

**A Clash of Capitalisms:**

**Foreign Shareholders and Corporate Restructuring in 1990s Japan**

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#### **ABSTRACT**

This paper examines the conflict between stakeholder- and market-based business systems that resulted from an increase in foreign portfolio investment in the Japanese economy in the 1990's. As foreign institutions, which were more interested in investment returns than in long-term relationships, replaced domestic shareholders, one of the fundamental pillars of Japan's stakeholder capitalism began to crack, and Japanese firms began to adopt practices more characteristic of Anglo-American market economies. In an analysis of 1626 listed Japanese firms between 1990 and 1997, we found that foreign shareholders increased a firm's propensity to downsize and divest assets. The effect of foreign shareholders was strongest among firms less integrated into the existing Japanese system—those with lower levels of shareholding by domestic corporations and financial institutions. There is little evidence that foreigners exerted pressure directly through shareholder activism. Rather, as firms' resource dependencies shifted from domestic to foreign capital, their behavior shifted accordingly.

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The impact of global markets for capital, products, labor and information on national economic systems ranks among the most critical issues in the social sciences today. While a long tradition of research has predicted an increasing similarity of organizational forms, business practices, and market structures in the face of advancing technology and intensifying competitive pressures (Bell, 1973; Kerr, Dunlop, et al. 1964; Coffee, 1999), other scholars highlight the improbability of such convergence. They argue that a nation's economic structure is the product of a set of complementary institutions, including the state, financial infrastructure, and social system; and consequently, business systems vary widely across the globe (Hall and Soskice, 2001; Hamilton and Biggart, 1988; Whitley, 1992; Streeck and Yamamura, 2001). Research on regional and national economies demonstrates that decades of global trade, multinational corporations, and rapidly flowing information has done little to suppress the rich diversity of business systems across continents (Guillen, 2001; Berger and Dore, 1996).

One of the sharpest distinctions among business systems is between the market economies of the Anglo-American countries, and the stakeholder economies, as typified by Germany and Japan (Hall and Soskice, 2001; Albert, 1993; Streeck and Yamamura, 2001). At the core of this distinction are different systems of corporate finance and corporate ownership. The Anglo-American system is based on dispersed shareholders and equity-based finance. In contrast, stakeholder business systems feature debt financing, concentrated shareholders, and tight interconnected networks between firms, their trading partners and financial institutions. These different financial systems are closely linked to differences in employment policies and

firm strategies. The Anglo-American system features highly liquid labor markets, an external market for skills, and an emphasis on profitability over growth, while stakeholder systems are built around internal labor markets, development of firm-specific skills, and an emphasis on growth over profits.

Japanese and German performance in the postwar economy demonstrated that stakeholder business systems had distinct advantages: in promoting growth, developing skills, and refining manufacturing processes (Hall and Soskice, 2001). Some writers even advocated that the US and the UK adopt stakeholder systems (Albert, 1993; Dore, 1987). In the early 1990's, however, increasing globalization of capital began to undermine the very foundations of the stakeholder systems of business. Institutional investors, especially those from the Anglo-American economies, increasingly looked beyond their own national borders for investment opportunities (Useem, 1998). Between 1990 and 1998, Americans increased their holdings of foreign shares from \$197.3 million to \$1.4 trillion (Steinmetz and Sesit, 1999) and much of this went to non Anglo-American economies. During this period, for example, foreign ownership in Japanese stocks increased from 4 to 10% of all publicly listed shares. Foreign ownership continued to increase to levels of around 20% by 2001 (Tokyo Stock Exchange, 2001). Concurrently, the strong banking systems that supported the stakeholder systems declined. Large firms increasingly moved from bank debt to capital markets. In Japan, a banking crisis weakened the banks, and caused them to sell off large portions of their holdings of firm shares (Hoshi and Kashyap, 2001), while in Germany, leading banks shifted their strategies from relationship banking towards investment banking and capital markets.

This globalization of investment capital brought market and stakeholder-based systems of capitalism into direct contact. What was the result of this interaction? The Economist, a strong proponent of market-based capitalism proclaimed the end of stakeholder capitalism: “The

[German and Japanese] model is itself quietly being dismantled. For as an equity culture has spread in Germany, France and even in Japan and Italy, these countries have been inexorably evolving in an American direction” (Economist, 2001). Researchers on business systems, however, have argued that change is not so easy. Business systems consist of a set of closely linked, complementary institutions, and a change in one part of the system does not mean wholesale transformation (Hall and Soskice, 2001; Aoki, 2001). It is difficult, however, to believe that foreign capital has had no influence on change. With their growing investments abroad, institutional investors, with no interest other than to maximize returns for their investors, increasingly replaced long-term, patient shareholders. Firms with foreign shareholders simultaneously confronted two systems of business, and two very different sorts of pressure. How did they respond?

This paper explores this question in a study of 1,626 publicly listed Japanese firms between 1990 and 1997. We examine the effect of foreign ownership on downsizing and asset divestiture, and how existing patterns of ownership, by Japanese financial institutions and corporations, moderated the effect of foreign shareholding. Foreign influence did not occur in a vacuum—rather, foreigners encountered existing elements of Japan’s stakeholder system. We are thus interested in how the interaction between these two systems shaped firm behavior. Japan is a particularly interesting setting for research on the confrontation between two business systems for a number of reasons: the Japanese system contrasted so sharply with the Anglo-American system, the influence of foreign investors increased dramatically during the 1990’s, and firm-level data on foreign investment in Japanese firms is widely available. Downsizing and asset divestiture are particularly interesting practices to study, as they represent the main points of contention between Japanese and Anglo-American systems. In Japan, the company was considered a community, with lifetime employment and increasing opportunities for core

employees a primary objective (Dore, 1973). In the US firm, in contrast, downsizing had become a legitimate and effective means to deliver further value to shareholders (Budros, 1997).

Similarly Japanese firms valued growth over profitability or share price (Ablegga and Stalk, 1985) while US firms in the 1980's and 1990's showed increasing willingness to sell off and reconfigure assets to improve the return on shareholders' investments (Davis, Diekmann et al., 1994).

We argue that foreign investors exerted their influence on Japanese firms due to shifting resource dependencies for capital, rather than direct pressure. We demonstrate that firms more dependent on foreign capital—those with a larger percentage of foreign shareholders and with a high reliance on foreign markets—were more likely to respond to foreign influence through downsizing and asset divestiture. Firms more closely integrated into the existing Japanese system through existing banking and corporate relationships, as well as through business group membership, were less susceptible to foreign influence. Our analyses indicate that globalization of capital is leading to some degree of convergence in business practices, though mainly among those firms already less integrated into local business systems.

While our research is set in Japan, its implications reach across the study of institutional and organizational change in a global economy. Our questions, of how global capital affects firm behavior, and what happens when foreign investors bring market-based capitalism to a stakeholder system, have important implications for understanding organizations. While organizational theorists have long focused on the organizational change, they have tended to focus on domestic pressures. Developing theory and gathering empirical evidence on how firms respond to the pressures of global markets—be it for capital, products, or ideas—is a critical task for organization theorists. This paper seeks to contribute to this agenda.

## **BACKGROUND**

Japan's distinct path of development has been a rejoinder to predictions that economies across the world would become more similar in the process of economic development. Decades ago, in one of the first systematic studies of the Japanese corporation, James Abegglen argued strongly against convergence, noting "... industrial organization in Japan has followed a different course from that of the United States; yet it has also achieved outstanding results. Indeed, it seems likely that it is as a consequence of having developed a different, Japanese approach to organization that Japan has accomplished the industrial success that it has" (Abegglen 1969, p. 100). By the 1980's, as Japan began to overtake other developed economies in a number of industries, widespread agreement had emerged: Japanese economic institutions differed in many respects from those of US and European industrialized nations and yet were highly effective.

Scholars, in a rich outpouring of research, sought to explain the particular historical, political, and institutional circumstances leading to the development of the Japanese economic system (see for example, Clark, 1979; Cole, 1979; Gordon, 1985; Johnson, 1982; Westney, 1987). They highlighted a complementary system of employment practices, industrial organization, corporate ownership and finance, and state policy that linked together to form the Japanese system. Large Japanese firms offered a system of "welfare corporatism" (Dore, 1973), combining permanent employment, age-based compensation and promotion, and enterprise unionism. Industrial organization was characterized by intercorporate groups of firms linked through long-term, partially exclusive trading relationships and capital flows (Gerlach, 1992). Firms developed and implemented strategy based on long-term goals, and sought to maximize market share and growth, rather than profits or share price (Abegglen and Stalk, 1985).

This Japanese variant of capitalism balanced the interests of multiple stakeholders: employers, creditors, trading partners, and finally, shareholders (Clark 1979; Aoki 1988). The fact that they came last was of little concern to most shareholders: they had other interests in the firm, and were concerned about the broader relationship, rather than their return on investment. In the late 1980's, banks and other financial institutions held about 40% of Japanese publicly listed shares. While the law forbid any single bank from holding a stake of greater than 5%, banks combined with closely affiliated trust banks, insurance companies, and other affiliated financial institutions to assure that shares remained in friendly hands. Banks made money through corporate lending and fees, rather than share appreciation. Other corporations held approximately 25% of shares in the late 1980's, often in the form of cross-shareholding. These shareholding stakes often cemented long-term relationships between a firm and its buyers, distributors, parts suppliers, and other product and service suppliers. While the stake of a single firm was often not high and the concentration of shareholding in Japanese firms was low (La Porta, Lopez-de-Silanes et al., 1998), a firm's shares tended to be held by a number of friendly firms, often members of the same business group.

The Anglo-American system contrasted sharply with the Japanese system. Firms relied heavily on capital markets rather than on close main bank relationships. Corporate ownership was highly dispersed, and the majority of shareholders were institutional or individual investors. Institutional ownership increased dramatically during the 1980's and 1990's. In 1985, institutional investors owned about 43% of the shares of the 1,000 largest US companies, while individuals owned 57%. By 1997, those positions had reversed; institutions owned 60% and individuals only 40% (Useem, 1996). The increase in institutional participation was accompanied by an increased in shareholder activism. Investors showed their preferences through exit—average share turnover per NYSE listed firm increased from 12% in 1960, to 46%

in 1990 and 94% in 2001 (Byrne, 2002). They also exercised influence through voice—publicizing firms that did not meet their expectations, meeting with CEO’s, and exercising their voting rights. An active hostile takeover market also made it easier to depose managers who strayed too far from the interests of shareholders. While the takeover market had virtually disappeared by the end of the 1980’s, by the time it was over, more than a third of the companies in the Fortune 500 at the beginning of the decade had ceased to exist as independent entities (Davis and Stout, 1992).

By the 1990s, it was universally accepted by US managers that the fundamental purpose of the corporation was to “create shareholder value.” For US firms, that has translated into a set of practices, such as break up of conglomerates and the pursuit of “focus” (cf. Davis and Robbins 2002). Downsizing in the 1980’s increased, as a means to refocus firms and increase responsibility to shareholders (Budros, 1997). As documented by Useem (1996), the system of governance now in place in the US can be described as “investor capitalism.” Though there is occasional lip service paid to the need to consider and weigh the interests of all the various stakeholders of the firm, “the range of constituencies that matter has been narrowed to only one” (Davis and Robbins, 2002).

**Investor capitalism moves abroad** In the 1990’s, institutional investors increasingly added international stocks to their portfolios. Fresh from their victories in the US, these investors brought their calls for investor capitalism around the world (Useem 1998; Steinmetz, 1999). CalPERS (California Public Employees Retirement System), one of the most active and vocal institutional investors, called for economies around the world to adopt practices more consistent with US investor capitalism. For example, CalPERS’ recommendations for Japan called for an increased focus on shareholders:

“Best governance practices in Japan should include elements that strengthen management accountability to corporate owners through the director-shareholder relationship...In order to attract new investors, particularly from overseas, Japanese corporations will need to demonstrate that corporate assets are being managed in the interests of the company and its owners, not in the interests of a select group of shareholders or stakeholders. Improvements in corporate governance which increase the emphasis on long-term returns to shareholders will increase the marketability and attractiveness of a company’s shares and, by increasing share value, will benefit inside shareholders as well as outsiders” ([calpersgovernance.org/principles/international/japan/page03](http://calpersgovernance.org/principles/international/japan/page03) 9/22/99).

For CalPERS, the term “corporate owners” clearly meant shareholders. And the notion that shareholders were a firm’s owners represented a sharp break from Japan’s stakeholder system. In the Japanese system, the “marketability and attractiveness of a company’s shares” was of secondary interest. The entrance of CalPERS and other foreign institutional investors set the stage for a clash between systems.

Of course, making pronouncements about shareholder value and actually influencing firms to make a difference are two different things. Institutional investors such as CalPERS, however, had a number of ways to make a difference. First, foreign investors had an inordinate influence on share prices during this period. Foreign shareholders were much more active in buying and selling shares than Japanese investors (except the banks, which were net sellers). And, according to an IR manager for a major company, Japanese investors often followed foreigners’ moves in and out of stocks (interview, 7/2000). While share price was not a main focus of attention for Japanese managers during much of the post-war period, share price was gaining increasing attention. Equity linked finance had become increasingly important during the

1980's, as firms increasingly turned to equity linked convertible bonds and bonds with warrants. While equity financing decreased during the early 1990s, it began to increase again in 1996, 1997, and 1998 (Hoshi and Kashyap: p. 240). In the mid-1990s, Japanese managers did not expect to remain mired in an ongoing regression—in 1995-1996, economic prospects had been looking better. Thus, it is plausible that executives expected to continue to use equity finance in the future, and increasingly, kept an eye on share price.

Japanese managers were also concerned about hostile takeovers. This threat was not an immediate one—hostile takeovers in Japan were rare during this period, and remain rare even today. Nevertheless, there was concern that Japanese firms would soon find themselves on the receiving end of a hostile takeover bid. In the second half of the 1990s, for example, Toyota began to increase its equity stakes in affiliated suppliers, a move, it claimed, designed to keep their shares out of the hands of foreigners (Shirouzu, 1999). The head of investor relations at Sony said that concern for hostile takeover led it on a program of restructuring and reform in its organizational structure and corporate governance. Sony, he said, was concerned about its relatively low market capitalization. A low share price, combined with a high level of foreign investors (which at Sony hovered near 50%), was a volatile combination (speech at American Chamber of Commerce, December 2001). Sony and other companies feared that in the event of a tender offer, foreigners would sell to the highest bidder, unlike stable and friendly Japanese financial institutions and corporations.

While there was no active shareholder movement in the 1990s, foreigners also exercised influence through voice. Japanese firms initiated investor relations activities directed towards foreigners (investor relations for domestic investors began somewhat later). Senior Japanese managers began to meet with the big U.S. funds, and learned of their concerns first hand. A former executive in a foreign investment firm noted that Japanese managers became more aware

of what foreigners wanted. “When they see foreign ownership on their share register moving from 5% to 10% to 20%, they feel a strong psychological pressure to pay attention to corporate governance (interview 6/2002).” To these managers, corporate governance implied Anglo-American practices, such as downsizing, and other types of restructuring. In our own interviews with Japanese executives, we also found that executives were extremely aware of how much of their shares were owned by foreigners.<sup>1</sup> While they insisted that foreigners had done little to exert direct pressure on them, they admitted that they were increasingly making decisions with foreigners in mind.

Foreign ownership also gave firms a justification for taking measures that were distasteful and likely to be criticized. The best-known example of this function of foreigners was the takeover of Nissan by Renault in 1999. Nissan, under the leadership of Carlos Ghosn, a Renault executive, proceeded with downsizing, selling off of related businesses, and severing contacts with long-term suppliers. Both people inside Nissan and in the Japanese business community noted that only a foreigner could have done this, and such behavior would not have been accepted from Japanese managers, unless they were under severe foreign pressure.

## **HYPOTHESES**

The objective of this paper is to examine the degree to which foreign institutional investors caused Japanese firms to adopt practices consistent with Anglo-American investor capitalism, and to assess the degree to which foreign influence was tempered by domestic institutions, of institutional and corporate shareholding, and business groups. One challenge in

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<sup>1</sup> One of the authors conducted interviews with approximately 50 corporate executives, institutional investors, and government officials involved in the Japanese market, between 2000 and 2002. This was part of a larger project on corporate governance reform and changes in the Japanese business system.

studying the effect of foreign investors is that, as research on corporate governance in the US has revealed, firms adopt all sorts of strategies to conform to shareholder demands in appearance, but not in substance (Westphal and Zajac, 1998). In this paper, we examine two practices that are substantial rather than symbolic: downsizing, as measured by reduction of total number of permanent employees, and divestiture of assets, as measured by reduction of fixed assets.

It is difficult to think of a management practice less consistent with Japanese social norms than downsizing. Stable long-term employment within large firms was a core element of Japanese economic and political policy for decades. In contrast, the 1980s saw an enormous wave of downsizing among US firms. While employment reductions in response to extremely bad performance had previously been common, it was novel for reasonably profitable firms to downsize in the pursuit of increased profits. It was an indication of the growing ascendancy of shareholders over stakeholders that the pursuit of “increased shareholder value” was accepted as a legitimate justification for downsizing (Budros, 1997). Yet by the 1990s, it was clear that such strategic downsizing was an established and accepted part of normal corporate strategy (Useem, 1996).

The divestiture of assets is another form of restructuring that was a centerpiece of shareholder activism. In the United States, the emphasis of shareholder activism has been on strategic focus on spinning off unrelated diversified divisions (Davis and Robbins, 2002). Since Japanese firms were more focused, and had long spun off unrelated, or marginally related operations (Ito, 1995), the pertinent problem was excess assets in the form of overcapacity or real estate. Yet after years of gauging their progress in terms of corporate growth, it was difficult for Japanese management to divest productive assets “merely” because they were underperforming. A manager at a large Japanese firm that had been recently taken over by a US company recounted to one of the authors an example of this sort of discipline. This firm had

owned a hotel in a very valuable tourist spot, and though it was not losing money, neither was it producing large profits for the firm. One of the first acts of the US management was to sell the hotel. The manager claimed that the idea of divesting this asset had not occurred to the Japanese management, and if it had, would probably not have been considered seriously.

Firms with foreign shareholders were more likely to downsize and divest assets for several reasons. First, downsizing and selling off under-performing assets were consistent with the ideology of investor capitalism and signaled effective management to foreign shareholders. Second, downsizing and asset divestiture were moves to increase operating efficiency and ensure proper levels of return to a firm's equity investors. Japanese firms suffered from excess employees—after a bout of over-hiring during the bubble economy in the late 1980's. Estimates of excess employees reached six million (Eisenstodt, 1995). During these over-heated bubble years, Japanese firms had also over-invested in real estate and production capacity. This exacerbated already low levels of productivity across many industries. For example, McKinsey & Co. estimated that productivity of capital in Japan, across all industries, was 60% of that in the US, while labor productivity was about 70% (McKinsey, 2000).

We predict that the higher the levels of foreign ownership a firm has, the more likely it will take action to become leaner, by downsizing or divesting assets.

H1: The greater the percentage of a firm's shares held by foreign investors, the more likely it is to downsize or divest assets.

In Japan, there was a distinct difference between wholly domestic and export-oriented firms. Export oriented-firms must compete on a global basis, and were less likely than domestic firms to be protected by a cocoon of regulations. Export oriented firms also had considerable

infrastructure overseas—sales offices, and, increasingly, manufacturing facilities. These firms were likely to be looking to foreigners for capital to support their day-to-day operations as well as their capital investments. They were also likely to be pursuing acquisition and joint-venture strategies with domestic partners. Thus, export-oriented firms were particularly concerned about the good will of foreign investors. Toyota, for example, in 1999 announced that it would list on the NYSE and London Stock Exchanges, as a means not only to increase its exposure to foreign capital, but also to improve its image and name recognition among foreign investors (Nikkei, 1999). Exporting firms were thus particularly dependent on foreign capital, and with their global exposure, are more likely to be aware of demands of foreign investors. Consequently,

H2: The more a firm exports, the stronger the relationship between foreign ownership and downsizing and asset divestiture.

Foreign investors, however, came face to face with an existing set of institutions. The Japanese economy in the 1990's experienced a slow stagnation, rather than collapse, and therefore existing institutions remained intact. The banking system, though weakened, remained one of the cornerstones of Japan's stakeholder economy. Although the law limited a single bank's holdings to no more than 5% of a firm's shares, the combination of banks, affiliated trust banks, insurance companies, and other concerns concentrated a considerable percentage of shares in the hands of financial institutions. A bank made most of its money through loans and various banking fees, and held shares to manage its overall relationship with a firm, rather than for dividends (which were miniscule in Japan) or for appreciation (since stakes were rarely sold). Consequently, the bank's overall interest lay in preventing defaults, and fostering stable growth so that a firm repaid its loans and continued to borrow in the future. Banks protected their

interests through careful monitoring of firms, and, if a firm was in distress, mounted a bailout by providing managerial and financial resources, and orchestrating the rescue efforts of other shareholders (Kester, 1991).

Firms with high equity holdings by financial institutions were less susceptible to the influence of foreign shareholders for several reasons. First, firms with high levels of equity holdings by banks had better access to financing and were assured of a lender of last resort. Researchers have demonstrated that firms with close relationships to main banks recovered more quickly from financial crisis, as main banks were more willing to provide them with liquidity (Hoshi and Kashyap, 2001). Financial shareholders were also less likely to sell their shares in the case of a takeover bid or other crisis, and thus made a firm less susceptible to the fickle nature of foreign investors. A good example of the value of stable shareholders was seen in 2002, when Yoshiaki Murakami, manager of an activist investment fund (Japan's only activist domestic fund), purchased an 11.9% stake in a medium-sized clothing firm, Tokyo Style. Tokyo Style had a cushion of cash larger than its market capitalization, sitting in bank deposits. Murakami demanded that the firm pay its investors a 500 yen dividend, buy back its shares, and appoint two Murakami-endorsed outside directors. The proposal was defeated, barely, as friendly banks and affiliated companies came to Tokyo Style's aid, while foreign investors supported Murakami's demands (Singer, 2002). We predict that a firm with a large percentage of ownership by financial institutions will be less susceptible to foreign influence.

H3: The greater the percentage of a firm's shares held by financial institutions, the weaker the relationship between foreign ownership and downsizing and asset divestiture.

Shareholdings by related corporations also provided an important base for the Japanese system of capitalism, though there is some debate as to the exact role of these shares. Some scholars argue that they were a means to prevent hostile takeovers while others assert that they were a means to monitor and govern interfirm transactions (Kester, 1991; Flath, 1996; Gilson and Roe, 1993). Still others argue that their role was largely symbolic, and that they signified particularly close and long-term business relationships (Gerlach, 1992). Whatever the exact function of corporate shareholding, it was not to maximize return on investment, but rather, to manage long-term commitments.

As the Tokyo Style case indicates, corporate shareholders also enabled a firm to resist the demands of foreigners. Firms with corporate shareholders had a strong core of stable shareholders who would hold their shares, even as the foreigners threatened to sell, thus protecting a firm from takeover. Corporate shareholders also helped firms with access to financing, either through management of accounts payable and receivable (see Hodder and Tschoegl, 1985) or through directly intervening with banks. Corporate shareholders also offered assurance of long-term, stable transactions, and assistance if a firm encountered financial crisis, in order to preserve ongoing business relations. Thus,

H4: The greater the percentage of a firm's shares held by other corporations, the weaker the relationship between foreign ownership and downsizing and asset divestiture.

Japanese firms were also embedded in networks of business groups (Gerlach, 1992). There were, in very broad terms, two types of corporate group: intermarket groups, or *kigyō shudan*, comprised of large firms in diverse industries and vertical groups, of manufacturers and their affiliated suppliers and distributors. Dense webs of equity, bank loans, interlocking

directorates, joint projects and other social and business relationships linked group members.

These corporate groups valued stable performance and ongoing relationships at the expense of superior financial gains (Lincoln, Gerlach, et al., 1996; Nakatani, 1984). A member of a business group was likely to have a large percentage of its shares in the hands of friendly financial institutions and other group corporations, and thus, was even more able to resist the pressures of foreigners.

H5: The relationship between foreign ownership and downsizing and asset divestiture will be weaker in companies that are members of business groups.

## **DATA AND METHODS**

The data set consists of 1,626 publicly listed companies in 1990-1997: machinery; electric and electronic equipment; shipbuilding and repairing; motor vehicles and auto parts; precision equipment; construction; wholesale trade; retail trade; foods; textile products; pulp and paper; chemicals; drugs; petroleum; rubber products; stone clay, and glass products; iron and steel; and non-ferrous metal and metal products. We included only firms that were publicly listed in all years of this period, omitting 32 firms that were listed in 1990 but subsequently exited from the sample. Exits were almost all due to merger or acquisition or delisting rather than bankruptcy. Since only a very small percentage of the firms in the sample exited during this period, selection bias is unlikely to be a problem. We also eliminated from the sample 12 firms in which a single foreign corporation had a controlling stake (no firms had controlling stakes by institutional investors). In firms that are controlled by foreigners, these foreign owners are able to impose their will directly. Since the foreign owner has the last word, the interaction between financial and corporate shareholders and foreign shareholders is likely to be irrelevant. (We

estimated our models on the full sample as well, and found that including these foreign-controlled companies had virtually no effect on the outcomes of interest.)

**Dependent variables** We analyzed two measures of *downsizing*. The first is a dichotomous variable that equals 1 when a firm decreased its number of permanent employees by 5% or more between year *t* and year *t-1*. Five percent represents a substantial cut in the labor force, and is large enough to be more than a random fluctuation in employment level. The second measure of downsizing is equal to 1 when a firm decreased its number of permanent employees by 10% or more between year *t* and year *t-1*. A firm may reduce employees through early retirement, reduction in hiring, outplacement or firing. Although our data do not distinguish between types of employment reduction, it is safe to say that outright firings are relatively infrequent. Japanese firms are far less likely than U.S. firms to use firing as a means of labor force reduction (Mroczkowski and Hanaoka, 1997). Although firing was not a common technique of downsizing, our measure of downsizing represents substantial changes in the number of permanent employees (see Ahmadjian and Robinson, 2001 and Colignon and Usui, 1996, for discussions of methods of downsizing during the 1990s). Our measure of downsizing captures actual labor force reductions, not announcements of intentions to downsize. Although researchers on downsizing in the United States and Japan have used reports of downsizing events from the mass media (Lee 1997; Budros, 1997) public announcements of downsizing in Japan do not necessarily capture actual downsizings. A firm may announce downsizing and not go through with it, or try to keep a low profile and downsize without an announcement. We believe real reductions in labor force are better measures of downsizings than public announcements.

We measured asset divestiture in a similar way. The first measure is a dichotomous variable that equals 1 when a firm decreased its total tangible fixed assets by 5% or more

between year t and year t-1. The second measure equals 1 when a firm decreased its total tangible fixed capital by 10% or more between year t and year t-1.

**Independent variables** *Foreign ownership* is the percentage of total shares outstanding held by non-Japanese investors. The Nikkei NEEDS tape did not specify whether a foreign investor was an individual, an institutional investor, or a non-financial corporation. *Nikkei Kaisha Nenkan*, a printed compilation of corporate financial information does report the identities of the top ten shareholders. We examined these reports and found that foreign investors are mostly institutional investors. As noted previously, foreign corporations had controlling stakes in 12 firms and there were relatively few firms in which foreign corporations held top 10 ownership positions. We found that most of the foreign institutional investors were from Anglo-American economies (largely from the U.S. and the U.K.). To test whether the effect of foreign ownership is stronger among firms with high exports, we included the ratio of *exports to sales*.

*Financial ownership* is the percentage of shares outstanding held by Japanese banks, trust banks, and life and casualty insurance companies. *Corporate ownership* is the percentage of total shares outstanding held by other corporations. The omitted category of share ownership is predominantly ownership by individuals. In the 1990s, individuals were an important group of shareholders, holding approximately one third of all shares. *Big six group membership* takes the value of 1 when a firm was a member of the presidents' council of either the Sumitomo, Mitsubishi, Mitsui, Fuyo, Sanwa, or DKB groups (Gerlach, 1992).

We measured corporate performance in three ways. *Return on assets*, profits before taxes and extraordinary items divided by total assets, has been used to measure corporate performance in numerous analyses of Japanese firm performance (see Kaplan, 1994; Lincoln et al., 1996; Nakatani, 1984). Since Japanese managers also valued growth as an important corporate objective and performance metric (Abegglen and Stalk, 1985), we included *annual change in*

*sales* between year  $t$  and year  $t-1$ . Since repeated negative profitability is a particularly strong signal of poor performance to Japanese managers, we also included a dummy variable that equals 1 when a firm experienced two consecutive periods of negative profitability.

**Controls** To control for *industry effects*, we included the industry average for each dependent variable. These industry averages were calculated by taking the mean of the dependent variable across all firms in the same industry, excluding the focal firm, for a given year. We controlled for firm size with the *log employees* in the case of downsizing, and *log of total assets* in the case of asset divestiture. In analyses of downsizing, we controlled for wage level, calculated by dividing total wages by number of employees, standardized by industry. In analyses of divestiture, we controlled for capital intensity, calculated by dividing tangible fixed assets by employees.

**Analytical approach** Our data set consisted of a panel of 1,626 firms observed over eight years. Downsizing is an event that may or may not occur in any given year and may occur in multiple years. We employed discrete-time event history methodology (Allison, 1984; Yamaguchi, 1991). We used a logit model to estimate the hazard of a downsizing event in a given year in a pooled sample of each organization observed during each of the eight years. The discrete-time model is appropriate when information on the exact timing of an event is not available, and multiple organizations report the same event as occurring at the same time (i.e., in the same year). In most cases, discrete and continuous time models produce similar results (Allison, 1984). It is also important to control for unobserved heterogeneity between firms because downsizing was a repeated event. Some firms downsized more than others, and if these different propensities to downsize were due to unmeasured firm-specific factors, statistical tests of resulting coefficient estimates could be inaccurate. Following the recommendation of Allison (1984), we included a variable that measures each firm's cumulative history of downsizing since

1985. We also report standard errors derived from a robust estimator of variance (White, 1980). This estimator allowed us to obtain consistent standard errors even when the correlation structure assumed by a logit model is violated. Using this estimator allows us to relax the assumption that observations within the same cluster (in our case, the same firm observed across the eight years) are uncorrelated.

## **FINDINGS**

Table 1 reports descriptive statistics for all variables. Table 2 reports bivariate correlations. Figure 1 shows downsizing rates over time, and Figure 2 shows rates of asset divestiture over time.

Table 1 about here

Table 2 about here

Figure 1 about here

Figure 2 about here

Table 3 reports discrete event time series analyses for 5% or greater downsizings. Model 1 is a baseline model, including firm characteristics, industry downsizing rates, and previous firm experience in downsizing. This model indicates that downsizing became more prevalent over time, varied significantly by industry, and was positively related to a firm's past experience in downsizing. Less profitable and slower-growing firms were more likely to downsize, while older firms and firms with higher levels of exports were less likely to do so.

Table 3 about here

Model 2 adds percentage of foreign ownership. Consistent with H1, the more foreign ownership, the more likely a firm was to downsize. Model 3 adds an interaction term between percentage foreign ownership and exports. Supporting H2, exporting firms were more susceptible to foreign influence in downsizing.

Model 4 adds measures of a firm's integration into the existing Japanese system: financial ownership, corporate ownership, and membership in a big six corporate group. Financial and corporate ownership had no effect on a firm's propensity to downsize, while members of big six corporate groups were more likely to downsize. Model 5 introduces an interaction term between foreign ownership and financial ownership. As predicted by H3, the estimate is negative and significant. The higher the financial ownership of a firm, the less influence foreign owners had. Figure 3 shows the relationship between foreign ownership and downsizing at levels of financial ownership of 10% and 30%. It demonstrates how the effect of foreign ownership decreases as financial ownership increases.

Figure 3 about here

Model 6 adds an interaction between corporate ownership and foreign ownership, and supports H4. The more corporate ownership a firm had, the less influential were foreign shareholders. Figure 4 shows the relationship between foreign ownership and downsizing at levels of 10% and 30% corporate ownership. H5 was also supported, as shown in Model 7. Members of big six groups were less susceptible to foreign influence in downsizing. Model 8 includes all three interactions, and indicates that financial ownership, corporate ownership, and big six group membership had independent effects on reducing foreign influence.

Figure 4 about here

Table 4 presents a similar set of analyses for above 10% downsizings. Foreign ownership had a large and significant effect on downsizings of this larger magnitude. While the interaction between foreign ownership and exports was positive and generally consistent with the results for over 5% downsizing, it was not significant. Financial ownership increased a firm's propensity to conduct large downsizings, as did membership in a big six corporate group. As in the case of 5% downsizing, financial ownership decreased the foreign influence, although the estimate was no longer significant. Corporate ownership had a very strong dampening effect on foreign influence, while there was no effect of big six group membership.

Table 4 about here

Table 5 presents results for asset divestitures. Foreign ownership increased a firm's propensity to divest assets, although the significance level was low. Contrary to H2, foreign ownership was not more influential in exporting firms. Model 5 indicates that consistent with H3, financial ownership decreased the influence of foreign ownership on asset divestiture, though significance level was relatively low. Contrary to H4, the sign of the interaction between corporate ownership and asset divestiture was positive. Big six group membership appears to have had a negative interaction with foreign ownership on asset divestiture, though the sign was not positive. Table 6 presents results for greater than 10% divestiture of assets. The results were generally consistent with greater than 5% divestiture. In the case of 10% divestiture, however,

the interaction between financial and foreign ownership was significant, providing stronger support of H3, that financial ownership decreased the effect of foreign ownership on downsizing.

Table 5 about here

Table 6 about here

**Ruling out alternative explanations** Additional analyses (available from the authors) allowed us to rule out alternative explanations for the strong effect of foreign ownership. One alternative explanation of our results is reverse causality: firms that downsized and divested assets attracted greater levels of foreign investment. If this was the case, we should be able to detect an increase in foreign ownership among firms that have downsized or divested assets. To explore this possibility, we compared the increase in foreign ownership between year  $t$  and year  $t+2$  between the entire sample and the sub-sample of firms that had downsized in the previous period ( $t-1$ ). There was no significant difference in the increase in foreign ownership between the two samples. We also estimated models in which change in foreign ownership was the dependent variable, and downsizing in the previous year an explanatory variable. According to these regression analyses, downsizing in the previous period had no effect on subsequent change in foreign ownership.

A common causal factor may also explain the relationship between foreign ownership and downsizing and divestiture, if foreign investors were more likely to purchase shares in troubled firms that then went on to downsize. To examine this possibility, we compared the increase in foreign ownership over the subsequent two years for a sample of firms with return on assets of less than zero, with the whole sample. Foreign ownership was not more likely to

increase among these troubled firms, indicating that foreigners did not have a higher propensity to buy shares of troubled firms.

We have argued that the foreign investors were largely institutional investors. We removed from the sample the few cases in which a firm was controlled by a foreign corporation (there were no cases in which a firm was controlled by a single foreign institutional investor). Though relatively rare, there were a number of cases in which one of a firm's largest investors (though not controlling investor) was a foreign corporation. In order to assure that the foreign shareholder effect was, indeed, due to foreign institutional investors, and not foreign corporations, we conducted additional analyses (available separately from the authors) in which we included a dummy variable that indicated whether one of a firm's top ten shareholders was a foreign corporation (for a sub-sample of 700 firms). Adding this variable did not change the pattern of results.

## **DISCUSSION**

In the 1990's, divergent business systems came into direct contact as portfolio investors increasingly invested in distant markets. This paper examined the interaction between the Anglo-American market system and the stakeholder system of Japan. We found evidence that foreign investors brought to Japan elements of the Anglo-American system. The greater the percentage of its shares held by foreign investors, the more likely a Japanese firm was to adopt practices inconsistent with its stakeholder system—downsizing and divestiture of assets. Foreign investors were less influential in firms closely tied into the existing Japanese stakeholder system, as members of corporate groups and firms with high levels of financial and corporate shareholding were less likely to respond to foreign influence. In contrast, firms more dependent on foreign markets for their business were more susceptible to foreign influence.

The foreign shareholders in this study were largely institutional investors. Our sample omitted the few cases in which foreign corporations had a controlling stake. Furthermore, we found that compared to ownership by foreign institutional investors, ownership by foreign corporations was relatively rare. While purchases of Japanese firms by foreigners—for example, Renault’s de facto takeover of Nissan—received much publicity in the years after our sample ends, our findings suggest that the effect of foreign investors extends beyond such well-known cases of foreign control. It is the foreign institutional investors—mutual funds, pension funds, and other investment capital—that are bringing business systems into contact, and conflict.

While foreign investors were influential, their influence was conditioned on the degree to which a firm is integrated into the Japanese system. The more of a firm’s shares held by Japanese financial institutions, the less susceptible it was to influence of foreign shareholders. Ownership by financial institutions had a particularly strong effect on greater than 10% divestitures of assets. In this case, financial ownership had a negative main effect on asset divestiture, as well as decreasing the influence of foreigners on asset divestitures. We believe that this reflects the interests of banks. Since financial institutions benefit from a firm’s increasing demands for capital and transactions, they are likely to discourage a firm’s attempts to shrink through disposal of assets. Interestingly, financial ownership has a positive and significant relationship with over 10% downsizing. Other studies have suggested that one of the roles of the main bank in the Japanese system was to facilitate restructuring when a firm’s situation became desperate (Hoshi and Kashyap, 2001). In such cases, banks would do what was necessary to assure that a firm remained solvent and able to repay loans. The positive relationship between financial ownership and large downsizings is evidence that banks were playing this role.

Shareholding by corporations also reduced the effect of foreign ownership on downsizing. Since corporations provided a promise of continued sales, loan guarantees, even promises to buy

shares in case of a takeover, firms with close relationships to other firms were better able to resist foreign pressure. In many cases, corporate shareholders encouraged firms to take on excess employees from their own companies. Equity ties provided a basis for *shukko*, or dispatch of employees between firms (Lincoln and Ahmadjian, 2000). Thus, it is likely that firms with high levels of corporate ownership ignored calls for downsizing, and rather, continued to accept *shukko* from these related companies.

It is puzzling that in contrast to the case of downsizing, corporate shareholders actually enhanced the influence of foreign shareholders for asset divestitures of greater than 5%. We found a possible answer to this puzzle in analyses that examined the early and later periods separately (available from the authors). The relationship between corporate ownership, foreign ownership and divestiture reverses over time. While corporate shareholders weakened foreign pressure for divestiture during the early period, the relationship switches signs in the later period. In the early 1990's, corporate owners did reduce foreign influence on divestiture. As the 1990's progressed, however, divestiture of assets seems to have become increasingly consistent with interests of corporate owners as well. This may be because these corporations were increasingly subject, themselves, to foreign influence, and changed their own investment strategies accordingly. Furthermore, as the economic slowdown persisted through the 1990s, corporations also felt increasing pressure to improve the performance of their affiliates. Auto manufacturers, for example, increasingly placed pressure on their suppliers (whose shares they often held) to streamline their operations and improve efficiency (Ahmadjian and Lincoln 2001).

Members of big six groups were less susceptible to foreign influence. Although the level of significance of this finding was not high, it nevertheless conforms with the pattern of results for financial and foreign ownership, and strengthens our conclusion that the less closely tied a firm was with the Japanese system, the less susceptible it was to foreign influence. It is puzzling,

however, that the main effect of group membership on downsizing was positive, suggesting that group members were more likely to downsize than others. We believe that this is the result of our rather narrow definition of group. Members of presidents' councils of big six groups were at the apex of their groups, and these large and dominant firms were more likely to be able to exert pressure on periphery group members to accept their own excess employees. Thus, they may have been more likely to reduce their labor force because it was easier for them to do so. Our finding that group members were not more likely to divest assets than other firms strengthens this explanation. It was easier for group firms to downsize because they were surrounded by smaller firms that took on their excess employees. Since these smaller firms did not provide the same service for excess assets, we did not find the same relationship between group membership and asset divestiture.

While our findings for interactions between foreign ownership and financial ownership, corporate ownership and group membership were generally consistent, there were also some points of divergence, especially in the effects of financial and corporate ownership. In general, financial ownership seemed to have a greater effect on asset divestiture than downsizing. Corporate ownership, on the other hand, seemed to have a greater influence in reducing downsizing. These patterns are merely impressionistic, and we are hesitant to draw firm conclusions. The fact that the effects of financial and corporate investors differed, however, offers intriguing evidence that "the Japanese system" was not a monolithic institution, but rather consisted of diverse players with diverging interests. While financial shareholders encouraged growth, corporate shareholders were more concerned about maintaining stability and employment levels. These differences merit further research, since they suggest that the effect of foreign shareholders and global capital depended not only on how closely a firm was linked with existing institutions, but, specifically, on which institutions the firm was most closely linked.

Though it is difficult to identify exactly how foreigners exerted their influence, the general pattern of results offers some clues. First, we know from our interviews that foreign shareholders during this time were not active in exercising voting rights or launching proxy battles, and thus, their influence was not due to shareholder activism. Furthermore, our finding that financial ownership, corporate ownership, and group membership all diminished the influence of foreigners also suggests that foreign influence was not simply an excuse that firms used to elicit a sense of crisis. If foreign ownership was simply used as an excuse to justify restructuring, it is difficult to see why financial, corporate, and group membership would make restructuring less likely.

The general pattern of findings is consistent with a resource dependence explanation of influence (Pfeffer and Salancik, 1978). According to resource dependence theory, organizations are more likely to respond to influence of organizations on which they depend for critical resources that have few substitutes. Capital is such a resource, and our paper demonstrates how firms respond to the desires of providers of capital. As capital flows became more global, and foreign investors entered Japan, the resource dependencies of many firms shifted from domestic to international capital. As a consequence, firm behavior began to shift. A number of our results further support this resource dependence explanation. First, firms with a particularly strong dependence on foreign capital—exporting firms—were more likely to respond to foreign influence. Second, firms with other sources of capital and support—those with financial or corporate ownership or group membership—were less dependent on foreigners, and thus, less likely to respond to their influence. Our finding that foreigners exerted influence without making overt demands is further consistent with resource dependence theory. According to this perspective, organizations know quite well where their dependencies lay, and respond accordingly, without the need for explicit demands (Pfeffer and Salancik, 1978).

**Prospects for continued change** Taken together, our findings indicate that the globalization of capital has had a significant and important effect on Japanese firm behavior, and has led Japanese firms to behave in ways more consistent with the Anglo-American system of capitalism, through downsizing employees and disposing of assets. Foreigners have had the greater influence among firms whose linkages to existing institutions are weaker, and whose ties to foreign markets are stronger. What do these results imply for the trajectory and ultimate outcome of change in Japan?

One possibility is that foreigners will continue to have a strong influence among firms that remain less closely linked to the existing set of institutions. If this is the case, there will be an increased bifurcation between firms that are more exposed to foreign capital and adopt more Anglo-American practices, and those that continue to be tied to the Japanese system and maintain business as usual. Other researchers have suggested this potential outcome of globalization (Walsh and Seward 1990; Davis and Useem 1999).

We believe that a more likely scenario is that foreign-influenced practices will spread, as other firms less exposed to foreign influence increasingly imitate these practices. There are a number of reasons why such practices might spread beyond the foreign-influenced sectors of the corporate population. Other firms may observe that downsizing and divestiture of assets have favorable outcomes, and thus learn from the behavior of foreign-influenced firms (Haunschild and Miner 1997). Downsizing and divestiture may spread as a fad, as firms hop on a bandwagon of a popular business practice (Abrahamson and Rosenkopf, 1993). Other research on downsizing in Japan indicates that downsizing spread among firms in the 1990's, moving from smaller and less prestigious firms to larger, older and more prestigious ones as increasing rates of downsizing removed the perceived illegitimacy of the practice (Ahmadjian and Robinson, 2001). This process is likely to continue, making downsizing and asset divestiture more common.

Foreigners may also spread the gospel of investor capitalism to other domestic investors. Our interviews with both investors and investor relations officials from Japanese firms suggest that this has occurred. Increasingly, domestic trust banks, pension funds, and insurance companies are following the lead of foreign investors, and becoming more cognizant of the return on their investments (Nikkei Weekly, 2002). Changes in accounting regulations are also likely to decrease the degree to which financial and corporate shareholders lessen the influence of foreigners. Until 2002, Japanese firms were not required to state their holdings of equity at market value, and thus, they had little incentive to care about performance of those companies whose shares they held. This is no longer true, and it is unlikely that financial and institutional shareholders could continue to suppress a firm's tendency to downsize and divest assets after this regulatory change.

Our analyses, however, also suggest checks on spreading foreign influence. While banks are selling off their shares, bank holdings still remain high, and as the case of Tokyo Style mentioned previously suggested, banks continue to side with incumbent management against foreigners or active domestic investors. While we found that corporate shareholding appeared to have a declining tendency to weaken the effect of foreign investors on asset divestiture over time, corporate shareholding continued to be a check on foreign influence on downsizing. Despite unwinding of some intercorporate cross-holdings, corporate holdings have remained high into the 21<sup>st</sup> century. While changes in accounting standards will make banks and corporations less able to tolerate poor performance in their stock portfolios, remaining social distaste for downsizing and divestiture means that although these practices are likely to spread, Japanese firms are unlikely to reach downsizing and divestiture levels found in the U.S.

**Implications for theory** This paper has a number of implications for understanding globalization, systems of capitalisms, and processes of organizational change. First, it highlights

the role of foreign capital as an agent of globalization. While much research has highlighted the improbability of a global convergence in business practices and economic system, the analyses in this paper offer evidence that such convergence is occurring as institutional investors seek returns in foreign markets. We are not willing to claim that Japan will become exactly like the US, and that business practices around the world are achieving uniformity. On the other hand, we believe that research to date may have underestimated the influences of globalization, especially in the power of global capital to disrupt and transform domestic systems of capitalism.

Our research also offers evidence that systems of capitalism are not monolithic entities, but rather, sets of complementary, interlocking institutions—players with their own, sometimes divergent, set of interests. We saw how these interests met on the firm level, as foreign owners interacted with existing owners for outcomes that differed depending on the existing ownership structure of the firm. It has been suggested that social arenas which fall "between the worlds," in which multiple logics of action are possible, are the windows of opportunity for institutional change (Friedland and Alford, 1991). Our findings demonstrate that change is occurring in the gaps where firms are less embedded in the existing system of institutions.

This paper also has implications for organization theorists beyond issues of globalization. First the analyses highlight the important link between ownership structure and firm behavior. While this link has been one of the fundamental insights offered by researchers on systems of capitalism (Aoki, 2001; Hall and Soskice, 2001), organizational theory has had less to say about this relationship. Our analyses show that ownership patterns differ not only across economic systems, but across firms in the same system, and that these patterns have powerful implications for firm behavior.

Our results further highlight the importance of resource dependencies in determining how institutions affect firm behavior. Our results demonstrate that the institutions that construct a

system of capitalism—its patterns of ownership and corporate finance system--shape a firm's resource dependencies. Shifts in these resource dependencies—from debt to equity capital and from Japanese corporations and financial institutions to foreigners have induced shifts in firm behavior. These shifts in firm behavior—toward greater levels of downsizing and asset divestiture are further changing institutions such as the permanent employment system that comprise the Japanese business system. While neo-institutional theory has focused on institutions as arbiters of legitimacy and cognitive constructions that shape conceptions of proper behavior (Scott, 1995), a long tradition in organization theory, from the work of Selznick (1949) to Thompson (1967) to DiMaggio and Powell's (1983) treatment of coercive isomorphism, has also highlighted how responses to resource dependencies shape the behavior of organizations (Mizruchi and Fein, 1999). Researchers are well advised to take these shifting resource dependencies into account in studies of both globalization and other instances of organizational change.

**Limitations and questions for further research** Like all research, this study has a number of limitations. First, the measures of ownership are very broad, since finer grained data was unavailable. For example, financial owners include banks, trust banks, and life insurance companies. During the period studied in this paper, these different types of financial institutions had similar interests. Life insurance companies, for example, were primary shareholders of banks, and their interests to a large extent overlapped with those of banks. As the financial crisis in Japan progressed and deepened these interests have diverged, and it will be useful to examine the effects of different types of financial institution separately. It would also be useful to differentiate between the strengths of relationships between specific financial institutions and corporations and a given firm. For example, a corporate shareholder that is the main buyer of a supplier's output is likely to have a greater influence than a corporate shareholder whose

business ties are less intense. These data are available in hard copy, and it would be possible, though onerous, to code the identities of specific shareholders and evaluate their business relationships with the firm. We suspect that such finer grained coding of shareholders and relationships would lead to stronger levels of significance in the financial and corporate ownership interactions in our analyses.

More fine-grained measures of resource dependencies would also be useful. A firm's capital requirements—for example, its reliance on equity finance, and rates of investment and growth—are likely to affect susceptibility to influence by foreign shareholders. We predict, for example, that Toyota, which has been known as “Toyota Bank” for its strong cash position and propensity to fund investments internally, has been less influenced by foreign investors than firms that are actively accessing capital markets.

The measures of asset divestiture and downsizing are also limited by data availability. It would be interesting to see if firms with foreign ownership were more likely to conduct downsizing through layoffs, involuntary “early retirement,” or other means of labor force adjustment. While these data are virtually impossible to obtain for a large sample, case studies of a limited set of companies (who were willing to disclose such controversial practices) might be possible.

There may also be other paths through which US investor capitalism has influenced Japanese firm behavior. Firms may learn about different systems of capitalism through foreign experience of their senior managers, foreigners on their boards of directors, and contact with foreign companies in Japan. This research, however, must wait for a few more years. There are still very few foreign directors on Japanese boards, and managers with extensive foreign experience (in particular, MBA's) still have not climbed very high on the corporate ladder.

Finally, while the question of the globalization of capital and its influence on firm behavior is relevant beyond Japan, our research focuses only on Japan, leaving open the question of the generalizability of our findings. We believe that our findings are applicable across national borders. Foreign institutional investors have a growing presence a number of economies that have distinct business systems—Korea, Germany, and France, for example—and we believe that a similar link between foreign investors and firm behavior will exist. More research is needed to compare the influence of foreign investors across economies, to examine the factors that shape this influence, and the conditions under which foreigners are likely to be influential.

**Conclusion** Scholars have catalogued the rich diversity of systems of capitalism in industrialized economies and examined the processes by which divergent political systems, institutional structures, and idiosyncratic paths of development have led to distinct systems of employment, industrial organization, and corporate governance. An accelerating global economy, and a flow of investment capital across national borders is to some degree minimizing these differences. While it is unlikely that US investor capitalism will replace the Japanese or other business systems, the increasing globalization of capital assures that future developments will reflect encounters between divergent systems. A critical task of scholars of organization going forward will be to understand how these heterogeneous elements interact and recombine (Stark, 1996). The developments that we examine in this paper echo a long-standing concern with the conditions under which institutional change is possible.

## REFERENCES

Abegglen, J. C. 1968. "Organizational change." In The Japanese Employee, by R. J. Ballon. Rutland, Vermont, Charles E. Tuttle.

Abegglen, J. C., and G. Stalk, Jr. 1985. Kaisha: The Japanese Corporation. New York: Basic Books.

Abrahamson, E. and L. Rosenkopf. 1993. "Institutional and competitive bandwagons: Using mathematical modeling as a tool to explore innovation diffusion." Academy of Management Review 18: 487-517.

Ahmadjian, C. L. and J. R. Lincoln. 2001. "Keiretsu, governance and learning: Case studies in change from the Japanese automotive industry." Organization Science 12: 683-701.

Ahmadjian, C. L. and P. Robinson. 2001. "Safety in numbers: Downsizing and the deinstitutionalization of permanent employment in Japan." Administrative Science Quarterly 46: 622-654.

Albert, M. 1993. Capitalism vs. Capitalism: How America's obsession with individual achievement and short-term profit has led it to the brink of collapse. New York: Four Walls Eight Windows.

Aoki, M. 1988. Information, Incentives, and Bargaining in the Japanese Economy. Cambridge: Cambridge University Press.

Aoki, M. 2001. Toward a Comparative Institutional Analysis. Cambridge, MA: The MIT Press.

Bell, D. 1973. The Coming of Post-Industrial Society: A Venture in Social Forecasting. New York: Basic Books.

Berger, S. and R. Dore. 1996. National Diversity and Global Capitalism. Ithaca, NY: Cornell University Press.

Bradley, M., C. Schipani, A.K. Sundaram, J.P. Walsh. 1999. Corporate Governance in a Comparative Setting: The United States, Germany, and Japan. Durham, N.C.: Duke University.

Budros, A. 1997. "The new capitalism and organizational rationality: The Adoption of downsizing programs, 1979-1994." Social Forces 76: 229-250.

Byrne, J. A. 2002. "Commentary: Investor power has its downside, too." Business Week. July 1, 2002. [www.businessweek.com](http://www.businessweek.com), viewed 7/24/2002

CalPERS. 1999. [calpersgovernance.org/principles/international/japan/page03](http://calpersgovernance.org/principles/international/japan/page03), 9/22/99.

Clark, R. 1979. The Japanese Company. New Haven, CT: Yale University Press.

Coffee, J. C., Jr. 1999. "The future as history: The prospects for global convergence in corporate governance and its implications, Columbia Law School, Law and Economics working paper series. CITATION

Cole, R. E. 1979. Work, Mobility, and Participation: A Comparative Study of American and Japanese Industry. Berkeley, CA: University of California Press.

Davis, G. F., K. Diemann, C. Tinsely. 1994. "The decline and fall of the conglomerate firm in the 1980's: The deinstitutionalization of an organizational form." American Sociological Review 59: 547-570.

Davis, G. F., and S. Stout. 1992. "Organization theory and the market for corporate control: A dynamic analysis of the characteristics of large takeover targets, 1980-1990." Administrative Science Quarterly, 37:605-633.

Davis, G. F. and G. E. Robbins. 2002. "The fate of the conglomerate firm in the United States. Bending the Bars of the Iron Cage: Institutional Dynamics and Processes." W. W. Powell (ed.). Chicago: University of Chicago Press.

Davis, G. F. and M. Useem. 1999. "Top management, company directors, and corporate control." In Handbook of Strategy and Management, A. Pettigrew, H. Thomas and R. Whittington. (eds.).

CITATION

DiMaggio, P. and W. W. Powell. 1983. "The iron cage revisited: Institutional isomorphism and

collective rationality in organizational fields.” American Sociological Review 48: 147-160.

Dore, R. 1973. British Factory Japanese Factory: The Origins of National Diversity in Industrial Relations. Berkeley, CA: University of California Press.

Dore, R. 1987. Taking Japan Seriously: A Confucian Perspective on Leading Economic Issues. Stanford, CA: Stanford University Press.

Economist, “Governing the modern corporation” May 3 2001, [www.economist.com](http://www.economist.com), viewed 7/22/02.

Eisenstodt, G., 1995. "Job shokku." *Forbes*, 156 (Jul. 31): 42-43.

Flath, D. (1996). “The keiretsu puzzle.” Journal of the Japanese and International Economies 10: 101-121.

Friedland, R., and R.R. Alford, R. R. "Bringing society back in: Symbols, practices, and institutional contradictions." In The New Institutionalism in Organizational Analysis, W. W. Powell and P. J. DiMaggio (eds.). Chicago: The University of Chicago Press.

Gerlach, M. L. 1992. Alliance Capitalism: The Social Organization of Japanese Business. Berkeley, CA: University of California Press.

Gilson, R. J. and M. J. Roe. 1993. "Understanding keiretsu overlaps." The Yale Law Journal 102: 871-906.

Gordon, A. 1985. The Evolution of Labor Relations in Japan. Cambridge, MA: Harvard University Press.

Guillen, M. 2001. The Limits of Convergence: Globalization and Organizational Change in Argentina, South Korea, and Spain. Princeton, NJ: Princeton University Press.

Hall, P. A. and D. Soskice. 2001. "An introduction to varieties of capitalism." Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. P. A. Hall and D. Soskice (eds.). New York: Oxford University Press: 1-70.

Hamilton, G. G. and N. W. Biggart. 1988. "Market, culture, and authority: A Comparative analysis of management and organization in the Far East." American Journal of Sociology. 94:S52-S94.

Haunschild, P. R. and A. S. Miner. 1997. "Modes of interorganizational imitation: The effects of outcome salience and uncertainty." Administrative Science Quarterly 42: 472-500.

Hodder, J. E. and A. E. Tschoegl. 1985. "Some aspects of Japanese corporate finance." Journal of Financial and Quantitative Analysis 20: 173-191.

Hoshi, T. and A. Kashyap. 2001. Corporate Financing and Governance in Japan: The Road to the Future. Cambridge, MA: The MIT Press.

Ito, K. 1995. "Japanese spinoffs: Unexplored survival strategies." Strategic Management Journal, 16:431-446.

Johnson, C. 1982. MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925 to 1975. Stanford, CA: Stanford University Press.

Kaplan, S. N. 1994. "Top executive rewards and firm performance: A comparison of Japan and the United States". Journal of Political Economy, 102:510-546.

Kerr, C., J. T. Dunlop, F. Harbison, and C.A. Meyers. 1964. Industrialism and Industrial Man. New York: Oxford University Press.

Kester, C. W. 1991. Japanese Takeovers: The Global Contest for Corporate Control. Boston: Harvard University Press.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer, R.W. Vishny. 1998. "Law and finance." Journal of Political Economy 106:1113-1155.

Lee, P. 1997. "A comparative analysis of layoff announcements and stock price reactions in the United States and Japan." Strategic Management Journal 18:879-894.

Lincoln, J. R., M. L. Gerlach, and C. L. Ahmadjian. 1996. "Interfirm networks and corporate performance in Japan." American Sociological Review, 61:67-88.

Lincoln, J. R. and C. L. Ahmadjian. 2000. "Shukko (employee transfers) and tacit knowledge exchange in Japanese supply networks: The electronics industry case." Knowledge Emergence: Social, Technical, and Evolutionary Dimensions of Knowledge Creation. I. Nonaka and T. Nishiguchi (eds.). New York: Oxford University Press.

McKinsey Global Institute. 2000. "Why the Japanese economy is not growing: micro barriers to productivity growth." Washington, DC.

Mizruchi, M. S. and L. C. Fein. 1999. "The social construction of organizational knowledge: A study of the uses of coercive, mimetic, and normative isomorphism." Administrative Science Quarterly: 653-683. CITATION

Nakatani, I. 1984. "The economic role of financial corporate grouping." In The Economic Analysis of the Japanese Firm, M. Aoki (ed.). Amsterdam: North Holland.

Nihon Keizai Shimbun. [Japan Economic Journal]. 1999. "Toyota, Shihonmen mo Kokusai-ka" [Toyota, globalizing capital As well]. 8/8/99.

Nihon Keizai Shimbun. [Japan Economic Journal]. NEEDS data tape. Tokyo.

The Nikkei Weekly. 2002. "Growing influence of foreign, individual shareholders reshaping management that is increasingly open to change." 6/08/92. [www.nni.nikkei.co.ac.jp](http://www.nni.nikkei.co.ac.jp) viewed 7/1/02.

Pfeffer, J., and G.R. Salancik, 1978. The External Control of Organizations: A Resource Dependence Perspective. New York: Harper and Row.

Scott, R. W. 1995. Institutions and Organizations. Thousand Oaks, CA: Sage.

Selznick, P. 1949. TVA and the Grass Roots. Berkeley, CA: University of California Press.

Shirouzu, N. 1999 "Toyota is tightening control of key suppliers in bid to clock encroachment by foreign firms." Wall Street Journal, August 3, 1999. p. A18.

Singer, J. 2002. "Japanese company defeats challenge from shareholder" Wall Street Journal, May 4, 2002 [www.wsj.com](http://www.wsj.com) viewed 7/22/02.

Stark, D. 1996. "Recombinant property in East European capitalism." American Journal of Sociology 101. CITATION

Steinmetz, G. 1999. "Rising U.S. investment in European equities galvanizes old world." Wall Street Journal. 8/4/99. p. 1.

Streeck, W. 2001. "Introduction: Explorations into the origins of nonliberal capitalism in Germany and Japan." The Origins of Nonliberal Capitalism. W. Streeck and K. Yamamura (eds.). Ithaca, NY: Cornell University Press.

Thompson, J. 1967. Organizations in Action. New York: McGraw-Hill.

Useem, M. 1996. Investor Capitalism: How Money Managers are Changing the Face of Corporate America. New York: Basic Books/HarperCollins.

Useem, M. 1998. "Corporate leadership in a globalizing equity market." Academy of Management Executive, 12:43-59.

Usui, C. and R. Colignon. 1996. "Corporate restructuring: converging world pattern or societally specific embeddedness?" Sociological Quarterly 4: 351-378.

Walsh, J. P. and J. K. Seward. 1990. "On the efficiency of internal and external corporate control mechanisms." Academy of Management Journal 15: 421-458.

Westney, D. E. 1987. Imitation and Innovation: The Transfer of Western Organizational Patterns to Meiji Japan. Cambridge, MA: Harvard University Press.

Westphal, J. D. and E. J. Zajac. 1998. "The Symbolic Management of Stockholders: Corporate Governance Reforms and Shareholder Reactions." Administrative Science Quarterly 43:127-153.

Whitley, R. 1992. Business Systems in East Asia. London: Sage.

**TABLE 1: Descriptive statistics 1626 firms, 1990-1997**

<b>Variable</b>	<b>mean</b>	<b>Standard deviation</b>	<b>minimum</b>	<b>maximum</b>
> 5% downsizing	0.136	0.343	0.000	1.000
> 10% downsizing	0.048	0.213	0.000	1.000
> 5% asset divestiture	0.147	0.354	0.000	1.000
> 10% asset divestiture	0.040	0.196	0.000	1.000
Industry average downsizing rate	0.136	0.109	0.000	0.597
Industry average divestiture rate	0.147	0.119	0.000	0.563
Return on assets (t-1)	0.039	0.044	-0.472	0.251
% change in sales	0.030	0.117	-0.675	2.114
1= negative profits in both year t-1 and year t-2	0.053	0.224	0.000	1.000
Assets (ln) t-1	10.941	1.367	6.836	16.008
Number of employees (ln) t-1	6.918	1.173	2.833	11.308
Wage (deviation from industry mean) t-1	0	1	-5.245	4.468
Firm age in 1990	48.630	14.774	9.000	109.000
Capital intensity (t-1)	14.233	14.936	0.382	268.975
Exports/sales (t-1)	0.085	0.142	0.000	0.997
Number of 5% downsizings since 1985	0.993	1.406	0.000	11.000
Number of 5% downsizings since 1985 squared	2.961	7.142	0.000	121.000
Number of 5% divestitures since 1985	0.975	1.318	0.000	10.000
Number of 5% divestitures since 1985 squared	2.687	6.160	0.000	100.000
% foreign ownership (t-1)	0.040	0.062	0.000	0.778
% financial ownership (t-1)	0.310	0.161	0.000	0.809
% corporate ownership (t-1)	0.325	0.192	0.000	1.000
Member of big six group	0.077	0.266	0.000	1.000
% foreign ownership * exports/sales	0.005	0.020	0.000	0.512

% foreign ownership * % financial ownership	0.015	0.022	0.000	0.197
% foreign ownership * % corporate ownership	0.010	0.014	0.000	0.165
% foreign ownership * member of big six group	0.005	0.029	0.000	0.554

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**Table 2: Bivariate correlations, 1626 firms, 1990-1997**

	1	2	3	4	5	6	7
1 > 5% downsizing	1.00						
2 > 10% downsizing	0.59	1.00					
3 > 5% asset divestiture	0.20	0.18	1.00				
4 > 10% asset divestiture	0.18	0.21	0.50	1.00			
5 Industry average downsizing rate	0.28	0.14	0.19	0.10	1.00		
6 Industry average divestiture rate	0.13	0.11	0.35	0.16	0.50	1.00	
7 Return on assets (t-1)	-0.32	-0.28	-0.27	-0.21	-0.32	-0.28	1.00
8 % change in sales	-0.15	-0.12	-0.18	-0.08	-0.12	-0.26	0.09
9 1= negative profits in both year t-1 and year t-2	0.25	0.24	0.20	0.15	0.17	0.14	-0.50
10 Assets (ln)	-0.06	-0.08	-0.13	-0.08	0.02	-0.07	0.09
11 Number of employees (ln) t-1	-0.12	-0.13	-0.11	-0.11	-0.05	0.00	0.11
12 Wage (deviation from industry mean) t-1	-0.02	-0.01	-0.06	-0.01	0.01	-0.03	0.03
13 Firm age in 1990	-0.03	-0.05	-0.03	-0.04	-0.07	-0.01	-0.08
14 Capital intensity (t-1)	0.05	0.02	-0.05	-0.01	0.09	-0.04	-0.01
15 Exports/sales (t-1)	0.01	0.06	0.09	0.07	0.02	0.19	-0.10
16 Number of 5% downsizings since 1985	0.26	0.21	0.10	0.12	0.20	0.06	-0.34
17 Number of 5% downsizings since 1985 squared	0.22	0.20	0.10	0.11	0.16	0.06	-0.27
18 Number of 5% divestitures since 1985	0.15	0.14	0.23	0.14	0.22	0.20	-0.28
19 Number of 5% divestitures since 1985 squared	0.12	0.12	0.19	0.12	0.17	0.15	-0.25
20 % foreign ownership (t-1)	-0.01	0.02	-0.02	0.00	0.11	0.09	0.17
21 % financial ownership (t-1)	-0.07	-0.07	-0.09	-0.09	-0.02	-0.02	0.11
22 % corporate ownership (t-1)	0.02	0.01	0.04	0.04	0.00	0.00	-0.12
23 Member of big six group	0.01	0.00	-0.04	-0.02	-0.01	-0.01	-0.05
24 % foreign ownership * exports/sales	0.04	0.08	0.04	0.06	0.06	0.13	-0.03
25 % foreign ownership * % financial ownership	-0.04	-0.03	-0.06	-0.04	0.11	0.09	0.21
26 % foreign ownership * % corporate ownership	-0.05	-0.05	-0.01	-0.01	0.11	0.08	0.14
27 % foreign ownership * member of big six group	0.01	0.01	-0.03	-0.02	0.02	0.01	-0.02

		8	9	10	11	12	13	14
8	% change in sales	1.00						
9	1= negative profits in both year t-1 and year t-2	0.04	1.00					
10	Assets (ln)	0.03	-0.14	1.00				
11	Number of employees (ln) t-1	0.01	-0.14	0.87	1.00			
12	Wage (deviation from industry mean) t-1	0.00	-0.03	0.25	0.08	1.00		
13	Firm age in 1990	-0.04	0.03	0.15	0.18	0.04	1.00	
14	Capital intensity (t-1)	-0.01	0.00	0.22	0.02	0.04	-0.06	1.00
15	Exports/sales (t-1)	0.03	0.09	0.21	0.19	-0.02	-0.03	-0.03
16	Number of 5% downsizings since 1985	0.00	0.28	-0.14	-0.24	0.04	0.03	0.02
17	Number of 5% downsizings since 1985 squared	-0.01	0.25	-0.12	-0.20	0.03	0.01	0.01
18	Number of 5% divestitures since 1985	0.01	0.25	-0.30	-0.33	-0.06	-0.01	-0.19
19	Number of 5% divestitures since 1985 squared	0.02	0.24	-0.26	-0.28	-0.05	0.00	-0.14
20	% foreign ownership (t-1)	0.05	-0.04	0.34	0.32	0.11	-0.02	0.05
21	% financial ownership (t-1)	-0.03	-0.11	0.61	0.52	0.25	0.27	0.15
22	% corporate ownership (t-1)	0.00	0.04	-0.28	-0.21	-0.14	-0.15	-0.05
23	Member of big six group	-.02	-.03	.45	.41	.10	.19	.15
24	% foreign ownership * exports/sales	0.03	0.07	0.22	0.19	0.05	-0.02	0.02
25	% foreign ownership * % financial ownership	0.05	-0.08	0.50	0.46	0.16	0.07	0.09
26	% foreign ownership * % corporate ownership	0.07	-0.08	0.24	0.25	0.01	-0.15	0.04
27	% foreign ownership * big six	0.07	-0.00	-0.02	0.33	0.06	0.10	0.11

		15	16	17	18	19	20	21
15	Exports/sales (t-1)	1						
16	Number of 5% downsizings since 1985	0.11	1.00					
17	Number of 5% downsizings since 1985 squared	0.11	0.89	1.00				
18	Number of 5% divestitures since 1985	0.16	0.40	0.37	1.00			
19	Number of 5% divestitures since 1985 squared	0.14	0.38	0.38	0.91	1.00		
20	% foreign ownership (t-1)	0.24	-0.04	0.02	-0.05	-0.01	1.00	
21	% financial ownership (t-1)	0.09	-0.15	-0.12	-0.21	-0.18	0.17	1.00
22	% corporate ownership (t-1)	-0.12	0.07	0.03	0.06	0.04	-0.29	-0.69
23	Member of big six group	.10	.03	.02	-.07	-.10	-.09	.48
24	% foreign ownership * exports/sales	0.56	0.10	0.16	0.09	0.12	0.69	0.07
25	% foreign ownership * % financial ownership	0.24	-0.12	-0.08	-0.13	-0.10	0.84	0.45
26	% foreign ownership * % corporate ownership	0.17	-0.08	-0.06	-0.05	-0.04	0.64	-0.08
27	% foreign ownership * member of big six group	0.10	0.02	0.01	-0.06	-0.05	0.18	0.36

		22	23	24	25	26	27
22	% corporate ownership (t-1)	1.00					
23	Member of big six group	-.17	1.00				
24	% foreign ownership * exports/sales	-0.18	-0.17	1.00			
25	% foreign ownership * % financial ownership	-0.44	-0.34	0.53	1.00		
26	% foreign ownership * % corporate ownership	0.14	-0.39	0.35	0.47	1.00	
27	% foreign ownership * member of big six group	-0.16	0.64	0.22	0.44	0.11	1.00

**TABLE 3: Discrete time event history analysis, > 5% downsizing, 1626 firms, 1990-1997**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Industry average downsizing rate	3.927*** (.329)	3.905*** (.329)	3.935*** (.329)	3.918*** (.329)	3.948*** (.328)	3.954*** (.330)	3.916*** (.329)	3.996*** (.329)
Return on assets (t-1)	-15.233*** (1.227)	-15.669*** (1.237)	-15.607*** (1.235)	-15.652*** (1.245)	-15.569*** (1.244)	-15.512*** (1.248)	-15.717*** (1.245)	-15.442*** (1.252)
% change in sales	-4.062*** (.353)	-4.106*** (.350)	-4.126*** (.350)	-4.090*** (.350)	-4.083*** (.350)	-4.089*** (.350)	-4.099*** (.351)	-4.095*** (.351)
1= negative profits in both year t-1 and year t-2	.309* (.126)	.296* (.126)	.300* (.126)	.306** (.126)	.308* (.126)	.308* (.126)	.304* (.126)	.309** (.126)
Number of employees (ln) (t-1)	-.037 (.028)	-.057+ (.029)	-.052+ (.029)	-.108*** (.036)	-.105* (.036)	-.102* (.037)	-.108* (.036)	-.095** (.036)
Firm age in 1990	-.009*** (.002)	-.009*** (.002)	-.009*** (.002)	-.010*** (.002)	-.010*** (.002)	-.011*** (.002)	-.010*** (.002)	-.011*** (.002)
Wage (deviation from industry mean) (t-1)	-.024 (.030)	-.029 (.029)	-.030 (.030)	-.042+ (.031)	-.042 (.031)	-.042 (.031)	-.043 (.030)	-.044+ (.031)
Exports/sales (t-1)	-.478* (.221)	-.588** (.222)	-.858*** (.269)	-.616** (.227)	-.594** (.227)	-.604** (.225)	-.634*** (.227)	-.594** (.229)
Cumulative 5% downsizings, 1985 to t-1	.424*** (.044)	.426*** (.043)	.434*** (.043)	.412*** (.044)	.415*** (.043)	.411*** (.044)	.415*** (.044)	.415*** (.044)
Cumulative 5% downsizings, squared	-.037*** (.008)	-.037*** (.007)	-.039*** (.007)	-.036*** (.008)	-.037*** (.007)	-.037*** (.007)	-.037*** (.007)	-.038*** (.007)
% foreign ownership (t-1)		1.459** (.473)	.813 (.613)	.338*** (.505)	2.627** (.890)	2.154*** (.644)	1.666** (.534)	4.175*** (.975)
% foreign ownership * exports/sales			3.90* (1.828)					
% financial ownership (t-1)				.229 (.306)	.436+ (.333)	.246 (.306)	.201 (.307)	.434 (.340)
% corporate ownership (t-1)				-.071	-.053	.040	-.076	.104

				(.221)	(.222)	(.233)	(.221)	(.235)
Member of big six corporate group				.327** (.116)	.349** (.117)	.314** (.117)	.466*** (.143)	.478*** (.141)
% foreign ownership * % financial ownership					-5.143* (3.035)			-5.170* (3.115)
% foreign ownership * % corporate ownership						-5.564* (3.291)		-7.948** (3.182)
% foreign ownership * member of big six corporate group							-1.988+ (1.286)	-2.112* (1.278)
Constant	-1.464*** (.236)	-1.339*** (.241)	-1.345*** (.242)	-.989*** (.276)	-1.081*** (.284)	-1.049** (.281)	-.989*** (.276)	-1.163*** (.290)
log likelihood (df)	-4022.1*** (17)	-4017.7*** (18)	-4015.8*** (19)	-4012.8*** (21)	-4011.4*** (22)	-4011.4*** (22)	-4011.6*** (22)	-4007.9*** (25)

+p<.10, p < .05; \*\* p < .01; \*\*\* p < .001 (robust standard errors in parentheses)

**two tailed tests for control variables, one tailed for hypothesized effects.**

**TABLE 4: Discrete time event history analysis, > 10% downsizing, 1626 firms, 1990-1997**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Industry average downsizing rate	2.518*** (.445)	2.525*** (.443)	2.541551** * (.443)	2.532*** (.443)	2.569*** (.443)	2.624*** (.442)	2.524*** (.443)	2.665*** (.443)
Return on assets (t-1)	-16.228*** (1.666)	-16.674*** (1.664)	-16.639*** (1.662)	-16.934*** (1.679)	-16.888*** (1.679)	-16.713*** (1.675)	-16.934*** (1.683)	-16.569*** (1.681)
% change in sales	-4.169*** (.549)	-4.240*** (.540)	-4.261*** (.541)	-4.216*** (.542)	-4.222*** (.544)	-4.210*** (.541)	-4.216*** (.542)	-4.220*** (.543)
1= negative profits in both year t-1 and year t-2	.324+ (.168)	.315+ (.169)	.315+ (.169)	.326+ (.170)	.326+ (.170)	.327* (.169)	.326* (.170)	.327* (.169)
Number of employees (ln) (t-1)	-.091+ (.046)	-.118* (.047)	-.114* (.048)	-.235*** (.060)	-.232*** (.060)	-.224*** (.061)	-.235*** (.056)	-.221*** (.061)
Firm age in 1990	-.012*** (.004)	-.012** (.004)	-.012** (.004)	-.014*** (.004)	-.014*** (.004)	-.016*** (.004)	-.014*** (.004)	-.016*** (.003)
Wage (deviation from industry mean) (t-1)	-.011 (.052)	-.026 (.052)	-.026 (.052)	-.059 (.052)	-.060 (.052)	-.056 (.052)	-.059 (.052)	-.057 (.052)
Exports/sales (t-1)	.537+ (.322)	.349 (.325)	.198 (.389)	.255 (.332)	.267 (.333)	.313 (.337)	.255 (.337)	.322 (.342)
Cumulative 5% downsizings, 1985 to t-1	.398*** (.065)	.405*** (.065)	.410*** (.066)	.393*** (.065)	.396*** (.065)	.387*** (.065)	.393*** (.066)	.391*** (.066)
Cumulative 5% downsizings, squared	-.021** (.009)	-.023** (.009)	-.024** (.009)	-.022** (.009)	-.023** (.009)	-.022** (.009)	-.022** (.009)	-.023** (.009)
% foreign ownership (t-1)		2.349*** (.726)	1.848* (1.015)	2.093** (.967)	3.282* (1.502)	4.050*** (.887)	2.09**1 (.888)	5.743*** (1.528)
% foreign ownership * exports/sales			2.260 (2.929)					
% financial ownership (t-1)				.868* (.509)	1.065* (.548)	.986* (.510)	.869* (.512)	1.213* (.559)
% corporate ownership (t-1)				-.390	-.368	-.108	-.390	-.064

				(.356)	(.358)	(.372)	(.357)	(.374)
Membership in big six corporate group				.390*	.419*	.363*	-.389 *	.445*
				(.187)	(.188)	(.187)	(.229)	(.222)
% foreign ownership * % financial ownership					-5.118			-6.045
					(5.233)			(5.551)
% foreign ownership * % corporate ownership						-16.906**		-17.742**
						(6.269)		(6.062)
% foreign ownership * membership in big six corporate group							.015	-.582
							(1.823)	(1.745)
Constant	-1.994***	-1.847***	-1.855***	-1.049*	-1.135**	-1.160+	-1.049 *	-1.254**
	(.385)	(.388)	(.389)	(.451)	(.469)	(.456)	(.450)	(.472)
log likelihood (df)	-1901.1***	-1895.7***	-1895.3***	-1887.5***	-1886.9***	-1882.7***	-1887.4***	-1881.7***
	(17)	(18)	(19)	(21)	(22)	(22)	(22)	(22)

+p<.10, p < .05; \*\* p < .01; \*\*\* p< .001 (robust standard errors in parentheses)

two tailed tests for control variables, one tailed for hypothesized effects

**TABLE 5: Discrete time event history analysis, > 5% asset divestiture, 1626 firms, 1990-1997**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Industry average divestiture rate	4.500*** (.303)	4.473*** (.304)	4.472*** (.304)	4.475*** (.305)	4.495*** (.305)	4.456*** (.305)	4.474*** (.305)	4.478*** (.305)
Return on assets (t-1)	-10.465*** (1.079)	-10.715*** (1.103)	-10.719*** (1.105)	-10.743*** (1.106)	-10.647*** (1.109)	-10.841*** (1.113)	-10.761*** (1.107)	-10.740*** (1.118)
% change in sales	-2.942*** (.352)	-2.962*** (.353)	-2.962*** (.353)	-2.967*** (.353)	-2.958*** (.353)	-2.971*** (.353)	-2.969*** (.353)	-2.963*** (.353)
1= negative profits in both year t-1 and year t-2	.065 (.126)	.052 (.127)	.052 (.127)	.053 (.127)	.057 (.127)	.052 (.127)	.053 (.127)	.056 (.127)
assets (ln) (t-1)	-.129*** (.024)	-.139*** (.026)	-.140*** (.026)	-.133*** (.032)	-.128*** (.032)	-.137*** (.033)	-.133*** (.032)	-.132*** (.033)
Firm age in 1990	-.007*** (.002)	-.007*** (.002)	-.007*** (.002)	-.007*** (.002)	-.007** (.002)	-.007*** (.002)	-.007*** (.002)	-.007*** (.002)
Capital intensity	-.001 (.002)	-.001 (.002)	-.001 (.002)	-.001 (.002)	-.001 (.002)	-.001 (.002)	-.001 (.002)	-.001 (.002)
Exports/sales (t-1)	.165 (.200)	.108 (.203)	.122 (.247)	.108 (.203)	.135 (.205)	.107 (.203)	.105 (.203)	.129 (.205)
Cumulative 5% divestitures, 1985 to t- 1	.400*** (.045)	.402*** (.045)	.401*** (.045)	.402*** (.046)	.402*** (.046)	.402*** (.046)	.401*** (.045)	.401*** (.046)
Cumulative 5% divestitures, squared	-.028*** (.009)	-.028*** (.009)	-.028*** (.009)	-.028*** (.009)	-.028** (.009)	-.028*** (.009)	-.028*** (.009)	-.028*** (.009)
% foreign ownership (t-1)		.788+ (.510)	.827+ (.638)	.831+ (.524)	2.019* (.957)	.196 (.702)	.943* (.543)	1.402 (1.105)
% foreign ownership * exports/sales			-.205 (2.130)					
% financial ownership (t-1)				.067 (.299)	.246 (.325)	.066 (.299)	.058 (.300)	.213 (.329)

% corporate ownership (t-1)				.062 (.204)	.072 (.205)	-.021 (.214)	.061 (.203)	.008 (.217)
Member of big six corporate group				-.123 (.128)	-.108 (.129)	-.114 (.128)	-.047 (.177)	-.079 (.178)
% foreign ownership * % financial ownership					-4.798+ (3.093)			-4.037 (3.187)
% foreign ownership * % corporate ownership						3.869+ (2.982)		2.826 (2.996)
% foreign ownership * member of big six group							-1.110 (1.886)	-.373 (1.944)
Constant	-.951*** (.292)	-.859*** (.302)	-.858** (.302)	-.977** (.349)	-1.071** (.353)	-.926*** (.353)	-.974** (.349)	-1.019 (.356)
log likelihood (df)	-4346.8*** (17)	-4345.6*** (18)	-4345.5*** (19)	-4345.0*** (21)	-4343.7*** (22)	-4344.2*** (22)	-4344.8*** (22)	-4343.2*** (24)

+p<.10, p < .05; \*\* p < .01; \*\*\* p< .001 (robust standard errors in parentheses)

two tailed tests for control variables, one tailed for hypothesized effects

**TABLE 6: Discrete time event history analysis, > 10% asset divestiture, 1626 firms, 1990-1997**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Industry average divestiture rate	3.016*** (.539)	2.978*** (.542)	2.992*** (.545)	3.115*** (.543)	3.177*** (.543)	3.129*** (.545)	3.123*** (.544)	3.193*** (.545)
Return on assets (t-1)	-10.545*** (1.694)	-10.809*** (1.712)	-10.786*** (1.715)	-10.717*** (1.703)	-10.582*** (1.707)	-10.653*** (1.714)	-10.740*** (1.705)	-10.524*** (1.716)
% change in sales	-1.653** (.640)	-1.688** (.642)	-1.694** (.643)	-1.725*** (.634)	-1.710** (.639)	-1.720** (.635)	-1.732** (.635)	-1.709** (.640)
1= negative profits in both year t-1 and year t-2	.236 (.189)	.221 (.190)	.221 (.190)	.224 (.189)	.231 (.188)	.224 (.189)	.226 (.189)	.232 (.188)
Assets (ln) (t-1)	-.054 (.045)	-.071+ (.046)	-.069 (.047)	.030 (.057)	.042 (.058)	.034 (.057)	.031 (.057)	.046 (.057)
Firm age in 1990	-.011** (.004)	-.010** (.004)	-.011** (.004)	-.008* (.004)	-.008* (.004)	-.008* (.004)	-.008* (.004)	-.008* (.004)
Capital intensity	-.00001 (.004)	-.0005 (.004)	-.0004 (.004)	-.001 (.004)	-.0004 (.004)	-.0008 (.004)	-.0009 (.004)	-.0005 (.004)
Exports/sales (t-1)	.355 (.331)	.247 (.338)	.169 (.389)	.296 (.331)	.334 (.332)	.301 (.334)	.288 (.332)	.333 (.334)
Cumulative 5% divestitures, 1985 to t- 1	.482*** (.078)	.489*** (.079)	.492*** (.079)	.486*** (.080)	.490*** (.081)	.487*** (.080)	.484*** (.080)	.490*** (.082)
Cumulative 5% divestitures, squared	-.039** (.014)	-.041** (.014)	-.041** (.014)	-.040 (.015)	-.042** (.015)	-.041** (.015)	-.040** (.014)	-.042** (.015)
% foreign ownership (t-1)		.422* (.833)	1.087 (1.305)	1.343* (.811)	3.443** (1.272)	1.721* (.939)	1.607* (.798)	3.961** (1.344)
% foreign ownership * exports/sales			1.233 (3.027)					
% financial ownership (t-1)				-1.231** (.522)	-.863+ (.573)	-1.225** (.524)	-1.256** (.525)	-.901+ (.586)
% corporate ownership (t-1)				.017 (.321)	.025 (.325)	.070 (.337)	.014 (.321)	.101 (.341)

Member of big six group				-.241 (.250)	-.199 (.253)	-.246 (.250)	.076 (.514)	-.006 (.474)
% foreign ownership * % financial ownership					-10.500* (5.720)			-9.491+ (6.041)
% foreign ownership * % corporate ownership						-2.784 (5.698)		-3.899 (5.284)
% foreign ownership * member of big six group							-5.065 (8.567)	-3.412 (7.737)
Constant	-2.731** (.519)	-2.568*** (.534)	-2.578*** (.537)	-3.884** (.619)	-4.085*** (.627)	-3.916*** (.622)	-3.891*** (.622)	-4.113*** (.624)
log likelihood (df)	-1858.6*** (17)	-1856.9*** (18)	-1856.8*** (19)	-1851.8*** (21)	-1848.9*** (22)	-1851.2*** (22)	-1850.2*** (23)	-1848.1*** (25)

+p<.10, p < .05; \*\* p < .01; \*\*\* p < .001 (robust standard errors in parentheses)

two tailed tests for control variables, one tailed for hypothesized effects

Figure 1: Annual downsizing rates, 1990-1997

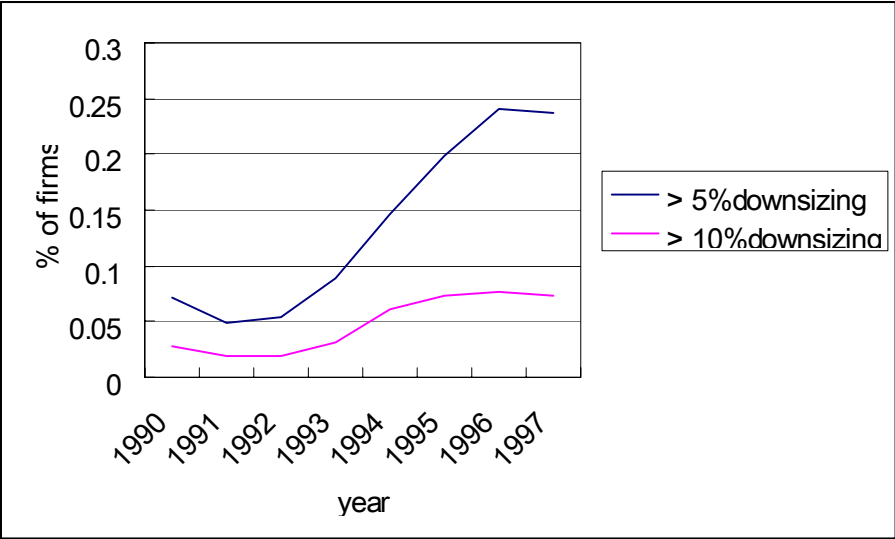


Figure 2: Annual divestiture rates, 1990-1997

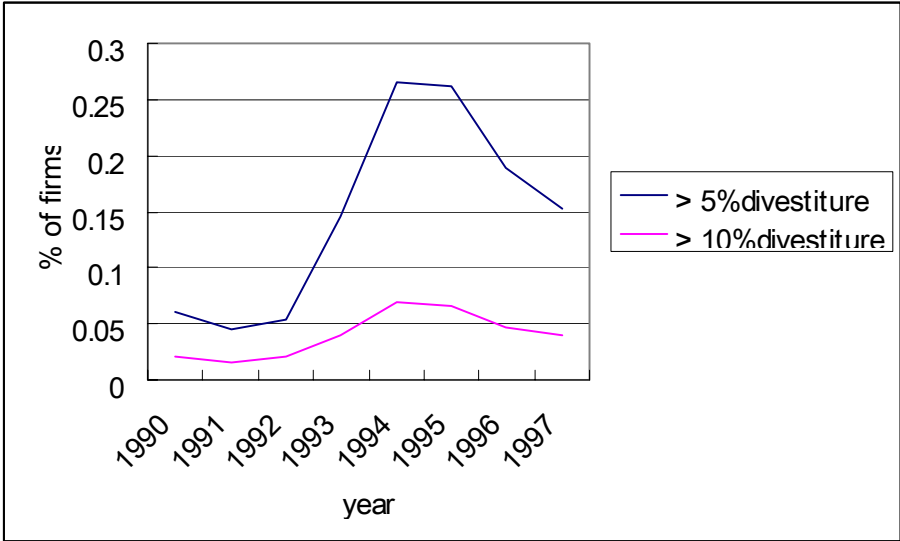


Figure 3: Effect of financial ownership on downsizing

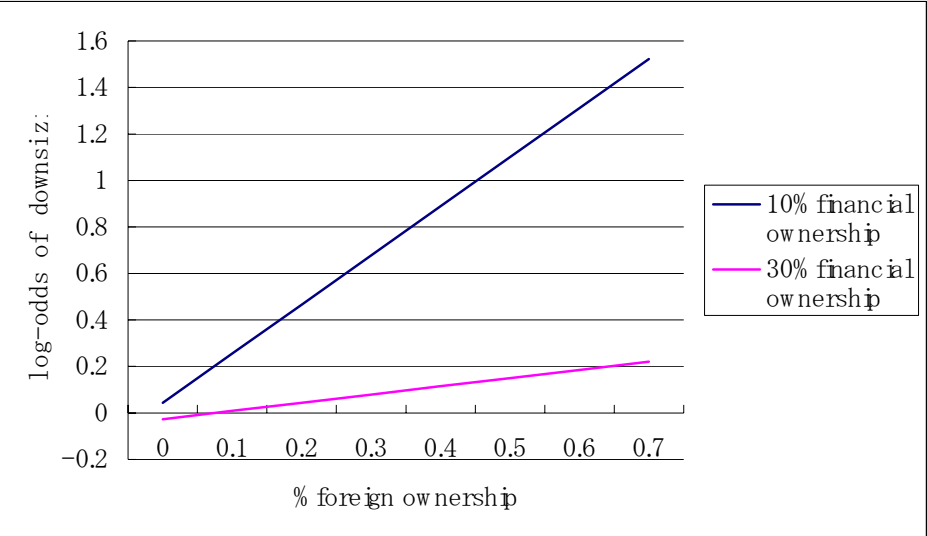


Figure 4: Effect of corporate ownership on downsizing

