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'OUTSIDE' INTERVENTION IN
JAPANESE COMPANIES: ITS
DETERMINANTS AND ITS
IMPLICATIONS FOR MANAGERS

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ABSTRACT

This paper estimates the determinants of appointments of 'outsiders' -- directors previously employed by banks or other non-financial firms -- to the boards of large (non-financial) Japanese companies. Appointments of both types of 'outsiders' increase with poor stock performance; those of bank outsiders also increase with negative current income. Appointments of bank outsiders are related to firm debt levels; those of corporate outsiders, to shareholder concentration and group affiliation. Both types of outsider appointments appear to be disciplinary -- top executive turnover increase substantially in the same year. Additional evidence on subsequent firm performance suggests that "bank" directors are appointed in financially distressed or contracting firms, while "corporate" directors are appointed in firms with temporary problems.

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I. Introduction

In the U.S., managers have been pressured to represent shareholder interests by an active market for corporate control and by boards of directors increasingly dominated by outsiders.¹ In Japan, in contrast, takeovers, proxy fights, and public contests for control are infrequent. Furthermore, unlike their U.S. counterparts, boards of Japanese companies are dominated by insiders. Many companies do not have any directors who are not full-time employees. Instead, Japanese firms are supposedly governed and controlled through three types of relationships:²

First, most non-financial corporations have a main bank that owns shares of the firm's stock, provides settlement services for intercorporate payments, and makes loans. Under certain circumstances, a senior main bank employee(s) may be appointed to a senior position in the (non-financial) firm.

Second, the majority of shares of most non-financial corporations are owned by financial institutions and other corporations. Because these shareholdings tend to be very stable, managers have been insulated from takeovers and other external stock market forces.

Finally, many Japanese firms belong to one of two types of corporate groups or keiretsu. Financial keiretsu are groups of firms that are linked by relationships to a main bank, by crossholdings of equity, and by product-market links. Enterprise keiretsu -- like Toyota, Toshiba, and Nissan -- are groups of firms organized around a particular enterprise. They are characterized by cross-holdings of equity and even stronger product-market links. While firms in financial keiretsu span many industries, those in enterprise keiretsu tend to be focused in one or two primary industries.

Although the existence of these three sets of relationships is well-documented, their impact on managers and monitoring is less so. Some have argued that these

¹ See Morck, Shleifer, and Vishny (1988) and Weisbach (1988). Although there is some disagreement on the magnitude of this pressure, there is little disagreement over its existence.

² See Aoki (1990 and 1992).

relationships lead to reduced agency costs and more effective monitoring of managers.³ Others believe that these relationships both entrench managers and serve as a form of insurance. Because shareholdings are stable and boards are dominated by insiders, it is very difficult to oust incumbent management. And in the event a company encounters financial difficulties, the relationships help ensure the company's survival whether it is efficient or not.⁴ Between these two extreme views, Aoki (1990), Aoki and Sheard (1992) and Kester (1991) argue that Japanese managers must earn enough profit to satisfy their banks and meet debt payments. Conditional on earning a satisfactory profit, however, managers can run their firms in the interests of employees or themselves.

This paper attempts to shed light on the nature of these relationships by considering when banks and shareholders intervene or become active in 119 large, non-financial Japanese firms. We define such interventions as board appointments of 'outsiders' - directors previously employed by banks or other non-financial firms. Appointments of both types of 'outsiders' increase significantly with poor stock performance; those of bank outsiders also increase with negative current income. The two types of outside appointments rarely occur in the same year.

We add measures of relationships and find that appointments of bank outsiders are related to a firm's borrowings from banks; appointments of corporate outsiders, to shareholder concentration and affiliation with both enterprise and financial keiretsu. We find some evidence of interactions between the performance and relationship variables.

One interpretation of our results is that the web of relationships in Japan substitute for the corporate control mechanisms in the U.S. It is not, however, the only one. The appearance of outsiders in response to poor performance does not necessarily indicate

³ See, for example, Drucker (1991), Grundfest (1990), Hoshi et al. (1990 and 1991) and Prowse (1990).

⁴ See Abegglen and Stalk (1985), Blinder (1992), Coffee (1991), and Nakatani (1984) for different aspects of this view.

that incumbent management is being disciplined. Such outside appointments are also consistent with the appearance of an insurance agent after an accident. The presence of the outsider may signal to suppliers, customers or others that the bank or the group will support -- i.e, insure and bail out -- the business.

Previous work is ambiguous on this subject. For example, Sheard (1989 and 1992) provide descriptions of many instances of bank interventions in response to financial distress. While these descriptions tend to favor monitoring over insurance, they are consistent with both. Hoshi, Kashyap and Scharfstein (1990a and 1990b) find that investment is less sensitive to cash flow and to financial distress in firms in financial keiretsu and with strong main bank relationships. This is consistent with an interpretation that such relationships promote efficient investment by overcoming free rider and information problems. Alternatively, their results are consistent with such relationships providing insurance, and, therefore, promoting inefficient investment.

In this paper, we distinguish between the two interpretations by considering the impact of outside interventions on the turnover of incumbent managers. We find strong evidence that both types of outside appointments are disciplinary. Top executive turnover increases substantially in periods when outsiders are appointed to firm boards. This is true even when we control for firm performance.

The observation that appointments of bank directors and corporate directors rarely coincide suggests that they may be motivated by different internal problems. Accordingly, we examine firm performance prior and subsequent to the outside intervention. Our results suggest that bank directors are appointed in firms that are contracting or financially distressed while corporate directors are appointed in firms that have temporary or reversible problems.

Overall, our results suggest that the web of relationships in Japan does in fact substitute for the alternative corporate control mechanisms in the U.S. Consistent with Aoki

and Sheard (1992), Kaplan (1992), and Kester (1991), banks intervene when firms have difficulty meeting fixed obligations. More strikingly, interventions by banks and other corporations are driven most strongly by poor stock performance in the current and previous year. This sharply contradicts the views of some observers that the corporate governance system in Japan pays little attention to current stock prices.⁵

Recently, some have argued that the efficacy of governance relationships in Japan has weakened over time.⁶ According to this view, the successes of the 1980s allowed managers to distance themselves from interventions by the main bank and other firms. If this view is correct, appointments of bank and corporate directors should be less sensitive to performance over time. We conclude our paper by testing for such a deterioration. We do not find one.

Our paper is related to recent papers by Morck and Nakamura (1992) and Kaplan (1992). Morck and Nakamura (1992) find that the appointment of bank directors increases significantly with poor stock performance and with low earnings or financial distress. They also find that bank directors are appointed to firms in declining industries. Morck and Nakamura, however, do not present any evidence on the impact of such appointments on incumbent managers. Morck and Nakamura also make the puzzling finding that the firms that appoint bank directors tend to have lower stock returns relative to the industry in the years after the intervention. We do not obtain this result. Firms earn normal returns in the years after both bank and corporate appointments.

Kaplan (1992) documents that top executive turnover and compensation is related to several measures of performance, particularly to low earnings. And like Morck and Nakamura, he finds that bank director appointments increase significantly with poor stock

⁵ See Porter (1992).

⁶ See Hoshi, Kashyap and Scharfstein (1992) and Kester (1992).

performance and with low earnings. In general, the evidence in Kaplan (1992) favors the intermediate and monitoring explanations over that of insurance. However, that paper does not explicitly consider the relation between bank appointments and top executive turnover. Nor does it consider corporate appointments at all.

The paper proceeds as follows. Section 2 describes the sample selection, data sources, and sample companies. Section 3 examines the performance-related determinants of outside appointments. Section 4 adds relationship-based explanatory variables. Section 5 documents top executive turnover in firms that make outside appointments. Section 6 presents evidence on pre- and post-appointment financial performance. Section 7 presents tests for a change in the appointment-performance relations over time. Section 8 concludes.

2. Sample and data

2.1 Sample and sources

The sample of Japanese companies is the same as that used in Kaplan (1992). The 119 firms are the publicly-traded Japanese industrial firms on Fortune Magazine's list of the 500 largest foreign industrials (by sales) in 1980. Because the fiscal years of most Japanese companies end in March, the Fortune list is largely based on fiscal years ended March 1980.

Financial data on the Japanese companies come from several sources. Financial statement, employment, and stock price data come from annual issues of Diamond's Kaisha Yoran Zenjojo Kaishaban and from the Daiwa Institute of Research Analysts' Guide. Shareholding and lending data are obtained from editions of Kigyo Keiretsu Soran and from the Yuka Shoken Hokokusho -- the Japanese equivalent of U.S. 10-K filings -- filed by the sample companies in 1982 and 1984. The information on corporate executives and directors is obtained from annual issues of Diamond's Kaisha Shokuin Roku which is literally Diamond's Company Personnel. Diamond's Kaisha Shokuin Roku does not indicate if a

director worked elsewhere before joining his current company. We recorded previous employers using the 1982 and 1984 Yuka Shoken Hokokusho and various editions of Kigyō Keiretsu Soran.

Panel 1.1 of table 1 presents data on sales, market value and current or pre-tax income in 1980 and 1988 for the 119 Japanese firms. These accounting measures here and throughout the paper are based on unconsolidated financial reports. (In so doing, we follow most previous work on Japanese companies. Our results are similar when we use consolidated sales and consolidated current income.)

2.2 Governance measures

Boards of directors in Japan have the statutory power to manage the corporation.⁷ The directors are technically elected at a shareholder meeting to terms of not more than (and usually equal to) two years. Shareholder meetings are held annually, but shareholders holding at least 3% of a company's shares do have the right to convene a meeting to vote on the dismissal of directors.

The median firm in our sample has 21 directors. Very few of these directors are outside directors as we know them in the U.S. In fact, all of the directors of the median firm in our sample are currently employed by the firm. This is consistent with the 1985 MITI study cited by Ballon and Tomita (1988) that finds that 43.5% of the manufacturing companies listed on the Tokyo stock exchange do not have any outside directors.

Most of the Japanese directors are executive managers who are long-term employees; few directors have ever worked anywhere else. Kigyō Keiretsu Soran indicates if any director concurrently works for or has previously worked for another company. At the beginning of fiscal year 1981, the firms in the sample had a median of only 2 such directors.

⁷ The discussion in this section is taken largely from Heftel (1983). See also Ballon and Tomita (1988) and Gerlach (1991).

In fact, 29% of the sample companies did not have even one director who was listed as having ever worked for any other firm. Kaplan (1992) provides a more detailed description of the structure and composition of the board of directors for this sample.

Our definition of directors does not include appointments of statutory auditors. All Japanese firms hire one to three statutory auditors who are generally retired employees of the firm, the main bank, or some other firm. The auditors can attend, but cannot vote at board meetings. Morck and Nakamura (1992) include statutory auditor appointments as director appointments, but note that their results are similar under different definitions.

We follow the boards of directors of our sample from 1981 to 1989 and determine if a firm appoints a new director with previous or current experience at another firm. We refer to such directors as outsiders. We distinguish between employment at a bank or at a different (Japanese) corporation, referring to directors with bank experience as bank directors, and to those with corporate experience elsewhere as corporate directors.

We consider an outside intervention to have occurred if a firm appoints one or more outsiders to its board in a given period. Panel 1.2 of table 1 indicates that firms appoint at least one bank director in 7.5% (or 72) of firm years and at least one corporate director in 5.9% (or 55) of firm years. We do not distinguish between single and multiple appointments because in the large majority of appointment-years only one outsider is appointed -- 90% of bank appointment-years and 83% of corporate appointment-years.

Although only one outsider is usually appointed in a given year (if an outsider is appointed at all), some firms appoint outsiders in more than one of the sample years. During the eight sample years, 26 firms appoint a bank director in one year; 11 firms in two years; 4 firms in three years; and 3 firms in four years. The remaining 75 firms do not appoint a bank director in any of the eight years. At the same time, 18 firms appoint a corporate director in one year; 7 firms in two years; 3 firms in three years; and 3 firms in four or five years. The remaining 88 firms do not appoint a corporate director. In our

analyses, we consider all outside appointments to be outside interventions. We obtain similar results when we exclude outside appointments in which a new outsider replaces an incumbent or old outsider.

Panel 1.2 also indicates that the 'outside' directors tend to go in at the level of director, rather than at the more senior level of representative director. This indicates that the 'outsiders' do not take over the management of the firm -- at least not publicly. Panel 1.3 presents similar results for two-year periods.

We note two other observations concerning our data. First, among the new outside appointments in our sample, 28% of bank appointments and 51% of corporate appointments are listed as having a concurrent affiliation -- as either a director or employee - with another firm; the rest are affiliated only with the sample firm. Throughout the paper, we do not distinguish between those who retain an affiliation and those who do not. Although not reported, our results are qualitatively similar for each group individually.

Second, appointments of bank and corporate directors in the same year are rare, occurring in only 0.5% (or 5) of firm-years. (This joint probability approximately equals the product of the two individual probabilities.) In fact, during the entire sample period, only 12 firms appoint both a bank and corporate director.

In our subsequent tests of management turnover, we follow Kaplan (1992) and measure incumbent management turnover in four ways: (1) turnover of the president; (2) non-standard turnover of the president -- the president does not become chairman; (3) turnover of representative directors -- typically 3 directors, always including the president, who have the right to legally represent the company; and (4) turnover of all directors.

2.3 Performance Measures

This paper uses the same performance measures as those in Kaplan (1992). This paper measures director appointments both over two year periods and over one-year periods.

Performance is measured over the contemporaneous and previous intervals. The two year interval is chosen in addition to the one year interval because Japanese directors typically receive two year contracts.

One of the goals of this paper is to describe which performance measures banks, shareholders, and keiretsu members rely on. We present results for four measures of performance: (1) company stock returns; (2) sales growth; (3) change in pre-tax income as a fraction of total assets; (4) and a dummy variable if pre-tax income is negative. The dummy variable for negative pre-tax income is intended to serve as a proxy for financial difficulty -- negative pre-tax income indicates that a firm has not earned enough (in an accounting sense) to meet its operating and financial expenses.

3. 'Outside' appointments and performance.

3.1 Bank appointments

Table 2 presents maximum likelihood estimates of logit models of the likelihood of bank director appointments for each of the four performance measures individually.

Separate estimations are run for each performance measure and its lagged values.⁸

The likelihood of a new bank director is most closely associated with negative pre-tax income at both one- and two-years. For example, the one-year estimates imply that the likelihood of a new bank director increases by 7.5% in the year of negative income, and by 4.6% in the subsequent year for a cumulative increase of 12.1%. The two-year estimates imply an increased likelihood of 12% in the same two-year period. The results at both frequencies indicate that the bank appointments respond relatively quickly to measures of recent performance. The increased likelihoods are both large relative to the unconditional likelihoods of 7.5% in one year and 13.3% in two year periods.

⁸ To make sure that outliers do not drive the results, the continuous performance variables were transformed into their decile ranks. The results are qualitatively similar to those presented in what follows.

At the one-year frequency, there is also a statistically strong (at the 1% level) negative relation between the likelihood of a bank director appointment and stock returns. A two standard deviation decline in stock returns in a given year is associated with a 7% increase in the likelihood of a bank appointment in the following year. This is also a large increase relative to the unconditional likelihood of 7.5%. At the two-year frequency, bank appointments are also negatively associated with stock returns, but the magnitude and significance levels of the coefficients are smaller.

Overall, these results suggest that bank appointments respond to poor firm performance and do so over relatively short frequencies.

3.2 Corporate appointments

Table 3 reports logit estimates of the likelihood of appointments of new corporate directors against the four performance measures. Such appointments are most closely associated with poor stock performance in both the one- and two-year regressions. The one-year estimates associate a two standard deviation decline in stock returns with an increased likelihood of a corporate director of 4.3% and 3.6%, respectively, in the current year and in the next year. This 7.9% cumulative increased likelihood is economically significant. It exceeds the unconditional likelihood of 5.9%.

At a one-year frequency, corporate appointments are also related to changes in pretax income although the relations are not so statistically or economically significant as those for stock returns. Strikingly, corporate appointments are not related to negative income.

The patterns suggest a difference between bank interventions and corporate interventions. Banks appear to intervene in firms with poor stock performance and difficulty meeting their financial obligations to the banks. In contrast, other corporations appear to intervene in firms with poor stock performance that is not related to an inability to meet

financial obligations.

3.3 Bank or corporate appointments

Tables 2 and 3 suggest that bank and corporate appointments both respond to poor performance, but to different types of poor performance. Table 4, therefore, presents estimates of the likelihood of an appointment of an outsider -- either from a bank or another corporation -- as a function of performance. The unconditional likelihood of such an appointment is 12.9% in any one year and 23.0% in any two-year period.

Table 4 indicates that outside appointments -- at both two- and one-year frequencies -- are most closely related to stock performance. At a one-year frequency, for example, a two standard deviation decline in stock returns is associated with 3.1% and 8.7% increases, respectively, in the likelihood of an outside appointment in the year of and the year after the appointment. The cumulative 11.8% increase is, again, economically and statistically large compared to the unconditional likelihood of 12.9%. At both frequencies, outside appointments are also significantly related to negative income.

Given the infrequency of both bank and corporate appointments in the same year, we also consider whether either type of appointment affects the likelihood of the other type of appointment. As noted earlier, the unconditional likelihood of both types of appointments of 0.54% is only slightly greater than the 0.44% product of the unconditional likelihoods of either appointment (7.5% and 5.9%). The two types of appointment, therefore, are positively correlated not conditioning on performance. The previous results, however, indicate that both types of appointments are increasingly likely with poor stock performance. Accordingly, we estimate a bivariate probit model to test whether one type of appointment affects the likelihood of the other conditional on performance (as measured by stock returns and negative current income). We find that such appointments are negatively, but not significantly related. These results suggest that the decision to appoint one type of outsider

does not have an appreciable affect on the decision to appoint the other type of outsider.

4. 'Outside' appointments, performance, and relationship variables.

Overall, the results in section 3 indicate that outside board appointments are related to firm stock performance and to low earnings. This is consistent with the Japanese system of relationships substituting for a market for corporate control.

It is possible, however, that the results in section 3 are driven by some unobserved correlation between financial performance and the relationships in Japan. For example, if firms with high debt tend to appoint bank directors and such firms also tend to have negative income and poor stock returns during the sample period, we will observe a potentially spurious correlation between appointments and performance. In this section, we estimate the relation of outside appointments to performance controlling for the three basic sets of relationships in Japan.

We use two measures for the importance of bank relationships. First, we include the ratio of total borrowings to assets for these firms in 1980, the year before our sample begins. We measure borrowings as the book value of bank borrowings reported in Kigyō Keiretsu Soran. The median value of bank borrowings to total assets is 30.7%. It is worth noting that we measure debt levels at the beginning of our sample period to reduce the likelihood that performance -- particularly earnings performance -- is endogenously correlated with debt levels.

Second, to estimate the strength of a firm's relationship with its main bank we follow Hoshi, Kashyap, and Scharfstein (1990b) and calculate the fraction of a firm's borrowing that is provided by its largest lender. As they do, we call this variable TOPLEND. The median firm in our sample obtains 13.2% of its total borrowings from its largest lender. TOPLEND is set to 0 for firms with no borrowings.

To measure the importance of intercorporate shareholdings, we obtain the

ownership concentration of the top 10 shareholders in 1981 from Kigyō Keiretsu Soran. We call this variable SHR10. This measure includes shares held by foreign banks and corporations. We obtain qualitatively identical results when we exclude such foreign ownership.

Finally, we include measures of financial and enterprise keiretsu relationships. We use the listings in Dodwell (1982) to determine whether a firm is associated with one of the six financial keiretsu -- DKB, Fuyo, Mitsubishi, Mitsui, Sanwa, and Sumitomo. According to Dodwell, almost 65% of our sample firms have some affiliation with one of these keiretsu. Although we do not present them, the coefficients for financial keiretsu membership have the same sign, but are smaller in magnitude when we identify financial keiretsu members as (1) members of any of the president's councils associated with these six keiretsu; or as (2) firms listed by Dodwell as being strongly inclined to the keiretsu (an inclination of three or four stars).

We also use the listings in Dodwell (1982) to determine whether a firm was associated with an enterprise group at the beginning of the sample period. These enterprise groups include Hitachi, Matsushita, Nippon Steel, Nissan Motors, Toshiba, and Toyota. Almost 17% of our sample firms are associated with one of these enterprise groups.

Both to conserve space and to focus on the stronger relations, we only report results for the one-year estimates. We also restrict performance measures to stock returns and negative current income in the bank appointment estimations, and to stock returns in the corporate appointment estimations.

4.1 Bank appointments

The first column of table 5 presents (multiple) logit estimates of the determinants of appointments of bank directors. The likelihood of such an appointment is still significantly related to firm stock returns in the previous year. Negative current income is

also associated with an economically significant increased likelihood of a bank appointment -- of 5.0% in the same year -- but the association is no longer statistically significant.

Appointments of bank directors are closely related to the two variables meant to measure the strength of the main bank relationship. In contrast, such appointments are unrelated to the variables measuring shareholdings and keiretsu relationships.

Bank appointments are most strongly related (in terms of significance level) to the ratio of total borrowings to assets. In a given year, the likelihood of an appointment of a bank director is 8.1% more likely (significant at 1%) for firms with a borrowings to total assets ratio of 47% than for firms with a ratio of 11% (a two standard deviation difference).

Bank appointments are also significantly related to the fraction of borrowings from the largest lender. A two standard deviation difference (14%) in TOPLEND is associated with a 5.0% increase in the likelihood of a board appointment.

These patterns provide additional support for the view that bank directors are appointed in firms and situations where there is a bank loan to protect. In contrast, the appointment of bank directors is not related to the strength of shareholdings and other relationships. This suggests that banks place less importance in maintaining those relationships. Although not reported, we obtain similar (insignificant) results when we measure shareholdings as the equity owned by a firm's main bank.

4.2 Corporate appointments

The second column of table 5 presents estimates of the determinants of appointments of corporate directors. Again, stock performance remains significant in the presence of the relationship variables.

The relationship variables are almost the mirror image of their values for bank director appointments. The two main bank variables are not significantly related to corporate appointments. Instead, corporate appointments are strongly related to share

ownership, and to the two keiretsu membership variables. The coefficient for the enterprise keiretsu variable is particularly noteworthy. The coefficient indicates that the likelihood of a corporate appointment is approximately 20% greater for a member of an enterprise keiretsu. This is almost three times greater than the 7% increase implied by the coefficient for financial keiretsu membership.

These patterns provide additional support for the view that the two types of appointments, although related to performance, serve different purposes and protect different interests. The results suggest that corporate appointments are meant to protect or support intercorporate shareholdings and relationships. Such appointments do not appear to be intended to protect the main bank.

4.3 Performance and relationship interactions

The previous analysis does not allow for any interaction between the performance and relationship variables. There is some reason to believe such interactions might be important. For example, larger borrowings (or shareholdings) may give lenders (or large shareholders) both a greater incentive and greater power to intervene after poor performance. If this is true, the interaction of borrowings (shareholdings) and performance would be negatively related to the likelihood of outside intervention. Alternatively, larger borrowings (or shareholdings) may give lenders (or large shareholders) greater access to firm specific information. If this is true, financial performance might be less informative about the true quality of management or state of the firm leading to a positive interaction of borrowings (shareholdings) and performance. Hoshi, Kashyap and Scharfstein (1990a and 1990b) find evidence of such an interaction: investment is less sensitive to internal cash flow and to financial distress for firms in financial keiretsu and with strong main bank relationships.

In this section, we consider logit estimates that include performance and

relationship variable interactions. For bank appointments, we run separate estimations for (1) stock returns and (2) negative current income. In each of the estimations, we include three relationship variables both alone and interacted with (multiplied by) the performance variables: (1) total borrowing to total assets, (2) TOPLEND, and (3) financial keiretsu membership as relationship variables. For corporate appointments, we run one estimation using stock returns as the performance variables interacted with (1) SHR10, (2) financial keiretsu membership, and (3) enterprise keiretsu membership as relationship variables.

For bank appointments, the interaction results do not yield any easily interpretable patterns. To conserve space, we do not report the results of these estimations in a table. Using stock returns as the performance variable, there is a positive interaction between current year stock returns and total borrowing, and a negative interaction between previous year stock returns and financial keiretsu membership. Both of these are significant at the 10% level. Bank appointments, therefore, are less likely in the year of poor stock returns in firms with high debt, but more likely in the year after poor stock returns in firms that belong to a financial keiretsu. Based on the results in Hoshi et al. (1990b), one would have expected these interactions to have the same sign. Furthermore, the borrowing-stock return interaction is not significant when we run a separate estimation for the borrowing-stock return interaction alone.

Neither the borrowing-performance or financial keiretsu-performance interaction holds when we replace stock returns with negative current income. Instead, two different interactions are significant: for firms with higher TOPLEND, a bank appointment is less likely in the year of negative current income, but more likely in the year after negative current income. These two coefficients, however, are not significantly different from each other. This suggests that TOPLEND affect the timing of the effect of negative current income on bank appointments, not the net impact.

One interpretation of the mixed interaction results for bank appointments is that

the two effects of stronger bank relationships -- greater incentives and better information -- offset each other. A different interpretation is suggested by Aoki and Sheard (1992). They claim that all firms have a main bank even though the main bank will appear dormant in operationally successful firms with no borrowings. When firms run into difficulties and reach a "bad profit state", however, the main bank intervenes. If all firms have main banks, particularly poor stock performance or negative income may trigger bank intervention regardless of loan size (as measured at the beginning of our sample period).

For corporate appointments, there is one significant interaction -- that between SHR10 and stock return in the same year. The coefficient indicates that corporate director appointments are more sensitive to poor performance in firms with more concentrated shareholdings. This is consistent with larger ownership positions giving shareholders both a greater incentive and greater power to intervene after poor performance.

5. The impact of 'outside' appointments on incumbent managers.

The results in the previous sections indicate that outside intervention is significantly more likely in Japanese firms in the face of poor firm performance. Bank, shareholding and keiretsu relationships also play a role. The results, however, do not necessarily indicate the nature of the interventions.

One interpretation is that banks, corporate shareholders, and related corporations respond to poor performance by sending directors to oversee or implement responses to that poor performance. The power of a main bank to appoint directors comes from its combined role as lender, shareholder, and settler of intercorporate payment accounts. The power of corporate shareholders to appoint directors stems from their share ownership and concomitant ability to withhold proxies on the shares they own. Under this interpretation, the bank and intercorporate relations in Japan play a similar role to outside directors and, particularly, the market for corporate control in the U.S.

There is, however, another interpretation. The injection of an outsider in response to poor performance may be required to signal to suppliers, customers or others that the bank or the group will support the continuation of the business. According to this view, the main bank more than recoups any costs of such insurance in normal times by charging above market fees for services. Similarly, corporate managers are willing to agree to such an insurance scheme in order to maintain their positions.⁹

This second interpretation suggests that the primary role for the outside appointment is as insurance rather than as discipline or monitoring. The fact that most outside appointments are at the level of director -- not the more senior representative director level -- is consistent with this interpretation.

The insurance and monitoring interpretations have different implications for incumbent management. If the relationships serve to insure managers, then the appointment of an outsider should not affect executive turnover. Alternatively, if the relationships replace the control mechanisms familiar to the U.S., then outside interventions should be costly for incumbent management. Accordingly, in this section, we test whether top executive turnover is high in the year of outside intervention. Before proceeding, we note that this test should be biased against finding abnormally high turnover even if the monitoring or disciplining interpretation is correct. The reason, suggested by the significant results for the relationship variables, is those outside appointments based on relationships need not be disciplinary even if those based on performance are.

5.1 Outside intervention and executive turnover

In our tests, we regress different measures of top executive turnover against a dummy variable that equals 1 if there is an outside intervention, and 0 otherwise. The

⁹ See Coffee (1991) for a detailed discussion of this interpretation.

regressions in table 6 include year or period dummies as well. In interpreting the results, note that the unconditional likelihoods of president turnover, non-standard president turnover, representative director turnover, and director turnover for one-year periods are respectively 15.11%, 3.86%, 14.36%, and 12.05%.

Panel A of table 6 presents the results for one-year periods. The results indicate economically and statistically significant increases in all four types of executive turnover. For example, the coefficients imply that representative director turnover increases, respectively by 13.50%, 9.16%, and 11.76% in the year a firm appoints a new bank director, a new corporate director, or either type of outside director. These represent increases of 94%, 64%, and 80% over the unconditional likelihood of 14.36%. Except for standard presidential turnover, the appointment of a bank director seems to be more serious for incumbent management than the appointment of a corporate director.

Panel A, however, may overstate the extent of abnormal turnover because most firms appoint directors on two year cycles. We control for this in two ways. First, we present results that control for the directorship cycle. In each of the regressions, we include a dummy variable for each firm-year that indicates whether a firm is in the year of board appointments or an off year. We assume a firm operates on an even-year (odd-year) cycle if the average number of directorship appointments over the entire sample period is greater in even (odd) years for that firm. Panel B indicates that this adjustment reduces the magnitude of all of the coefficients, but only marginally. The results are economically and statistically similar to those in panel A.

Second, we present estimates of increased turnover over two-year periods. The coefficients in panel C for corporate appointments are economically smaller for president and director turnover than over the one-year periods. However, representative director turnover increases by an even greater margin over the two year period than over one. Furthermore, the coefficients in panel C for appointments of a bank director or any outside

director are economically and statistically similar to those in panel B.

We interpret these results as strong evidence that both types of outsider appointments are disciplinary -- top executive turnover, particularly that of representative directors, increases substantially in the same period. The fact that the outsiders tend to be appointed to the director level suggests that outside appointments oversee that transfer of control from one internal management team to another.

5.2 Outside intervention and executive turnover and performance

Table 6 indicates that outside appointments and unusually high executive turnover coincide. From the earlier section of this paper and Kaplan (1992), we know that both of these events are associated with poor firm performance. It is possible that outside appointments have no marginal effect on top executive turnover. To test for this possibility, we repeat the tests presented in table 6, but control for stock performance and negative current income (in the current and lagged periods).

Panel A of table 7 presents the estimated increase in turnover controlling for performance and the directorship cycle. The coefficients decline slightly compared to those in table 6, but the results are statistically and economically similar. Turnover still increases significantly in the year of outside appointments. The estimates in panel B for two-year periods tell a similar story. Although not reported, the coefficients on the performance variables are largely unaffected by the inclusion of the intervention dummy variables.

The results in table 7 provide additional support for the conclusion that outside interventions have a disciplinary effect on top executives.¹⁰

¹⁰ It is possible that the types of firms that make outside appointments may normally have high top executive turnover. To control for this, we repeated the analyses in this section using firm fixed effects. We obtained qualitatively similar results.

6. Post-appointment financial performance.

The observation that appointments of bank directors and corporate directors rarely coincide suggests that they may be motivated by different internal problems. Accordingly, we compare the performance of firms that appointed 'outside' directors to the performance of all other firms subsequent to the outside intervention.¹¹ The reported performance difference is the coefficient (and, in brackets, the associated standard error) from a regression of performance against a dummy variable for the relevant 'outside' appointment. The regressions include dummy variables for the year, so performance is relative to average performance for all firms in a given year. We label year 0 as the year of the appointment.

Panel A of table 8 presents the results for bank appointments. In broad terms, bank directors appear to be appointed to firms that are in the process of contracting or declining relative to the market both before and after the appointment. The patterns also suggest that the firms are successful in managing this contraction.

Sales growth is negative from two years before the appointment year through two years after; the decline in year +1 is significant. Asset growth is negative in all years from year -2 to year +4; the declines in three of the seven years are significant. The decline finally appears to reverse in year +5. The ratio of current income to assets follows a similar pattern. In all eight years presented, current income to assets is significantly negative (i.e., less than market) for the sample firms. However, the ratio improves (i.e., moves closer to zero) from -1.99% in year +1 to -1.04% in year +5. Finally, stock returns are significantly negative in the year before the bank director is appointed. In the years that follow, however, returns are not significantly different from 0.

Because Morck and Nakamura (1992) present all of their results relative to

¹¹ Morck and Nakamura (1992) perform a similar analysis for financial performance after bank appointments.

industry means, it is difficult to compare our results to theirs precisely. It appears, however, that our results differ from theirs in one important way. They find significantly negative stock returns in five of the nine post-appointment years they examine. We do not find any in the five post-appointment years we report. Although not reported in the table, we also fail to find significantly negative returns (a) in years +6 and +7; and (b) when we measure firm stock returns relative to industry stock returns (reported in the Daiwa Analysts Guide). We have no explanation for the difference between our results and theirs.

Panel B reports the analogous patterns for firms with corporate appointments. Consistent with the results in previous sections, the patterns for firms with corporate appointments are different from those for firms with bank appointments. Up to the year of the corporate appointment sales and asset growth do not differ significantly from those of other firms. Instead, changes in pre-tax income are negative in both the year before and the year of the corporate appointments although these changes are not significant at conventional levels. In those same years, company stock returns are significantly negative. These patterns suggest that corporate directors are appointed to firms with internal difficulties that may be partially earnings related.

None of the performance measures differ significantly from 0 after the year of the corporate appointment except for sales and asset growth in year +1. In that year, firms with appointments experience abnormal growth of 2.39% and 2.51% (significant at the 10% level). Stock returns are positive at 4.19%, but not significantly so. These patterns are consistent with the corporate directors being sent to firms in need of assistance to turn around some temporary setback. There is no evidence of the sustained decline or contraction present in firms that appoint bank directors.

Overall, these results suggest that bank directors are appointed to firms that are in financial distress or in the process of contracting. After the bank directors arrive, these firms continue to contract, but their performance -- as measured by stock returns and

earnings -- does not deteriorate. Other corporations appear to send directors in response to different problems. After the corporate directors arrive, the firm sales and asset growth rebound, and their performance -- as measured by stock returns and earnings -- do not deteriorate, and, if anything, improve.

7. Changes in performance-appointment relations over time

Recently, some authors have argued that the importance of corporate relationships in Japan -- particularly those between firms and their main banks -- has weakened over time. Hoshi, Kashyap and Scharfstein (1992) find that healthier firms have reduced their reliance on bank borrowings, and, potentially, the ability of banks to monitor or intervene in the firms' management. Kester (1992) makes a similar argument. According to him, the successes of Japanese companies in the 1980s have allowed managers to distance themselves from interventions by the main bank and other firms.

If these arguments are correct, appointments of bank and corporate directors should be less sensitive to performance over time. In this section, we attempt to test for this by comparing the sensitivity of bank, corporate, and any outside director appointments to performance in the early and later half of our sample. Because we have only eight years of data (four years in each half) we recognize that our test may have limited power to detect a slow deterioration in these relationships.

We choose to focus on stock performance, and, therefore, present estimates that exclude the other performance variables and the relationship variables. The results for bank appointments are qualitatively similar for negative current income. The results for all three estimations are also qualitatively similar when we include the five relationship variables. In each logit estimation, we include a dummy variable that equals one if the firm-year is in the latter half of our sample (1985 to 1988). We also include three interaction terms equal to the product of the dummy variable and the stock return variable. If the appointment-

performance relation deteriorated over the 1980s, the coefficients on these interaction terms should be positive.

Table 9 presents our results. We find no evidence of a deterioration in appointment-performance sensitivity. None of the coefficients on the interaction terms in any of the three estimations is significant. And only three of nine coefficients even have a positive sign. At the same time, the coefficients on the (non-interacted) stock return variables are almost identical to their values in tables 2-4. (The coefficients also remain significant at conventional levels although their standard errors increase.)

The estimates provide one possible, albeit weak, piece of evidence for a decline in the importance of relationships. The constant terms in each of the three logits are negative, although they are not statistically significant. Over a longer time period, this is potentially consistent with a reduced importance for relationships.

Overall, our results are broadly consistent with Aoki and Sheard (1992). They argue that a main bank relationship can remain dormant if the industrial firm is performing well. However, "if the firm is mismanaged, external monitoring represented by the main bank is mobilized."

8. Summary and discussion.

The results in this paper suggest that the relationship oriented system of corporate governance in Japan substitutes for the more market oriented system in the U.S.

Appointments of 'outsiders' -- both bank directors and corporate directors -- increase significantly with poor stock performance; those of bank outsiders also increase with negative current income. We distinguish between monitoring and insurance-based interpretations by considering the impact of those interventions on incumbent managers. We find strong evidence that both types of outsider appointments are disciplinary -- top executive turnover increases substantially in the same year. It is noteworthy that our results reflect the largest

non-financial firms in Japan. It seems probable that the relationships -- as measured by bank borrowings, shareholder concentration, and enterprise group membership -- are stronger in smaller firms than in larger ones.

The finding that appointments of bank directors and corporate directors rarely coincide suggests that they may be motivated by different internal problems. Accordingly, we examine firm performance subsequent to the outside intervention. Our results suggest that bank directors are sent to manage contraction or financial distress, while corporate directors are sent to manage or reverse temporary problems.

Recently, several authors have argued that the efficacy of the relationships in Japan may be weakening. We conclude by testing for a deterioration in our sample and find little evidence for one. We recognize, however, that the absence of a deterioration may not be surprising given that the sample period was a relatively prosperous one for Japanese industrial companies and Japanese banks. The early 1990s, in contrast, have been economically difficult, particularly for Japanese financial institutions. It is an interesting question whether (or how) the current difficulties will affect the relations found in this paper.

More generally, this paper should interest those -- like Grundfest (1990) and Porter (1992) -- who have argued that the U.S. system should copy aspects of the Japanese system. Our results are consistent with their arguments that monitoring relationships exist in which banks and other corporations intervene in the management of poorly-performing firms. Compared to hostile takeovers or overt hostile pressure, these interventions appear to be less costly to initiate and less disruptive to carry out.

Our results, however, sharply dispute one of the supposedly major advantages of the Japanese system to those who advocate copying it -- the system's ability to ignore 'short-term' measures of performance. Current earnings and, particularly, current stock returns are important determinants of outside appointments. We favor a simple interpretation to reconcile these results to the widely-held view that Japanese firms are more long-term

oriented -- a company's current stock price provides a good measure of a company's current and future prospects.

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Table 1

Firm financial and governance characteristics

Average and medians of firm financial and governance characteristics for 119 large Japanese firms. Japanese companies are listed in Fortune Magazine's 1981 list of the largest international companies (by sales). Returns of Japanese companies do not include dividends and are lower than with dividend returns by approximately 1.25 per year. Yen values are converted into dollars using year-end yen-dollar exchange rates. Data on levels in panel 1.1 reflect the fiscal year ending 1980 unless otherwise indicated.

	<u>Mean</u>	<u>Median</u>	<u>Std. Dev.</u>
<u>1.1 Levels</u>			
Sales (\$ M)	2,401	1,580	2,464
Market value of equity (\$ M)	691	449	733
Current income to total assets (%)	5.40	4.65	4.39
Debt to total assets (%)	28.5	30.7	18.0
Debt of top lender to total debt (%)	14.1	13.2	6.9
Shares top 10 shareholders (% Kigyō Keiretsu Soran 1982)	39.6	36.8	11.9
Member of Financial Keiretsu (% Dodwell 1982)	64.7		
Member of Enterprise Keiretsu (% Dodwell 1982)	16.8		
<u>1.2 Panel Data - 1 year periods, 1980 - 1988</u>			
Stock returns	0.150	0.122	0.26
Sales growth	0.032	0.036	0.12
Change in pre-tax income to assets	-0.000	-0.000	0.02
Initial pre-tax income to assets	0.045	0.037	0.05
Pre-tax income is negative	0.088		
New director with bank experience	0.075		
New director with experience at non-financial corporation	0.059		
New director with experience at bank or non-financial corporation	0.129		
New representative director with bank experience	0.018		
New representative director with experience at non-financial corporation	0.008		
<u>1.3 Panel Data - 2 year periods, 1980 - 1988</u>			
Stock returns	0.315	0.299	0.36
Sales growth	0.065	0.071	0.19
Change in pre-tax income to assets	-0.003	-0.002	0.03
Initial pre-tax income to assets	0.045	0.037	0.05
Pre-tax income is negative one year or more	0.147		
New director with bank experience	0.133		
New director with experience at non-financial corporation	0.107		
New director with experience at bank or non-financial corporation	0.230		
New representative director with bank experience	0.029		
New representative director with experience at non-financial corporation	0.017		

Table 2
 Appointments of bank directors and performance

Maximum likelihood logit estimates of the likelihood that a new director was previously employed by a bank by two-year and one-year periods in Japanese firms as a function of sales growth, stock returns, earnings growth, and negative pre-tax income for 119 Japanese firms from 1980 to 1988. A separate logit estimation is run for each performance measure. All logits include dummy variables for the time period. Asymptotic standard errors are in brackets.

Logit estimates that at least one new director previously employed by a bank

Independent variables:	Two-year periods		One-year periods	
	Coeff. [S.E.]	Log Like.	Coeff. [S.E.]	Log Like.
Stock Return: same period	-0.71 [0.45]	-177.6	-0.01 [0.53]	-237.8
one lag	-0.36 [0.42]		-1.48 ¹ [0.56]	
two lags			0.30 [0.52]	
Sales growth: same period	-0.88 [0.81]	-182.5	-0.45 [1.24]	-241.4
one lag	-0.43 [0.83]		-0.58 [1.18]	
two lags			-0.35 [1.24]	
Change in pre-tax income / assets: same period	-1.05 [4.71]	-183.0	-1.57 [6.66]	-240.3
one lags	-2.71 [4.82]		8.80 [6.07]	
two lags			4.70 [6.43]	
Pre-tax income is negative: same period	0.89 ¹ [0.33]	-176.2	0.92 ⁵ [0.38]	-234.8
one lag			0.64 ¹⁰ [0.39]	
Mean dependent variable	0.133		0.075	
Obs.	466		933	

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.

Table 3
 Appointments of corporate directors and performance

Maximum likelihood logit estimates of the likelihood that a new director was previously employed by a different non-financial corporation by two-year and one-year periods in Japanese firms as a function of sales growth, stock returns, earnings growth, and negative pre-tax income for 119 Japanese firms from 1980 to 1988. A separate logit estimation is run for each performance measure. All estimations include dummy variables for the time period. Asymptotic standard errors are in brackets.

Logit estimates that at least one new director previously employed by non-financial corporation

Independent variables:	Two-year periods		One-year periods	
	Coeff. [S.E.]	Log Like.	Coeff. [S.E.]	Log Like.
Stock Return:				
same period	-1.04 ⁵ [0.50]	-155.0	-1.59 ⁵ [0.66]	-195.0
one lag	-0.92 ⁵ [0.47]		-1.39 ⁵ [0.61]	
two lags			-0.34 [0.64]	
Sales growth:				
same period	-0.20 [0.90]	-159.2	0.37 [1.38]	-200.0
one lag	-0.24 [0.92]		-1.52 [1.31]	
two lags			0.89 [1.40]	
Change in pre-tax income / assets:				
same period	-6.20 [5.21]	-158.3	-11.41 ¹⁰ [6.98]	-198.6
one lags	-4.73 [5.25]		-9.19 [6.67]	
two lags			-4.78 [7.23]	
Pre-tax Income is negative:				
same period	-0.21 [0.46]	-159.5	0.25 [0.53]	-200.4
one lag			-0.35 [0.58]	
Mean dependent variable	0.107		0.059	
Obs.	467		933	

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.

Table 4
Appointments of 'outside' directors and performance

Maximum likelihood logit estimates of the likelihood that a new director was previously employed by a different outside the firm -- by a bank or a different non-financial corporation -- by two-year and one-year periods in Japanese firms as a function of sales growth, stock returns, earnings growth, and negative pre-tax income for 119 Japanese firms from 1980 to 1988. A separate logit estimation is run for each performance measure. All estimations include dummy variables for the time period. Asymptotic standard errors are in brackets.

Logit estimates that at least one new director previously employed elsewhere

Independent variables:	Two-year periods		One-year periods	
	Coeff. [S.E.]	Log Like.	Coeff. [S.E.]	Log Like.
Stock Return: same period	-0.85 ⁵ [0.36]	-245.3	-0.58 [0.44]	-342.5
one lag	-0.67 ⁵ [0.34]		-1.37 ¹ [0.44]	
two lags			0.05 [0.45]	
Sales growth: same period	0.38 [0.66]	-252.7	0.22 [0.98]	-348.0
one lag	-0.35 [0.68]		-0.79 [0.93]	
two lags			0.05 [0.99]	
Change in pre-tax income / assets: same period	-4.13 [3.90]	-252.1	-5.92 [5.16]	-347.6
one lags	-4.10 [3.92]		1.73 [4.81]	
two lags			0.12 [5.11]	
Pre-tax income is negative: same period	0.51 ¹⁰ [0.29]	-248.2	0.73 ⁵ [0.32]	-344.0
one lag			0.32 [0.34]	
Mean dependent variable	0.230		0.129	
Obs.	466		933	

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.

Table 5

Appointments of bank and corporate directors versus performance and relationship measures

Maximum likelihood logit estimates of the likelihood that a new director was (1) previously employed by a bank and (2) previously employed by a different non-financial corporation over one-year periods in Japanese firms as a function of performance and relationship measures for 119 Japanese firms from 1980 to 1988. For bank appointments, performance is measured by stock returns and negative current income; for corporate appointments, by stock performance only. Relationship measures are (a) total borrowings to total assets; (b) the fraction of total borrowings lent by the largest lender; (c) the percentage of shares owned by the ten largest shareholders; (d) a dummy variable equal to one if Dodwell (1982) indicates the firm is associated with a financial keiretsu, and equal to zero otherwise; and (e) a dummy variable equal to one if Dodwell (1982) indicates the firm is associated with an enterprise keiretsu, and equal to zero otherwise. All estimations include dummy variables for the time period.

Logit estimates for one-year periods

Independent variables:	(1) At least one new director previously employed by bank	(2) At least one new director previously employed by non-financial corporation
	Coeff. [S.E.]	Coeff. [S.E.]
Stock Return: same period	0.27 [0.54]	-1.54 ⁵ [0.76]
one lag	-1.30 ⁵ [0.57]	-1.21 ¹⁰ [0.70]
two lags	0.61 [0.54]	0.37 [0.71]
Pre-tax Income is negative: same period	0.55 [0.40]	
one lag	0.33 [0.41]	
Total Borrowings / Total Assets	3.37 ¹ [0.91]	0.80 [0.94]
Top Lend / Total Borrowings	5.50 ⁵ [2.21]	-1.35 [2.15]
Pct. ownership top 10 shareholders	-0.51 [1.06]	3.43 ¹ [1.17]
Member Financial Keiretsu	-0.08 [0.30]	1.35 ¹ [0.40]
Member Enterprise Keiretsu	0.38 [0.40]	2.74 ¹ [0.40]
Log Likelihood	-222.5	-162.1
Mean dependent variable	0.075	0.059
Obs.	933	933

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.

Table 5B
Interactions of performance and relationship variables

Maximum likelihood logit estimates of the likelihood that a new director was previously employed by either a bank or other non-financial corporation in one-year periods in Japanese firms as a function of stock returns and relationship variables for 119 Japanese firms from 1980 to 1988. Each estimation includes the relevant performance variable, the relevant relationship variables, and the product of the performance variables and the relevant relationship variables. Performance variables are stock returns and negative current income. Relationship variables are (a) total borrowings to total assets; (b) the fraction of total borrowings lent by the largest lender; (c) the fraction of shares owned by the ten largest shareholders; (d) a dummy variable equal to one if Dodwell (1982) indicates the firms is associated with a financial keiretsu, and equal to zero otherwise; and (e) a dummy variable equal to one if Dodwell (1982) indicates the firms is associated with an enterprise keiretsu, and equal to zero otherwise. All estimations include dummy variables for the time period. Standard errors are heteroscedastic-consistent.

Logit estimates for one-year periods

Independent variables:	At least one new bank director	At least one new bank director	Independent variables:	At least one new corporate director
	Stock returns	Negative Current Income		Stock returns
	Coeff. [S.E.]	Coeff. [S.E.]		Coeff. [S.E.]
Performance: same period	-3.19 [2.20]	5.78 ⁵ [2.66]	Stock Return: same period	2.89 [3.09]
one lag	-1.35 [2.31]	-3.40 [2.85]	one lag	3.08 [3.05]
two lags	0.58 [2.24]		two lags	-0.62 [3.32]
Performance x total borrowings same period	5.67 ¹⁰ [3.06]	5.21 [4.15]	Stock return x share ownership same period	-9.49 ¹⁰ [5.26]
one lag	-0.10 [3.43]	-4.96 [4.12]	one lag	-6.42 [4.88]
two lags	-0.22 [3.15]		two lags	-2.58 [4.83]
Performance x top lend same period	10.98 [8.03]	-17.93 ⁵ [8.16]	Stock return x financial keiretsu same period	-0.43 [1.64]
one lag	7.25 [8.27]	13.27 ¹⁰ [7.96]	one lag	0.09 [1.75]
two lags	3.27 [8.10]		two lags	-1.78 [2.01]
Performance x financial keiretsu same period	-0.52 [1.08]	-0.37 [0.81]	Stock return x enterprise keiretsu same period	-0.54 [1.72]
one lag	-2.20 ¹⁰ [1.14]	-0.63 [0.81]	one lag	-2.19 [1.81]
two lags	-0.72 [1.13]		two lags	1.87 [2.15]
Log likelihood	-219.3	-222.8	Log likelihood	-159.1
Mean dependent variable	0.075	0.075	Mean dependent variable	0.059
Obs.	933	933	Obs.	933

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.

Table 6

Increase in turnover in years of 'outsider' appointments

Increase in likelihood of president turnover, president turnover not becoming chairman, representative director turnover, and director turnover in periods when new directors are appointed who have (1) previous experience at banks, (2) previous experience at other non-financial companies, and (3) previous experience at either a bank or non-financial corporation. Reported increases are coefficients on appointment dummy variables in regressions of management turnover. Control for directorship cycle controls for whether the firm's board is appointed on an even or odd year cycle. The mean likelihood of president turnover, president turnover not becoming chairman, representative director turnover, and director turnover are, respectively, 15.11%, 3.86%, 14.36%, and 12.05% over one-year; 30.50%, 7.84%, 28.64%, and 23.96% over two-years. Standard errors are in brackets.

	Increase in % Turnover President	Increase % turnover president does not become chairman	Increase in % turnover representative directors	Increase in % turnover directors	N obs.
A. One-year periods - no control directorship cycle					
1. New director from bank	8.66% ⁵ [4.13]	10.15% ¹ [2.41]	13.50% ¹ [2.40]	6.31% ¹ [1.28]	933 - 944
2. New director from (outside) non-financial corporation	13.41 ¹ [4.63]	3.09 [2.70]	9.16 ¹ [2.81]	4.04 ¹ [1.45]	933 - 944
3. New director from bank or (outside) non-financial corporation	10.51 ¹ [3.26]	7.27 ¹ [1.90]	11.76 ¹ [1.91]	5.75 ¹ [1.01]	933 - 944
B. One-year periods - control directorship cycle					
1. New director from bank	8.08% ⁵ [4.15]	10.08% ¹ [2.41]	12.00% ¹ [2.43]	4.87% ¹ [1.15]	933 - 944
2. New director from (outside) non-financial corporation	12.70 ¹ [4.64]	3.04 [2.73]	7.57 ¹ [2.76]	2.49 ¹⁰ [1.31]	933 - 944
3. New director from bank or (outside) non-financial corporation	9.76 ¹ [3.27]	7.17 ¹ [1.91]	10.07 ¹ [1.91]	4.15 ¹ [0.91]	933 - 944
C. Two-year periods					
1. New director from bank	5.12% [5.73]	10.38% ¹ [3.81]	11.75% ¹ [3.61]	6.82% ⁵ [1.64]	459 - 472
2. New director from (outside) non-financial corporation	5.96 [6.20]	2.31 [4.16]	12.26 ¹ [3.94]	0.31 [1.83]	459 - 472
3. New director from bank or (outside) non-financial corporation	5.03 [4.58]	7.28 ⁵ [3.05]	12.98 ¹ [2.87]	4.50 ¹ [1.34]	459 - 472

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.

Table 7
Increase in turnover in years of 'outsider' appointments controlling for performance

Increase in likelihood of president turnover, president turnover not becoming chairman, representative director turnover, and director turnover in periods when new directors are appointed who have (1) previous experience at banks, (2) previous experience at other non-financial companies, and (3) previous experience at either a bank or non-financial corporation. Reported increases are coefficients on appointment dummy variables in regressions of management turnover. Control for directorship cycle controls for whether the firm's board is appointed on an even or odd year cycle. Control for performance include controls for negative current income and for stock performance. The mean likelihood of president turnover, president turnover not becoming chairman, representative director turnover, and director turnover are, respectively, 15.11%, 3.86%, 14.36%, and 12.05% over one-year; 30.50%, 7.84%, 28.64%, and 23.96% over two-years. Standard errors are in brackets.

	Increase in % Turnover President	Increase % turnover president does not become chairman	Increase in % turnover representative directors	Increase in % turnover directors	N obs.
A. One-year periods - control directorship cycle and performance					
1. New director from bank	5.67% [4.28]	7.64% ¹ [2.46]	11.10% ¹ [2.48]	3.26% ¹ [1.15]	919 - 933
2. New director from (outside) non-financial corporation	13.04 ¹ [4.68]	2.67 [2.71]	7.28 ¹ [2.76]	2.45 ¹⁰ [1.27]	919 - 933
3. New director from bank or (outside) non-financial corporation	8.49 ⁵ [3.34]	5.50 ¹ [1.92]	9.36 ¹ [1.94]	3.19 ¹ [0.90]	919 - 933
B. Two-year periods - control for performance					
1. New director from bank	2.57% [5.85]	7.70% ⁵ [3.86]	9.78% ¹ [3.65]	5.05% ¹ [1.61]	452 - 466
2. New director from (outside) non-financial corporation	6.66 [6.23]	2.19 [4.31]	12.11 ¹ [3.91]	0.73 [1.75]	452 - 466
3. New director from bank or (outside) non-financial corporation	3.74 [4.64]	5.52 ¹⁰ [3.07]	11.71 ¹ [2.88]	3.55 ¹ [1.29]	452 - 466

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.

Table 8

Company performance around years of 'outside' director appointments

Company sales growth, asset growth, change in pre-tax income to assets, pre-tax income levels, and stock returns before and after appointments of directors with previous experiences at banks or other non-financial corporations. Reported performance is the coefficient [and standard error] from a regression of performance against a dummy variable for the relevant 'outside' appointment. The regressions include dummy variables for the year, so performance is relative to average performance for all firms in a given year. Year 0 is the year of the appointment.

A. At least one new director appointed from bank

	Sales Growth	Asset Growth	Change Pre-tax Income to Assets	Pre-tax Income to Assets	Stock Return	N - All firm years N - Bank appointment
Year -2	-0.48 [1.30]	-3.72 ¹ [1.34]	0.16 [0.25]	-2.14 ¹ [0.56]	1.68 [2.94]	933 72
Year -1	-0.86 [1.37]	-1.53 [1.35]	0.37 [0.26]	-1.77 ¹ [0.55]	-8.21 ¹ [3.07]	934 72
Year 0	-0.57 [1.31]	-1.48 [1.28]	-0.13 [0.25]	-1.90 ¹ [0.53]	0.00 [3.02]	935 72
Year +1	-2.32 ¹⁰ [1.29]	-3.94 ¹ [1.24]	-0.09 [0.29]	-1.99 ¹ [0.53]	-0.02 [3.14]	936 72
Year +2	-0.15 [1.39]	-1.90 [1.37]	0.40 [0.31]	-1.41 ⁵ [0.55]	-0.17 [3.38]	819 62
Year +3	0.32 [1.56]	-3.00 ⁵ [1.53]	-0.11 [0.34]	-1.27 ⁵ [0.59]	-3.22 [3.71]	702 53
Year +4	-1.56 [1.66]	-1.73 [1.66]	0.20 [0.36]	-1.22 ⁵ [0.60]	-1.00 [4.00]	585 48
Year +5	2.43 [1.86]	3.45 ¹⁰ [1.85]	0.15 [0.41]	-1.04 ¹⁰ [0.64]	2.88 [4.59]	458 41

B. At least one new director appointed from outside non-financial company

	Sales Growth	Asset Growth	Change Pre-tax Income to Assets	Pre-tax Income to Assets	Stock Return	N - All firm years N - Corp. Appointments
Year -2	0.53 [1.45]	1.60 [1.33]	-0.09 [0.28]	0.17 [0.63]	-1.53 [3.29]	933 55
Year -1	-1.60 [1.53]	-0.59 [1.53]	-0.34 [0.29]	-0.17 [0.61]	-7.57 ⁵ [3.44]	934 55
Year 0	0.08 [1.46]	0.59 [1.44]	-0.38 [0.28]	-0.55 [0.60]	-7.49 ⁵ [3.36]	935 55
Year +1	2.39 ¹⁰ [1.44]	2.51 ¹⁰ [1.41]	0.02 [0.32]	-0.52 [0.61]	4.19 [3.51]	936 55
Year +2	1.36 [1.53]	-0.21 [1.52]	0.36 [0.34]	0.08 [0.61]	1.17 [3.68]	819 50
Year +3	-0.11 [1.75]	0.99 [1.74]	0.13 [0.38]	0.51 [0.66]	0.77 [4.18]	702 41
Year +4	0.53 [1.79]	1.48 [1.82]	-0.36 [0.39]	0.25 [0.65]	2.03 [4.38]	585 40
Year +5	0.57 [2.17]	0.10 [2.17]	-0.19 [0.48]	0.09 [0.75]	-0.33 [5.35]	468 29

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.

Table 9
 Appointments of 'outside' directors and performance over time

Logit regressions of the likelihood that a new director was previously employed by a bank, by a different non-financial corporation, or by either in one-periods in Japanese firms as a function of stock returns and time period for 119 Japanese firms from 1980 to 1988. The regressions include a dummy variable for whether the firm-year is in the latter-half of the sample period (1985-1988). The regressions also include interaction terms which equal the product of the stock return variables and the time period variable. All regressions include dummy variables for the time period. Asymptotic standard errors are in brackets.

Independent variables:	New bank director	New corporate director	New bank or corporate director
	Coeff. [S.E.]	Coeff. [S.E.]	Coeff. [S.E.]
Dummy variable for firm-years 1985-1988	-0.35 [0.59]	-0.90 [0.64]	-0.67 [0.45]
Stock Return: same period	0.14 [0.73]	-1.91 ² [0.96]	-0.51 [0.61]
one lag	-1.35 ¹⁰ [0.75]	-1.38 ¹⁰ [0.83]	-1.30 ⁵ [0.59]
two lags	-0.28 [0.64]	-0.18 [0.83]	-0.15 [0.56]
Stock Return x Years 1985-1988 same period	-0.19 [1.09]	0.61 [1.33]	-0.11 [0.87]
one lag	-0.41 [1.13]	-0.02 [1.23]	-0.18 [0.88]
two lags	1.44 [1.06]	-0.34 [1.29]	0.48 [0.87]
Log likelihood	-236.8	-194.9	-342.1
Mean dependent variable	0.075	0.059	0.129
Obs.	933	933	933

Significantly different from zero ¹ at the 1% level; ⁵ at the 5% level; and ¹⁰ at the 10% level.