FOREIGN AND DOMESTIC OWNERSHIP, BUSINESS GROUPS AND FIRM PERFORMANCE: EVIDENCE FROM A LARGE EMERGING MARKET

Sytse Douma
Tilburg University

Rejie George
Tilburg University and Cochin University

Rezaul Kabir
Tilburg University

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Address for correspondence:
Tilburg University, P.O. Box 90153, 5000 LE Tilburg, The Netherlands.
E-mails: s.w.douma@uvt.nl, r.george@uvt.nl, m.r.kabir@uvt.nl

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Abstract

We examine how ownership structure affects the performance of firms using firm level data from a large emerging market, India. We specifically focus on a previously unexplored phenomenon, namely the differential role played by foreign institutional and foreign corporate shareholders. An examination of more than one thousand Indian listed firms suggests that the positive effect on firm performance of foreign ownership is attributable to foreign corporations that have, on average, a larger shareholding and a higher degree commitment and long-term involvement. Furthermore, we document the positive influence of domestic corporations, which are by far the largest blockholders with significant monitoring potential. We find an interesting dichotomy in their monitoring influence depending on whether they have a group affiliation. We also perform an analysis of group firms, the results of which generally suggest a negative impact on firm performance.

1. INTRODUCTION

Understanding the behavior of corporate organization requires a deeper knowledge of its governance and the factors that determine the distribution of power among corporate managers, shareholders, and directors (Jensen and Warner, 1988). Corporations especially in the Anglo-Saxon economies are characterized by a pronounced separation of ownership and control. Separation of management from ownership allows corporate managers to pursue their own interests at the expense of shareholders. Opportunities for managers to do so are constrained by different external control mechanisms like the debt market, the takeover market, the managerial labor market and the product market. Managers who disregard shareholder interests may be ousted after a hostile takeover or simply by powerful shareholders. This presupposes that shareholders have an interest to indulge in monitoring managerial behavior. However, shareholders differ with respect to (a) incentives to spend resources on monitoring and (b) abilities to perform the monitoring task effectively. Shareholders owning a miniscule proportion of shares of a firm have very little incentive to devote the necessary time and effort on monitoring managers on account of free riding from other shareholders.

Following the seminal work by Berle and Means (1932), a long hiatus ensued and it was only in the 1970s that contributions pertaining to the relationship between ownership and performance both at the theoretical and empirical level began to pour in. The theoretical postulates by Jensen and Meckling (1976) and Shleifer and Vishny (1986) have been empirically tested by Morck, Shleifer and Vishny (1988), McConnell and Servaes (1990), Thomsen and Pedersen (2000) and Gedajlovic and Shapiro (1998, 2002), to name a few. These studies find significant managerial, blockholder and institutional influences on firm performance. These

results are obtained using data from countries with highly developed capital markets, such as the United States, Western Europe and Japan.

In emerging and transition economies capital markets are less developed. Governance of listed corporations takes place mainly through other means. Family-run business groups play an important role in many emerging economies. Government-owned banks and other financial intermediaries are often important shareholders and may have incentives and objectives quite different from the incentives and objectives of private investors. Consequently, the effect of ownership on performance in emerging economies is likely to be different. A common characteristic of emerging markets is the presence of foreign shareholders and blockholders. A recent survey of corporate ownership across the world by La Porta et al. (1999) finds that contrary to the widely held belief; diffused ownership is the exception rather than the norm. The same study also highlights the preponderance of blockholdings in general and familial holdings in particular among non Anglo-Saxon economies. Recent years have witnessed the birth of a growing body of literature examining corporate governance issues utilizing data from emerging economies including India: Chibber and Majumdar (1999), Qi et al. (2000), Claessens et al. (2000), Khanna and Palepu (2000a, 2000b, 2000c), Khanna and Rivkin (2001), Wiwattanakantang (2001), and Chang and Hong (2002).

In this study, we utilize large-scale firm level data of Indian listed corporations to take a closer look at the monitoring roles of foreign and domestic blockholders. The paper makes several important contributions to the literature. Firstly, the paper extends prior studies, which examine the performance impact of foreign ownership. But, with regard to foreign investors, none of these studies specifically makes a distinction between the two most important categories

of foreign investors namely, foreign financial institutions and foreign industrial corporations. There is, therefore, no comparative analysis of the influence of these two types of foreign investors on domestic firm performance. Since, the nature of these two different classes of investors and their motivations can be fundamentally different, the aggregation of them into one common class of shareholders masks certain important results which can only be determined if they are analyzed separately. In particular, the result of our study casts some doubts on the efficacy of viewing foreign institutional shareholdings as important monitors of companies listed in emerging markets.

Secondly, while foreign ownership is undoubtedly an important component in the shareholding of firms in many emerging countries, it is far from being the largest block of shareholding in these countries. In this study, we focus on domestic corporate shareholdings, which in fact constitute the largest proportion of blockholdings in Indian corporations. We document the significant role performed by these large blockholders and also highlight an interesting dichotomy in their ability to enhance corporate performance.

Thirdly, this paper provides additional evidence on the relationship between business group affiliation and firm performance. Prior research has yielded mixed evidence on this relationship. Khanna and Rivkin (2001) and Chang and Hong (2000) provide evidence on significantly higher performance of group firms in some countries. On the other hand, Lins and Servaes (2002) and Campbell and Keys (2002) find a significantly lower performance among group firms for different countries. For India, Khanna and Palepu (2000b) report superior firm performance for highly diversified groups, but lower performance for the least and intermediate diversified business groups.

Finally, the study utilizes data from the financial year 1999-2000, a time period incorporating many new developments in the Indian corporate scenario. Earlier studies predate several institutional changes, which have occurred subsequent to the mid 1990s. Moreover, earlier studies primarily rely on the same database (namely the database maintained by the Center for Monitoring the Indian Economy). Our study uses a new database (Capitaline 2000), which gives us a detailed break up of all shareholdings, domestic as well as foreign, and thereby yields a fresh perspective on the subject.

The remainder of the paper is organized in the following manner. The next section discusses the institutional environment in India. We develop the hypotheses in Section 3 and discuss the data and the variables in Sections 4 and 5. The methodology and the results of the study are described in Sections 6 and 7. Finally, some concluding remarks are presented in Section 8.

2. INSTITUTIONAL BACKGROUND

In India, until the onset of the liberalization process, which began in 1991, the monitoring of corporations was severely constrained on account of a host of factors. Firstly, the market for corporate control was virtually non-existent. Mergers and acquisitions were looked upon by the Monopolies and Restrictive Trade Practices Commission with disfavor, and there were restrictions on the acquisitions and transfer of shares. Financial institutions remained dormant and were instructed by their principal shareholder, the government, not to destabilize existing management. Secondly, a significant proportion of Indian corporations were managed by family

members. Professional managers appointed at the highest echelons of the corporate hierarchy were the exception rather than the norm. This blunted the effectiveness of the managerial labor market in being an effective monitoring tool. Thirdly, prior to 1991, the domestic market in India was shielded from competition by a maze of arcane restrictions laid down by the *Industrial Development and Regulation Act of 1956* and very high import tariff barriers. This effectively forestalled any serious competition in the product market. The cumulative effect of this was that family managers remained well entrenched with hardly any accountability on their performance.

The post 1991 time-period marked a dramatic shift in the institutional framework in India. Foreign capital (both direct as well as institutional/portfolio investment) leapfrogged from minuscule levels to form a substantial component of the country's total capital inflows.[1] In broad terms, foreign direct investments are permitted at a higher level of shareholding. Sector-specific guidelines for consideration of such investments by the Foreign Investment Promotion Board are stipulated in *Annexure 3 and 4 of the New Industrial Policy*. These guidelines have been amended from time to time to gradually craft an increasingly open investment ambience. Without going into the specifics of the guidelines it would suffice to mention that automatic approval is granted for a holding of 51 percent and above in most sectors.

On the other hand, the regulatory regime as far as foreign institutional investment is concerned can be described as more restrictive. In 2000, the shareholding of an individual foreign institutional investor is restricted to a maximum limit of 10 percent of the total issued capital in

[1] For the financial year 1990-91 total foreign direct investment (FDI) inflows constituted almost 100 million US dollars while foreign institutional investment (FII) inflows were negligible. In contrast, by 1999-00 total FDI inflows had reached 2162 million US dollars while FII inflows were 3029 million US dollars. When expressed as a percentage of India's total capital inflows the percentage of FDI and FII cumulatively has risen from 1.4 percent to 49.7 percent in the period from 1990-91 to 1999-00 (calculated from RBI annual report 2000-01, Appendix table VI.6)

an individual firm with a cumulative foreign institutional investment limit of 24 percent. This limit can be raised in exceptional circumstances if the board of the domestic company agrees, and it is approved by the central bank, the Reserve Bank of India.

Apart from developments pertaining to the flow of foreign capital, the adoption of an nascent 'takeover code' in 1994 paved the way for a rudimentary market for corporate control. The *SEBI* (*substantial acquisition of shares and takeovers regulations) of 1997* which resulted in the formation of extensive guidelines for takeovers, has given further impetus to the growth of mergers and acquisitions in India.

In the ensuing period, the process of financial liberalization and restructuring resulted in the state sponsored financial institutions losing their privileged access to funds from the government and being forced to tap domestic and international markets. This in turn fostered a greater sense of accountability with regard to their monitoring roles in Indian corporations. Within the firms themselves, Indian companies realized the necessity to foster professionalism in their management to remain competitive both in product and financial markets, domestically as well as internationally. This led to a new breed of professional managers at the helm of corporate affairs and the beginnings of a vibrant market for managerial labor. The dismantling of the infamous 'license raj'[2] and the progressive reduction in import tariffs ignited the much needed competition in the product market and exposed firms formerly used to a cocooned existence.

[2] The word 'raj' is literally associated with the colonial rule of the British. In the text the analogy is made in a similar vein with regard to the reign by the politicians, bureaucrats and influential businessmen in India after independence in 1947. As per the provisions of the *Industrial Development and Regulation Act (1956)*, permission from the central government was needed for investment in new divisions and also for substantial expansion of capacity in existing divisions. Industrial licensing reduced competition by acting as a barrier for new entry ostensibly to avoid emergence of 'wasteful' surplus capacity. It encouraged the establishment of smaller sub-optimal scale plants, partly in order to encourage a broader spread of entrepreneurship. The system was often used to push new investments into backward areas in the hope of promoting regional equity. The system also discouraged systematic project evaluation by banks

These path-breaking measures coupled with the opening up of India's capital markets to foreign direct and portfolio investments, and the gradual adoption of corporate governance codes have brought corporate governance issues to the forefront. Furthermore, the amendment in December 2000 of the *Companies Act of 1956* led to a further improvement in governance practices and corporate disclosure norms as evidenced in the revamped listing guidelines of the stock exchanges. The listing agreements entail quarterly filing of shareholding data, segmented reporting of business activities and the setting of audit committees on the board among others. These developments coupled with fact that India is one of the largest emerging economies, having a long standing stock market and a large pool of listed companies make it an ideal staging ground for our analysis.

It is also necessary to briefly dwell on a specific institutional aspect affecting the analysis of Indian firms. It relates to the prevalence of business groups and the complexities of the typical board structure of a firm in India. Although there is no legal definition of a group, firms are usually classified as belonging to a group when there is common ownership and management by family members.[3] Furthermore, as information pertaining to group affiliation is publicly available it is relatively easy to identify group affiliation with a degree of accuracy in the Indian context. Each firm within a group has a separate legal entity and can be listed separately on the stock

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and financial institutions by creating a presumption in favor of supporting projects, which had received approval from the government. The inefficiencies generated by the system in turn became the excuse to seek tailor made protection through protective trade policies (see Ahluwalia, 1999).

[3] See Khanna and Rivkin (2001) for a broader discussion of business groups in emerging economies.

exchange. Groups in India, reflect a mix of the *associative* groups found in East Asia and *hierarchical* groups prevalent in continental Europe and share a number of features with them.[4]

While firms in India are largely focused entities, the business groups tend to be diversified enterprises and have certain features similar to a typical western conglomerate or a Japanese *Keiretsu.* Similarities exist in the sense that akin to the headquarters of the conglomerate, the controlling family sets the overall strategic direction and regulates financial transfers. An important difference, though, is that unlike divisions of a typical conglomerate firm, each firm in India has its own unique set of shareholding comprising of various blockholders and the general public, and unlike the typical Japanese *Keiretsu*, Indian groups do not have an in-house financial institution.

Director affiliations in India can be explained along three dimensions: (1) executive and non-executive, (2) family and non-family, and (3) group and non-group. For a non-group firm, total insider holdings include ownership stakes held by all executive/family directors, all non-executive/non-family (independent) directors as well as stakes held by relatives of all directors. The stakes held by executive/family directors and relatives constitute the owner manager holdings and they form the bulk of the director and relative shareholdings. For a group firm, total insider holdings include stakes of the above-mentioned categories and the stakes held by domestic corporations affiliated with the same group. These aspects are vital to an understanding

[4] The associative group, which is particularly common in Japan, is characterized by the absence of a holding company and may be viewed as a confederation of firms connected through mutual, non-majority shareholdings. Coordination of the group's business activities is enhanced by commonality of interest of member firms and it is exploited through information exchanges and tacit rules of conduct. Hierarchical groups on the other hand are defined as a set of companies controlled but not entirely owned by a single main investor. Hierarchical groups are often organized as pyramids of companies controlled by the main investor through a holding company. A unique feature of pyramidal holdings is that it allows the main investor to exert control with a limited amount of capital. (see Brioschi, Marseguerra and Paleari, 1999).

of the differences between director ownership and insider ownership among group and non-group firms in India.

3. HYPOTHESES

Significant differences can exist in the performance of foreign and domestic firms. Using a sample of Canadian firms Boardman et al. (1997) find significant performance differences among multinational enterprises or their subsidiaries and domestic firms.[5] Among emerging economies, Willmore (1986) analyzed a matched sample of foreign and domestic firms in Brazil and finds foreign firms to have higher ratios of value-added to output, higher labor productivity and greater capital intensity among others. Among Thai firms, Wiwattanakantang (2001) finds that foreign controlled firms exhibit superior firm performance. In the Indian context, Chibber and Majumdar (1999), Khanna and Palepu (2000a) and Sarkar and Sarkar (2000) find a strong positive influence of foreign ownership on firm performance. Companies with larger foreign shareholdings presumably have superior access to technical and financial resources. They are also endowed with superior managerial capital. *Ceteris paribus*, these competencies should translate into superior performance *vis á vis* firms with lower or negligible foreign holdings. This leads us to our first hypothesis:

H1: Foreign ownership positively affects firm performance.

[5] See the same study for an overview of literature concerning the performance of multinational enterprises or their subsidiaries in comparison to domestic firms in developed economies. See Jenkins (1990) for a comparative assessment in less developed countries or emerging economies.

During the 1990s, there has been an increasing trend towards transnational equity investments in the form of portfolio inflows. There is therefore a pressing need to disentangle the effects of foreign ownership in a firm belonging to foreign industrial corporations and those belonging to foreign financial institutions. Foreign corporations holding an ownership stake in a domestic company tend to invest in firms related to their core business. For example, General Motors is much more likely to invest in an automobile company than in a brewery. Thus, foreign corporations will have relevant experience and know how enabling it to 'benchmark' the performance of an Indian company. The nature of such a relationship typically goes beyond financial contributions and extends to provision of managerial expertise and technical collaborations. In fact, Isobe et al. (2000) find that the extent of a foreign firm's control over a joint venture is positively associated with the degree of resource commitment to technology transfer, and that technology transfer in turn is positively related to its local market performance. Governments also stimulate investments made by foreign corporations by providing various incentives because they provide long-run benefits to the firm as well as the economy. Moreover, since foreign corporations tend to be long-term investors, and in most cases, are a single blockholder, they have both the capability and strong incentives to monitor the domestic company they have invested in. This leads us to the following hypothesis:

H1a: Foreign corporate ownership positively affects firm performance.

Foreign financial institutional investors, on the other hand, can behave in a manner that is significantly different from foreign corporate investors (see Wilkins (1999) for an extensive discussion on the differences between foreign institutional investors characterized as foreign

portfolio investment and foreign corporate investors characterized as foreign direct investment).[6] In the case of foreign financial institutions, decisions to buy and sell shares of domestic firms are made by fund managers, whose performance is measured by comparing their results with a stock market index and/or with competing institutions of a similar class. These institutions have different investment horizons and are primarily oriented towards stock market based measures of performance. They have the requisite incentives to sell their stakes unless a firm can maintain short-term capital market gains. Foreign fund managers also manage a portfolio of a large number of investments in different industries to obtain the benefits associated with a diversified portfolio of investments. Furthermore, the ownership stake of a single foreign institutional investor as well as foreign institutional investors as a class in a single Indian firm is legally constrained. Consequently, they hold extremely fragmented stakes.

Since foreign institutional investors have different investment philosophies and investment horizons, and they come from different countries, it is debatable if they have the ability to act as a cohesive block to be an effective player in enhancing corporate performance in the companies in which they hold investments. Moreover, they tend to select investments in companies, which are large, familiar and actively traded (Kang and Stulz (1997)), and which are covered by mass media (Falkenstein (1996)). If foreign institutional investors are dissatisfied with a company's share performance they have the relatively easy option to sell their ownership

[6] "The impact of inward foreign direct investment (FDI) and foreign portfolio investment (FPI) on host economies is markedly different. Capital is *not* homogenous. Its use is what matters….A transnational corporation (TNC) transfers core competencies and expects return on the whole package, not only on capital provided and mobilized…The 'visible hand' of the firm allocates the resources to productive use. By contrast, the foreign portfolio investor expects generally to leave the management of the business (or government) to the recipient….Incentive structures in the use of FDI and FPI funds are entirely different. The responses to inadequate performance of the investment can be expected to be different with FDI and FPI. The impact of FDI on stock markets tends to be indirect. When FPI involves host country securities (stocks or bonds), it becomes associated with the functioning of national stock markets and can have a major impact on stock market performance, especially if markets are thin" (see Wilkins, 1999)

stake. As a result, the foreign fund manager is much more likely to sell the shares of an under performing company than to invest time and energy to institute a process of corporate restructuring. This leads to the following hypothesis:

H1b: Foreign financial institutional ownership is positively associated with stock market-based measures of firm performance only.

Domestic financial institutions form a significant chunk of the total shareholding of Indian firms, and consist of development financial institutions, insurance companies, banks and mutual funds. The common thread among all of these disparate domestic financial institutions is that they are predominantly government owned and consequently face the commonly associated problems of having the Government as the principal shareholder. Government ownership is plagued by a number of problems, which reduces their monitoring potential significantly. Firstly, the Government's nominees on the board are typically bureaucrats who are essentially generalists with minimal expertise in either the specifics of the firm's line of activity or corporate matters, Secondly, even if these agents of the Government are equipped for the task of oversight in corporate matters they do not have a strong incentive to be effective monitors as their tenure and career growth prospects are rarely affected by the performance of the companies in which they serve on the board as nominees. Thirdly, since governments especially in developing economies, espouse significant social welfare objectives, they are less profit driven and hence less vigilant in their monitoring role (Ramaswamy et al. (2002)). It can therefore be reasonably assumed that these domestic financial institutions bring to bear a detrimental effect on firm performance, which leads to the hypothesis below:

H2: Domestic financial institutional ownership negatively affects firm performance.

In many emerging countries, domestic corporations are among the largest group of blockholders (Claessens et al., 2000). In Indian listed firms they also constitute the largest category of shareholders. These blockholders usually have a longer investment horizon. Their monitoring incentives as well as their abilities are substantially greater than those of domestic financial institutions. Furthermore, in response to the greater competitive and liberalized environment in India since the mid 1990s, a number of companies have begun the process of acquiring strategic stakes in other companies in an effort to enhance and sustain the domain of their core competence. The presence of large corporate shareholders also increases the likelihood that a firm is taken over. These domestic corporations are therefore likely to have both the incentives and the skills to act as good monitors, which form the basis for the third hypothesis:

H3: Domestic corporate ownership positively affects firm performance.

Jensen and Meckling (1976) postulate that owner managers with significant shareholdings lead to 'reduced on the job consumption' and a greater convergence of interests between the principal and the agent. In view of the preponderance of family based firms in emerging markets in general, and India in particular, this postulate assumes more significance. Owner managers have a strong incentive to manage their companies well and generate wealth as their fortunes are tied to the well being of the company. They are after all the promoters of the company and they have the greatest stakes (both in tangible as well as intangible terms) associated with the success and failure of the companies. We hypothesize therefore that

H4: Ownership by owner managers positively affects firm performance.

Business group affiliation is associated with benefits and costs. Among the beneficial effects, Chang and Hong (2000) find that groups companies serve as an organizational structure for appropriating quasi rents, which accrue from access to scarce and imperfectly marketed inputs such as capital and information. They also offer an alternative to portfolio diversification when the markets for risk and uncertainty are absent. Furthermore, they facilitate vertical integration thereby eliminating problems arising from bilateral monopoly or oligopoly. Khanna and Rivkin (2001) report that groups can boost the profitability of member firms as they fill the voids left by the missing institutions that normally underpin the efficient functioning of product, capital and labor markets.

On the other hand, Indian groups tend to be diversified entities. Studies such as Berger and Ofek (1995) and Lins and Servaes (1999) show that corporate diversification destroys value. Furthermore, firms belonging to a group tend to support each other. Thus, a firm performing well in the market for products may have to support one or more group companies doing less well. Lamont (1997), Shin and Stulz (1998) and Rajan et al. (2000) find support for the argument that over-investment and cross subsidization contribute to value loss in conglomerates.

While Indian business groups cannot strictly be viewed as conglomerates in view of the fact that the individual firms, while akin to divisions in a typical conglomerate, have their own distinct sets of shareholders, they, nevertheless share some of the features found in

multidivisional organizations. These similarities are comparable to the scenario in which the head office lays down overall strategic targets and apportions financial transfers across divisions.

Groups are also characterized by the larger possibility of exploitation of minority shareholders through tunneling of resources by the controlling family in the group (Johnson et al., 2000 and Bertrand et al., 2002). The extraction of quasi-rents, bridging of institutional voids, greater information asymmetry in group operations, the larger possibility of exploitation of minority shareholders, and the similarities that exist between conglomerates and group firms lead us to believe that there could be a significant differential in the performance of firms belonging to a group *vis á vis* non-group firms.

The empirical evidence on the performance effects of group affiliation is also mixed. Khanna and Palepu (2000c) and Chang and Hong (2000) find group affiliation to be positively associated with performance. Khanna and Rivkin (2001) in a cross-country study of fourteen emerging markets find that in some economies group affiliation is positively associated with performance while for others the effect is either negative or insignificant. Lins and Servaes (2002) on the other hand in another cross-country study of seven emerging economies consistently find that firms associated with industrial groups in these emerging economies are characterized by under valuation. Campbell and Keys (2002) find that top five South Korean *chaebols* exhibit significantly lower performance. Khanna and Palepu (2000b) also find a significant negative influence on firm performance as measured by return on assets for as many as ninety percent of Indian group firms.

The benefits and costs associated with group affiliation are moderated to a considerable degree by country specific development policies and group strategies as they evolve over time. Khanna and Palepu (2000c) find that the benefits of group affiliation atrophy over time. Guillén (2000) finds that the prevailing business climate is conducive to either business groups or unaffiliated firms depending on the development strategies pursued by the governments in these economies, specifically, those policies that have an impact on the level of foreign trade and investment inflows/outflows. Chang and Hong (2002) find that the business group effects among South Korean *chaebols* mitigate over time. The liberalization measures initiated in India and the consequent changes in the economic landscape alluded to earlier in the paper lead us to believe that some of the benefits associated with group membership have eroded over time. This coupled with the significant negative attributes of group affiliation elaborated on earlier lead us to anticipate that on balance the negative effects of group affiliation outweigh the benefits in the Indian context.

Consistent with this belief we expect group firms to negatively influence firm performance. Consequently, our fifth hypothesis is that:

H5: Group affiliation negatively affects firm performance

In many of the traditional Indian business groups, domestic corporate holding is used as a mechanism to exercise indirect control through pyramids and extensive crossholdings. The power of corporate shareholders to expropriate wealth of other minority shareholders increases in case of group affiliation. Bebchuk et al. (2000) describe the means by which pyramids and cross holding structures enable a controlling shareholder or group to maintain a complete lock on the

control of a firm while holding less than a majority of the cash flow rights associated with its equity. These shareholders might look into their own interests and treat themselves preferentially at the expense of others. Such a scenario would result in domestic corporate holding affiliated to a group mitigating the monitoring efforts of other shareholders and would abet group insiders in their efforts to exercise private benefits of control. Therefore:

H5a: Domestic corporate ownership in group firms will result in lower firm performance.

Consistent with the earlier argument for a negative influence of firms affiliated to groups, owner managers belonging to group companies can also exert a negative influence. Their stock holdings can mitigate monitoring efforts by other shareholders because in group firms domestic corporations and group directors could act in consort to expropriate wealth. Owner managers in group-firms may also pursue non-profit maximizing objectives that increase their private benefits. Therefore, our final hypothesis is:

H5b: Ownership by owner managers in group firms will result in lower firm performance.

4. DATA DESCRIPTION

The data for the study are collected from a publicly available database named ‘Capitaline 2000’ maintained by Capital Market Publishers India Pvt. Ltd. The database contains financial, shareholding, annual reports and other information filed with regulatory agencies of a large number of companies. In order to select the final sample, we adopt the following criteria: First,

we identify the year for which the database reports the maximum number of firms with financial and shareholding information. Second, we restrict our analysis to firms listed on the Bombay Stock Exchange (BSE), which is the oldest, and one of the two main stock exchanges operating in India (the other one is the National Stock Exchange). This is because the reliability of data pertaining to performance and share ownership is better with regard to listed firms. Almost all published studies related to India use the BSE listing as a basis to construct their samples. It enables us to compare the results of this study with those of previous studies.

Third, following the convention adopted by studies of this nature, we eliminate financial, utility, real estate, trading and Government firms (defined as firm with a total government holding of 50 percent and more) from our sample. Fourth, as our study relates to Indian corporations, we drop firms, which have a total foreign shareholding component of fifty percent and above. Some of these firms could ostensibly be subsidiaries of foreign firms. It also precludes any ambiguity involved in classifying firms with a foreign holding of more than 50 percent as domestic firms. Finally, we drop a few more firms on account of a lack of information on some of the variables required for analysis and due to suspicion of typographic errors being present in some of the observations. This exercise leads to final sample size of 1005 firms belonging to the financial year 1999-2000.[7] Many different industries are represented in the sample. With regard to the problem pertaining to outliers, which is common to an empirical

[7] The financial year in India commences on the 1st of April and extends to the 31st of March of the following year. Company profit and loss statements pertain to this period while balance sheet figures are as on the 31st of March 2000. The Database obtains shareholding information from annual regulatory filings with the Bombay Stock Exchange and from company annual reports. As there is a delay in compiling and filing this information with the Stock Exchange and also because of the fact that annual reports are published after the end of the financial year, the shareholding information pertaining to the period April 1999 to March 2000 is reported in the database during May 2000 and December 2000.

analysis using financial statement data, instead of dropping them from the sample, we cap the performance variables at their 1st and 99th percentile values.

5. DEFINITION OF VARIABLES

5.1 Performance measures

We use two widely used performance measures to determine firm performance. These measures are the Return on Assets (ROA) and a proxy for Tobin's Q (henceforth referred to as the Q ratio). In line with similar studies of this nature, ROA is defined as the operating earnings before interest, depreciation and taxes over the book value of total assets. The Q ratio is defined as the sum of the market value of equity and book value of debt divided by the book value of assets. A description of these and other variables used in this study is presented in *Table 1*. As a robustness check we also use the market to book value ratio (M/B), which is defined as the market value of equity over the book value of equity. However, as the M/B ratio is substantially correlated with the Q ratio and the empirical results do not change qualitatively, we do not report these results separately.

The descriptive statistics on the performance measures of sample firms are presented in *Panel A of Table 2*. The mean (median) return on assets of sample firms is 12.69 percent (13.29 percent). The maximum and the minimum ROA reveal that our sample contains firms with a wide variation in performance with a maximum of 51 percent and a minimum of –35 percent. The mean Q ratio in our sample is 1.3. It also indicates a considerable variation with a minimum of 0.23 and maximum of 10.8.

5.2 Explanatory variables

The most important explanatory variables used in the study are ownership variables. At first, we make a broad distinction between foreign shareholders and domestic shareholders. Although the identification of foreign shareholders appears to be straightforward, we make a slight adjustment to preclude any ambiguity in the definition of 'foreign'. We do not consider equity ownership by Indian individuals staying abroad as foreign shareholders. We also preclude ownership by overseas corporate bodies, which are owned directly, or indirectly to the extent of at least 60 percent by persons of Indian nationality. These adjustments allow us to specifically focus on foreign shareholdings in its true sense. The variables representing foreign and domestic shareholdings are denoted as FOR and DOM.

Since the purpose of this study is to examine the influence of ownership at a disaggregate level, we split the broad ownership variables into important categories. We calculate the percentage of common shares held by foreign institutional investors and identify the variable as FORI. In recent years, foreign institutional investors have been playing an increasingly prominent and highly visible role in India's capital markets.[8] Although, on average, they account only for a small percentage of the shares of Indian listed corporations *(see Panel B of Table 2)*[9], they account for a substantial proportion of the daily stock turnover on the stock exchange, and are seen as significant drivers of market sentiment.[10] These funds relate to investments made

[8] As of 31st March 2000 there were 369 foreign institutional investors registered with the Securities and Exchange Board of India. As per SEBI figures, for the period 1993 to 1999 net cumulative foreign institutional investors investment stood at US$ 9.2 Billion.

[9] In our sample, 327 firms have shareholding by foreign financial institutions. The mean (median) value of this sub-sample is 3.59 (0.64) percent.

[10] While as of January 2000, foreign institutional investors (FIIs) constituted barely 5 percent of the market capitalization (which stood at roughly US$ 239 billion), they account for 50 percent of the 'free float' (shares that are actually publicly available for trading) in most big stocks. (see Banaji, 2000).

primarily by pension funds, mutual funds and insurance funds managed by these foreign institutional owners.

The variable FORC refers to the percentage of common shares held by foreign corporations. We observe that a single firm almost always holds the shares belonging to this category. These shareholdings are primarily foreign collaborator holdings. As a consequence, these holdings do not represent mere financial investments in companies, but substantial technical and managerial collaborations with Indian firms. The average (median) FORC in the sample is larger than that of the FORI (see *Panel B of Table 2*). Although, only a limited number of Indian firms (138) have foreign corporations as shareholders, the average stake held by these foreign corporations in this sub-sample is substantial (17.83 percent).

Similar to foreign ownership variables, we construct the variable DOMI which refers to the percentage of common shares owned by domestic (i.e. Indian) financial institutions. This category includes ownership stakes by development financial institutions, insurance companies, commercial banks and mutual funds. Development financial institutions comprise of the Industrial Development Bank of India, Industrial Credit and Investment Corporation of India, the Industrial Finance Corporation of India and the Infrastructure Development Finance Company Limited. These four institutions are primarily government owned. Insurance companies are the Life Insurance Corporation and the General Insurance Corporation both of which were formed after nationalizing many private insurance companies. Under the category of commercial banks fall many nationalized banks which account for the bulk of the banking business in the country. Private sector banks are also included in this category. Mutual funds include the Unit Trust of India and private Indian mutual funds. All together, domestic financial institutions form a fairly

[11] Private banks and private mutual funds account for a very small proportion of total domestic financial institutional holding.

significant chunk of the total shareholding of Indian listed corporations. Mean (median) as shown in *Panel B of Table 2* are 7.13 (2.56) percent. The common feature among all of these disparate financial institutions is that with the exception of private banks and mutual funds[11] they are predominantly Government owned, and that apart from equity holdings they are also a prominent source of debt finance to Indian firms.

The variable DOMC refers to the percentage of common shares held by domestic Indian corporations. This is the largest component of equity ownership in Indian listed firms. The mean (median) values of DOMC in the sample are 28.47 (25.74) percent, respectively. We also construct another ownership variable DIR, which represents the percentage of common shares, owned by all directors (including relatives). These share holdings are held either through their individual capacity or through investment channels other than domestic corporations. This categorization is practically similar to the definition of a 'promoter' under the *SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 1997*. The only difference is that 'corporate promoters' are classified in this study under domestic corporations (DOMC). The mean (median) ownership of directors and their relatives in our sample of firms is 17.28 (10.87) percent. It is the second largest category of owners in Indian listed firms. With the exception of foreign holdings[12], the descriptive statistics obtained for other shareholders compare favorably with the Sarkar and Sarkar (2000) study (which uses variables which are generally defined in a manner

[12] Chibber and Majumdar (1999) do not provide information pertaining to foreign holdings. Khanna and Palepu (2000b) use a sample of firms from 1993, and report a mean foreign holding of 8.75 percent. Sarkar and Sarkar (2000) use a 1995-96 sample of private manufacturing companies and report a mean holding of 10.1 percent. We find a lower figure because the sample we use does not contain foreign holdings of 50 percent and more, and also excludes certain other categories of shareholdings, namely those of Non–Resident Indian (NRI) and Overseas Corporate Bodies (OCBs).

similar to this study[13]) especially considering the differences in sample construction and the time period.

5.3 Control Variables

The two principal control variables we use are total sales and age. The variable, total sale is a proxy for the size of a firm. Size of a firm can have a significant influence over the performance of a firm. Large firms are able to exploit substantial economies of scale and scope. Alternatively, smaller firms tend to more nimble and adaptive to changes in the competitive environment. Summary statistics of total sales presented in *Panel C of Table 2* indicate that the sample we study consists of firms with a wide variety of sizes. Age is also considered to be an important determinant of firm performance. Older firms are more experienced, receive the benefits of learning and are associated with first mover advantages. However, older firms are also arguably prone to inertia and less flexibility in their ability to adapt to competitive pressures. *From Panel C of Table 2,* one can ascertain that the mean (median) firm in our sample is 23 (16) years old. The sample consists of a firm with a wide dispersion of ages with the youngest firm being 2 years old while the oldest registering an age of 121 years.

Apart from these two principal control variables, we adjust for the group affiliation of firms and industry factors because differences on these dimensions can also influence the relative performance of firms. The identification of business groups in India is relatively easy and non-controversial because firms are usually members of only one group. As mentioned earlier, group firms are substantially managed and owned by the same business family. We use in our study the classification as made by the database. It determines group affiliation from a variety of sources,

[13] Analyzing a sample of 1567 manufacturing companies for 1995-96, Sarkar and Sarkar (2000) report the following mean ownership figures: Financial institutions and institutional investors (9.8 percent), corporations (23.8 percent), and others, which includes directors and relatives (15.4 percent).

which include public announcements made by individual corporations and groups, regulatory filings and keeping track of new ventures and listings by corporations/groups among others.[14] To determine the impact of group affiliation on firm performance we make a distinction between non–group firms and group firms. In our sample we have 600 non-group firms and 405 group firms.[15] We take into account the effect of group affiliation by constructing a dummy variable, which has a value of one in case a firm belongs to a group and zero otherwise.

Although the database has its own classification of industries, in order to make the classification more amenable to that of previous studies, we have recoded these industries into their closest two-digit Standard Industrial Classification (SIC) equivalents. We define industries at the two-digit SIC code level provided that there are at least five firms in one industry group.[16] In total, the sample firms are distributed over 22 different two digit SIC code industries, which form the basis for industry dummies, used in the regression analysis.

6. METHODOLOGY

We study the effect of foreign and domestic equity ownership on the performance of firms. The general form of the regression specification we estimate is:

Performance = f (ownership variables, control variables) *(1)*

[14] An independent check on group affiliation conducted by us of 100 large Indian corporations has revealed that these affiliations are accurate. Furthermore, to assess the time stability of these groupings we looked at the 1995 ranking of the Financial Express (FE) 500 (a local business publication) listing of largest 500 Indian firms and were able to find consistent group affiliations for the firms listed in the FE500 and those present in our sample.

[15] The proportion of group firms in our sample is 40 percent, which is exactly same as the proportion of group firms/observations in the Indian context reported by Lins and Serveas (2002) and Bertrand et al. (2002)

[16] Most firms in India, regardless of being group firms or non-group firms correspond substantially to a single two digit SIC code.

The specification uses corporate performance as measured by ROA and Q as the dependent variable. Different categories of ownership variables are used as explanatory variables. This basic specification is estimated using a variety of regression specifications.

The first set of regression equations that we estimate includes broad foreign and domestic equity ownership categories and is specified as follows:

$$\begin{aligned} Performance_i = {} & \beta_0 + ß_1 FOR_i + ß_2 DOM_i + ß_3 DIR_i + \\ & ß_4 LOG(Sales)_i + ß_5 LOG(AGE)_i + \\ & ß_6 Group\ dummy + \sum \lambda_l Industry\ dummies + \varepsilon_i, \end{aligned} \qquad (2)$$

where i represents the firms in our sample, l represents number of industry dummies and $\varepsilon_{i,}$ is an error term. The coefficients $ß_1$ and $ß_2$ measure the average impact of foreign and domestic share ownership on firm performance. A major problem with the above regression specification is that it fails to uncover the potentially conflicting influence of different categories of foreign and domestic ownerships. Therefore, the second set of regression is estimated as follows:

$$\begin{aligned} Performance_i = {} & \beta_0 + ß_1 FORI_i + ß_2 FORC_i + ß_3 DOMI_i + ß_4 DOMC_i + \\ & ß_5 DIR_i + ß_6 LOG(Sales)_i + ß_7 LOG(AGE)_i + \\ & ß_8 Group\ dummy + \sum \lambda_l Industry\ dummies + \varepsilon_i. \end{aligned} \qquad (3)$$

The variables FORI and FORC measure the impact of foreign institutional and foreign corporate ownerships separately. Similarly, the variables DOMI and DOMC measure the impact of domestic institutional and domestic corporate ownerships separately.

We also perform additional regression analysis as robustness checks. In one set of regressions, we allow the group dummy to interact with several foreign and domestic ownership variables. We include interaction variables to gauge whether the relationship between ownership and performance is affected by the fact that a firm belongs to a particular business group. We also test for entrenchment effects of the ownership variables using quadratic specifications similar to McConnell and Servaes (1990) to examine the influence of inside and outside block holders on firm performance. We re-estimate specification *(3)* using a censored regression specification wherein the left and right censoring values are the relevant caps on the dependent variable at the 1 percent and 99 percent level. To further check if the hypothesized differences in performance with regard to foreign corporate and foreign institutional investors persist with the probability of the presence of these shareholders, we use the following logit regression specification:

$$\begin{aligned} \textit{Probability (Ownership)}_i = {} & \beta_0 + ß_1\, \textit{Performance}_i + ß_2\, \textit{Foreign ownership}_i + ß_3\, \textit{DOMI}_i + \\ & ß_4\, \textit{DOMC}_I + ß_5\, \textit{DIR}_i + ß_6\, \textit{LOG (Sales)}_i + ß_7\, \textit{LOG (AGE)}_i \\ & + ß_8\, \textit{Group dummy} + \varepsilon_i . \qquad (4) \end{aligned}$$

The variable ownership corresponds to one if a firm has foreign corporate ownership and zero otherwise. Similarly, for a specification involving foreign institutional ownership, the presence of foreign institutional ownership is coded as one and zero otherwise. Performance is measured in separate equations as ROA or Q ratio. The variable foreign ownership is either FORI or FORC depending on the regression specification used. The control variables are defined as in earlier specifications.

7. RESULTS AND DISCUSSION

The results of OLS regressions are presented in *Table 4*. In all these regression specifications, we include industry dummies to take into account any industry-specific factors that could affect firm performance. These coefficient estimates are not reported for the sake of brevity. We present in *Panels A, B and C*, the results obtained from using ROA and Q ratio.

The results from the most basic regression model are presented in *model (1).* We observe that the coefficient of foreign ownership (FOR) is positive and statistically significant. This result is consistent regardless of whether the performance measure is ROA (*Panel A*) or the Q ratio (*Panel B*). The finding suggests that foreign ownership positively affects firm performance, and provides support for Hypothesis 1. Prior studies also report similar findings.

As mentioned earlier, an important contribution of this study is to disaggregate foreign ownership into its two main components. *Models (2) and (4) in Panels A and B of Table 4* provide the results of break up. When foreign ownership is broken up into those relating to foreign corporations (FORC) and those pertaining to foreign institutions (FORI), an interesting picture emerges. In *Model (2) of Panel A,* when the separate effect of FORC and FORI on return on assets is considered, we observe that the variable representing ownership by foreign corporations (FORC) remains positive and significant, but ownership by foreign financial institutions (FORI) loses its statistical significance completely. The same result is obtained in *Model (4),* where we use additional controls for domestic ownership by disaggregating it into domestic institutional and domestic corporate ownership. The result is consistent with our hypothesis *H1a*.

When Q ratio is used as the performance variable *(models (2) and (4) in Panel B of Table 4),* we find that both foreign corporations (FORC) and foreign institutional investors (FORI) variable are positive and statistically significant. We also observe that the regression coefficient of FORI (0.076) is considerably larger than that of FORC (0.014). It indicates that foreign institutional owners have a larger impact than foreign corporate owners when performance is measured using stock market valuation criterion.

What could be the possible explanation for this result? Firstly, we have noted earlier that foreign institutions have substantially lower level of shareholdings compared to foreign corporations. This indicates that they have relatively lower incentives to devote time and energy to monitor firms. Moreover, foreign institutional owners are not one homogeneous block as is often thought to be the case and treated as such in pervious studies. A typical company in our sample, which has a foreign institutional ownership component, would have more than one such foreign institutional owner. These owners belong to different countries and employ fund managers with different investment horizons and different investment philosophies. They are in the business of managing and continuously adjusting a portfolio of financial assets. As a consequence, it is unlikely that they would be in a position to monitor and significantly influence the operating performance of the companies in which they hold fragmented stakes.

On the other hand, the average shareholdings by foreign corporations are substantially higher. The incentives and the rewards to monitor are consequently higher. These corporations do not have to devote their time and attention to a multitude of firms in which they have investments, which would be the case for a fund manager in a foreign financial institution. Furthermore, foreign corporate ownership entails almost always an ownership stake by a single corporate entity. The degree of commitment of a foreign corporate is much deeper than a pure

institutional investor. It extends to improving managerial and technical expertise in the firms in which they invest apart from just a financial contribution. Since these foreign corporations tend to be in the same industry as the firm in which they invest in, they have excellent monitoring capabilities and the possibility to benchmark managerial performance. Most foreign corporations are in India for the long haul considering the size and the future potentialities of the Indian market and they expect to earn a long-term return on their investment.

While our prior results indicate that foreign institutional share holdings have no significant impact on firm performance as measured by ROA, the results show that there is a significant positive relationship when firm performance is measured by Q ratio. This is consistent with our hypothesis *H1b*. As mentioned earlier, although the influence of foreign corporate shareholdings is positive, the magnitude of the estimated regression coefficient is interestingly lower than that of foreign institutional investors. Since the performance measure Q ratio is based on stock market valuation, the above finding is consistent with the view that foreign institutions are either 'tracking'[17] better performing firms or 'cherry picking' them (i.e. investing in firms that offer superior market returns). One does not have to delve too deep into the matter to realize why this would be the case. Firstly, as stated earlier in the paper, a fund manager's performance is bench marked against some index (a composite of selected stocks) and other competitive funds in the same class. It is in the fund manager's interest to out perform this index and the competitors. To this end he/she is constantly on the look out for stocks, which will enable his/her portfolio to do that. A fund manager is therefore far more likely to use the exit option rather than the voice option in relation to an under performing stock.

[17] Foreign institutional investors usually 'track' firms that have a high probability of improving their market value. When a tracked firm implements improvements, its market value rises because the improvements have been realized (Yeung, 2000). Here these foreign investors' contribution has been merely to 'track' firms with high probability of improving market value and investing in them.

Secondly, a close watch on the trading volumes pertaining to the Indian markets would testify to the preponderance of foreign institutional investor and to a lesser extent domestic institutional investor activity. The typical shareholding patterns of Indian corporations lead to this result. The stakes held by all directors and family members is dormant, so too is the shareholding by domestic corporations and foreign corporations. Trading activity among the general public (directly holding stakes in corporations) is thin and hardly cohesive enough to have a discernable impact. This leaves only domestic institutional investors (DOMI) which posses the potential to impact trading volumes. However, among the DOMIs it is only the domestic mutual funds, which are bound by performance benchmarks similar to foreign institutional investors. They constitute only a small proportion of domestic institutional investors. Foreign institutional investors are therefore uniquely paced in comparison to other shareholders to contribute significantly to the overall volatility in the market.

Thirdly, bulk purchases by foreign investors have a very high visibility in the media. Foreign institutional investors are perceived to have superior and more sophisticated analytical abilities and a stake by them is seen as a vote of confidence in the company by the most astute and discerning investors. The combined effect of the three factors enumerated above leads to a significant impact, which they have on firm performance as measured by the Q ratio. This process of ‘tracking’ or cherry picking of stocks however does not translate into a positive and significant influence when ROA is the performance measure. Foreign corporate holdings in comparison are not actively traded. The positive influence, which it has on Indian corporations, is on account of their ability to provide an integrated package of capital, management and technology that is less efficiently or easily assembled piecemeal (Chhibber and Majumdar, 1999). This impact is captured in both the ROA and Q ratio regressions.

We undertake a number of robustness checks to determine whether the differential results reported with regard to foreign corporate shareholdings and foreign institutional shareholdings are on account of the model specifications in *Panels A and B of Table 4.* This includes re-estimating the regressions by dropping each of the control variables. In every case, except when we do not control for sales the differential result persists. The sales variable is a proxy for firm size, and as can be ascertained from the correlation matrix presented in *Table 3,* is highly positively correlated with Foreign institutional ownership (0.28). This suggests that foreign institutional investment is primarily in large firms. This 'size bias' is consistent with the findings of Kang and Stulz (1997), who report a similar, albeit stronger correlation in their analysis of foreign portfolio equity ownership in Japan. Moreover, it reinforces the argument that foreign institutional investors invest in large, liquid companies which enable them to exit their positions quickly at relatively lower cost.

The above results remain consistent with censored regressions models presented in *Panel D of Table 4* and to logit regression models presented in *Table 5.* The censored regression model is robust to the distribution of the dependent variable being discrete and continuous which would be case when the performance measure is capped. The results of the logit model demonstrate that while an increase in ROA or Q ratio is positively associated with the probability of the presence of foreign corporate shareholdings (*Models (1) and (2) of Table 5),* the same does not hold true of foreign institutional shareholdings. *Models (3) and (4) of Table 5,* indicate that while a rise in the Q ratio is strongly positively associated with the probability of the presence of foreign institutional ownership, a rise in ROA has no significant impact on it. The logit regression also confirms the notion that foreign institutional investors primarily invest in firms that are large. *Models (3) and (4) of Table 5* indicate that the sales variable (which is the proxy for size) is

positively associated with the probability of the presence of foreign institutional investment and the magnitude of the coefficient is relatively large.

The regressions in *Models (3) and (4) in Panel A of Table 4* confirm the second hypothesis that domestic financial institutional ownership (DOMI) negatively affects firm performance. The reported coefficients are large (0.15 for both models) and attest to the severity of the negative influence attributed to these block holders. The reasons for these domestic financial institutions being poor monitors were broached earlier in the paper and stems primarily from the following reasons. Firstly, there is a lack of proper incentives for effective monitoring. Secondly, the fact that the monitoring function is not the primary objective of these primarily government-owned institutions. Thirdly, that competition between these financial intermediaries is non-existent, and finally, that there is hardly any self-monitoring (monitoring of the monitor). *Models (3) and (4) of Panel B* that use Q ratio as the performance measure do not corroborate this argument entirely. The variable DOMI is found to exert an insignificant impact on firm performance. This result is in partial agreement with Khanna and Palepu (2000a) as they do not obtain significant results in any of their cross-sectional model specifications using Tobin's Q as well.[18] However, using panel data from 1990-94, and a specification in which the dependent variable is defined as the change in Tobin's Q from 1990–94, they find a significant negative influence. Furthermore, Sarkar and Sarkar (2000) using a similar measure of performance as our study too find that domestic institutional investors have an insignificant effect on company value.[19]

[18] In Khanna and Palepu (2000b), which is a study primarily investigating the influence of diversified groups on firm performance and ownership variables are used as controls, the authors report that they do find a negative influence by domestic institutional ownership on performance using both ROA and a proxy for Tobin's Q as performance measures.

[19] Their variable excludes state owned development financial institutions and banks.

The results of investigation of the hypothesis that domestic corporate ownership (DOMC) positively affects firm performance are presented in *Table 4*. The regression results of *Models (3) and (4) in Panels A and B* confirm this hypothesis regardless of the performance measure used. Although, the coefficient values are considerably smaller in comparison to those reported by foreign corporate holdings, in view of the prevalence of this blockholder in most Indian corporations and the large stakes held by them, this finding has some important implications. Firstly, it is consistent with the notion that large blockholders have an impact on performance (Shleifer and Vishny, 1986). Secondly, it demonstrates that there is a large external domestic blockholder, which has a positive and significant influence on firm performance. It, therefore, substantiates the reasons elaborated earlier about domestic corporations possessing the ability and the incentive to be good monitors as far as the governance of corporations is concerned. Thirdly, this is a finding, which is consistent with positive influence exerted by corporate holdings as reported by Claessens (1997) and Qi et al. (2000), and therefore, has a cross-country relevance. It is broadly in agreement with Sarkar and Sarkar (2000) who find that corporate shareholdings beyond 25 percent positively and significantly influence company value.

Our fourth hypothesis states that ownership by owner managers positively affects firm performance. All models in *Panel A of Table 4* confirm this result. The coefficient estimates of the variable DIR are relatively large and statistically significant. However, the variable loses significance in the models in *Panel B of Table 4* where Q ratio is used as a performance measure. The lack of statistical significance of owner manager ownership with regard to Q ratio seems to suggest that the capital market in India perceives executive director and family holdings to be of minor importance. A plausible explanation could be that the proportion of executive and family director holdings is larger in smaller companies *(see Table 3),* which tend to be undervalued in the stock market.

The last main hypothesis of our study is that affiliation of firms belonging to Indian business groups is negatively associated with firm performance. The empirical result is presented in *Panels A and B of Table 4.* We find that the variable Group Dummy is negative and statistically significant. This negative influence holds true for all models regardless of the performance measure chosen.[20] The results suggest the sub-optimal allocative functioning of the internal capital markets in these group firms in an emerging economy context such as India. Khanna and Palepu (2000b) also find a statistically significant negative influence of least and intermediate diversified groups on firm performance as measured by return on assets.

The results of the investigation of the impact of domestic corporate ownership in group firms on firm performance are presented in *Panel C of Table 4*. The interaction variable DOMCINT is used to examine the hypothesis. The coefficient of the variable is negative in both ROA and Q ratio regressions, and is statistically significant in the latter case. The findings indicate that the earlier documented positive influence attributed to domestic corporate ownership for all firms is reduced in case of a group-affiliation. It provides evidence of an interesting dichotomy associated with domestic corporate ownership. It indicates that domestic corporate ownership in group firms is used as a vehicle by traditional family based groups to exert their influence on the affairs of the firm and extort private benefits of control. Bebchuk et al. (2000) and Johnson et al. (2000) present arguments on how these domestic corporate holdings can be used to form pyramids that can be effectively employed for the purpose of tunneling resources at the expense of other shareholders.

We find that the mean (median) share ownership by domestic corporations (DOMC) belonging to group firms is 34.22 (35.08) whereas the respective figures for non-group firms are

[20] Moreover, an ANOVA analysis whose results are not presented for reasons of brevity also revealed significant performance differences among group and non-group firms.

20.23 (14.92). In contrast, the mean (median) figures all directors and relatives (DIR) are 7.78 (1.54) for group firms and 23.69 (20.76) for non-group firms. These large differences between the DOMC and DIR variables between group and non-group firms clearly suggest that the major proportion of group influence is channeled through domestic corporate holdings.

The variable DIRINT representing owner managers belonging to group firms is found to negatively influence firm performance. In line with our previous result (*Panels A and B of Table 4*), a statistically significant finding is obtained when return on assets is used as the performance measure. The coefficient of DIRINT is significantly negative. The result is in sharp contrast to the strong positive effect of the DIR variable for the whole sample as shown in *Panel A of Table 4*, and reinforces the negative influence that group affiliation brings to bear.

The combination of the DIRINT and the DOMCINT variables represent the total quantum of 'insider' holding in group firms. The total 'insider' effect in group firms manifests itself through both these interaction variables. Our results broadly suggest that insider ownership lowers firm performance when firms are affiliated with a group.

Panel C also depicts results of the interaction of the Group Dummy with other ownership variables. Of particular interest is the result of the interaction of the foreign institutional ownership variable with the Group Dummy (FORIINT). The Q ratio regression result indicates that FORIINT negatively influences firm performance. The finding is consistent with our earlier hypothesis pertaining to foreign institutional investors wherein we postulate that their impact on performance is restricted to the stock marked based performance measure only. This result, which is also similar to DOMCINT, suggests that stock market based performance gain associated with foreign institutional investors is eroded partially if the ownership stake is in group companies.

The logit regression results presented in *Models (3) and (4) of Table 5* suggest that there is higher probability of the presence of foreign institutional investors for group firms. However, the regression results in *Panel C of Table 4* show that investment by them in group firms does not improve performance. This finding casts some doubt on the ability of foreign institutional investors to improve transparency in group firms.

Similar to the robustness check undertaken for foreign blockholders, all domestic blockholders are also subjected to censored regressions. The censored regression specification results in *Panel D of Table 4* are consistent with our regression estimates on the influence of these ownership variables on firm performance. It confirms the robustness of our results. The coefficient of domestic corporate ownership is positive and statistically significant. Ownership by domestic institutional investors is inversely related with return on assets. The holdings by directors and relatives are positively related with return on assets indicating that owner managers significantly influence firm performance. The robustness check also confirms the negative influence on performance of firms affiliated with groups. In addition to the censored regression specification, we use models incorporating quadratic specifications for all ownership variables. Since none of these variables is found to be significant at conventional levels, we do not report the results.

8. CONCLUSION

Our study demonstrates the necessity of disaggregating foreign ownership into foreign institutional and foreign corporate shareholdings. These two categories of shareholders need to viewed and analyzed separately. The underlying dynamics governing the investments by institutions and corporations are vastly different. Our findings also highlight the fact that the role of foreign institutional investors in India as good monitors is possibly overrated, and the results

reported by earlier studies on aggregate foreign shareholdings need additional review. The distinction we are making in this study between foreign portfolio/institutional ownership and foreign direct/corporate ownership holds relevance among the broader comity of emerging economies, which are characterized by increasing external capital inflows. Further studies facilitating this distinction in other emerging economies and using a cross-country approach is therefore warranted. This by no means discounts the positive role, which financial institutions have played in advanced economies particularly in the United States in reforming corporate boardrooms, fostering greater accountability and thereby ensuring that shareholders get adequate returns from their investment. However, with the stakes which foreign institutions currently posses and the limited number of firms that they are currently active in suggest that they have a considerable distance to travel before they begin to assume the mantle of being stellar corporate reformists/monitors. Foreign corporations, on the other hand, have unambiguously a positive influence on firm performance and as we have argued earlier in the paper, they are able to do so through diverse means.

It is however, an undeniable fact that only a small proportion of Indian firms posses foreign corporate share holdings even though their stakes in individual firms may be substantial. While their numbers and holding levels are expected to rise in the foreseeable future, in the short and medium term, domestic shareholders have to don the mantle of corporate reformers. Among the outside domestic shareholders, the study shows that domestic corporations positively influence firm performance although the coefficients do not have the same magnitudes as for foreign corporations. Nevertheless, the result assumes significance in view of the fact that blockholdings by these domestic corporations constitute among the largest blocks of concentrated stock holding, and unlike domestic financial institutions their monitoring abilities and incentives are substantially superior. Moreover, as firm managements professionalize, travel

further along the learning curve and spill over effects being to manifest themselves to a greater degree, the quality of the monitoring effort should enhance. However, there is evidence to suggest that these benefits could be eroded if these domestic corporations belong to the same group. In fact, a common thread running along all our group level analysis is the negative influence associated with group firms regardless of the performance measure chosen.

In the longer term as the government progressively relinquishes control over domestic financial institutions, Indian private institutional investors gain in prominence and knowledge spill over effects of foreign institutional investor activity begin to bear fruit, there could possibly be a reversal of some of the negative influence reported by earlier studies as well as ours with regard to domestic financial institutions. It needs to be noted though, that especially with regard to domestic mutual funds, being financial institutions of similar nature they suffer from some of the very same problems that plague foreign institutional investors.

Finally, the story as far as directors and their relatives share holding is concerned is a mixed bag. The strong positive influence, which these shareholders exert when return on assets is the measure of performance, is encouraging. Here too the caveat is that these results are moderated if these directors belong to group companies. Their lack of influence with regard to stock market measures of performance is puzzling. Further research taking into account more board level parameters and examining their influence on performance may shed more light on this vexing issue.

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Table 1: Variable definitions

Performance variables:

ROA = Return on Assets defined as the {(Earnings before interest, taxes and depreciation)/Book value of total assets}

Q Ratio = (Market Value of Equity + Book Value of Total Debt)/Book Value of Total Assets

Ownership variables:

FOR = Percentage of common shares owned by foreign institutional investors and foreign corporations.

FORI = Percentage of common shares owned by foreign institutional investors

FORC = Percentage of common shares owned by foreign corporations

DOM = Percentage of common share owned by domestic (Indian) financial institutions and domestic corporations

DOMI = Percentage of common share owned by domestic financial institutions

DOMC = Percentage of common share owned by domestic corporations

DIR = Percentage of common shares owned by all directors and relatives

Principal control variables:

Sales = Annual sales turnover in Millions of Rupees[21]

Age = Number of years since the date of incorporation of the company

Interaction variables:

FORIINT = FORI*Group Dummy

FORCINT = FORC*Group Dummy

DOMIINT = DOMI*Group Dummy

DOMCINT = DOMC*Group Dummy

DIRINT = DIR*Group Dummy

[21] The Rupee was trading at approximately 43 to the US$ during the period of the study.

Table 2: Descriptive statistics

The sample consists of 1005 Indian firms (defined as having a firm having a foreign shareholding of less than 50 percent) listed on the Bombay Stock Exchange. Financial, utility, real estate, trading and Government (defined as firms in which the Government has a stake of 50 percent and more) firms are excluded. Annual data for the fiscal year 1999-2000 are analyzed. All variables are as defined in *Table 1*.

Panel A: Performance measures

Performance measure	Mean	Median	Maximum	Minimum	Standard Deviation
ROA (%)	12.69	13.29	51.00	-35.00	12.88
Q	1.30	0.80	10.80	0.23	1.59

Panel B: Ownership variables

Ownership variables (%)	Mean	Median	Maximum	Minimum	Standard Deviation
FORI	1.17	0.00	44.80	0.00	3.96
FORC	2.45	0.00	48.99	0.00	7.86
FOR	3.62	0.00	49.00	0.00	8.88
DOMI	7.13	2.56	66.19	0.00	9.77
DOMC	28.47	25.74	100.00	0.00	21.38
DOM	35.60	33.41	100.00	0.00	24.02
DIR	17.28	10.87	91.20	0.00	18.97

Panel C: Firm characteristics

Firm variables	Mean	Median	Maximum	Minimum	Standard Deviation
Sales (millions of Rupees)	2,323.00	590.00	158,472.00	1.00	7,926.00
Age (years)	23	16	121	2	17

Table 3: Pearson correlation matrix

Variable	FORI	FORC	FOR	DOMI	DOMC	DOM	DIR	Sales	Age	ROA	Q
FORI	1										
FORC	0.02	1									
FOR	0.46**	0.90**	1								
DOMI	0.12**	-0.01	0.04	1							
DOMC	0.01	-0.05	-0.04	0.06	1						
DOM	0.06	-0.05	-0.02	0.46**	0.92	1					
DIR	-0.14**	-0.16**	-0.20**	-0.3**	-0.49**	-0.56**	1				
Sales	0.28**	-0.02	0.11**	0.25**	0.08**	0.17**	-0.15**	1			
Age	0.11**	0.02	0.07*	0.38**	0.18**	0.32**	-0.18	0.28**	1		
ROA	0.08**	0.10**	0.13**	-0.02	0.07*	0.06	0.07*	0.10**	0.10**	1	
Q	0.22**	0.04	0.13**	-0.03	0.02	0.00	-0.00	0.04	-0.09**	0.11**	1

** denotes significance at the 1 percent level
* denotes significance at the 5 percent level

Table 4: The relationship between ownership and performance

This table presents the results of OLS regressions of firm performance on ownership and firm-specific control variables. The sample consists of 1005 Indian firms (defined as a firm having a foreign shareholding of less than 50 percent) listed on the Bombay Stock Exchange. Financial, utility, real estate, trading and Government (defined as firms in which the Government has a stake of 50 percent and more) firms are excluded. Annual data for the fiscal year 1999-2000 are analyzed. The regressions are corrected for heteroskedasticity using White heteroskedasticity-consistent standard errors and covariance. All variables are defined in *Table 1*. Industry dummies are included in each regression but their coefficients are not reported. The asterisks ***, ** and, * denote statistical significance at 1 percent, 5 percent, and 10 percent levels, respectively.

Panel A: Firm performance measured by ROA

Explanatory variables	Model (1)	Model (2)	Model (3)	Model (4)
FORI		-0.018		-0.003
FORC		0.134**		0.130**
FOR	0.104**		0.104**	
DOMI			-0.156***	-0.154***
DOMC			0.041*	0.040*
DOM	0.018	0.017		
DIR	0.102***	0.102***	0.094***	0.093***
Log Sales	3.098***	3.150***	3.263***	3.307***
Log Age	-0.957	-0.939	-0.0384	-0.375
Group Dummy	-2.989***	-2.917***	-3.039***	-2.976***
Adjusted R^2	0.202	0.202	0.217	0.217
F-statistic	10.046***	9.777***	10.572***	10.277***

Panel B: Firm performance measured by Q ratio

Explanatory variables	Model (1)	Model (2)	Model (3)	Model (4)
FORI		0.076***		0.076***
FORC		0.014***		0.014***
FOR	0.027***		0.0267***	
DOMI			0.004	0.003
DOMC			0.006*	0.006**
DOM	0.006*	0.006**		
DIR	0.002	0.002	0.002	0.002
Log Sales	0.023	0.001	0.024	0.004
Log Age	-0.197**	-0.204**	-0.191**	-0.196**
Group Dummy	-0.204*	-0.233**	-0.204*	-0.234**
Adjusted R^2	0.317	0.334	0.316	0.333
F- statistic	17.626***	18.328***	17.008***	17.717***

Panel C: Regressions using interactive group dummies

Explanatory variables	ROA	Q ratio
FORI	0.032	0.134***
FORIINT	-0.071	-0.086**
FORC	0.066	0.009
FORCINT	0.123	0.009
DOMI	-0.098*	0.002
DOMIINT	-0.109*	0.001
DOMC	0.047*	0.009**
DOMCINT	-0.029	-0.007**
DIR	0.115***	0.002
DIRINT	-0.075*	0.006
Log Sales	3.262***	0.001
Log Age	-0.374	-0.189**
Adjusted R^2	0.215	0.345
F- statistic	9.089***	16.529***

Panel D: Censored regressions

This table presents the results of censored regressions of firm performance on ownership and firm specific control variables. The sample consists of 1005 Indian firms (defined as having a firm having a foreign shareholding of less than 50 percent) listed on the Bombay Stock Exchange. Financial, utility, real estate, trading and Government firms (defined as firms in which the Government has a stake of 50 percent and more) excluded. Annual data for the fiscal year 1999-2000 are analyzed. All variables are defined in *Table 1*. The asterisks ***, ** and, * denote statistical significance at 1 percent, 5 percent, and 10 percent levels, respectively.

Explanatory variables	ROA	Q ratio
FORI	0.002	0.077***
FORC	0.133***	0.014**
DOMI	-0.155***	0.003
DOMC	0.041*	0.006***
DIR	0.095***	0.002
Log Sales	3.327***	0.011
Log Age	-0.394	-0.205***
Group Dummy	-2.979***	-0.238**
Adjusted R^2	0.216	0.316
Log likelihood	-3833.460	-1685.706
χ^2	311.693***	536.686***

Table 5: Logit regressions of foreign corporate and foreign institutional holdings

This table presents the results of binary logit regressions of foreign corporate and foreign institutional ownerships. Models (1) and (2) use foreign corporate ownership dummy as the dependent variable while Models (3) and (4) use foreign institutional ownership dummy as the dependent variable. The sample consists of 1005 Indian firms (defined as having a firm having a foreign shareholding of less than 50 percent) listed on the Bombay Stock Exchange. Financial, utility, real estate, trading and Government firms (defined as firms in which the Government has a stake of 50 percent and more) excluded. Annual data for the fiscal year 1999-2000 are analyzed. All variables are defined in *Table 1*. The asterisks ***, ** and, * denote statistical significance at 1 percent, 5 percent, and 10 percent levels, respectively.

Explanatory variables	Model (1)	Model (2)	Model (3)	Model (4)
ROA	0.017**		0.004	
Q ratio		0.101**		0.269***
FORI	-0.007	-0.017		
FORC			0.021**	0.020**
DOMI	-0.020*	-0.019**	-0.010	0.009
DOMC	-0.019***	-0.023***	-0.011**	-0.012***
DIR	-0.037***	-0.036***	-0.02**	-0.013**
Log Sales	-0.010	0.040	0.526***	0.529***
Log Age	0.102	0.145	-0.058	0.054
Group Dummy	0.252	0.243	0.438**	0.531***
McFadden R^2	0.051	0.049	0.169	0.191
Log Likelihood	-381.462	-382.257	-526.635	-512.603
LR statistic	41.190***	39.599***	214.746***	242.809***