasticity in any of the regression equations. The OLS estimates are, therefore, efficient[18].

We began our empirical analysis by estimating the spline specification for MBVR with respect to equity holdings by directors and relatives. One issue that arose with the spline specification was how to choose the number of spline variables and the exact spline nodes. In our analysis we first estimated a regression by using a quadratic specification for holdings by directors and relatives since the quadratic specification allows one to endogenously determine the threshold point. The estimated threshold point was found to occur at 24 percent and indicated a negative relation between MBVR and directors' holdings as long as the holdings were below 24 percent. Thereafter there was a positive relation between MBVR and directors' holdings. Interestingly, the threshold point of 24 percent was just about below the 26 percent mark which gives the directors, and for that matter, any blockholder, the power to block a special resolution under the Companies Act of 1956[19]. The inflection point was also very close to the 25 percent mark, which has been one of the specified spline nodes used in many empirical studies.

However, though the quadratic specification endogenizes the point of inflection it cannot allow the relation between company performance and extent of equity holdings to be different in more than two segments. Many empirical studies (Morck, Shleifer and Vishny, 1988; McConnell and Servaes, 1990) have supported the fact that company value tends to increase initially, decline thereafter up to a certain point, and then increase again. Thus once the threshold point was determined, we replaced the quadratic specification by a spline specification allowing for one as well as two spline nodes. We specified

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$$w_i = \begin{cases} 1 & \text{if } \left|DFFITS_i\right| \leq \textit{cut-off value} \\ \dfrac{\textit{cut-off value}}{\left|DFFITS_i\right|} & \text{if } \left|DFFITS_i\right| > \textit{cut-off value} \end{cases}$$

[18] The test-statistic suggested by White is actually a test of the joint hypothesis that the model's specification of the first *and* second moments of the dependent variable is correct. An insignificant test-statistic, therefore, indicates not only that the model is free from heteroskedasticty, but also that the linear specification is correct (pp. 823, White (1980)).

[19] Under the Companies Act of 1956, important decisions like changing the line of business, diversification into new areas, amalgamation with other companies, alteration of rights of certain classes of share holders, reduction in share capital, etc. have to be approved by a special resolution. A resolution is deemed to be a special resolution if "the votes cast in favour of the resolution … are not less three times the number of the votes, if any, cast against the resolution by the members so entitled and voting" (Section 189).

alternative values of the spline nodes around the threshold point and undertook a specification search to determine both the number of splines as well as the spline nodes that were most adequately supported by our data. The outcomes of the specification search suggested that an appropriate specification for the spline formulation with respect to holdings by directors and relatives was one spline node, with the spline node set at 25 percent. We adopted this specification for all types of blockholders and for the PQ-Ratio as well. Presumably one can fix the spline nodes for all types of blockholders endogenously through specification searches. However, given that our analysis uses many different types of blockholders (five, to be specific), such an approach would greatly increase the dimensionality of the specification search. The fixation of the spline node at 25% for other blockholders has good institutional support as discussed earlier. The description of the spline variables are given in the Appendix.

Finally, we attempted to tackle in our estimation the important theoretical issue of reverse causality that arises in the analysis of performance and ownership. It can be argued that while ownership may influence performance, performance can affect ownership structures too. Implicitly built up in our regression equation is a one way causality between ownership and performance without explicitly incorporating the possibility that performance itself can influence the extent to which different ownership groups will commit to holding shares in a company. Thus, the positive effect that we may find between ownership and performance for different types of holdings may be influenced by the fact that each group is expected to increase its holdings in the more successful or better performing companies. If this is indeed the case, then the extent of ownership cannot be taken as exogenous in the regression equations, and any estimate derived under this assumption is likely to be inconsistent. Under these circumstances, the correct procedure for estimating the effect of ownership on performance would be to use instrumental variable method with the ownership of previous years as instruments.

While theoretically this is a valid argument, the issue of endogeneity has not received much attention in empirical work because ownership patterns in most countries have been observed to change only very gradually over time. In this case the positive relation that one obtains from a cross section regression between ownership and performance, treating ownership as exogenous, can be interpreted as a causal relation from ownership and performance. It is thus, not surprising that none of the existing empirical studies, though recognizing the problem of reverse causality, have empirically built it into their estimation. However, in our analysis, we addressed the problem of reverse causality specifically for foreign holdings for which we have found rather discrete increases in holdings in the early nineties. While this could have been triggered off by the liberalization of the regulations guiding foreign participation in domestic activities in India in recent times in a bid to integrate the country into the global economy, we nonetheless test for reverse causality to check whether increases in holdings have been induced by increases in company value.

4.0 Empirical Findings

Regression results showing the relation between company value and the extent of equity holdings by different types of blockholders are reported in Tables 3a, 3b, and 5. Regression results with respect to the effect of dual holdings of debt and equity by financial institutions are presented in Tables 6a and 6b.

4.1 Managerial Holdings

The estimates reported in Column 1 of Tables 3a and 3b show the effect of managerial holdings on company value measured in terms of MBVR and PQ-Ratio, respectively. The estimates show that MBVR declines by 0.8 percent for every 1 percent increase in directors' holdings up to 25 percent and thereafter MVBR increases by 1.3 percent for every 1 percent increase in directors' holdings (Col. 1 of Table 3a). With respect to PQ-Ratio, company value declines by 0.3 percent for every 1 percent increase in directors' holdings up to 25 percent and thereafter increases by 0.4 percent for every 1 percent increase in directors' holdings (Col. 1 of Table 3b). These results, therefore, suggest that the relationship between managerial ownership and company value is non-linear, a finding that is consistent with those of the studies by Morck, Shleifer and Vishny (1988), and McConnell and Servaes, 1990) with respect to US companies. The nature of non-linearity that we find in our study is similar to that by Morck et al. (1988) who too find company value to increase beyond a threshold level (also 25 percent in their study) and contrasts with that of McConnell and Servaes (1990) who find company value to decline after a threshold level (49.4 percent with 1976 data and 37.6 percent with 1986 data).

However, there is one difference between our result and that by Morck et al. (1988). This is with respect to the effect of managerial holdings below the 25 percent level. While Morck et al. (1988) find company value to first increase between 0 and 5 percent level of equity holdings and then decrease between 5 and 25 percent, we find company value to decline uniformly over the entire range. This negative relation that we find in our study, however, ceases to be statistically significant when we introduce the holdings by other blockholders in the regression. In contrast, the positive effect of managerial shareholders on company value beyond the 25 percent level, continues to remain statistically significant at the 1 percent level even after incorporating the effects of other blockholders (Table 5).

4.2 Foreign Holdings

The coefficients of both the spline variables associated with foreign ownership in Column 1 of Tables 3a and 3b are positive and highly significant. An increase in foreign holdings increases company value in terms of both MBVR and PQ-Ratio at all levels of equity holding, although the effect is significantly higher once the extent of holdings crosses 25 percent. Given the 24% limit applicable in 1995-96 to Foreign Institutional Investment (FII) in the equity of one single company, the significantly higher effect of foreign ownership that we find for the second spline dummy can be safely associated with holdings by foreign corporate bodies (termed as Foreign Direct Investment (FDI) in the government regulations[20]. Our results therefore seem to suggest that the incremental effect of foreign corporate holdings on company value to be higher than that of FII, though a strict comparison should look at the relative effects of these two groups in comparable ranges of ownership i.e., below 24% holdings. Unfortunately, as pointed out earlier, this breakup is not available in our database.

Our findings with regard to foreign holdings are largely in line with those of some earlier studies with respect to developing countries that foreign ownership increases company value (Khanna and Palepu (1998) and Chhibber and Majumdar (1999) in the case of India; Vendrell-Alda (1978) in the case of Argentina; and Willmore (1986) in the case of Brazil). Further, our result that foreign ownership is non-linearly related to performance is consistent with that obtained by Chhibber and Majumdar (1999). However, our results differ from that of Chhibber and Majumdar (1999) in terms of the precise nature of non-linearity in the sense that while the latter find foreign ownership to display superior performance only when property rights devolve to foreign owners at sufficiently high levels of holdings (51 percent, in their study), we find foreign holdings to increase company value even at low levels of holdings. This difference in result could very well lie in the fact that unlike in our analysis, Chhibber and Majumdar (1999) do not build in the combined effect on company value of holdings by large shareholders other than that of the foreign holders and use accounting rates of return in evaluating company performance.

In order to address the issue of reverse causality with respect to foreign holdings and to check the robustness of the positive relationship that we have obtained, we took all the 92 foreign companies in our sample and tried to relate the change in foreign equity holdings with company performance. Specifically, we looked at the extent of foreign equity holdings in these companies in 1992 and 1995 and examined if increase in holdings, as well as the extent of increase in holdings, tended to occur in the better performing companies. Results of this analysis are presented in Table 4. Panel A of the table shows that out of the 69 companies on which ownership data was available for the year 1992, the share of foreign equity increased in two-thirds of the companies and decreased in the remaining one-thirds. However, while the average increase was over 9%, the extent of decrease was significantly lower at just under 3%. Did the increase in foreign equity occur in the better performing companies? The last three Columns in Panel A gives the average values of three performance indicators for the year 1992. As far as the two accounting indicators are concerned, the average return of the increasing share companies in 1992 was not any higher than the decreasing share companies. Whereas the return-to-net-worth was the same for the two groups of companies, the return-to-sales of the increasing share companies was actually lower. However, with respect to the market indicator, increasing share companies had a significantly higher market-to-book-value ratio in 1992.

Since the evidence here was somewhat mixed, we then looked at only the increasing share companies and tried to analyze whether the extent of increase in foreign equity was positively related to the performance of the companies in this group. For this, we took each of the three performance indicators and divided the increasing share companies into two groups, one group consisting of companies whose performance was higher than the average performance in 1992, and the other group consisting of companies whose performance were lower than the average performance. We then calculated the extent of increase in foreign holdings for these two groups of companies. Panel B gives the results of this exercise. The results indicate that the extent of increase in foreign equity was actually higher in the "lower than average" companies irrespective of whichever performance indicator we use. Thus in terms of the market-to-book-value indicator while foreign holdings increased by just over 8% in the "higher than average" companies, it increased by almost 10% in the "lower than average" companies. This difference becomes more significant when judged against the fact that the average value of the performance indicator for the increasing share companies was more than twice the value of that for the "lower than average companies." Similar findings occur with respect to the accounting indicators with greater degree of significance. Thus our analysis does not lend support to the hypothesis that increase in foreign equity holdings tend to occur only in the better performing companies.

4.3 Corporate Holdings

To find out the effect of equity holdings by corporate bodies on company value, we introduce the spline variables COR_SP1 (spline up to 25 percent) and COR_SP2 (spline above 25 percent) in the regression. The results are reported in Column 2 of Tables 3a and 3b. The coefficient of COR_SP1 and the associated t-statistics in the Tables suggest that, similar to that with respect to managerial holdings, holdings by

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[20] We would like to thank an anonymous referee for suggesting this interpretation.

corporate bodies do not affect company value as long as the holdings are below 25 percent. However, as is evident from the positive and statistically significant coefficient of COR_SP2, corporate bodies tend to positively influence company value once their holdings cross 25 percent. For every 1 percent increase in corporate holdings, MBVR increases by 1.4 percent and PQ-Ratio by 0.5 percent. Both these effects are statistically significant at the 1 percent level.

The estimates with respect to the effect of corporate holdings on company value reported above as well as the effect of managerial holdings reported earlier were obtained with respect to the entire sample by pooling both business group and stand-alone companies. However, in a country like India with significant amount of cross-holdings among group companies, an analysis of the effect of insider ownership, i.e., impact of managerial holdings and corporate holdings, might become more meaningful by estimating the effects separately for group and stand-alone companies. Insider ownership for group companies is difficult to determine because managers in group companies may, apart from exerting direct control over the company through their equity holdings, exercise indirect control through cross holdings in other group companies via "control chains" or "pyramids."[21] In such cases, the low level of managerial holdings in group companies relative to stand-alones would effectively understate the influence of managerial ownership on company value. A similar logic would hold with respect to capturing the effect of corporate holdings in group companies wherein a significant proportion of the holdings presumably consists of holdings by other companies in the group.

To explore this issue of insider ownership we estimated the model separately for the 610 group companies and 955 stand-alone companies in our sample. The results of the estimation are presented in Column 3 (for group companies) and Column 4 (for stand-alone companies) of Tables 3a and 3b. The estimates reveal that while there are some differences in the impact of managerial holdings on company value between group and stand-alone companies, there are no such differences with respect to the impact of corporate bodies. Both with respect to MBVR as well as PQ-Ratio, while managerial holdings below 25 percent have a negative and statistically significant relationship with company value in non-group companies, no such relationship is evident in the case of group companies. For managerial holdings above 25 percent, while the relationship with company value is positive in the case of both group and stand-alone companies, it is only statistically significant for the stand-alones. The differences in the effect

[21] According to La Porta *et al.* (1998) , a shareholder has x percent indirect control over firm A if (1) it directly controls firm B which in turn controls x percent of firm A, or (2) directly controls firm C which in turn controls firm B or a sequence of firms leading to firm B through a control chain. A firm's ownership structure is a pyramid if it has an ultimate owner and there is at least one publicly traded company between it and the ultimate owner. Corporate bodies are often publicly traded companies and/or group companies.

across group and non-group companies that arise with respect to managerial holdings, however, does not appear with respect to the influence of corporate bodies. Corporate holdings beyond the threshold of 25 percent have a positive influence on company value (both with respect to MBVR and PQ-Ratio) in both group and non-group companies and the estimates are significant at 1 percent. For holdings below 25 percent, corporate bodies do not have any statistically significant effect on company value either in group and non-group companies.

In order to analyze if the differences in the effects of managerial and corporate holdings across business group and stand-alone companies are statistically significant, we estimated a pooled regression by creating a Group dummy variable (which equaled 1 for a group company and 0 otherwise) and then interacting it with the spline variables with respect to managerial and corporate body holdings. This specification provides an easy test for the statistical significance of the differences since the interaction terms picks up this effect. The results of the estimation are presented in Column 5 of Tables 3a and 3b. Both with respect to MBVR as well as PQ-Ratio, the estimates associated with the interaction terms are statistically insignificant for holdings less than 25 percent as well as that for holdings more than 25 percent. The results thus indicate that there are no statistically significant differences between the effect of insider ownership and corporate holdings on group and stand-alone companies.

The absence of any statistically significant differences that we find in our analysis is in line with the results of an earlier study by Khanna and Palepu (1998) of the absence of any group effects in their sample. However, the value addition of our analysis lies in our non-linear specification which clearly highlights that the effect of managerial holdings and corporate bodies depend on the level of equity ownership. Thus while Khanna and Palepu (1998) report that managerial ownership has no significant effect on company value, we find a positive and significant effect beyond holdings of 25 percent. With regard to corporate bodies too, while the above-mentioned study finds a positive and significant relationship with company value, we find the existence of such a relationship only beyond the threshold level of 25 percent.

4.4 Financial Institutions and Institutional Investor Holdings

We now introduce blockholdings by government institutions into the regression[22]. Results of this regression are reported in Columns 1 and 3 of Table 5. The coefficients of the spline variable GOV_SP1

[22] Since our earlier analysis indicates the absence of any statistically significant differences in the effect of managerial and corporate holdings across group and stand-alone companies, we use the pooled regression and drop the interaction terms when we introduce the holdings by institutional investors and financial institutions.

(spline upto 25 percent) suggest that government holdings have a negative impact on corporate value, measured by MBVR and PQ-Ratio, but the effect is statistically significant only with respect to the former measure. On the other hand, for higher levels, the effect of government holdings, though positive, is insignificant both with respect to MBVR and PQ-Ratio, as are reflected in the coefficients of GOV_SP2 (spline above 25 percent). These results point to an interesting contrast with the results obtained with respect to the other blockholders, that government financial institutions are passive monitors even when they have substantial stakes in a company.

While the result that financial institutions as a group in India are passive monitors is consistent with the conclusion arrived at by Khanna and Palepu (1998), it is important to undertake a more disaggregated analysis of the effect of the different types of institutions that constitute the group, given the different incentives of these two types of government institutions in influencing company value as highlighted in the introductory section. Recall that blockholdings by government institutions are of two types. First are the holdings by institutional investors namely the government sponsored mutual funds and insurance companies, and second are the holdings by development financial institutions. Institutional investors have only equity holdings while development financial institutions typically have both equity and debt holdings in companies. To capture any potential differences in effect of the two types of financial institutions, we re-estimated the regression by disaggregating government blockholdings into the fraction held by institutional investors and that held by development financial institutions. The results are reported in Columns 2 and 4 of Table 5.

With respect to institutional investors, company value tends to decline as share of institutional investors increases from 0 percent to 25 percent. This effect is statistically significant with respect to MBVR. For holdings above 25 percent, institutional investors have a positive but insignificant effect on company value as measured by both MBVR and PQ-Ratio, a result that is similar to that obtained with respect to government holdings as a whole. These results contrast sharply with the strong positive effects found by McConnell and Servaes (1990) with regard to US corporates and Xu and Wang (1997) with respect to Chinese enterprises, but are consistent with the conclusions of the survey by Black (1998) with regard to the inactivism of institutional investors in general in the US.

With respect to development financial institutions, we find very little effect on company value as the share of these institutions increases from 0 percent to 25 percent. However, company value, measured both by MBVR and PQ-Ratio tends to rise significantly as the share of development financial institutions increases beyond 25 percent. Our results suggest that, unlike institutional investors, development financial institutions start monitoring the company once they have substantial stakes in it which in turn have a beneficial impact on company value. Our result also contrasts with the finding by Xu and Wang (1997) in the case of Chinese enterprises that holdings by financial institutions uniformly reduce company value.

4.5 Dual Holdings of Debt and Equity

As discussed earlier, one of the features of development financial institutions in India is that they typically hold both equity and debt in companies. Does debt holdings by these financial institutions influence their incentive to monitor the companies, and if it does, what is the nature of this influence? An overview of the existing theoretical and empirical literature on the incentives for corporate monitoring under dual holdings (i.e., "split-financing") by financial institutions reveals several costs and benefits, but the empirical evidence on the subject is so far inconclusive, and primarily restricted to German companies (see, for example, Mulbert (1998) for a detailed discussion). One such benefit, as highlighted in Mulbert (1998) is that when banks are blockholders, the stock market can interpret the granting of a loan as a positive signal and can respond with a positive share price reaction, thereby generating additional stock return to all shareholders including the banks. Another important benefit is the mitigation of informational asymmetries between the company and the banks as the company has the incentive to submit better information to the bank with the expectation that as a blockholder, a bank is less likely to misuse confidential information to the detriment of the company. Among the costs of dual holdings that have been discussed in the literature, the most commonly mentioned one is the possibility that banks, in spite of being blockholders would seldom be in a position to exercise the "exit" option as a monitoring device. This is because, in doing so, banks would have to forego the benefits of "relational investing."

In order to draw some basic insights on this issue of governance under dual holdings, we undertook the following exercise with respect to our sample of companies. We created a dummy variable which we coded as 1 if the share of development financial institutions in total long term debt exceeded a cut-off point and interacted this dummy variable with the spline variable relating to equity holdings by these institutions. The interaction was done for the first spline variable only (upto 25 percent holding) because it is in this range of equity ownership that we have found development financial institutions to be particularly passive, so that the incentive for debt-monitoring is likely to be strong. We then estimated the regression for different cut-off points. The results for six cut-off points, i.e., 40 percent, 45 percent, 50 percent, 55 percent, 60 percent, and 65 percent are reported for both MBVR and the PQ-Ratio in Tables 6a and 6b, respectively. The coefficient of the interaction variable is positive in all the regressions with the t-statistics becoming significant at the 50 percent and the 55 percent cut-off points for MBVR and beyond the 45 percent cut-off points in the case of the PQ-Ratio. Further, the t-statistics assumes the highest level of significance at the 55 percent cut-off point both in the case of MBVR and the PQ-Ratio.

These results indicate that the effectiveness of development financial institutions in monitoring companies in which they have low equity stakes depends significantly on their debt holdings. Where debt holdings are low or absent, development financial institutions, like institutional investors, appear to be poor monitors. However, as the level of debt holdings increases, development financial institutions seem to exert a positive and significant impact on company value suggesting that these institutions step up their controlling and monitoring activities with higher levels of debt.

While a more detailed theoretical and empirical analysis is needed to understand the underlying dynamics of our result, which is beyond the scope of this paper, the interesting insight of our analysis is that the net benefits of "split-financing" depend on the levels of debt for any given level of equity, and are positive only beyond a threshold level of debt. Thus, conflicting empirical evidence on the governance value of dual holdings that are present in the literature with respect to German firms (see, for example, Gorton and Schmid, 1996 and Nibler, 1995)[23] can be explained consistently in terms of our result.

4.6 Control Variables

Finally, we discuss briefly the importance of the various control variables included in our analysis. Four, out of the seven, control variables are significant in all the regressions. These are the size variable, LSALES; the leverage variable, LEVRG; the advertising intensity variable, ADVINT; and the depreciation intensity variable, DEPINT. The coefficients associated with all these variables are positive with very high t-values. The positive sign of the size variable is consistent with the argument that companies might acquire market power as well as achieve significant economies of scale with an increase in size. The positive sign of the leverage variable is consistent with the tax argument advanced by Modigliani and Miller (1963). It also supports the signaling argument advanced by Ross (1977) that a more efficient management may signal its expertise by committing to high fixed payments. The positive sign of the advertising intensity variable supports the hypothesis that higher advertising expenditure tends to increase the intangible assets of companies, which in turn are likely to increase company value. The positive sign of the depreciation intensity variable indicates that companies which are more capital intensive and, therefore, probably more technologically advanced, tend to have higher market value.

[23] Gorton and Schmid (1996) analysed two samples of German firms for the years 1974 and 1985 and show that while there existed a uniquely significant positive influence of bank holdings on the value of the firm in the 1974 sample, no such unique relation was found for the 1985 sample, and monitoring by bank blockholders was similar to that of other blockholders. The latter result finds support in 1988-1992 study by Nibler (1995).

4.7 Time Stability of Regression Results

Since we have ownership data for only one year the time stability of our regression results is open to question. To address this issue in a simple manner we re-estimated the regressions using 1994-95 values of the dependent variable and all the control variables, but using the 1995-96 values of the equity ownership variables[24]. The regressions were estimated using all the companies in our sample for which financial information for the year 1994-95 was available (1272 companies). Since changes in ownership structure are likely to occur only slowly, these regressions should give us some indication about the time stability of our results.

The coefficient estimates based on the 1994-95 data reconfirmed our inferences regarding the effect of directors' holdings, corporate bodies' holdings, and foreign holdings on company value. However, there were some differences with respect government holdings. While our results based on 1995-96 data suggested a negative but insignificant effect of government holdings on company value for relatively low level of equity ownership (i.e. less 25 percent), the results based on 1994-95 data indicated a negative and significant effect. The coefficient associated with the second spline dummy (i.e., ownership of more than 25 percent) which was positive but insignificant in the 1995-96 regression, changed to negative but insignificant in the 1994-95 regression. These results suggested some improvement in the effectiveness of government ownership in enhancing company value over time. When we looked deeper into the role played by the institutional investors and the lending institutions in bringing about this improvement, we observed that this improvement was largely due to the role of the lending institutions. The fact that some of the lending institutions have themselves accessed the capital market and have become publicly traded during this period could be one of the reasons behind their taking a more active interest in the governance of the companies in which these institutions have higher ownership stakes.

5. Conclusions

Our empirical analysis of the activism by different types of large shareholders in the governance of corporates in developing and emerging countries like India has sought to add to the sparse evidence that exists with respect to these countries. We specifically provide evidence on the non-linearity in the relationship between ownership stakes and company value and also present a detailed analysis on the role of development financial institutions in corporate governance that were not dealt with in earlier work with respect to emerging economies, particularly India. The picture that emerges from our study is consistent on the one hand with some conclusions arrived at with respect to the outsider-dominated market-based

[24] This approach is similar to that used by Morck et al. (1988).

systems of US and UK, and on the other hand, has some commonality with elements of the insider dominated bank-based systems of Germany and Japan.

The common thread running through all our results is that the relationship between each of the different types of shareholders and company value is piece-wise linearly related. This is consistent with the results of some of the existing studies with respect to the US regarding the effect of managerial holdings on company value, and with respect to India regarding the relationship between foreign ownership and company performance. Beyond the threshold of 25 percent, barring that of institutional investors, we find the relationship between shareholding and company value to be positive and statistically significant. An implication of this result is that concentrated ownership increases company value and our evidence provides support to the "convergence of interest" hypothesis rather than the "entrenchment" and "conflict-of-interest" hypotheses. Put simply, the benefits of concentrated ownership by directors and relatives, corporate bodies and financial institutions outweigh its costs when ownership becomes substantial. Of particular interest is our evidence of the of absence of expropriation by insiders at any level of holdings. One could reasonably expect such expropriation to be present in developing countries like India that are characterized by relatively weak enforcement of legal rights of minority shareholders. Our result suggest that other blockholders may have a positive role in mitigating managerial agency problems in the presence of weak legal protection.

The positive relationship between managerial holdings and company value beyond a certain threshold in India is consistent with the fact that many Indian corporates, both small and large, are typically family dominated where managers are *de facto* owners of enterprises. One could, therefore, expect them to maximize the surplus generated by corporate assets once their ownership stakes become substantial. A similar result holds for corporate bodies. Given the largely anecdotal evidence in India that a significant component of corporate holdings are cross-holdings, our results provide some support to the contention (Kester, 1992) that significant benefits might flow from lower implicit contractual costs in insider-dominated systems as that in India. Our analysis of any potential differences in the effect of managerial holdings and corporate bodies across group and stand-alone companies in India reveal that differences when these exist, are not statistically significant.

The other point of consistency with many of the existing studies is with respect to the passivity of institutional investors as mutual funds and insurance companies, as also the passivity of financial institutions at relatively low concentrations of equity holdings. We clearly find no evidence of a positive and significant relationship between holdings of institutional investors and company value at any level of equity ownership which is consistent with the conclusion arrived at a recent survey of the role of institutional investors in US companies (Black, 1998). The passivity of institutional investors at all levels of equity ownership strengthens the profile of institutional nominees drawn up in several accounts in the literature -- nominees who seldom use the voice option as they have little expertise in the specifics of the company they monitor, and who have no risk of loss to bear if the value of an investment declines, and who have no reward to gain, if the value increases.

Our study also finds support for the efficiency of the German/Japanese model of bank-based governance. Our results indicate a distinct improvement in the role of financial institutions in enhancing company value when stakes in both equity and debt are considerable, and as the government has partially divested ownership in some of these institutions. Our results suggest that the institutions start monitoring the company once they have substantial stakes in it. Our result, of the positive impact of lending institutions holdings on company value, is in contrast to the finding in the case of Chinese enterprises (Xu and Wang, 1997), but is in line with the finding by Claessens *et al*., (1996). This finding, together with the finding that concentration of insider ownership beyond a threshold level increases company value, lends credence to the viewpoint that insider-dominated, bank-based systems of governance could be effective in the context of transitional and emerging economies.

Our analysis of the role of government controlled institutional investors and development financial institutions in monitoring company value throws some valuable insights into the scarcely analyzed question of whether government ownership of such institutions necessarily impairs their ability to monitor companies effectively. While institutional investors and development financial institutions are both government controlled, the impact of these institutions as suggested by our analysis is rather conflicting with the former having no positive impact on company value, whereas the latter increasing company value beyond a certain level of equity holding. These two results taken together tend to suggest that government ownership may not necessarily be an impeding factor in effective monitoring provided there are counteracting factors to neutralize the agency problems associated with government ownership. Results of our robustness tests which indicate that the development financial institutions became more efficient in monitoring over a period as a certain percentage of government ownership was divested and these institutions went to the market to raise private capital while the mutual fund industry remained completely government controlled and virtually monopolized, suggest that market pressures on the monitors could be one such counteracting factor. The other counteracting factor could be our finding that significant debt holding by these lending institutions reinforces their incentives to monitor and exercise their voice option more effectively relative to institutional investors.

Finally, our analysis also highlights the beneficial effect that foreign equity ownership can have on the corporate governance of developing country corporates. This result is in line with that of existing studies with respect to other developing countries, which find that companies with foreign ownership have higher valuation. In our analysis, foreign holdings increase company value at all levels of equity holding, with the effect being higher once the extent of holdings crosses 25 percent. More significantly, the magnitude of the beneficial effect of foreign holdings beyond the 25 percent threshold are substantially higher than the corresponding effects of managerial and corporate holdings.

References

Aoki, Masahiko, 1995, Controlling insider control: issues of corporate governance in transition economies, in Masahiko Aoki and Hyung-Ki Kim, (eds.) *Corporate governance in transitional economies: insider control and the role of banks,* EDI, World Bank.

Aoki, Masahiko and Hyung-Ki Kim, 1995, *Corporate governance in transitional economies: insider control and the role of banks,* EDI, World Bank.

Ahluwalia, M.S., 1995, India's economic reforms, in R. Cassen and V. Joshi (eds.) India*: The future of economic reform*, Oxford University Press, New Delhi.

Belsley, D., Kuh, E., and Welsch, R., 1980. *Regression diagnostics: identifying influential data and sources of collinearity.* London: Wiley.

Berle, Adolf and Gardiner Means, 1932, *The Modern Corporation and Private Property,* Macmillan, New York.

Bharat, 1998, *Manual of Companies Act, Corporate Laws and SEBI Guidelines,* Bharat Law House, New Delhi.

Black Bernard, 1998, Shareholder activism and corporate governance in the United States, in Peter Newman, ed. *The New Plagrave Dictionary of Economics and Law,* forthcoming.

Blair, Margaret, 1995, *Ownership and Control: Rethinking Corporate Governance for the Twenty-First Century,* The Brookings institution, Washington D.C.

Blasi, Joseph and Andrei Shleifer, 1996, Corporate governance in Russia: An initial look, in Roman Frydman, Cheryl Gray, and Andrei Rapaczynski, Eds., *Corporate Governance in Central Europe and Russia:* Vol.2 *Insiders and the State,* Centarl European University Press, Budapest.

Brickley, James A.; Lease, Ronald C.; Smith, Clifford W., Jr., 1988, Ownership structure and voting on antitakeover amendments, *Journal of Financial Economics,* 20(1/2), 1988, 267-91.

Burkart, M., Denis Gromb, and Fausto Panunzi., 1997, Large shareholders, monitoring and fiduciary duty, *Quarterly Journal of Economics.*

Capon, Noel, John Farley and Scott Hoenig, 1996, *Toward an Integrative Explanation of Corporate Financial Performance,* Kluwer Academic Publishers, Boston.

Chhibber, P. K. and S. K. Majumdar, 1999, Foreign ownership and profitability: property rights, control, and the performance of firms in Indian industry, *Journal of Law and Finance,* 42(1), pages 209-239.

CII, 1998, *Desirable Corporate Governance: A Code,* Confederation of Indian Industry.

Claessens, Stijn, 1997, Corporate governance and equity prices: evidence from Czech and Slovak Republics, *Journal of Finance*, 52(4), September, pages 1641-58.

Claessens, Stijn, Simeon Djankov and Gerhard Pohl, 1996, Ownership and Corporate Governance: Evidence from the Czech Republic, World Bank, Washington, D.C.

Choudhury, Mita, 1999, Potential selectivity bias in Prowess - A company-level database on Indian economy, mimeo, Indira Gandhi Institute of Development Research.

Dodd, Peter and Jerold Warner, 1983, On corporate governance: A study of proxy contests, *Journal of Financial Economics,* 11, 401-439.

Edwards, Jeremy and Klaus Fischer, 1994, *Banks, finance and investment in West Germany since 1970*, Cambridge University Press, Cambridge.

Fama Eugene and Michael Jensen, 1983, Agency problems and residual claims, *Journal of Law and Economics*, 26, 327-349.

Gorton, Gary and Frank Schmid, 1996, Universal banking and the performance German firms, Working Paper, 5453, National Bureau of Economic Research, Cambridge, MA.

Gray Cheryl and Rebecca J. Hanson, 1993, Corporate governance in central and eastern Europe, Policy Research Working Paper 1182, World Bank.

Hopt, Klaus, J., Hideki Kanda, mark J. Roe, Eddy Wymeersch and Stefan Prigge (eds.), 1998, *Comparative Corporate Governance - The State of the Art and Emerging Research,* Oxford: Clarendon Press.

Jensen Michael and William Meckling, 1976, Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics,* 3, 305-360.

Keasey, Kevin, Steve Thompson and Mark Wright (eds.), 1999, *Corporate Governance,* Cheltenham: Edward Elgar.

Kester, W. C., 1992, Industrial groups as systems of contractual governance, *Oxford Review of Economic Policy,* vol.8, no.3, 24 - 44.

Khanna, Tarun and Krishna Palepu, 1998, Emerging Market Business Groups, Foreign Investors and Corporate Governance, forthcoming in Randall Morck, edited, NBER volume on *Concentrated Ownership*, University of Chicago Press.

La Porta Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny, 1998, Law and Finance, *Journal of Political Economy,* 106(6), 1113 - 1155.

La Porta Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer , 1999, Corporate Ownership Around the World, *Journal of Finance*, 54(2), 471-517.

McConnell, John and Henri Servaes, 1990, Additional evidence on equity ownership and corporate value, *Journal of Financial Economics,* 27, 595-612.

Miyajima, Hideaki , 1995, The privatization of ex-Zaibatsu holding stocks and the emergence of bank-centered corporate groups in Japan, in Masahiko Aoki and Hyung-Ki Kim, (eds.) *Corporate governance in transitional economies: insider control and the role of banks,* EDI, World Bank.

Modigliani, Franco and Merton Miller, 1963, Corporate income taxes and the cost of capital: A correction, *American Economic Review*, 48, 261-297

Morck, Randall, Andrei Shleifer and Robert W. Vishny,. 1988, Management ownership and market valuation: An empirical analysis, *Journal of Financial Economics*, 20, 293-315.

Mulbert, Peter O. Trier (1998), Bank equity holdings in non-financial firms and corporate governance: the case of German universal banks, in Hopt, Klaus et al. (eds.), *Comparative Corporate Governance - The State of the Art and Emerging Research,* Oxford: Clarendon Press, 445 - 497.

Nibler, Marcus, 1995, Bank control and corporate performance in Germany: the evidence, University of Cambridge, Faculty of Economics and Politics, Research Paper Series, no. 48.

OECD, 1995, *Financial Market Trends,* no. 62, December, OECD, Paris.

Pound John,1988, Proxy contests and the efficiency of shareholder oversight, *Journal of Financial Economics*, 20(1/2), 237-65.

Prowse, Stephen D. , 1990, Institutional investment patterns and corporate financial behavior in the United States and Japan, *Journal of Financial Economics,* 27, 43-66.

Ross, Stephen A., 1977, The determination of financial structure: The incentive-signalling approach, *Bell Journal of Economics*, 8, 23-40.

Sarkar, Jayati and Subrata Sarkar, 1999, The governance of Indian corporates, in Kirit S.Parikh (ed.) *India Development Report 1999-2000*, Oxford University Press, New Delhi, 201-218.

Schmidt, Klaus 1996, The costs and benefits of privatization, *The Journal of Law, Economics and Organization*, 12, 1-24.

Shleifer, Andrei and Lawrence Summers, 1988, Breach of trust in hostile takeovers, in A.J. Auerbach (ed.) *Corporate Takeovers: Causes and Consequence*, University of Chicago Press, Chicago, 65-88.

Shleifer, Andrei and Robert W. Vishny, 1986, Large shareholders and corporate control, *Journal of Political Economy*, 94, 461-488.

Shleifer, Andrei and Robert W. Vishny, 1997, A survey of corporate governance, *The Journal of Finance*, vol. LII, no.2, 737-783.

Singh, Ajit, 1995, Corporate financial patterns and industrializing economies: A comparative international study, Technical Paper, International Finance Corporation.

Vendrell-Alda, J. L. M., 1978, *Comparing Foreign Subsidiaries and Domestic Firms: A Research Methodology Applied to Efficiency in Argentine Industry*. New York, Garland.

Welsch, R. E., 1980, Regression sensitivity analysis and bounded-influence estimation, in Kmenta, J. and Ramsey, J. B. (eds.) *Evaluation of econometric models*, pp. 153-67. New York: Academic Press.

Willmore, L. N., 1986, The comparative performance of foreign and domestic firms in Brazil, *World Development*, 4, 499-517.

White, H., 1980, A heteroscedasticity-consistent covariance matrix estimator and a direct test for heteroscedasticity, *Econometrica*, 48, 817-838.

Xu Xiaonian and Yan Wang, 1997, Ownership structure, corporate governance, and corporate

performance: The case of Chinese stock companies, Policy Research Working Paper 1794, World Bank.

Table 1: Pattern of Equity Ownership in Different Types of Companies in India

Type of Company	Mean Equity Holding (in %) by					
	Directors and relatives	Corporate Bodies	Foreign	Financial Institutions	Institutional Investors	Public
Private companies belonging to business groups	8.2	33.5	9.3	4.2	10.3	34.5
Private stand-alone companies	21.3	18.5	7.4	3.2	3.2	46.4
Foreign companies belonging to business groups	0.8	18.3	42.0	4.3	12.2	22.4
Foreign stand-alone companies	2.8	14.0	43.1	1.7	8.4	30.0
All sample companies	15.4	23.8	10.1	3.6	6.2	40.9
Percentage of sample companies in which equity holdings is greater than 25%	26.6	42.5	12.8	2.5	6.7	

Notes: Based on a sample of 1567 private manufacturing sector companies for which ownership information for the year 1995-1996 is available from the CIMM database provided by the Center for Monitoring Indian Economy(CMIE).

Table 2: Characteristics of Equity Ownership and Shareholder Rights in India and Select Countries

	India[1] (1996)	US (1993)	UK (1993)	Germany (1993)	Japan (1993)
I. Distribution of Shareholding (%)					
(i) All corporations	33.6	46	64	68	69
(ii) Financial institutions	9.8	46	62	29	45
- Banks/lending institutions	3.6[2]		1	14	22
- Insurance companies	2.1	5	17	7	17
- Pension/investment funds	-	26	34	-	1
- Mutual funds	4.1	11	7	8	3
- Others	-	4	3	-	1
(iii) Non-financial corporations	23.8	-	2	39	24
(iv) Individuals	40.9[3]	49	18	17	24
(v) Foreign	10.1	5	16	12	7
(vi) Government	--	-	1	4	1
(vii) Others	15.4[4]	-	2	-	-
(viii) Ownership by Three Top Shareholders in the 10 Largest Non-financial Firms (%)					
- Mean	40	20	19	48	18
- Median	43	12	15	50	13
II. Antidirector Rights of Minority Shareholders[a] (scale of 6)	5	5	5	1	4
III. Per capita G.N.P ($) (1993)	300	24,740	18,060	23,560	31,490

Notes:

[a]: Antidirector Rights measure how strongly the legal system protects minority shareholders against dominant shareholders in the corporate decision making process, including the voting process. For details, see from La Porta *et al*. (1998).

1: Data is based on the study sample of 1567 companies.

2. Includes commercial banks, government owned/promoted term-lending institutions and financial corporations.

3. Individuals include top 50. Others include shares held by directors and relatives.

Sources: Data on Distribution of Shareholding (i) - (vii) for US, UK, Germany and Japan from OECD, 1995. Data on I (viii), II and III for all five countries pertains to the year 1993 and sourced from La Porta *et al*. (1998), Table 7 and Table 5.

Table 3a: Relationship between MBVR and Extent of Equity Holdings by Directors and Corporate Bodies

	Column 1		Column 2		Column 3		Column 4		Column 5	
Variable	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statisti
INTERCEPT	0.1269	0.28	0.0080	0.02	-1.2986	-1.34	0.2198	0.43	0.0301	0.0
DIR_SP1	-0.0082	-1.67*	-0.0037	-0.74	0.0097	1.02	-0.0100	-1.65*	-0.0068	-1.1
DIR_SP2	0.0126	2.42**	0.0146	2.76**	0.0185	1.46	0.0131	2.30**	0.0144	2.48*
DIR_SP1*GROUP									0.0051	0.4
DIR_SP2*GROUP									0.0061	0.4
COR_SP1			-0.0005	-0.09	0.0051	0.51	-0.0016	-0.26	0.0001	0.0
COR_SP2			0.0135	3.27**	0.0152	2.67**	0.0169	2.76**	0.0187	3.02*
COR_SP1*GROUP									-0.0043	-0.5
COR_SP2*GROUP									-0.0072	-0.8
FOR_SP1	0.0108	1.89*	0.0159	2.71**	0.0226	2.46**	0.0082	1.10	0.0166	2.80*
FOR_SP2	0.0543	8.17**	0.0565	8.34**	0.0530	5.36**	0.0647	6.97**	0.0551	8.04*
LSALES	0.1034	3.65*	0.0914	3.17**	0.1398	2.74**	0.1259	3.23**	0.1004	3.30*
AGE	0.0007	0.28	0.0004	0.15	0.0016	0.51	-0.0025	-0.68	0.0003	0.1
EXPINT	-0.0005	-0.28	-0.0006	-0.36	0.0051	1.53	-0.0011	-0.55	-0.0006	-0.3
ADVINT	0.1627	5.84**	0.1607	5.79**	0.3079	5.64**	0.1160	3.65**	0.1573	5.65*
DEPINT	0.0638	6.71**	0.0647	6.83**	0.0925	6.10**	0.0508	4.32**	0.0647	6.83*
LEVRG1	0.0042	12.14**	0.0042	12.16**	0.0082	15.30**	0.0016	3.62**	0.0042	12.22*
DIV	0.1997	0.37	0.2049	0.39	0.1667	0.17	1.4352	1.22	0.1697	0.3
Industry dummy			Included		Included		Included		Included	
Adj. R-squared	0.27		0.28		0.43		0.21		0.28	
F	22.59		21.65		17.06		9.7		19.15	
N	1567		1567		611		956		1567	
Chi-squared for Heteroskedasticity	266.78		295.14		302.63		245.1		327.63	
Prob. > Chi-squared	0.13		0.53		0.05		0.94		0.99	

** significant at 1% level
* significant at 5% level

Notes: Results in Column 1 and 2 are based on pooled regressions of group and stand-alone companies. Results in Column 3 are for group companies only, and those in Column 4 are for stand-alone companies only. Results in Column 5 are again based on a pooled regression of group and stand-alone companies, but the spline variables with respect to holdings by directors and relatives, and corporate bodies are interacted by a group dummy variable, "Group."

Table 3b: Relationship between PQ-Ratio and Extent of Equity Holdings by Directors and Corporate Bodies

	Column 1		Column 2		Column 3		Column 4		Column 5	
Variable	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statisti
INTERCEPT	0.3913	2.37**	0.3701	2.21*	0.5688	1.61	0.3421	1.75*	0.3828	2.27
DIR_SP1	-0.0030	-1.68*	-0.0016	-0.86	0.0028	0.81	-0.0039	-1.67*	-0.0031	-1.4
DIR_SP2	0.0039	2.02*	0.0043	2.23*	0.0068	1.47	0.0038	1.72*	0.0044	2.07
DIR_SP1*GROUP									0.0034	0.9
DIR_SP2*GROUP									0.0016	0.3
COR_SP1			-0.0014	-0.71	-0.0008	-0.21	-0.0018	-0.73	-0.0010	-0.4
COR_SP2			0.0049	3.24**	0.0066	3.17**	0.0058	2.47**	0.0062	2.76*
COR_SP1*GROUP									-0.0021	-0.7
COR_SP2*GROUP									-0.0017	-0.5
FOR_SP1	0.0041	1.94*	0.0058	2.71**	0.0103	3.10**	0.0025	0.87	0.0062	2.85*
FOR_SP2	0.0188	7.75**	0.0193	7.78**	0.0183	5.08**	0.0209	5.85**	0.0187	7.46*
LSALES	0.0533	5.16**	0.0505	4.80**	0.0647	3.48**	0.0515	3.43**	0.0529	4.76*
AGE	-0.0006	-0.70	-0.0007	-0.81	-0.0008	-0.69	-0.0006	-0.40	-0.0007	-0.8
EXPINT	0.0007	1.16	0.0007	1.09	0.0021	1.76	0.0004	0.55	0.0007	1.0
ADVINT	0.0745	7.32**	0.0738	7.27**	0.0806	4.06**	0.0657	5.37**	0.0725	7.13*
DEPINT	0.0197	5.67**	0.0199	5.76**	0.0264	4.80**	0.0169	3.73**	0.0200	5.77*
LEVRG1	0.0000	-0.24	0.0000	-0.23	0.0001	0.77	-0.0001	-0.60	0.0000	-0.1
DIV	0.0997	0.51	0.0966	0.50	-0.3489	-0.98	-0.0026	-0.01	0.0857	0.4
Industry dummy	Included		Included		Included		Included		Included	
Adj. R-squared	0.21		0.22		0.27		0.18		0.22	
F	16.56		15.91		8.72		8.10		14.09	
N	1567		1567		611		956		1567	
Chi-squared for Heteroskedasticity	204.83		232.92		236.75		208.48		284.62	
Prob. > Chi-squared	0.97		0.99		0.90		0.99		0.99	

** significant at 1% level
* significant at 5% level

Notes: Results in Column 1 and 2 are based on pooled regressions of group and stand-alone companies. Results in Column 3 are for group companies only, and those in Column 4 are for stand-alone companies only. Results in Column 5 are again based on a pooled regression of group and stand-alone companies, but the spline variables with respect to holdings by directors and relatives, and corporate bodies are interacted by a group dummy variable, "Group."

Table 4: Foreign Holdings and Reverse Causality

Panel A: All Companies (69)

	Sample Size	Mean Foreign Equity Holding (%)			Mean Value of Performance Indicators in 1992		
		In 1992	In 1995	Difference	Market to Book Value	Return on Sales	Return on Net-worth
Increasing share companies	46	43.52	52.67	9.15	6.26	0.05	0.15
All companies	*69*	*41.13*	*46.29*	*5.16*	*5.39*	*0.06*	*0.15*
Decreasing share companies	23	36.36	33.52	-2.84	3.63	0.08	0.15

Panel B: Increasing Share Companies (46)

	Sample Size	Mean Value of Performance Indicator in 1992	Mean Foreign Equity Holding (%)		
			In 1992	In 1995	Difference
Market to Book Value					
Higher than mean in 1992	21	8.89	42.78	50.97	8.19
All companies	*46*	*6.26*	*43.52*	*52.67*	*9.15*
Lower than mean in 1992	25	4.06	44.13	54.10	9.96
Return on Sales					
Higher than mean in 1992	21	0.08	42.42	49.64	7.23
All companies	*46*	*0.05*	*43.52*	*52.67*	*9.15*
Lower than mean in 1992	25	0.02	44.44	55.21	10.77
Return on Net-worth					
Higher than mean in 1992	24	0.24	42.89	49.11	6.21
All companies	*46*	*0.15*	*43.52*	*52.67*	*9.15*
Lower than mean in 1992	22	0.06	44.20	56.56	12.36

Table 5: Relationship between MVBR and PQ-Ratio, and Extent of Equity Holdings by Institutional Investors and Financial Institutions

	Based on MBVR				Based on PQ-Ratio			
	Column 1		Column 2		Column 3		Column 4	
Variable	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics
INTERCEPT	-0.0098	-0.02	-0.0528	-0.12	0.3651	2.18*	0.3485	2.08*
DIR_SP1	-0.0044	-0.86	-0.0051	-1.00	-0.0014	-0.74	-0.0016	-0.85
DIR_SP2	0.0134	2.51**	0.0134	2.51**	0.0044	2.23*	0.0043	2.21*
COR_SP1	-0.0002	-0.03	0.0000	-0.01	-0.0013	-0.65	-0.0012	-0.62
COR_SP2	0.0125	2.97**	0.0121	2.87**	0.0050	3.27**	0.0049	3.18**
GOV_SP1	-0.0102	-1.79*			-0.0003	-0.16		
GOV_SP2	0.0087	0.79			0.0031	0.76		
IINV_SP1			-0.0151	-2.24*			-0.0024	-0.96
IINV_SP2			0.0084	0.44			0.0026	0.37
DFI_SP1			-0.0047	-0.62			0.0014	0.51
DFI_SP2			0.0437	1.73*			0.0139	1.51+
FOR_SP1	0.0166	2.81**	0.0169	2.87**	0.0060	2.77**	0.0061	2.84**
FOR_SP2	0.0549	7.98**	0.0544	7.92**	0.0194	7.72**	0.0192	7.65**
LSALES	0.1092	3.51**	0.1156	3.70**	0.0495	4.35**	0.0520	4.54**
AGE	0.0009	0.37	0.0017	0.68	-0.0007	-0.83	-0.0004	-0.46
EXPINT	-0.0006	-0.33	-0.0005	-0.28	0.0007	1.10	0.0007	1.15
ADVINT	0.1604	5.78**	0.1619	5.83**	0.0738	7.26**	0.0743	7.31**
DEPINT	0.0642	6.77**	0.0644	6.81**	0.0200	5.76**	0.0200	5.78**
LEVRG1	0.0042	12.25**	0.0042	12.09**	0.0000	-0.26	0.0000	-0.38
DIV	0.2355	0.44	0.2884	0.54	0.0955	0.49	0.1163	0.60
Industry dummy	Included		Included		Included		Included	
Adj. R-squared	0.28		0.28		0.22		0.22	
F	20.38		19.35		14.89		14.14	
N	1567		1567		1567		1567	
Chi-squared for Heteroskedasticity	298.72		355.37		256.63		405.17	
Prob. > Chi-squared	0.98		0.98		0.99		0.54	

** significant at 1% level
* significant at 5% level
\+ significant at 7% level

Notes: Since the coefficients of the interaction terms in Column 5 of Table 3a and 3b are all insignificant, the Interaction terms are dropped in the regressions involving institutional investors and financial institutions.

Table 6a: Relationship between MBVR and Extent of Debt Holdings by Financial Institutions

	Share of Debt > 40%		Share of Debt > 45%		Share of Debt > 50%		Share of Debt > 55%		Share of Debt > 60%		Share of Debt > 65%	
Variables	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics
INTERCEPT	-0.1811	-0.47	-0.1643	-0.43	-0.1640	-0.42	-0.1657	-0.43	-0.1654	-0.43	-0.1674	-0.43
DIR_SP1	-0.0055	-1.06	-0.0057	-1.10	-0.0058	-1.12	-0.0057	-1.12	-0.0057	-1.11	-0.0056	-1.09
DIR_SP2	0.0136	2.55**	0.0137	2.56**	0.0137	2.58**	0.0137	2.58**	0.0138	2.59**	0.0137	2.56**
COR_SP1	0.0002	0.03	0.0003	0.06	0.0003	0.06	0.0004	0.07	0.0004	0.07	0.0003	0.06
COR_SP2	0.0121	2.88**	0.0121	2.86**	0.0120	2.83**	0.0120	2.84**	0.0120	2.85**	0.0120	2.85**
IINV_SP1	-0.0153	-2.27*	-0.0153	-2.28*	-0.0152	-2.26*	-0.0151	-2.25*	-0.0150	-2.23*	-0.0149	-2.21*
IINV_SP2	0.0086	0.45	0.0084	0.44	0.0082	0.43	0.0082	0.43	0.0081	0.42	0.0078	0.41
DFI_SP1	-0.0153	-1.08	-0.0192	-1.41	-0.0205	-1.66*	-0.0203	-1.68*	-0.0184	-1.58	-0.0171	-1.50
DFI_SP2	0.0452	1.79*	0.0477	1.88*	0.0466	1.85*	0.0460	1.82*	0.0450	1.79*	0.0442	1.76*
INTERACTION	0.0131	0.90	0.0180	1.29	0.0212	1.65*	0.0215	1.71*	0.0196	1.56	0.0182	1.47
FOR_SP1	0.0169	2.88**	0.0169	2.87**	0.0169	2.88**	0.0170	2.89**	0.0169	2.88**	0.0169	2.87**
FOR_SP2	0.0543	7.90**	0.0543	7.90**	0.0542	7.89**	0.0543	7.91**	0.0544	7.93**	0.0544	7.92**
LSALES	0.1168	3.73**	0.1175	3.75**	0.1186	3.79**	0.1186	3.79**	0.1179	3.77**	0.1183	3.78**
AGE	0.0017	0.70	0.0018	0.72	0.0018	0.72	0.0018	0.73	0.0018	0.71	0.0017	0.70
EXPINT	-0.0005	-0.30	-0.0005	-0.31	-0.0006	-0.33	-0.0006	-0.33	-0.0006	-0.34	-0.0006	-0.34
ADVINT	0.1638	5.93**	0.1648	5.97**	0.1649	5.97**	0.1649	5.97**	0.1644	5.96**	0.1642	5.95**
DEPINT	0.0647	6.83**	0.0647	6.84**	0.0646	6.83**	0.0645	6.82**	0.0645	6.82**	0.0645	6.82**
LEVRG1	0.0042	12.02**	0.0042	12.02**	0.0042	12.04**	0.0042	12.05**	0.0042	12.04**	0.0042	12.04**
DIV	0.4035	0.85	0.3787	0.80	0.3684	0.78	0.3774	0.80	0.3795	0.80	0.3792	0.80
INDUSTRY dummy	Included		Included		Included		Included		Included		Included	
R-squared	0.28		0.28		0.28		0.28		0.28		0.28	
F	19.37		19.41		19.45		19.45		19.44		19.43	
N	1567		1567		1567		1567		1567		1567	
Chi-squared for Heteroskedasticity	614.37		412.80		426.03		418.51		392.88		386.34	
Prob. > Chi-squared	0.00		0.79		0.62		0.73		0.94		0.96	

** significant at 1% level (2.326)
* significant at 5% level (1.65)

Table 6b: Relationship between PQ-Ratio and Extent of Debt Holdings by Financial Institutions

	Share of Debt > 40%		Share of Debt > 45%		Share of Debt > 50%		Share of Debt > 55%		Share of Debt > 60%		Share of Debt > 65%	
Variables	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics	Estimate	t-statistics
INTERCEPT	0.3148	2.23*	0.3252	2.30*	0.3244	2.29*	0.3237	2.29*	0.3237	2.29*	0.3228	2.28*
DIR_SP1	-0.0018	-0.96	-0.0019	-1.01	-0.0019	-1.00	-0.0019	-1.00	-0.0018	-0.98	-0.0018	-0.95
DIR_SP2	0.0044	2.28*	0.0045	2.30*	0.0045	2.30*	0.0045	2.30*	0.0045	2.31*	0.0044	2.28*
COR_SP1	-0.0011	-0.58	-0.0010	-0.53	-0.0011	-0.54	-0.0010	-0.53	-0.0010	-0.53	-0.0011	-0.55
COR_SP2	0.0049	3.20**	0.0049	3.17**	0.0048	3.14**	0.0048	3.14**	0.0049	3.16**	0.0049	3.16**
IINV_SP1	-0.0025	-1.02	-0.0025	-1.04	-0.0024	-0.99	-0.0024	-0.98	-0.0023	-0.96	-0.0023	-0.93
IINV_SP2	0.0027	0.39	0.0026	0.37	0.0025	0.36	0.0025	0.35	0.0024	0.35	0.0023	0.33
DFI_SP1	-0.0055	-1.06	-0.0071	-1.44	-0.0059	-1.31	-0.0060	-1.36	-0.0049	-1.14	-0.0041	-0.99
DFI_SP2	0.0149	1.61	0.0163	1.76*	0.0153	1.66*	0.0150	1.63	0.0145	1.58	0.0142	1.54
INTERACTION	0.0085	1.59	0.0106	2.07*	0.0098	2.05*	0.0102	2.17*	0.0089	1.94*	0.0081	1.79*
FOR_SP1	0.0062	2.86**	0.0061	2.85**	0.0061	2.86**	0.0062	2.86**	0.0061	2.85**	0.0061	2.84**
FOR_SP2	0.0192	7.63**	0.0191	7.62**	0.0191	7.61**	0.0192	7.64**	0.0192	7.66**	0.0192	7.65**
LSALES	0.0528	4.61**	0.0532	4.65**	0.0534	4.66**	0.0534	4.67**	0.0531	4.64**	0.0533	4.65**
AGE	-0.0004	-0.43	-0.0004	-0.40	-0.0004	-0.41	-0.0004	-0.40	-0.0004	-0.42	-0.0004	-0.44
EXPINT	0.0007	1.12	0.0007	1.10	0.0007	1.09	0.0007	1.08	0.0007	1.07	0.0007	1.08
ADVINT	0.0749	7.42**	0.0755	7.48**	0.0753	7.46**	0.0753	7.46**	0.0751	7.44**	0.0750	7.43**
DEPINT	0.0202	5.84**	0.0202	5.85**	0.0201	5.81**	0.0201	5.81**	0.0201	5.81**	0.0201	5.81**
LEVRG1	-0.0001	-0.47	-0.0001	-0.49	-0.0001	-0.45	-0.0001	-0.45	-0.0001	-0.45	-0.0001	-0.44
DIV	0.1420	0.82	0.1275	0.74	0.1263	0.73	0.1300	0.75	0.1316	0.76	0.1317	0.76
INDUSTRY dummy	Included		Included		Included		Included		Included		Included	
R-squared	0.22		0.22		0.22		0.22		0.24		0.24	
F	14.23		14.30		14.30		14.32		14.28		14.26	
N	1567		1567		1567		1567		1567		1567	
Chi-squared for Heteroskedasticity	663.90		502.63		427.73		422.03		411.71		380.01	
Prob. > Chi-squared	0.00		0.02		0.63		0.65		0.82		0.98	

** significant at 1% level
*   significant at 5% level

Appendix: List of Control and Spline Variables

<u>Control Variables</u>

LEVRG = defined as the ratio of long-term debt to total equity plus reserves. This variable captures the effect of corporate tax shields. In India, until recently, returns to equity was subjected to double taxation which made debt finance relatively less costly than equity finance, *ceteris paribus.*

LSALES = defined as the logarithm of sales. This variable reflects the effect of unobserved factors that are related to size. In the product market, size reflects possible entry barriers that might result from economies of scale. Size also reflects the extent of market power of a company. In the capital market, size reflects the higher ability of large companies to finance investment projects from internal sources as well their higher ability to raise additional resources through the issue of new equity.

*IND-DUMMY_*i *(one for each industry)* = industry dummy variable, IND-DUMMY_i equals 1 if the observation relates to industry i, and 0 otherwise. The dummy variable controls for industry specific effects. Among other things, this variable controls for differences in growth opportunities and the riskiness of different industries.

DIV = a dummy variable, DIV equals 1 if the company is diversified, and 0 otherwise. A company is diversified if no single product (based on 2 level SIC code) contributes more than 40 percent to its total sales. DIV captures, albeit imperfectly, the effect of company specific risk on performance.

AGE = defined as the number of years till date (1996) since incorporation. This controls for life-cycle effects as profits of older and mature companies may be enhanced due to reputation-building and learning efforts. Older companies may be subject to entrenchment of management and lack the ability to respond swiftly to changes in the environment.

EXPINT = export intensity, defined as the proportion of exports to total sales. It controls for the effects of exposure to international competition.

ADVINT = advertising intensity, defined as the ratio of advertising expenditure to sales. This partly captures the effect of intangible assets. Companies that incur high advertising expenditure may be successful in building up brand image and, with it, entry barriers for its market.

DEPINT = depreciation intensity, defined as the ratio of depreciation expenditure to sales. This controls for the technology used by the company. Higher the capital intensity of the company's technological process, higher will be the ratio of deprecation to total sales.

Spline Variables

DIR_SP1 = First spline variable with respect to holdings by directors and relatives.

$$\text{DIR\_SP1} = \begin{cases} 25 & \text{if } \text{DIR\_S} \geq 25 \\ \text{DIR\_S} & \text{if } \text{DIR\_S} < 25 \end{cases}$$

DIR_SP2 = Second spline variable with respect to holdings by directors and relatives.

$$\text{DIR\_SP2} = \begin{cases} \text{DIR\_S} - 25 & \text{if } \text{DIR\_S} > 25 \\ 0 & \text{if } \text{DIR\_S} \leq 25 \end{cases}$$

The spline variables for holdings by corporate bodies (COR_SP1, COR_SP2), foreign entities (FOR_SP1, FOR_SP2), government owned institutions (GOV_SP1, GOV_SP2), institutional investors (IINV_SP1, IINV_SP2), and development financial institutions (DFI_SP1, DFI_SP2) are similarly defined.

GROUP = Dummy variable, GROUP equals 1 if the company belongs to a business group, and 0 otherwise. This is used as an interaction variable in Column 5 of Tables 3a and 3b.