Ownership Structure, Investment Behaviour and Firm Performance in Japanese Manufacturing Industries

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Abstract

Using data spanning the 1996–98 fiscal years of 247 of Japan's largest manufacturers, we empirically evaluate the extent to which a firm's investment behaviour and financial performance are influenced by its ownership structure. To do so, we examine six distinct categories of Japanese shareholders: foreign investors, investment funds, pension funds, banks and insurance companies, affiliated companies and insiders. Our findings strongly indicate that the relationship between the equity stakes of a particular category of investor and a firm's financial performance and investment behaviour is considerably more complex than is depicted in simple principal-agent representations. Such a result emphasizes the importance of making finely grained and contextually relevant distinctions when modelling and evaluating corporate governance relations.

Keywords: ownership, foreign investors, institutional investors, corporate governance, Japan, dividends, capital expenditures

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In the past three decades there have been scores of studies that have examined the effects of ownership concentration on patterns in the generation and allocation of financial resources (Shleifer and Vishny 1997). More recently, there has been growing attention to issues pertaining to the identity of major shareholders, their investment objectives and their capacities to influence organizational practices and outcomes (Whitley and Kristensen 1996; Hollingsworth and Boyer 1997; Thomsen and Pedersen 2000). In this regard, Whitley (2000) argues that differences in corporate governance have an important bearing on the capacity of firms to innovate and Whitley and Czaban (1998) find that foreign ownership has resulted in major organizational changes in privatized Hungarian enterprises. More generally, Useem (1998) argues that foreign institutional investors often pressure local firms to restructure their operations to improve shareholder value.

To date, only a few studies have empirically examined the effects of different types of shareholders in the context of a single study (e.g. Gedajlovic 1993; Thomsen and Pedersen 2000). As a consequence, much of the previous empirical work in corporate governance carries with it the implicit assumption that shareholders are a monolithic stakeholder group whose interests are homogenous and focused on the single goal of maximizing returns on their equity investments (Jensen and Meckling 1976). Such an assumption is

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most tenable in the context of an arm's length governance system such as those found in the US and the UK where equity investments constitute the single tie that the majority of shareholders have to a firm in which they hold shares (Roe 1994; Whitley 1999). On the other hand, in many other economies, such as Japan, where diverse groups of shareholders own shares for multiple purposes, this assumption may be too simplistic (Gedajlovic and Shapiro 2002).

This study has two primary objectives. The first objective is to assess the degree of goal heterogeneity among Japanese shareholders and to consider whether these investors have more diverse investment objectives than is captured in a simple principal-agent modelling of ownership and control. Our related second objective is to investigate the extent to which the strategic behaviour and financial performance of Japanese firms are sensitive to the investment objectives of different types of shareholders.

To examine these issues, this paper proceeds as follows. In the next section we briefly review the literature regarding the effects of ownership structure on investment behaviour and financial performance. We also consider the characteristics and objectives of different types of shareholders in the light of ongoing structural reform to Japan's system of governance. Research hypotheses are developed based on these differences. We build our hypotheses using considerations pertaining to economic incentives as well the unique institutional context of Japan. Subsequent sections describe our research design, data analysis and the results. We conclude with a discussion of this study's findings and its implications for theory development as well as Japan's system of corporate governance.

Literature Review

Most past studies on ownership structure have focused on conflicts of interests between shareholders and managers within an agency theory framework (Shleifer and Vishny 1997). Agency theory offers a structured approach to the evaluation of a variety of incentive problems that arise in principal-agent relationships when (a) the goals of a principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing (Eisenhardt 1989). In this regard, the modern corporation in which professional managers operate the firm on behalf of a large group of widely dispersed shareholders represents a classic agency theory scenario (Milgrom and Roberts 1992). More specifically, since the shareholdings of large corporations are often dispersed, managers may have effective control over the firm despite having little or no ownership stake (Berle and Means 1932).

Most extant empirical research examining the strategic and performance implications of ownership structure have been carried out on samples composed exclusively of firms based in the US and adopted agency theory's implicit assumption that *all* shareholders have the common and singular objective of maximizing returns on their equity investment. This assumption must be approached with extreme caution in the Japanese context, where

different types of shareholders have distinct motivations and objectives related to their share ownership. In this regard, Gerlach (1992) has classified Japanese shareholders into three broad categories which he terms 'stable investors', 'market investors' and 'inside investors'. Theoretical considerations suggest that each of these shareholder types has relatively distinct investment objectives.

Traditionally, the majority of shares in Japanese firms have been held by stable investors such as affiliated firms, banks and insurance companies. A defining characteristic of these investors, who are called *antei kabunushi* or *seisaku toshika* in Japanese ('stable shareholders' or 'strategic investors'), is that they have other relationships, such as lending and commercial trade ties, with the firm in which they own shares. Equity ties are often reciprocated among these firms so that the cross-holding of shares is quite common (Roe 1994). In this regard, it is commonly argued that stable investors own their shares primarily to cement and grow stable business relationships rather than to earn returns on their equity investments (Abegglen and Stalk 1985). By virtue of shared norms (Clark 1979; Abegglen and Stalk 1985) and the multiplicity of ties (Gerlach 1992; Charkham 1994) between a focal Japanese corporation and its stable investors, firms should be quite sensitive to the investment objectives of these shareholders (Berglöf and Perotti 1994). As these firms are not only a corporation's shareholders, but are also its creditors, buyers, suppliers and business partners, they are exceptionally well positioned to monitor the policies of firms within their network and to enforce group norms favouring growth and stability rather than profitability objectives (Gedajlovic and Shapiro 2002).

Market investors, called *juntoshika* in Japanese (literally 'pure investors'), constitute a second class of shareholder found in Japan. Like the majority of shareholders in arm's length governance systems such as the US, the sole tie that these shareholders have to the firm is their equity stake (Gerlach 1992). Consequently, such market investors have equity returns as their primary investment objective. Like stable investors, market investors have an incentive to monitor firms in which they hold shares, but reflecting their singular tie to the firm, their monitoring efforts are likely to emphasize corporate profitability (Fukao 1999).

Japanese corporations may be sensitive to the investment objectives of market investors for a number of reasons. Recent international evidence suggests that market investors exert a disciplining influence by pricing the equities of firms which do not follow policies consistent with their investment objectives at a discount (Claessens et al. 1999, La Porta et al. 2000). Since the stakes of individual market investors are typically quite small, and because such investors are unencumbered by strong ties characterizing relations between stable investors and a focal organization (Granovetter 1973) they can easily sell their shares if they are unsatisfied with the management of the firm. They can also price in a risk premium, reflecting the possibility that value-added can be appropriated by managers and/or relationship investors or, more generally, because strategies consistent with their investment objectives are not being pursued (Claessens et al. 1999). Either action depresses the market value of the focal organization and raises its cost of capital.

Such actions can also seriously harm the balance sheets of Japanese stable investors who are now legally required to periodically restate the market value of the equity they hold in other firms on their financial statements (Fukao 1999). The upshot of such processes is that firms wishing to access the capital of market investors need be attuned to their investment objectives, or else face a relative disadvantage compared to firms that do. In this regard, the investment decisions of high-profile money managers such as those in charge of large pension and investment funds are especially noteworthy insofar as their decisions can strongly influence the investment decisions of other market investors (Prevost and Rao 2000). Historically, the large holdings of stable investors insulated most large Japanese companies from such pressures. As described in greater detail below, the ability of stable investors to provide such protection has deteriorated significantly in recent years (Whittaker and Kurosawa 1998; Fukao 1999; Kikuchi 1999; Yasui 1999; *Japan Economic Journal* 2001).

Inside investors, including corporate managers as well as founders and their immediate families, constitute a third class of shareholder found in Japan. Inside investors potentially represent a shareholding block that has both direct managerial control and ownership stakes in the firm (Fama and Jensen 1983). They are quite unique and distinct from either stable or market investors in this regard. The investment objectives of inside investors are relatively ambiguous insofar as their shareholdings provide them with a right to a firm's profit stream and consequently an incentive to adopt policies consistent with achieving high shareholder returns (Alchian and Demsetz 1972). However, the analysis of Fama and Jensen (1983) indicates that insiders are also likely to favour more risk-averse strategies than other shareholders owing to the fact that the vast majority of their wealth and income streams are tied to the fortunes of the firm they manage.

The preceding discussion suggests that distinct classes of shareholders have differing investment objectives and can be expected to exert influence over corporate behaviour in different ways. Stable investors influence corporate behaviour through their ability to monitor and potentially discipline through multiple and often reciprocated trade, debt and equity ties. On the other hand, market investors can influence corporate behaviour through their collective influence on the market value of a firm's shares and its ability to raise capital on favourable terms. Inside investors can influence corporate behaviour directly in their capacity as managers with decision control.

The capacity of these classes of shareholder to influence corporate behaviour has undergone some changes in recent years. Historically, stable shareholders have, by far, held the largest equity positions and the most influence over listed Japanese firms (Gerlach 1992). The existence of these holdings has insulated firms from capital market pressures and the threat of takeover (Kester 1991) and at the same time provided stable shareholders with a means of influencing corporate strategy in a manner consistent with their growth and stability objectives (Gedajlovic and Shapiro 2002). There is some evidence that the power of market investors is increasing in Japan (Kikuchi 1999; Yoshikawa and Phan 2001). In this regard, one important sub-

class of market investor is the foreign shareholder. Since the mid-1990s, foreign ownership of Japanese firms has been rising, climbing to over 18% of all listed Japanese shares at the end of March in 2000 (*Stock Distribution Survey* 2001). Thus, foreign shareholders are in a better position than ever before to influence corporate behaviour. Recent evidence suggesting a direct positive relationship between the quality of investor relations practices and the proportion of outstanding shares held by foreign shareholders supports the idea that Japanese corporations are now more sensitive to the objectives of market shareholders (Yoshikawa and Gedajlovic 2002).

At the same time, the influence of traditional stable shareholders in Japan appears to be diminishing. Cross-shareholdings among large listed Japanese firms have declined to 10.5% of all outstanding shares in 1999 from around 17% in the early 1990s and 18% in 1987 (*Japan Economic Journal* 2001). Also, many contemporary accounts suggest that the relationship between Japanese financial institutions and their client firms have become less relational and more transactional and arm's length during the past decade (e.g. Inoue 1999; Yasui 1999). Proponents of this view point to a variety of recent developments such as the bad debt and banking crises, which have severely damaged the ability of banks to support troubled affiliated firms (Sheard 1997; Fukao 1999). At the same time, financial market deregulation and the wider availability of equity and forms of non-mediated debt have lessened the dependence of large Japanese firms on banks for financing (Prowse 1996; Yasui 1999). Additionally, tax code and accounting changes have compelled financial and non-financial firms to unwind their equity positions in affiliated companies (Whittaker and Kurosawa 1998; Fukao 1999; Yasui 1999).

In summary, the preceding discussion suggests that the relative power of stable and market investors to influence corporate behaviour is undergoing an important change. Though stable investors still hold significant equity positions and have large influence over corporations, both are declining. Also the relationship between Japanese financial institutions and their client firms appears to be changing. At the same time, while market shareholders still collectively hold smaller equity positions than stable investors, the size of their shareholdings and their influence appear to be on the rise. In the following section we develop a series of hypotheses linking ownership structure with investment behaviour and financial performance that take these recent developments into consideration.

Hypotheses

While the notion that three classes of shareholders with relatively distinct investment objectives is widely accepted in the literature on Japan's system of corporate governance (Gerlach 1992; Fukao 1999; Yasui 1999), this assumption has not yet been subjected to direct investigation. In this section we develop hypotheses that distinguish between classes of shareholders in terms of their investment objectives and assess the extent to which Japanese firms are sensitive to these investment objectives. More specifically, we

develop hypotheses that relate the investment objectives of investor types to corporate dividend policy, capital expenditures, accounting profit and stock price volatility.

In this paper, stable investors are further categorized into two sub-categories — financial institutions and affiliated firms. We distinguish between financial institutions and affiliated firms because, although they are both usually treated as stable shareholders, their objectives in shareholdings and relationships with firms in which they hold shares may differ (Nitta 2000). This distinction appears warranted given the current reforms and stresses affecting Japan's banking and insurance industries and in particular the relationship between financial institutions and their client firms (Fukao 1999).

Market investors are split into three distinct sub-categories — foreign shareholders, pension funds and investment trusts. We draw this distinction because, as we describe below, there may be significant differences in their investment objectives due to differing tax and regulatory treatments of their holdings. Thus, we adopt a finer classification scheme in order to account for potential differences.

Dividend Payout

The literature on Japanese corporate governance suggests that stable shareholders make their investments in order to build and maintain stable trade ties rather than to earn investment returns (Kikuchi 1999). As such, managers are likely to face little pressure from stable shareholders to pay out large portions of corporate cash flow to them in the form of dividends. On the contrary, there are several reasons to expect that the percentage of shares held by stable shareholders will be negatively associated with dividend payout levels.

First, because of the interlocking nature of much of the stable shareholding in Japan (Sheard 1994a), stable investors effectively pay dividends to each other. In such a context, higher dividend incomes may be cancelled out by greater dividend payments demanded by business partners that want to offset their higher dividend costs. Second, low dividend levels allow firms to keep their profits internally, and thus to pursue additional growth opportunities, which benefit their business partners (Thomas and Waring 1999). Third, stable investors may be expected to prefer that affiliated firms preserve cash flow since these resources act as a buffer against environmental shocks which might disrupt existing trade ties (Bourgeois 1981).

While we can still apply these arguments to affiliated firms, we are not able to do so to financial institutions in the late 1990s. As discussed earlier, because of a variety of recent developments, the relationship between financial institutions and the firms in which they hold shares has become less relational and more transactional and arm's length during the past decade (e.g. Inoue 1999; Yasui 1999). In particular, since many Japanese financial institutions are currently under severe financial pressure owing to the ongoing bad debt crisis (Fukao 1999) they may need to generate cash flow from their equity investments and more generally pay greater attention to the direct economic benefits of their shareholdings in other firms.

The preceding discussion suggests that:

Hypothesis 1a: The size of the ownership stake of affiliated firms is negatively related to a firm's dividend payout levels.

Hypothesis 1b: The size of the ownership stake of financial institutions is positively related to a firm's dividend payout levels.

In contrast to affiliated firms, the shareholdings of market investors represent their single tie to the firm. Consequently, the investment objective of market investors is to earn as high a return as possible on their equity investment (Kikuchi 1999).

Although financial theory suggests that dividend policy is irrelevant in terms of shareholder returns (Modigliani and Miller 1958), agency considerations suggest that the interests of market shareholders are positively associated with dividend payout levels. In this regard, Jensen (1989) argues that shareholder interests are served by the payment of free cash flow to shareholders in the form of dividends because the depletion of such organizational slack (Cyert and March 1963) provides managers with a strong incentive to manage their businesses as efficiently as possible. At the same time, the payment of free cash flow to shareholders limits the number and size of investment proposals that can be funded from internal sources and compels managers to subject more of their investment proposals to the scrutiny of financial intermediaries and capital markets (Prowse 1996). From a theoretical perspective, therefore, market investors should prefer to receive higher dividend payments.

However, when we consider the investment incentives of domestic investors, we need to take taxation policies and legal requirements into consideration. Japanese pension funds benefit from favourable tax treatments, but are obligated to offer 'defined-benefit' rather than 'defined contribution' schemes (Fukao 1999). As such, pension fund managers must make up to investors the difference should investment yields fail to meet expected levels. In contrast, Japanese investment trusts are ineligible for such favourable tax treatments and are not required to offer investors a guaranteed rate of return. Therefore, since Japan taxes dividends at a much higher rate than capital gains (La Porta et al. 2000), the preferential tax treatment afforded pension funds means they are more likely than investment trust managers to favour high levels of dividend payouts. At the same time, the performance of investment trusts is often evaluated on a relatively short-term basis in Japan because investors frequently sell their funds and buy new ones because of the sales practices of securities companies (Fukao 1999). Consequently, investment trust managers often find it difficult to engage in stable and long-term investments, which lead them to seek stocks that have large potential for capital gains rather than stable dividend payments.

These considerations suggest that:

Hypothesis 1c: The size of the ownership stake of foreign shareholders is positively related to a firm's dividend payout levels.

Hypothesis 1d: The size of the ownership stake of pension funds is positively related to a firm's dividend payout levels.

Hypothesis 1e: The size of the ownership stake of investment trusts is negatively related to a firm's dividend payout levels.

The size of the ownership stake of inside investors is expected to be positively related to dividend payout levels for two primary reasons. First, agency theory reasoning suggests that insiders with ownership stakes have a direct claim on the firm's residual income and consequently have a compelling reason to favour high divided levels (Alchian and Demsetz 1972). Second, since the wealth and income streams of inside investors are likely to be highly firm dependent, the payout of cash flow through dividend payments affords these investors an opportunity to extract funds from the business and to diversify away some of their firm-specific cash flow risk (Chandler 1990; May 1995).

Consequently, we expect that:

Hypothesis 1f: The size of the ownership stake of inside investors is positively related to a firm's dividend payout levels.

Capital Expenditures

Viewed from the perspective of free cash flow theory, dividend payouts and capital expenditures are two non-mutually exclusive uses of a firm's cash flow. (Jensen 1989). Instead of higher dividend payments, affiliated firms can be expected to favour large capital expenditures because such use of funds provides many opportunities for them to expand their commercial and other non-equity ties with the firm. In this regard, affiliated firms may benefit from capital expenditures on either the buying or the supply side of a trade relationship (Clark 1979; Charkham 1994). Although financial and regulatory strains on Japanese financial institutions have made them more sensitive to the direct economic benefit of their shareholdings, they can still profit from capital expenditures made by their client firms by extending loans and selling other financial products and services (Aoki 1988; Weinstein and Yafeh 1995).

Thus, since both affiliated firms and financial institutions can benefit in a variety of ways from large capital expenditures made by their business partners, it is expected that:

Hypothesis 2a: The size of the ownership stake of affiliated firms is positively related to a firm's level of capital expenditures.

Hypothesis 2b: The size of the ownership stake of financial institutions is positively related to a firm's level of capital expenditures.

While capital expenditures can promote growth, they do not necessarily enhance future profitability (Baumol 1959). In contrast to relationship investors who have the growth of commercial ties and/or debt ties as a primary investment objective, market investors can be expected to favour only those

capital expenditures which promise returns in excess of the firm's cost of capital. Marris (1964) suggests that growth-oriented firms may undertake projects that having diminishing, or even negative, marginal returns. In this regard, the control of large portions of corporate equity in Japan's relational governance system by relationship investors has been linked to a system-wide bias towards higher levels of investment than is found in market-based governance systems where market investors predominate (Aoki 1988; Thomas and Waring 1999). Consequently, it can be expected that in the context of Japan's growth-oriented relational governance system, firms who have a large percentage of their shares in the hands of market-oriented investors will exhibit below-average levels of capital expenditures.

Hypothesis 2c: The size of the ownership stake held by foreign shareholders is negatively related to a firm's level of capital expenditures.

Hypothesis 2d: The size of the ownership stake held by pension funds is negatively related to a firm's level of capital expenditures.

Hypothesis 2e: The size of the ownership stake held by investment trusts is negatively related to a firm's level of capital expenditures.

Two considerations suggest a negative relationship between levels of share ownership by inside investors and capital expenditures. Firstly, as noted by Fama and Jensen (1983), providing managers with ownership rights has negative risk management implications, which may result in risk-averse strategic behaviour (May 1995). To the extent that large capital expenditures in fixed assets can make a firm more vulnerable to many changes in its business environment (Lieberman and Montgomery 1988), it has been argued that such risky expenditures are often avoided by firms with high levels of share ownership by inside investors (Chandler 1990). Second, firms with high levels of inside ownership may face a capital constraint owing to the reticence of insiders to relinquish their authority to outside investors (Shleifer and Vishny 1997), or creditors (Sheard 1994b) and/or the reluctance of outside minority shareholders to provide equity capital owing to the risk of its appropriation by inside shareholders (Claessens et al. 1999).

Thus, because of capital constraints and the riskiness of large capital investments, ownership by insiders is expected to have an attenuating effect on capital expenditures.

Hypothesis 2f: The size of the ownership stake held by inside investors is negatively related to a firm's level of capital expenditures.

Profitability

The reciprocal nature of shareholdings and the multiplicity of ties (i.e. equity, director and commercial) among stable investors suggest that profit maximization is not the primary objective of these shareholders. Indeed, since the extensive cross-shareholdings among stable investors constitutes a means by which they shield each other from capital market pressure and takeover threats

(Nakatani 1984; Nitta 2000) it can be expected that firms with a large base of stable investors will exhibit below-average profit levels.

Relatedly, the reciprocated nature of such shareholdings creates the possibility of retaliatory actions, as shareholders with business relations may fear the curtailment of business ties if they aggressively challenge other firms. Moreover, such shareholders are unlikely to pressure a firm to pursue profit maximization because actions to increase the profits of one firm may come at the expense of themselves as the firm's buyer, or supplier. For example, since pressures for profit maximization may lead a firm to be more price and rate sensitive when it purchases products from its affiliated firms (Prowse 1996), the interests of these affiliated firms may not be well served by strict profit maximization policies. Thus, shareholdings by affiliated firms are not expected to lead to higher profitability of firms in which they hold shares.

As for financial institutions, traditional argument suggests that, similar to affiliated firms, they do not press for profit maximization because pressures to enhance profitability may lead to higher required rates of return for new investment projects and result in decreased business volumes (Thomas and Waring 1999). However, as noted above, recent developments have changed the relationship between banks and their client firms. Most notably, because of large volumes of bad loans, Japanese financial institutions are increasingly motivated to pressure their client firms to place a greater emphasis on corporate profitability.

The preceding discussion suggests that:

Hypothesis 3a: The size of the ownership stake held by affiliated firms is negatively related to corporate profitability.

Hypothesis 3b: The size of the ownership stake held by financial institutions is positively related to corporate profitability.

As described above, the main investment objective of market investors is high investment returns because, unlike stable investors, they have only arm's length financial relations with the firms in which they own shares. Consequently, market investors cannot benefit from their association with a firm through any means other than returns on their equity investments. This situation puts them at cross-purposes with stable shareholders who can extract benefits from the firm through a variety of channels (e.g. commercial, or debt contracts) unavailable to market shareholders. Consequently, it is expected that managers of firms with a larger percentage of outstanding shares in the hands of market investors will face greater pressures from their shareholders to adopt profit-maximizing policies.

Hypothesis 3c: The size of the ownership stake held by foreign shareholders is positively related to corporate profitability.

Hypothesis 3d: The size of the ownership stake held by pension funds is positively related to corporate profitability.

Hypothesis 3e: The size of the ownership stake held by investment trusts is positively related to corporate profitability.

Corporate insiders who own stock have a direct claim on the profit produced by the firm (Alchian and Demsetz 1972) and also have decision control (Fama and Jensen 1983) over many discretionary factors that influence that profit (Jensen and Meckling 1976). As a consequence, it has been argued that inside investors who own shares have a strong incentive to adopt strategies consistent with profit maximization (Hill and Snell 1988) and act in the best interests of outside investors (Denis et al. 1997).

An alternative view is offered by Morck et al. (1988) who suggest that the relationship between inside ownership and financial performance is non-linear. According to their view, low levels of shareholdings by inside investors aligns their interests with those of market investors, but higher levels afford insiders insulation from capital market pressures, resulting in decreased levels of profitability.

Since the proportion of outstanding shares held by inside investors in Japan's largest companies is known to be quite low (Kester 1986; Gerlach 1992), both views outlined above suggest that the relationship between inside ownership and firm performance is expected to be positive for the Nikkei 300 firms examined in this study.

Hypothesis 3f: The size of the ownership stake held by inside investors is positively related to corporate profitability.

Stock Market Risk

Since stable investors want to maintain stable business ties and smooth cash flows that benefit various stakeholders including main banks and affiliated firms (Nakatani 1984), they do not wish their business partners to take excessive market risks (Thomas and Waring 1999). In this regard, stable equity prices are conducive to long-term strategic planning, promote the development of business ties and augment the expectation of steady business flows between firms (Caves and Uekusa 1976). At the same time, although Japanese banks and insurance companies have started to partially unload their shareholdings in client firms, the traditional practice of stable shareholders rarely trading each other's stock (Kester 1991; Charkham 1994) can be expected to decrease the volatility of a company's equity. In addition, Japanese banks, while they have started to pay greater attention to profitability in their shareholdings, would still prefer to earn stable earnings and banking business through such shareholdings because large capital losses from their equity investments can result in injurious asset write-offs (Fukao 1999).

Hypothesis 4a: The percentage of stock held by affiliated firms is negatively related to a firm's stock price volatility.

Hypothesis 4b: The percentage of stock held by financial institutions is negatively related to a firm's stock price volatility.

Market investors such as foreign institutional shareholders typically maintain well diversified and arm's length positions in many companies. Given the diversified nature of their investments, they are able to bear risk

more efficiently than other investors (Demsetz and Lehn 1985). As such, market investors are likely to prefer higher risk-return strategies than either inside investors (Amihud and Lev 1981; May 1995) or stable shareholders who have commercial ties with the firm in which they hold shares. Additionally, these investors are also much more likely to trade their shares on either good or bad corporate news (Kester 1991).

That said, the legal requirement that obliges pension funds in Japan to offer *'defined benefits'* could have an important effect on their investment behaviour (Fukao 1999). Because of this requirement, pension funds are accountable for the difference between the actual investment return and a guaranteed rate of return. In contrast, just like mutual funds in the US, Japanese investment trusts are not required to offer investors a guaranteed rate of return. As such, while both investment trusts and pension funds are essentially market investors, the defined benefit structure of pension funds strongly implies that pension fund managers will prefer less stock price volatility than other money managers. Both considerations suggest that:

Hypothesis 4c: The percentage of stock held by foreign shareholders is positively related to a firm's stock price volatility.

Hypothesis 4d: The percentage of stock held by pension funds is negatively related to a firm's stock price volatility.

Hypothesis 4e: The percentage of stock held by investment trusts is positively related to a firm's stock price volatility.

Insofar as a very large percentage of their personal wealth and income streams are tied to the fortunes of the firms they manage, inside investors can be expected to be highly risk-averse (Fama and Jensen 1983). In this regard, managerial control of a firm has been linked to less profitable, but risk-reducing, conglomerate mergers (Amihud and Lev 1981) as well as to lower but more stable cash flows (Kamin and Ronen 1985). As such, it can be expected that insiders with significant share ownership will pursue strategies that lead to less stock price volatility.

Hypothesis 4f: The percentage of stock held by inside investors is negatively related to a firm's stock price volatility.

Table 1 summarizes the hypotheses of this study.

Table 1. Summary of Hypotheses and Expected Results

Hypotheses	Dependent variable	Affiliated firms	Financial institutions	Foreign investors	Pension funds	Investment trusts	Inside investors
1a–1f	Dividend payout	(−)	(+)	(+)	(+)	(−)	(+)
2a–2f	Capital expenditures	(+)	(+)	(−)	(−)	(−)	(−)
3a–3f	Profitability	(−)	(+)	(+)	(+)	(+)	(+)
4a–4f	Market risk	(−)	(−)	(+)	(−)	(+)	(−)

Methods

Sample

The base sample consists of the 300 largest Japanese manufacturing firms listed on the Tokyo Stock Exchange. Data were collected from multiple sources — *Nikkei Kaisha Joho*, *Toyo Keizei*, *Worldscope* and the database of the Nomura Research Institute. A total of 53 firms were excluded from the final sample owing to the lack of available data. The final sample consists of 247 of Japan's largest manufacturing companies. Three years of data (1996–1998) are considered for each of these firms, resulting in a sample size of 741 company years.

The firms in the sample represent a broad cross-section of Japanese manufacturing concerns. In terms of industrial composition, the sample comprises firms from the automotive (6.5%), ceramics (6.1%), chemical (18.3%), electronics (22%), machinery (12.2%), metal (7.7%), pharmaceutical (6.5%), precision tool (5.3%), textile (6.5%) and transport (2%) sectors. A total of 88 (35.6%) of the firms included in the sample have seats on the president's club (*shacho-kai*) of a big-six *keiretsu* (inter-corporate network).

Independent Variables

The ownership structures of the firms examined here consist of six distinct categories of shareholders. Foreign shareholders are generally considered archetypal market investors as they are typically US and European institutional investors who have no ongoing business ties with the Japanese firms in which they own shares (Inoue 1999; Yasui 1999). The percentage of outstanding shares held by foreign investors is used to evaluate the importance of this ownership dimension. Data for this variable was obtained from *Nikkei Kaisha Joho.*

Investment trusts (mutual funds) and pension funds are two other classes of shareholders often cited as examples of market investors (Fukao 1999). In the Japanese context, these funds are primarily investment vehicles and typically do not have significant ongoing business relationships with the firm in which they own shares (Inoue 1999). Like investment managers elsewhere, these funds compete with other money managers for potential customers. The impact of these types of funds is evaluated by two variables equal to the percentage of total outstanding shares held by Japanese investment trusts and pension funds respectively. Data for these variables were obtained from the database of the Nomura Research Institute.

Two classes of Japanese shareholders are commonly considered stable investors because they are regarded as having both significant and enduring business ties with other firms. Financial institutions including banks and insurance companies usually have business dealings such as lending, insurance sales and other financial transactions with firms in which they hold shares (Charkham 1994). More recent accounts however suggest that Japanese financial institutions no longer behave like classic 'stable' investors and their

relationship with client firms has become more arm's length in recent years (Kikuchi 1999; Yasui 1999). The impact of these investors is evaluated via a variable equal to the percentage of total outstanding shares held by Japanese banks and insurance companies. Their ownership data were collected from the database of the Nomura Research Institute

Affiliated firms constitute another class of investor commonly depicted as being a stable shareholder (Gerlach 1992). These companies are the business partners, either suppliers and/or customers, of other firms with which they have cross-shareholding arrangements. Thus, these affiliated companies have multiple interests with the firms in which they hold shares (Lincoln et al. 1996). The impact of these investors is evaluated through a variable equal to the percentage of total outstanding shares held by affiliated companies. Their ownership data were collected from the database of the Nomura Research Institute.

The remaining type of shareholder considered here is the inside investor. Their ownership data were collected from *Toyo Keizai*. Since this publication reports only the twenty largest shareholders, the percentage of outstanding shares held by insiders used in this paper includes only the shareholdings by managers and founders and their family members who are among the top twenty shareholders.

Dependent Variables

Return on assets (ROA), the ratio of net income to total assets, is used to evaluate corporate profitability. ROA is a common measure of profitability and has been previously used in the Japanese context (Prowse 1992; Lincoln et al. 1996). Importantly, Prowse (1992) notes that since stock market returns are expected to adjust for any divergences between shareholders and managers, accounting-based measures such as ROA are preferable in studies relating ownership structure to financial performance.

Free or positive cash flow constitutes slack resources that can be used for a variety of pursuits such as the payment of dividends or the funding of new capital expenditures (Cyert and March 1963). The dividend payout ratio used in this study is equal to the percentage of available cash flow paid out to shareholders in the form of dividends. Capital expenditures are investments made to acquire, build or update fixed assets such as plant and equipment. Such expenditures are typically made to improve the efficiency of operations, or to accommodate expected future growth in the demand for a company's products and services. The extent to which a firm invests free cash flow in capital expenditures is measured by the ratio of its capital expenditures to its base of fixed assets. As such, this measure is equal to the percentage growth in a company's fixed asset base for a given year.

A firm's market risk reflects the degree to which its stock varies in relation to movements of the broader market. A commonly used measure of such risk is the beta of a firm's stock. The beta measure used in this study was computed by *Worldscope* and is based on between 23 and 35 consecutive month-end price percent changes of a firm's equity and its relation to the Nikkei-Dow Index.

Control Variables

The size of a firm is included in the multivariate tests to account for the potential economies of scale and scope accruing to large firms. We measure firm size as the log of assets. Financial leverage measured as the ratio of debt to capital employed is included as a control variable in the regression models for two reasons. First, there is a large body of literature in finance and economics that indicates that a firm's capital structure influences both investment decisions and firm performance (Harris and Raviv 1991). Second, financial leverage may be a constraining force on the discretion of managers (Jensen 1989; Williamson 1985).

It is generally contended that Japanese firms share a variety of equity and non-equity ties that may impact upon their profitability and investment decisions (Hoshi et al. 1991; Morck and Nakamura 1999). Since the focus of this paper is on the effects of ownership structure, other varieties of corporate ties need to be controlled for. We include a measure equal to the ratio of bank-mediated debt to total outstanding debt to control for debt ties between a firm and their primary bank lenders. Additionally, in order to control for possible network-level *keiretsu* effects, we follow Lincoln et al. (1996) and use an indicator variable representing whether a firm is a member of the *shacho-kai* (president's club) of a big-six *keiretsu* (Gerlach 1992).

Lastly since the competitive environment in which a firm operates has a profound impact on both its profit potential and the relative importance of particular investment and strategic decisions (Porter 1980), we include a series of industry variables representing nine of the ten sectors in which the sampled firms operate. We also include indicator variables representing data from the 1996 and 1997 fiscal years in order to control for possible business cycle effects in all the models estimated.

Results

Table 2 presents the pooled (1996–98) means, standard deviations, ranges and correlations of the continuous measures used in this study. Notable among the descriptive statistics are the averages of stock ownership by category of investors, which are quite similar to those reported by Fukao (1999). These statistics suggest that, at the sample level, shareholdings by financial institutions (42.07%) and affiliated firms (19.65%) are considerably larger than the holdings of foreigners (12.59%), domestic investment trusts (3.4%), pension funds (3.23%) and inside investors (1.73%). On the other hand, the standard deviations of these ownership variables indicate that there is still substantial firm-level variation in terms of the ownership structures of Japanese corporations.

Some of the most pronounced correlations presented in Table 2 are between the control variable, percent bank debt, and the four dependent variables — dividend payout (–.50), ROA (–.32), capital expenditures (–.34) and market beta (.48). These results suggest that debt ties need to be controlled for in our

Table 2. Pooled Means, Standard Deviations, Ranges and Correlations (1996–98)[a]

Variables	Mean	SD	Minimum	Maximum	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Ownership by foreign investors	12.59%	9.67%	0.54%	77.72%	1.00												
2. Ownership by investment trusts	3.40%	2.47%	0.00%	14.65%	0.06	1.00											
3. Ownership by pension funds	3.23%	1.89%	0.00%	11.14%	0.08	−0.05	1.00										
4. Ownership by financial institutions	42.07%	11.59%	0.00%	68.40%	−0.06	0.01	0.25	1.00									
5. Ownership by affiliated firms	19.65%	14.00%	0.21%	62.00%	−0.36	−0.19	−0.08	−0.61	1.00								
6. Ownership by insiders	1.73%	5.33%	0.00%	37.78%	0.08	−0.03	0.07	−0.24	−0.02	1.00							
7.Dividend payout	0.07	0.07	0.00	0.50	0.36	0.00	0.23	−0.02	−0.06	0.31	1.00						
8.Return on assets	2.24	3.32	−44.73	20.86	0.17	0.09	0.03	0.07	−0.08	0.08	0.43	1.00					
9.Market beta	0.99	0.34	.08	3.06	−0.21	0.28	−0.29	−0.13	0.01	−0.19	−0.46	−0.33	1.00				
10.Capital expenditures	0.07	0.04	0.01	0.27	0.09	−0.05	0.05	−0.02	0.14	0.04	0.29	0.30	−0.17	1.00			
11.Assets (US$m)	6574	12,297	262	121,912	0.16	−0.21	−0.11	0.18	−0.13	−0.10	0.15	−0.30	−0.19	0.13	1.00		
12.Debt ratio	31.97	8.27	0.00	77.37	−0.26	0.05	−0.22	−0.02	−0.03	−0.28	−0.43	−0.37	0.35	−0.18	0.11	1.00	
13.% Bankdebt	26.24%	20.73%	0.00	87.87%	−0.30	0.13	−0.27	−0.14	0.12	−0.19	−0.50	−0.32	0.48	−0.34	−0.14	0.69	1.00

[a] Correlations above .08 are significant at .05; correlations above .11 are significant at .01.

multivariate estimations. Relatedly, while the strong positive correlation between percent bank debt and debt ratio (.69) has a theoretical basis, in that it supports the notion the concentration of lending may facilitate monitoring and lead to higher levels of corporate borrowing (Hoshi et al. 1991), such a strong correlation also raises concerns regarding multicollinearity. In order to assess the extent to which collinearity between these two control variables could result in distorted parameter estimates, each of the models described below were estimated twice; with and without the percent bank debt variable. These sensitivity tests were strongly indicative that collinearity between these two control variables did not introduce interpretability problems into the estimated models.

The use of panel, or pooled cross-sectional, data sets such as the one used in this study carries with it a number of methodological implications. While such samples capture both firm-level and inter-temporal dynamics, they also present some difficulties in estimation because same-firm observations across company years are not statistically independent (Maddala 1977). Under such circumstances standard ordinary least square (OLS) regression estimates are inefficient and may produce biased standard error estimates (Baltagi 1995). Fortunately, random- and fixed-effects regression techniques based upon generalized least square (GLS) estimation are available which address these concerns (Maddala 1977). In the context of this study, Hausmann and Lagrange multiplier tests (Greene 1993) indicate that a random-effects estimation is most appropriate.

The dividend payout results reported in Table 3 do not support hypothesis 1a. Contrary to our expectation, we find no negative association between the percentage of shares held by affiliated firms and dividend payout levels. However, a strong *positive* association is apparent between ownership by financial institutions and dividend payout (p <.001), supporting hypothesis 1b. At the same time, the results in Table 3 offer support for hypotheses 1c and 1d. Consistent with the hypotheses, we find that dividend payout is positively associated with the percentage of shares held by foreign shareholders (p <.001) and pension funds (p <.001). Also, our findings indicate that the percentage of shares held by investment trusts is negatively related (p <.05) to dividend payouts, supporting hypothesis 1e. With respect to the hypothesized positive relationship between inside ownership and dividend payout levels, we find no support for hypothesis 1f.

The capital expenditure results presented in Table 4 offers support for hypothesis 2b as a positive association is found between ownership by financial institutions and capital expenditures (p <.01). On the other hand, no relationship is found between share ownership by affiliated firms and capital expenditures, which rejects hypothesis 2a. In support of hypothesis 2c, we find a significant negative relationship between foreign ownership and capital expenditures (p <.1). However, we find no significant relationships between ownership by investment trusts and pension funds and capital expenditures. Additionally, the results in Table 4 support hypothesis 2f. Inside ownership is negatively related to capital expenditures (p <.05).

The ROA results in Table 5 support hypotheses 3a and 3b. As predicted, we find a negative relationship between the percentage of shares held by

Table 3. Random-Effects Estimates of Dividend Payout [a]

Independent variables	B	SEM	B	SEM	B	SEM	B	SEM	B	SEM	B	SEM
Ownership by Foreign Investors	0.0489	0.0090***										
Ownership by Investment Trusts			−0.0497*	0.0241								
Ownership by Pension Funds					0.1869	0.0186***						
Ownership by Financial Institutions							0.0679	0.0076***				
Ownership by Affiliated Firms									−0.0045	0.0069		
Ownership by Insiders											−0.0665	0.0427
Log of Assets	0.0781	0.0054***	0.0780	0.0057***	0.0814	0.0045***	0.0716	0.0055***	0.0885	0.0045***	0.0749	0.0058***
Debt Ratio	−0.0012	0.0001***	−0.0013	0.0001***	−0.0011	0.0000***	−0.0011	0.0001***	−0.0012	0.0000***	−0.0012	0.0001***
% Bank Debt	−0.0221	0.0029***	−0.0223	0.0032***	−0.0173	0.0023***	−0.0193	0.0029***	−0.0217	0.0022***	−0.0227	0.0033***
Presidents Club	−0.0359	0.0078***	−0.0355	0.0079***	−0.0374	0.0078***	−0.0363	0.0079***	−0.0402	0.0078***	−0.0353	0.0078***
Constant	−0.4345	0.0390***	−0.4238	0.0409***	−0.4585	0.0334***	−0.4139	0.0394***	−0.4942	0.0336***	−0.4035	0.0415***
Adjusted R2	0.40		0.39		0.38		0.38		0.38		0.41	

[a] Coefficients and standard errors for the nine industries and two-year dummy variables estimated have been omitted for space considerations.
† $p < .1$ * $p < .05$ ** $p < .01$ *** $p < .001$

Table 4. Random-Effects Estimates of Capital Expenditures [a]

Independent variables	B	SEM	B	SEM	B	SEM	B	SEM	B	SEM	B	SEM
Ownership by foreign investors	−377.98	204.48†										
Ownership by investment trusts			−371.49	732.84								
Ownership by pension funds					1589.22	973.20						
Ownership by financial institutions							458.55	175.72**				
Ownership by affiliated firms									−15.74	147.64		
Ownership by insiders											−879.07	380.26*
Log of assets	301.79	51.70***	270.83	51.05***	277.16	49.81***	235.30	51.75***	274.86	51.30***	267.20	49.89***
Debt ratio	−1.50	1.40	−0.94	1.38	−0.81	1.37	−0.76	1.36	−0.97	1.37	−1.41	1.38
% Bank debt	71.47	111.64	78.94	111.91	110.26	113.46	92.98	111.43	77.16	111.99	66.77	111.55
President's Club	−43.47	47.05	−35.49	47.10	−34.99	46.90	−39.02	46.45	−36.33	47.14	−44.60	46.98
Constant	−2450.16	347.30***	−2311.78	352.49***	−2430.43	346.68***	−2280.15	340.98***	−2337.09	364.80***	−2270.06	344.41***
Adjusted R2	0.22		0.21		.22		0.23		0.21		0.22	

[a] Coefficients and standard errors for the nine industries and two-year dummy variables estimated have been omitted for space considerations.
† $p < .1$ * $p < .05$ ** $p < .01$ *** $p < .001$

Table 5. Random-Effects Estimates of ROA [a]

Independent variables	B	SEM	B	SEM	B	SEM	B	SEM	B	SEM	B	SEM
Ownership by foreign investors	1.0136	1.5683										
Ownership by investment trusts			17.4215	5.6344**								
Ownership by pension funds					19.0022	7.6164*						
Ownership by financial institutions							2.5720	1.3587†				
Ownership by affiliated firms									−2.3080	1.1197*		
Ownership by insiders											−3.1540	2.9065
Log of assets	1.0978	0.3944**	1.4143	0.3856**	1.1911	0.3800**	0.9436	0.3983**	0.9908	0.3890**	1.1429	0.3823**
Debt ratio	−0.0679	0.0109***	−0.0708	0.0106***	−0.0678	0.0106***	−0.0683	0.0106***	−0.0687	0.0106***	−0.0711	0.0108***
% Bank debt	0.1230	0.8795	0.0466	0.8736	0.5061	0.8903	0.1984	0.8786	0.0368	0.8775	0.0712	0.8799
President's Club	−0.6932	0.3573†	−0.7449	0.3538*	−0.7002	0.3565*	−0.7294	0.3562*	−0.7356	0.3558*	−0.7440	0.3587*
Constant	−4.3968	2.6476†	−6.4600	2.6615*	−5.6958	2.6459*	−4.3069	2.6227†	−2.8083	2.7651	−4.4253	2.6381†
Adjusted R2	0.26		0.27		0.27		0.27		0.27		0.26	

[a] Coefficients and standard errors for the nine industries and two-year dummy variables estimated have been omitted for space considerations.
† $p < .1$ * $p < .05$ ** $p < .01$ *** $p < .001$

Table 6. Random-Effects Estimates of Market Beta [a]

Independent variables	B	SEM	B	SEM	B	SEM	B	SEM	B	SEM	B	SEM
Ownership by foreign investors	−0.0646	0.1503										
Ownership by investment trusts			1.6269	0.5290**								
Ownership by pension funds					−5.7721	0.6930***						
Ownership by financial institutions							−0.2108	0.1302				
Ownership by affiliated firms									−0.2342	0.1065*		
Ownership by insiders											−0.6790	0.2736*
Log of assets	−0.2547	0.0379***	−0.2341	0.0359***	−0.2635	0.0346***	−0.2405	0.0382***	−0.2769	0.0370***	−0.2653	0.0360***
Debt ratio	0.0045	0.0010***	0.0043	0.0010***	0.0040	0.0009***	0.0045	0.0010***	0.0046	0.0010***	0.0042	0.0010***
% Bank debt	0.3974	0.0836***	0.4022	0.0827***	0.2798	0.0810***	0.3910	0.0836***	0.3932	0.0832***	0.3933	0.0831***
President's Club	0.0369	0.0343	0.0352	0.0329	0.0339	0.0324	0.0395	0.0342	0.0359	0.0339	0.0317	0.0338
Constant	2.5304	0.2542***	2.3690	0.2477***	2.8433	0.2409***	2.5162	0.2519***	2.7354	0.2631***	2.6054	0.2484***
Adjusted R2	0.38		0.40		0.44		0.38		0.39		0.39	

[a] Coefficients and standard errors for the nine industries and two-year dummy variables estimated have been omitted for space considerations.
† $p < .1$ * $p < .05$ ** $p < .01$ *** $p < .001$

affiliated firms and ROA (p <.05). We also found a positive relationship between the percentage of shares held by financial institutions and firm performance (p <.1). The ROA results support hypotheses 3d and 3e. That is, we observe the predicted positive relationship between market investors and ROA among investment trusts (p <.01) and pension funds (p <.05). On the other hand, no relationship is found between the percentage of shares held by foreign shareholders and ROA. No evidence is found for hypothesis 3f. There is no apparent relationship between the percentage of shares held by inside investors and ROA.[1]

Finally, the results in Table 6 present results regarding the relationship between various classes of shareholder and stock price volatility. In support of hypothesis 4a, we find the hypothesized negative association between the percentage of shares held by affiliated firms and beta (p <.05). However, contrary to hypothesis 4b, we find no significant relationship between ownership levels of financial institutions and stock price volatility. We observe a very strong negative relationship between ownership by pension funds and beta (p <.001), supporting hypothesis 4d. In support of hypotheses 4e, we find a positive relationship between stock market beta and the percentage of shares held by investment trusts (p <.01). However, we observe no relationship between beta and foreign ownership. Finally, our results support hypothesis 4f in that the expected negative relationship is found between inside ownership and stock price volatility (p <.05).

Discussion and Conclusions

The results reported here offer evidence that Japanese corporations are sensitive to the investment objectives of their shareholders. These results also provide a strong indication that this effect varies significantly across class of shareholder and criterion variable. In terms of dividend policy, we find that stock ownership by foreign shareholders, pension funds and financial institutions is associated with higher dividend payouts, while share ownership by investment trusts is negatively related to dividends. Similarly, while share ownership by financial institutions is associated with higher levels of investments in capital projects, ownership by foreign investors and insiders is negatively associated with such expenditures. In terms of financial performance, share ownership by investment trusts, pension funds and financial institutions is positively associated with corporate ROA, but share ownership by affiliated firms is negatively associated with the same performance indicator. Lastly, ownership by pension funds, insiders and affiliated firms is negatively related to market (systematic) risk, but ownership by investment trusts is positively associated with the same variable.

As noted above, we find multiple relationships of differing directions and magnitudes between ownership variables and theoretically relevant dependent variables. Such results clearly indicate that the influence of concentrated shareholdings on corporate behaviour in Japan is significantly more complex than what is modelled in standard agency tests of the separation of ownership

and control. The results indicate that an assumption that shareholders constitute a monolithic entity with a singular investment objective is clearly inappropriate in the Japanese context. Despite the fact that not all our hypotheses are supported, some clear patterns are evident. Though the holdings of none of the shareholder groups are significantly related to *all four* of the dependent variables, the influence of each class of shareholder is apparent in particular areas. For instance, the holdings of investment and pension fund managers appear to influence dividend policies, return on assets and stock price volatility, but not capital expenditures. Similarly, the holdings of financial institutions do not influence stock price volatility, but are related to dividend policies, capital expenditures and return on assets. Such results suggest that classes of shareholders differ in the relative importance they place on particular corporate outcomes and also their capacities to influence those outcomes. These findings strongly suggest that distinct classes of shareholders exert heterogeneous influences on Japanese organizations.

Our findings suggest that studies which do not empirically distinguish between different classes of shareholders run the risk of introducing serious measurement error into the models they estimate. While the results reported here pertain to the specific case of Japan, they highlight the need for corporate governance research to explicitly consider and empirically evaluate the extent to which investment objectives vary across category of shareholder (Thomsen and Pedersen 2000). Such research appears especially warranted in the context of other relational governance systems such as those found in Germany, Hong Kong and Korea (Roe 1994; Rajan and Zingales 1998), but is also relevant in more arm's length systems such as those found in countries with legal systems and property rights based upon English common law (La Porta et al. 1999).

Our findings also show that relationships between ownership structure and firm investment behaviour and financial performance are more complex than can be captured in a simple market / stable / inside investor categorization of shareholders. For instance, our results support the basic notion that investment trusts and pension funds are market investors insofar as the shareholdings of both are positively associated with firm performance. On the other hand, we find that the shareholdings of pension funds and investment trusts have *opposite* associations with dividend payout levels and market risk even though they are both usually treated as market investors. That is, shareholdings by investment trusts are negatively related with dividend payout levels and positively associated with market risk, but shareholdings by pension funds are positively related to dividend payouts and negatively related to market risk. As described above, these differences likely stem from the fact that investment trusts and pension funds are subject to differing tax and regulatory treatments in Japan.

The preceding discussion underscores the precarious nature of making simplifying assumptions regarding the investment objectives of shareholders. It also illustrates that these objectives can be very sensitive to a variety of context-specific rules, regulations and standards that may affect categories of investors (and other stakeholders) asymmetrically (Hollingsworth and

Boyer 1997). Such factors mean that extreme caution must be exercised in generalizing findings from one institutional context to another. These factors also challenge researchers in the field of corporate governance to develop finer and more contextually relevant distinctions when evaluating corporate governance relations. Case studies and ethnographic research directed at providing a deep understanding of the microprocesses and mechanisms through which shareholders influence corporate behaviour in particular national and temporal contexts can make a clear contribution in this regard.

Lastly, our findings pertaining to effects of share ownership by financial institutions suggest that temporal context may also matter. While Japanese financial institutions are traditionally portrayed as stable investors, the recent literature suggests that this orientation may have begun to change (Inoue 1999; Yasui 1999). Our finding that ownership by financial institutions is positively related to dividend levels and accounting profits supports this view insofar as these associations are traditionally associated with market investors. At the same time, our finding of a positive association between share ownership by financial institutions and capital expenditures suggests that financial institutions still favour corporate growth strategies more than market investors. In this regard, our findings suggest that Japanese financial institutions are benefiting from their shareholdings in two ways — through the receipt of dividends and through expanding load volumes. Such a finding indicates that resources are being transferred from client firms to bolster the financial standing of financial institutions with which they have close ties. Traditionally, the flow of resources has been primarily in the opposite direction. In this regard, Japanese banks have frequently been portrayed as conveyors of resources and organizers of bailout packages for troubled client firms (e.g. Hoshi et al. 1991). In these difficult times for Japanese financial institutions, client firms may be the conveyers and financial institutions the beneficiaries of income redistribution (Lincoln et al. 1996; Gedajlovic and Shapiro 2002).

The changing role of Japanese financial institutions as well as the increased equity holdings of market shareholders relative to stable investors (Fukao 1999) suggest that Japan's system of governance is currently at a crossroads (Nakamae 1998; Dore 1998). Proponents of global convergence suggest that Japanese corporate governance is in the midst of a transition to a system more closely resembling the arm's length approach characteristic of the US and the UK (Yoshikawa and Phan 2001). On the other hand, significant cross-shareholdings and robust inter-corporate networks characteristic of Japan's traditional approach to governance remain salient features of its enterprise system (Lincoln et al. 1998; Gedajlovic and Shapiro 2002). As such, an outstanding question is whether apparent changes represent a short-term diversion from deeply rooted traditional business norms (Dore 1998) caused by episodic stresses on Japan's financial institutions, or whether they are indicators of more profound secular changes. This open question can only be informed by time and subsequent research.

Notes

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1 Since there is some evidence in the literature suggesting that the relationship between insider share ownership and financial performance is non-linear in nature (Morck et al. 1988; Stulz 1988), we evaluated this possibility by estimating a model containing a quadratic term as well as by estimating a model using the piecewise regression technique used by Morck et al. (1988). No observable relationship between insider ownership and ROA was found using either of these estimation approaches.

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