Strategic Management Journal
Strat. Mgmt. J., **27**: 637–657 (2006)
Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/smj.535

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

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We adopt a multi-theoretic approach to investigate a previously unexplored phenomenon in extant literature, namely the differential impact of foreign institutional and foreign corporate shareholders on the performance of emerging market firms. We show that the previously documented positive effect of foreign ownership on firm performance is substantially attributable to foreign corporations that have, on average, larger shareholding, higher commitment, and longer-term involvement. We document the positive influence of corporations vis-á-vis financial institutions with respect to domestic shareholdings as well. We also find an interesting dichotomy in the impact of these shareholders depending on the business group affiliation of firms.

INTRODUCTION

Explaining performance differences among firms is a dominant theoretical and empirical issue in the field of strategic management (Hawawini, Subramanian, and Verdin, 2003). Understanding how these performance differences arise and translating that into how it can be achieved is of central concern to the field (Rumelt, Schendel, and Teece, 1994). In the research growing out of the industrial organization tradition, industry structure is a central determinant of firm performance (Porter, 1985). However, recent strategic management studies suggest that firm-specific factors are more important in explaining the differential performance of firms (Rumelt *et al*., 1994; McGahan and Porter, 1997). Differences among these firm-specific factors are created and sustained through, among others, differing property rights, resources, organizational processes, and team skills (Rumelt *et al*., 1994). In this paper, we examine the property rights dimension (i.e., ownership structure), the provision of scarce and inimitable resources by various shareholders, and the associated institutional context in explaining differences in firm performance.

A firm's ownership structure influences its performance for several reasons. Firstly, differences in identity, concentration, and resource endowments among owners determine their relative power,

Keywords: ownership structure; firm performance; corporate governance; business groups; emerging market
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Received 12 October 2002
Final revision received 28 November 2005

incentives, and ability to monitor managers. Shareholdings by corporations, individuals, banks, mutual funds, and governments are well-known examples of this phenomenon. Secondly, as owners have divergent goals, they have different influences on firm performance. For example, financial investors may be interested in short-term returns on their investment, while corporate investors may be more inclined towards establishing a long-term relationship.

The theoretical postulates concerning the relationship between the firm's ownership structure and firm performance put forward by Jensen and Meckling (1976) and Shleifer and Vishny (1986) were empirically tested in developed capital markets 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 found significant managerial, blockholder, and institutional influences on firm performance.

However, in emerging and transition economies external mechanisms are less developed, and therefore governance of listed corporations takes place mainly through internal mechanisms. Furthermore, institutional factors like family-run business groups play a distinctive role. Government-controlled financial institutions are often important shareholders and have incentives and objectives quite different from those of private investors. Consequently, the effect of ownership on performance in emerging economies is likely to be different. La Porta *et al*. (1999) highlight the preponderance of blockholdings in general and familial holdings in particular among non Anglo-Saxon economies. There is a growing body of literature examining ownership structure issues from emerging economies. Qi, Wu, and Zhang (2000), Claessens, Djankov, and Lang (2000), Khanna and Palepu (2000a), Khanna and Rivkin (2001), Wiwattanakantang (2001), Chang and Hong (2002), Joh (2003), and Lemmon and Lins (2003) are a representative few encompassing the literature in the strategy and finance realm.

In this study, we utilize large-scale firm-level data of Indian listed corporations to take a closer look at the performance impact of shareholders. The paper makes several important contributions to the extant literature. Firstly, prior studies did not make a distinction between the two most important categories of foreign shareholders, namely foreign financial institutions and foreign industrial corporations. Since the nature of these two different classes of investors and their motivations is fundamentally different, their aggregation into one common class of shareholders masks certain important results which can only be determined if they are analyzed separately. 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. We find that domestic corporations, which constitute the largest proportion of shareholdings in Indian corporations, also perform a significant role. Furthermore, we highlight an interesting dichotomy in their ability to enhance corporate performance. We observe that the influence of domestic corporations is conditional on business group affiliation of firms. Thirdly, we use recent data to provide additional evidence on the influence of controlling shareholders when firms are affiliated to a business group. Earlier studies utilized data predating several institutional and regulatory changes in India that occurred subsequent to the mid 1990s.

THEORY

A number of studies have examined ownership and performance relationships using agency theory as the theoretical lens. However, for firms in emerging economies, this perspective does not fully account for the diversity in the ownership–performance linkage (Hoskisson *et al*., 2000). Eisenhardt (1989), and Oliver (1997) also argue that agency theory presents a partial view of the world and advocate merging agency and resource-based theories with institutional theory. In view of this, we take recourse to embrace a multi-theoretic approach by incorporating elements of agency theory, resource-based theory and institutional theory. Combining these various perspectives yields a richer and more composite understanding of the influence of various shareholders in determining firm performance especially among emerging economies. Several recent studies (e.g., Hillman and Dalziel, 2003; Lynall, Golden, and Hillman, 2003) have usefully employed a multi-theoretic approach to examine a wide array of governance issues.

Agency theory

Agency theory concerns itself with problems that arise when the desires of the principal and the

agent conflict with each other and when it is difficult or expensive for the principal to verify what the agent is actually doing (Eisenhardt, 1989). This feature allows corporate managers to pursue their own interests at the expense of shareholders. Managers who disregard shareholder interests may be ousted by powerful shareholders or by a hostile takeover. This presupposes that shareholders have an interest to indulge in monitoring managerial behavior. However, shareholders differ with respect to incentives to spend resources on monitoring. Shareholders owning a miniscule proportion of shares of a firm have very little incentive to devote the necessary time and effort on voicing their view on account of free riding from other shareholders.

Dharwadkar, George, and Brandes (2000) argue that firms in emerging economies are especially characterized by unique agency problems arising from *principal–principal* goal incongruence. This is in addition to the traditional agency problems based upon *principal–agent* goal incongruence as observed in many Anglo-Saxon economies. The *principal–principal* goal incongruence in emerging economy firms stems from expropriation within weak governance contexts when large or majority owners assume control of the firm and deprive minority owners the right to appropriate returns on their investments (Claessens *et al*., 2000; Lemmon and Lins, 2003).

The impact on firm performance of various ownership categories taking into account both traditional and unique agency issues is outlined in Figure 1. Using the twin dimensions of ownership identity and ownership magnitude as proposed by Dharwadkar *et al*. (2000), we postulate the impact in four different quadrants. *Quadrant I* represents *dispersed–outside* shareholders whose impact on performance is postulated to be moderate because their ability to effectively monitor is limited by higher coordination costs and information asymmetry problems (Coffee, 1991; Black, 1998). *Quadrant II* represents *dispersed–inside* shareholders who embody the worst of both worlds. Being inside and dispersed distorts their incentive structures and compromises their ability to undertake an effective monitoring exercise[1] (Claessens *et al*., 2000; Sarkar and Sarkar, 2000; Khanna and Palepu, 2000b). Consequently, their impact on performance is predicted to be inferior. *Quadrant III* represents *concentrated–inside* ownership. While more concentrated holding results in a stronger

[1] Dispersed-outside and dispersed-inside shareholders are akin to pressure-resistant and pressure-sensitive shareholders respectively as per the categorization formulated by Brickely, Lease, and Smith (1988).

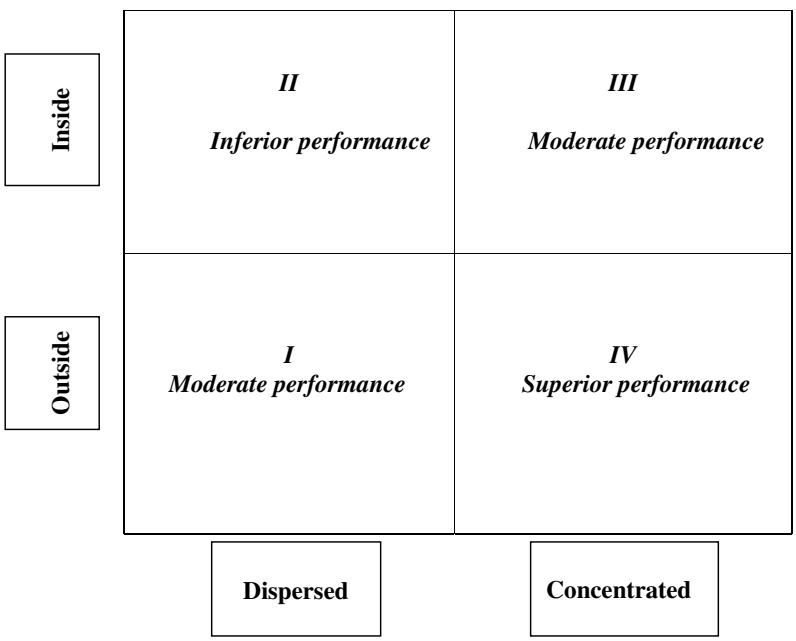

Figure 1. Ownership–performance relationship among emerging economy firms viewed from agency theory

incentive to efficiently manage the affairs of a firm, it provides opportunities and the means for expropriation of minority shareholders (Bebchuk *et al*., 2000; Claessens *et al*., 2000; Wiwattanakantang, 2001; Joh, 2003; Lemmon and Lins, 2003). Therefore, the impact on performance is envisaged to be moderate. Finally, *Quadrant IV* depicts *concentrated–outside* shareholdings whose impact on firm performance is postulated to be superior as these shareholders are capable of mitigating the expropriation of minority shareholders while at the same time maximizing the benefits of risk bearing, incentive alignment, and monitoring (Shleifer and Vishny, 1986; Chibber and Majumdar, 1999; Dharwadkar *et al*., 2000; Allen and Phillips, 2000).

Resource-based theory

According to the resource-based theory, a firm's competitive advantage is based on the possession of tangible and intangible resources, which are difficult or costly for other firms to obtain. In order to sustain the firm's competitive advantage these resources must be valuable, rare, inimitable, and unsubstitutable (Barney, 1991). A major contribution of resource-based theory is that it explains long-lived differences in firm profitability that cannot be attributed to differences in industry conditions (Peteraf, 1993). It can be argued that considerable resource heterogeneity exists among various shareholder categories. For emerging economy firms, these differences arise from shareholders being either foreign or domestic and financial or strategic. The impact on firm performance of these owners with diverse resource endowments is expected to differ as a consequence of this heterogeneity in resources and organizational capabilities. We shall now exemplify the impact on firm performance of various shareholders.

Financial–foreign shareholders are endowed with good monitoring capabilities, but their financial focus and emphasis on liquidity results in their being unwilling to commit to a long-term relationship with the firm and to engage in a process of restructuring in case of poor performance. These shareholders prefer strategies of exit rather than voice to monitor management (Coffee, 1991; Aguilera and Jackson, 2003). Consequently, *financial–foreign* shareholders are postulated to have a moderate impact on firm performance. *Financial–domestic* shareholders possess characteristics that represent the worst of both worlds. Their financial focus leads to short-term behavior and a preference for liquid stocks, while their domestic affiliation often results in a complex web of business relationship with the firm and other domestic shareholders (Claessens *et al*., 2000; Dharwadkar *et al*., 2000). Therefore, these shareholders are expected to have a negative influence on firm performance.

On the other hand, there are domestic and foreign shareholders who possess strategic interests because their ownership stakes are motivated by non-financial goals, such as obtaining control rights and developing sustainable competitive advantages and capabilities (Aguilera and Jackson, 2003). *Strategic–foreign* shareholders use their ownership stakes as a means to foster their strategic interests, which involve securing access to new markets, location-specific resources and low-cost production facilities. Their foreign affiliation also gives domestic firms relatively easy access to superior technical, managerial, and financial resources (Chibber and Majumdar, 1999). Therefore, their impact on firm performance is projected to be superior. *Strategic–domestic* owners exercise property rights as a means to pursue the strategic interests of their organizations which include regulating competition between firms, underwriting relational contracts, securing new markets, etc. (Aguilera and Jackson, 2003). However, their impact on firm performance is anticipated to be moderate because, in comparison to *strategic–foreign* shareholders, they have relatively inferior resource endowments and capabilities.

Institutional theory

While agency theory and the resource-based theory are powerful tools and provide important insights in examining the impact of ownership on firm performance, they suffer from the serious limitation that these two perspectives do not examine the social context within which the firm's activities are embedded. Institutional theory has the potential to address this important lacuna by introducing the social and regulatory context in influencing organizational structure and firm behavior. Thomsen and Pedersen (2000) in their study on large European corporations argue that both ownership concentration and identity are embedded in national institutions and these have to be taken into

account when accessing implications for corporate strategy and performance.

Institutional theory emphasizes the influence of socio-cultural norms, beliefs, and values, regulatory and judicial systems on organizational structure and behavior. Institutions regulate economic activities through formal and informal rules as a basis for production, exchange, and distribution (North, 1990). In addition to these features, emerging economies are characterized by greater imperfections in the markets for capital, products, and managerial talent. These lead to so-called 'institutional voids'—a situation when specialized intermediaries which typically provide these services in developed economies are absent (Khanna and Palepu, 2000b). It presents an opportunity for some firms which have the necessary resources and capabilities to bridge these institutional voids. Business groups are particularly well suited to provide the necessary welfare-enhancing functions to plug these institutional voids because of their superior ability to raise capital, train, and rotate managerial talent among group firms and use common brand names in marketing their products. On the downside, though, some of these institutional voids and ineffective protection of minority shareholder and creditor rights lead to greater entrenchment by controlling shareholders, resulting in conditions ideally suited for expropriation of disadvantaged stakeholders.

Multi-theoretic perspective

In view of the aforementioned inadequacies of a unitary perspective, we adopt a multi-theoretic view in this paper by taking recourse to elements of agency, resource-based, and institutional theories to formulate a more holistic perspective in examining the impact of ownership structure on firm performance. Figure 2 presents this multi-theoretic approach by summarizing the key elements.

Combining the agency, resource-based, and institutional theories reveals the differing influences of various categories of shareholders among emerging economy firms. Broadly, they indicate that there exists a positive reinforcing effect on firm performance if the shareholder is outside, concentrated, foreign, and has strategic resources. On the other hand, at the opposite end of the spectrum, there are negative reinforcing effects if the shareholder is inside, dispersed, domestic, and has financial interests. The reinforcing effects are accentuated further when the agency and resource-based characteristics of these shareholders are embedded in emerging economy institutional settings.

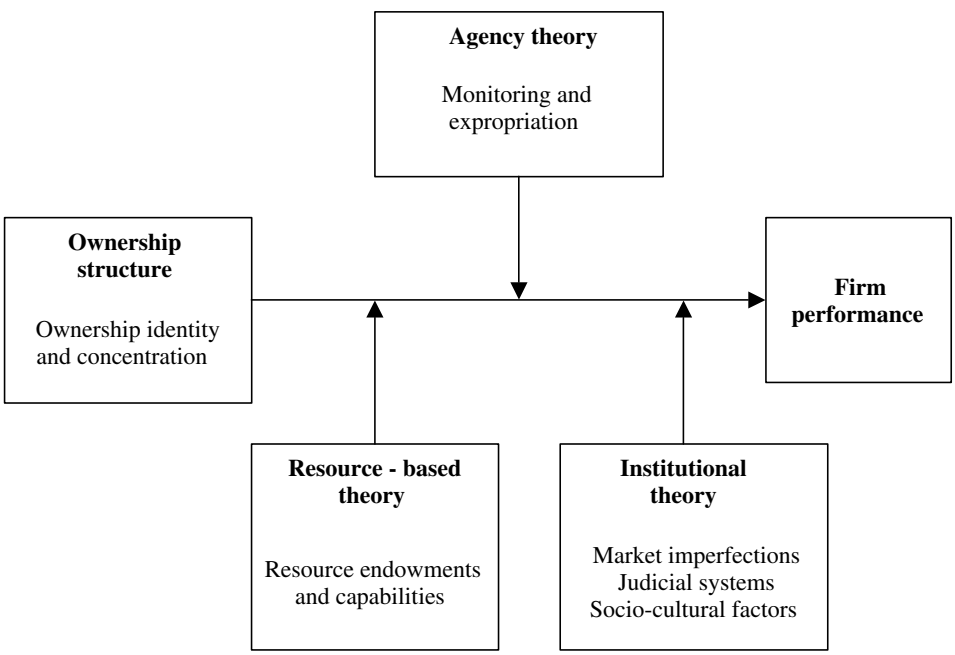

Figure 2. Multi-theoretic approach in explaining ownership–performance relationship among firms in an emerging economy context

With regard to shareholders with some other combinations of ownership traits, agency and resource-based effects tend to counteract each other. For instance, inside, concentrated, domestic shareholders with strategic interests are resource rich from the resource-based perspective but are subject to incentive distortions when viewed from the agency framework. On the other hand, outside, dispersed, foreign shareholders with a financial focus tend be resource poor from the resource-based perspective but have relatively more aligned interests from an agency perspective.

INSTITUTIONAL BACKGROUND

In India, until the onset of the liberalization process 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. There were legal restrictions on the acquisition and transfer of shares. Domestic financial institutions remained passive and often sided with the management. Secondly, many 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. Thirdly, the domestic market in India was shielded from competition in the product market by an arcane maze of tariff barriers and other regulations. The cumulative effect of all these factors was that managers of Indian firms remained entrenched with hardly any accountability on their performance.

The post-1991 time-period marked a dramatic shift in the institutional framework in India. Capital markets were liberalized. A takeover code was adopted in 1994, paving the way for a rudimentary market for corporate control. Steps were taken to improve corporate governance norms and disclosure practices. Foreign capital (both direct investment as well as institutional/portfolio investment) leapfrogged from minuscule levels to form a substantial component of the country's total capital inflows.[2] The investment limit though, especially with regard to foreign institutional investment, remained relatively restrictive. For example, in 2000, the shareholding of an individual foreign institutional investor is limited at 10 percent of the total issued capital in a firm with a cumulative foreign institutional investment limit of 24 percent.

Another distinctive feature of the Indian corporate landscape is the prevalence of business groups. 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. It is relatively easy to identify group affiliation with a high level of accuracy because the information pertaining to group affiliation is publicly disclosed. Moreover, firms are usually members of only one group and do not change their group affiliation over time. Each group has a controlling family that sets the overall strategic direction of the firm and regulates all financial transfers. Every firm within a group has a separate legal entity and can be listed separately on the stock exchange. Each firm has its own unique set of shareholders. The total insider shareholdings of a group firm include stakes held by executive/family directors and domestic corporations affiliated with the same group.

HYPOTHESES

Foreign ownership

It is important to disentangle the effects of foreign ownership in a firm belonging to foreign industrial corporations and foreign financial institutions. Agency theory suggests that since foreign corporate ownership stakes are larger and less fragmented than stakes held by foreign institutional shareholders, the incentives of these larger shareholders are more aligned to perform an effective monitoring role. Foreign corporations holding an ownership stake in a domestic company also tend to invest in firms related to their core business. For example, Honda is much more likely to invest in a transport 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 relative to the performance of other companies in other markets wherein the foreign corporation holds a stake. The nature of such a relationship typically

[2] The total percentage of foreign direct investment and foreign institutional investment has risen from 1.4 percent of India's total capital inflows in 1990–91 to 49.7 percent in 1999–2000 (Source: Reserve Bank of India Annual Report 2000–01, Appendix Table VI.6).

goes beyond financial contributions and extends to provision of managerial expertise and technical collaborations. The provision of such valuable expertise is characteristic of the resource-based perspective, which suggests that heterogeneity in resource capabilities of different owners will lead to a differential impact on firm performance. Companies with foreign corporate shareholdings are endowed with superior technical, organizational, and financial resources. For instance, Chibber and Majumdar, (1999) find that the extent of a foreign firm's control over a domestic firm is positively associated with the degree of resource commitment to technology transfer. Djankov and Hoekman (2000) find foreign investment to be associated with the provision of generic knowledge (management skills and quality systems) and specific knowledge (which cannot be transferred at arm's length). Furthermore, a study conducted by Dhar (1988) on foreign-controlled companies in India finds that most of these enterprises have business links beyond mere equity participation. They have technical collaborations, nominations of foreign directors on their boards, consultancy and marketing arrangements, trademarks, patent obligations, and managerial resource sharing.[3]

The sustainability of these advantages, though, is often linked to the institutional context. As a consequence of imperfections in capital, labor, and technological markets, foreign shareholders are, relative to domestic shareholders, in a better position to exploit their relative advantages to influence firm performance positively (see Chibber and Majumdar, 1999; Khanna and Palepu, 2000a; Sarkar and Sarkar, 2000). Furthermore, countries with stronger shareholder rights and judicial systems and a higher level of economic development attract higher levels of foreign capital (Aggarwal, Klapper, and Wysocki, 2003). Governments also stimulate investments made by foreign corporations by providing various incentives. These incentives are an example of how the institutional context can influence the firm's ownership structure and the provision of specialized resources.

Relating these arguments to the multi-theoretic approach developed in the previous section we can characterize these foreign corporate holdings as *concentrated–outside* and *strategic–foreign* from agency and resource-based theories respectively. Merging these perspectives leads to a strong positive influence on firm performance:

Hypothesis 1a: 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). 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. These shareholders are thus representative of the *dispersed–outside* category of shareholders as viewed from an agency perspective. Foreign institutional investors, each holding only very small stakes, are unlikely to act as a cohesive block in enhancing corporate performance. 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 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. These features

[3] See Appendix for some anecdotal evidence pertaining to specific companies in India.

are characteristic of *financial–foreign* shareholders as viewed from a resource-based perspective. Combining these perspectives yields:

Hypothesis 1b: Foreign financial institutional ownership is positively associated with stock market-based measures of firm performance only.

Domestic ownership

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 long investment horizon. Allen and Phillips (2000) present evidence that supports the argument that corporate ownership provides significant benefits to firms involved in certain business agreements by reducing the costs of monitoring the alliances or ventures between firms and their corporate blockholders. 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. Thus their monitoring incentives as well as their abilities are substantially greater than those of domestic financial institutions. These domestic corporate holdings thus share the features of *concentrated–inside/outside* holdings (depending on group affiliation) from an agency perspective and are characterized as *strategic–domestic* shareholders from a resource-based perspective. Provided the institutional context in terms of legal regulations is favorable, 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 according to the agency, resource-based, and institutional perspectives:

Hypothesis 2a: Domestic corporate ownership positively affects firm performance.

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. 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 with minimal expertise in corporate matters. This fits in with the characteristics of *financial–domestic* shareholders from the resource-based perspective. 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 prospects are rarely affected by the performance of the companies in which they serve on the board as nominees. Moreover, as many of the prominent business families have links with the political elite who in turn possess substantial clout over the functioning of these predominantly government-owned institutions, the nominees tend invariably to side with the management. These are the agency costs associated with a lack of incentive alignment and are a feature of *dispersed–inside* holdings. 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, Li, and Veliyath, 2002). Due to the nexus between the business families and the ruling elite, these government-controlled financial institutions are at times forced to purchase stocks of under-performing firms to bail them out in times of financial crisis. This demonstrates how the institutional context in which firms are embedded influences the behavior of these shareholders. Combining the agency, resource-based, and institutional perspectives results in strong negative reinforcing effects. It can therefore be reasonably assumed that these domestic financial institutions bring to bear a detrimental effect on firm performance:

Hypothesis 2b: Domestic financial institutional ownership negatively affects firm performance.

Jensen and Meckling (1976) postulate that ownership by managers leads to 'reduced on the job consumption.' 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 (in tangible as well as in intangible terms) in the success and failure of their companies. However, beyond a particular threshold level of owner-manager holding, the positive alignment effects are likely to be mitigated by entrenchment effects. For instance, Schulze *et al*. (2001) find that altruistic tendencies among family members can create a sense of entitlement by encouraging them to use the firm's resources as employment perquisites and other privileges. In a weak institutional context these tendencies tend to get exacerbated. A number of studies have documented such a curvilinear relationship between owner-manager holdings and firm performance (e.g., McConnell and Servaes, 1990). Thus, from agency and resource-based perspectives, we formulate the following hypothesis with respect to shareholdings of owner managers, which are *concentrated–inside* and *strategic–domestic* in character:

> *Hypothesis 2c: Ownership by owner managers positively affects firm performance up to a particular threshold level beyond which increased levels of ownership negatively affect firm performance*

Domestic ownership and group affiliation

Business groups consist of a collection of firms, which are linked together by common ownership, and director interlocks. Group affiliation has both benefits and costs. Among the beneficial effects, Chang and Hong (2000) find that group 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. 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. However, groups are also associated with the larger possibility of (i) inefficient transfer of resources from more profitable firms to financially constrained firms (Shin and Park, 1999) and (ii) exploitation of minority shareholders by means of tunneling of resources through pyramids and extensive cross-holdings by the controlling family (Johnson *et al*., 2000; Bertrand, Mehta, and Mullainathan, 2002).[4]

In many Indian business groups, domestic corporate holding is used primarily as a mechanism to expropriate wealth of other minority shareholders. These shareholdings serve as the primary vehicle to tunnel resources at the expense of minority shareholders and facilitate intra-group resource transfers. The controlling shareholders therefore use these shareholdings to further their own interests. In such a scenario, domestic corporate holding affiliated to a group would mitigate the monitoring efforts of other shareholders and would abet controlling shareholders in their efforts to exercise private benefits of control. This is consistent with the characteristic of these shareholders being *concentrated–inside* shareholdings as viewed from agency theory. While resource-based theory suggests that these shareholders possess traits of being *strategic–domestic* shareholders, being inside shareholders, they lack the positive reinforcing effects which non-group domestic corporate holdings possess. Consequently, we expect the negative agency effects to dominate:

> *Hypothesis 3a: Domestic corporate ownership in group firms will result in lower firm performance than domestic corporate ownership in non-group firms.*

Consistent with the earlier argument for a negative influence of corporate ownership within 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. In effect, while owner-managers among group firms are generally endowed with greater levels of resource-rich features such as board capital (human and relational) as viewed from a resource-based perspective *vis-à-vis* non-group firms (being *strategic–domestic* shareholders), in a weak institutional setting these positive effects are considerably attenuated by the higher agency costs (due to

[4] Bebchuk *et al*. (2000) describe the means by which pyramids and cross-holding structures enable one shareholder to maintain complete control of a firm while holding less than a majority of the cash flow rights.

greater levels of *principal–principal* goal incongruency) associated with owner-managers belonging to groups. We therefore expect the negative effects to dominate at all levels of ownership:

Hypothesis 3b: Ownership by owner-managers in group firms will result in lower firm performance than ownership by owner-managers in non-group firms.

METHODOLOGY

In line with prior studies that examine the relationship between ownership and firm performance (e.g., Gedajlovic and Shapiro, 1998; Thomsen and Pedersen, 2000; Khanna and Palepu, 2000b), we use the following regression specification:

$$\text{Performance} = \begin{matrix} f(\text{ownership variables}, \\ \text{control variables}) \end{matrix}$$

The specification uses corporate performance as measured by ROA and Q ratio as the dependent variable. Different categories of ownership variables such as foreign and domestic corporations, foreign and domestic financial institutions, and directors and relatives are used as explanatory variables. This basic specification is estimated using a variety of regression models. As a robustness check we also use censored regression specifications wherein the left and right censoring values are the relevant caps of the two performance variables at the 1 percent and 99 percent level.

Arguably, the above specification could potentially suffer from reverse causality, a phenomenon wherein ownership is influenced by firm performance rather than the other way around. However, this is unlikely to be a serious problem in this study because of the fact that the major categories of shareholdings in India have remained relatively stable over time.[5] In a similar vein, Thomsen and Pedersen (2000) in their study examining the impact of ownership structure on firm performance find equity ownership to be characterized by structural stability, which makes it reasonable to regard ownership structure as an exogenous variable.

Furthermore, in an effort to emphasize the robustness of our results as far as causality is concerned, we employed a regression specification for a small subsample of firms for which we had performance data for the year 2001 and ownership data for 2000. Using a lagged measure of the ownership variable implies a stronger assertion of causality. While we were not able to recreate a fully representative subsample (in terms of a similar proportion of group/non-group firms, etc.), we did follow exactly the same criterion for firm selection as in our main sample.[6]

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 firms with a total government holding of 50% and more) from our sample. Fourth, as our study relates to Indian corporations, we drop firms which have a total foreign shareholding component of 50 percent and above. This eliminates subsidiaries of

[5] This is primarily due to the fact that despite the institution of a takeover code in 1994, there have been relatively few takeovers in the period leading up to 2000. Large block trades among corporate shareholders are unusual and trading is largely confined to institutional shareholders. Among these institutional investors, foreign institutional investors are the most active traders but they constitute only a small minority of the shareholding among most Indian firms. A comparison of our broad shareholding categories with prior studies further attests to overall stability of these ownership categories.

[6] These specifications are not presented in the paper to conserve space but they are available from the authors.

foreign 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. Many different industries are represented in the sample. With regard to the problem pertaining to outliers, which is common to an empirical analysis using financial statement data, instead of dropping them from the sample, we cap the performance variables at their 1st and 99th percentile values.

DEFINITION OF VARIABLES

Performance measures

As stated earlier, we use ROA and *Q* ratio as measures of firm performance. 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.[7] A description of these and other variables used in this study is presented in Table 1.

Descriptive statistics concerning the performance measures of sample firms are presented in Panel A of Table 2. The mean (median) values for ROA are 12.69 (13.29) percent and for *Q* ratio are 1.30 (0.80), respectively.

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. The variables representing these shareholdings are denoted as FOR and DOM. Since the purpose of this study is to examine the influence of ownership at a disaggregated 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. Although, on average, they account for only a small percentage of the shares of Indian listed corporations (see Panel B of Table 2),[8] they account for a substantial proportion of the

[7] 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.

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

Table 1. Variable definitions

Performance variables	
ROA	(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 shares owned by domestic (Indian) financial institutions and domestic corporations
DOMI	Percentage of common shares owned by domestic financial institutions
DOMC	Percentage of common shares 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
Age	Number of years since the date of incorporation of the company
Interaction variables	
DOMCINT	DOMC * Group dummy
DIRINT	DIR * Group dummy

Table 2. Descriptive statistics. The sample consists of 1005 Indian firms (defined as a firm having a foreign shareholding of less than 50%) 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% 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 ratio	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)	2323.00	590.00	158,472.00	1.00	7926.00
Age (years)	23	16	121	2	17

daily stock turnover of large and liquid stocks on the stock exchange, and are seen as significant drivers of market sentiment.[9] 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 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 subsample is substantial (17.83%).

The variable DOMI refers to the percentage of common shares owned by domestic (i.e., Indian) financial institutions. 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 (see Panel B of Table 2). We also construct another ownership variable DIR, which represents the percentage of common shares, owned by all directors (including relatives). It is the second largest category of owners in Indian listed firms (see Panel B of Table 2).

In order to identify corporate and family ownership belonging to group firms, we use the classification made by the database itself. It determines group affiliation from a variety of sources including public announcements made by individual corporations and groups, regulatory filings, and stock exchange listings by corporations.[10]

[9] While as of January 2000 foreign institutional investors constituted barely 5 percent of the market capitalization, they account for 50 percent of the 'free float' (shares that are actually publicly available for trading) in most big stocks (see Banaji, 2000).

[10] 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

There are 600 non-group firms and 405 group firms in our sample.[11] Group affiliation information is then used to construct our two interaction variables: DOMCINT (which represents domestic corporate ownership in firms affiliated to groups) and DIRINT (representing director and other family member ownership in firms affiliated to groups). These interaction variables are employed in the regression specification to examine the influence of these ownership categories on firm performance when they belong to business groups.

Control variables

The two principal control variables we use are Sales and Age. Sales is a proxy for the size of a firm. Size of a firm can have a significant influence on firm performance and a proxy for firm size is used in almost all studies explaining firm performance. 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 are less flexible in their ability to adapt to competitive pressures. Summary statistics of these two control variables are presented in Panel C of Table 2. A correlation matrix involving performance and other variables is shown in Table 3.

We also adjust for business group affiliation with a group dummy and for industry factors because differences on these dimensions can influence the relative performance of firms. 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 2-digit Standard Industrial Classification (SIC) equivalents. We define industries at the 2-digit SIC code level provided there are at least five firms in one industry group. In total, the sample firms are distributed over 22 different 2-digit SIC code industries, which form the basis for industry dummies, used in the regression analysis.

RESULTS AND DISCUSSION

The results of regression analysis are presented in Table 4. In all 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. 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

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.

[11] The proportion of group firms in our sample is 40 percent, which is exactly the same as the proportion of group firms in India reported by Lins and Servaes (2002) and Bertrand *et al.* (2002).

Table 3. Pearson correlation matrix

Variable	FORI	FORC	FOR	DOMI	DOMC	DOM	DIR	Sales	Age	ROA	*Q* ratio
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**	−0.30**	−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 ratio	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 5% level.
** Denotes significance at the 1% 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%) 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% 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 and an intercept term are included in each regression but their coefficients are not reported. The asterisks ***, ** and, * denote statistical significance at 1%, 5%, and 10% levels, respectively

Panel A: Firm performance measured by ROA

Explanatory variables	Model 1	Model 2	Model 3	Model 4
FORI		−0.016		−0.002
FORC		0.137**		0.133**
FOR	0.107**		0.106**	
DOMI			−0.154***	−0.153***
DOMC			0.042*	0.041*
DOM	0.019	0.018		
DIR	0.143**	0.144**	0.125**	0.127**
DIR^2	−0.001	−0.001	−0.001	−0.001
Log Sales	3.115***	3.169***	3.276***	3.321***
Log Age	−0.953	−0.935	−0.0384	−0.374
Group Dummy	−2.885***	−2.807***	−2.958***	−2.889***
Adjusted R^2	0.201	0.202	0.216	0.217
F-statistic	9.714***	9.467***	10.224***	9.951***

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	0.005	0.004	0.005	0.004
DIR^2	−0.001	−0.001	−0.001	−0.001
Log Sales	0.024	0.002	0.025	0.004
Log Age	−0.197**	−0.204**	−0.191**	−0.196**
Group Dummy	−0.197*	−0.228**	−0.197*	−0.229**
Adjusted R^2	0.316	0.333	0.316	0.332
F-statistic	17.011***	17.705***	16.434***	17.132***

Panel C: Regressions using interactive group dummies

Explanatory variables	ROA		Q ratio	
	Model 1	Model 2	Model 3	Model 4
FORI	−0.015	−0.017	0.014***	0.015***
FORC	0.132**	0.131**	0.075***	0.075***

(*continued overleaf*)

Table 4. (*Continued*)

Panel C: Regressions using interactive group dummies (*Continued*)

Explanatory variables	ROA		Q ratio	
	Model 1	Model 2	Model 3	Model 4
DOMI	−0.157***	−0.168***	0.004	0.003
DOMC	0.058**	0.031	0.010**	0.005*
DOMCINT	−0.050**		−0.008***	
DIR	0.106***	0.124***	0.003	0.003
DIRINT		−0.099***		0.002
Log Sales	3.223***	3.200***	0.002	−0.011
Log Age	−0.527	−0.463	−0.202**	−0.216***
Adjusted R^2	0.212	0.213	0.336	0.330
F-statistic	10.017***	10.036***	17.949***	17.450***

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 is consistent with that of prior studies.

We now disaggregate foreign ownership into its two main components. Models 2 and 4 in Panels A and B of Table 4 provide the results. When foreign ownership is broken up into those relating to foreign corporations (FORC) and those pertaining to foreign institutions (FORI), an interesting picture emerges: the variable representing ownership by foreign corporations (FORC) is positive and significant, while ownership by foreign financial institutions (FORI) is not significant (Model 2 of Panel A). The same results are obtained in Model 4 of Panel A, where we disaggregate domestic ownership into domestic institutional and domestic corporate ownerships.

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) variables are positive and 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 criteria. The significant positive relationship of foreign institutions with *Q* ratio as performance variable may indicate that these institutions are either 'tracking' better-performing firms or 'cherry-picking' them (i.e., investing in firms that offer superior market returns).[12] Our empirical results are consistent with Hypotheses 1a and 1b.

The low and dispersed shareholdings of foreign institutions compared to foreign corporations suggest that foreign institutions are unlikely to be in a position to monitor and significantly influence the operating performance of these companies. For foreign corporations, whose average shareholdings are substantially larger, the incentives and rewards to monitor their resource endowments and capabilities, and the degree of commitment are higher. Since foreign corporations provide an integrated package of capital, management, and technology that is less easily or efficiently assembled piecemeal (Chibber and Majumdar, 1999), their positive impact is captured in both the ROA and *Q* ratio regressions.

Our findings are consistent with those of prior studies. Boardman, Shapiro, and Vining (1997) use a sample of Canadian firms and find significant performance differences among multinational enterprises or their subsidiaries and domestic firms. They attribute these differences to firm-specific advantages (resource heterogeneity) and differences in agency costs among foreign and domestic firms owing to ownership concentration

[12] 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' contributions have been merely to 'track' firms with high probability of improving market value and investing in them.

differences. Among emerging economies, Willmore (1986) analyzes a matched sample of foreign and domestic firms in Brazil and finds foreign firms to have higher productivity and greater capital intensity. In addition to the agency cost and resource-based advantages, Wiwattanakantang (2001) finds that institutional factors such as investment promotion benefits lead to performance differences between foreign controlled firms and domestic firms.

We undertake a number of checks to determine whether the differential results reported with regard to foreign corporate shareholdings and foreign institutional shareholdings are due to model specifications. This includes re-estimating the regressions by dropping each of the control variables. In every case, except when we do not control for firm size the differential result persists. The variable Sales, our proxy for firm size, is positively correlated with foreign institutional ownership (Table 3). 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 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 variable representing domestic corporate ownership (DOMC) is positive and significant (Models 3 and 4 in Panels A and B in Table 4) regardless of the performance measure used. This confirms Hypothesis 2a. The finding is consistent with positive influence exerted by corporate holdings as reported by Claessens (1997) and Qi *et al.* (2000). It is also broadly in agreement with Sarkar and Sarkar (2000), who find that corporate shareholdings beyond 25 percent positively and significantly influence company value.

The regressions in Models 3 and 4 in Panel A of Table 4 confirm Hypothesis 2b, which predicts that domestic financial institutional ownership (DOMI) in India 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 blockholders. Models 3 and 4 of Panel B that use Q ratio as the performance measure show an insignificant impact. This result is in partial agreement with Khanna and Palepu (2000a) as they do not obtain significant results in any of their cross-sectional specifications using Tobin's Q.[13] However, using panel data from 1990–94, and a specification in which the dependent variable is defined as the change in Tobin's Q, they find a significant negative influence. Furthermore, Sarkar and Sarkar (2000) using a similar measure of performance as our study find that domestic institutional investors have an insignificant effect on company value.[14]

Hypothesis 2c states that ownership by owner-managers has a curvilinear relationship with firm performance. Our empirical results do not confirm this hypothesis. In all model specifications, the coefficient estimates of the squared term DIR^2 are statistically insignificant. Therefore, there is no evidence of an entrenchment effect of owner-managers among Indian corporations. Instead, the DIR variable positively influences firm performance (Models 1–4 in Panel A of Table 4) when ROA is the performance measure; however, the impact is insignificant when Q ratio is the performance measure (Models 1–4 in Panel B of Table 4). A speculative reason for the lack of a discernible entrenchment effect could be that most of these holdings (especially in group firms) are rather small. Furthermore, as Dharwadkar *et al.* (2000) indicate, as emerging economies have feeble minority shareholder protection statutes fairly large holdings are necessary to overcome the agency costs and consequently the entrenchment effect possibly sets in only for majority holdings which are prevalent only among a small minority of firms in the sample.

As a robustness check we performed censored regressions for all the specifications discussed earlier. Our results remain unchanged. To further attest to the causal nature of our conjectures we employed a specification using lagged values of key explanatory variables. The results are fairly robust.[15]

The results of the investigation of the impact of domestic corporate ownership in group-affiliated firms on firm performance (Hypothesis 3a) are presented in Panel C of Table 4. The interaction

[13] Khanna and Palepu (2000b), who study primarily the influence of diversified groups on firm performance and use ownership variables as controls, find a negative influence of domestic institutional ownership on performance using both ROA and a proxy for Tobin's Q as performance measures.

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

[15] These results are available from the authors.

variable DOMCINT is used in Models 1 and 3 to examine this hypothesis. The coefficient of the variable is negative and statistically significant in both ROA and *Q* ratio regressions. The finding indicates that the earlier documented positive influence attributed to domestic corporate ownership for all firms is reduced in the case of 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.[16] 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.

Results of testing the hypothesis predicting the impact of owner managers among group firms (Hypothesis 3b) are also presented in Panel C of Table 4. The variable DIRINT in Model 2 representing owner-managers belonging to group firms is found to negatively influence firm performance. A statistically significant finding is obtained only when ROA is used as the performance measure. There is some support for Hypothesis 3b.[17]

The combination of the DIRINT and the DOMCINT variables represents the total quantum of 'insider' holding among 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.

Finally, although we do not directly measure the impact of the various ownership variables on non-financial measures of performance in our study, several studies have documented a significant positive influence of foreign holdings and large blockholdings on productivity. On the other hand, the empirical evidence on the influence of institutional shareholders on innovation and productivity is rather mixed.[18]

CONCLUSIONS

Our study demonstrates the necessity of disaggregating foreign ownership into foreign institutional and foreign corporate shareholdings. These two categories of shareholders need to be viewed and analyzed separately. The underlying dynamics governing the investments by institutions and corporations are vastly different. Our findings highlight the fact that the impact of foreign institutional investors on firm performance is not clear-cut. 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

[16] 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 20.23 (14.92). In contrast, the mean (median) figures for 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.

[17] The interaction coefficient loses statistical significance in separate specifications where the group dummy variable is also included.

[18] Griffith and Simpson (2003) examining the differences between manufacturing establishments of different ownership nationalities in Britain find that foreign-owned firms have significantly higher productivity than those that are domestically owned. Similarly, Aitken and Harrison (1999) using Venezuelan data conclude that foreign equity participation is positively correlated with plant productivity; Djankov and Hoekman (2000) find that total factor productivity growth is positively influenced by foreign investment in Czech firms. Hill and Snell (1989) using U.S. data find a positive relationship between ownership concentration and productivity. With regard to the United Kingdom, Köke and Renneboog (2005) find that large blockholders have a positive impact on productivity in poorly performing firms, while in Germany they find that firms controlled by large banks and insurance companies show higher productivity growth. In contrast though, Januszewski, Köke, and Winter (2002) document a negative impact of financial institutions on productivity growth using German data.

Graves (1988) found a negative relationship between institutional ownership and R&D spending in the computer industry in the United States. On the other hand, Kochhar and David (1996) using U.S. data find that institutional shareholders influence firms to increase innovation. However, they find differences in the influence of these institutional investors depending whether they are pressure-resistant (e.g., public pension funds) or pressure-sensitive (e.g., insurance companies and banks). While pressure-resistant institutional investors are found to have a positive influence on innovation, pressure-sensitive investors were found to have an insignificant impact. Similarly, Zahra (1996) using U.S. data finds that executive stock ownership and long-term institutional ownership are positively related to entrepreneurship but short-term institutional ownership is negatively associated with entrepreneurship. Hill and Snell (1989) document a positive correlation between ownership concentration and R&D expenditure using U.S. data.

among the broader comity of emerging economies, which are characterized by increasing external capital inflows. Future studies examining the role of foreign ownership in emerging economies should incorporate this distinction. We have provided some evidence of the benefits of foreign corporate holdings based on their superior monitoring abilities, resource endowments and skills to use the institutional environment to their advantage. However, we do acknowledge that these shareholdings are not the panacea for all the monitoring and performance ailments facing emerging economy firms.

Although only a small proportion of Indian firms possess foreign corporate shareholdings, their stakes in individual firms are 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 domestic corporations hold large blocks of shares 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 spillover effects begin to manifest themselves, the quality of the monitoring effort may increase. However, there is some evidence to suggest that these benefits could be eroded if these domestic corporations belong to the same group.

In the longer term as the government progressively relinquishes control over domestic financial institutions, Indian private institutional investors could gain in prominence and skill. Under these circumstances, 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 a 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 shareholding is concerned is a mixed bag. The absence of an entrenchment effect and 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 there is some evidence that the positive influence is 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.

ACKNOWLEDGEMENTS

The work for this research was carried out while the authors were at Tilburg University, The Netherlands. We thank our colleagues at the Faculty of Economics and Business Administration and the Development Research Institute for their support of the research undertaken. We are also grateful to the two anonymous referees and to Harry Barkema, Partick Bolton, Stijn Claessens, Marc Deloof, Ravi Dharwadkar, Ailsa Roell, Peter Roosenboom, Henri Servaes, and seminar participants at Tilburg University, The Netherlands, the 2002 Conference on Securities and Financial Markets, Kaohsiung, Taiwan, and the 2003 annual meeting of the Academy of Management, Seattle, U.S.A. for several insightful comments and suggestions.

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APPENDIX: ANECDOTAL EVIDENCE OF FOREIGN CORPORATE INVOLVEMENT IN INDIAN FIRMS

Hero Honda Ltd. is a company promoted and managed by the Munjal family (Hero Group) in which Honda Motors, Japan has an equity stake of 26 percent. The company is a major motorcycle manufacturer. The company's board composition is such that it has four directors who are nominated by Honda Motors: two of these directors hold executive positions having designations such as joint managing director and whole time director. These directors are actively involved in the day-to-day management of the affairs of the company. This is an indicator of the level of managerial involvement and transfer of valuable expertise. With regard to technological collaboration, the company states that Honda Motors is actively involved in the introduction of new products and that they have access to Honda's technology and product portfolio. Furthermore, the two companies have jointly finalized a new product rollout program for Hero Honda for the next 5 years (Hero Honda Ltd., Annual Report, 2002–03).

Tata-Honeywell Ltd. is a Tata Group company in which Honeywell Inc., U.S.A. (through Honeywell Asia Pacific Inc.) has a 41 percent equity stake. The company's business activities span industrial and building automation products, control systems and security solutions. Both the Tatas and Honeywell nominate three directors apiece. One of the Honeywell directors serves on the board as company vice-chairman and all three directors serve aboard various board-level committees such as the Audit, Remuneration, and Shareholder grievance committees. They are therefore entrusted with important monitoring and oversight responsibilities. The company's various business units source technology from Honeywell and its associates. Tata Honeywell serves multiple business units of Honeywell and is an integral part of Honeywell's worldwide engineering project activities.

The valuable experience gained by engaging in these global projects is utilized in the company's domestic (Indian) business activities as well (Tata Honeywell Ltd., Annual Report, 2001–02).

Esab India Ltd. is a non-group company in which Esab AB, Sweden and its associated companies (through Esab Holdings Ltd.) has a 37 percent equity stake. The company manufactures welding and cutting equipment under technical collaboration from Esab. The profile of one of Esab's directors states that he is the technical director of Esab AB with responsibility for R&D, quality, and environment affairs. Esab and its associated companies worldwide contribute three directors to Esab India's board and its nominee is the company chairman. The directors serve on the company's Audit and Investor grievance committees as well (Esab India Ltd., Annual Report 2002).

Snowcem India Ltd. is another non-group company having a technical collaboration with George Lillington & Co. Ltd., U.K. for the manufacture of cement specialty products. George Lillington & Co. has an equity stake of 18 percent in the company and has three directors on the company board (Snowcem India Ltd., Annual Report, 2001–02).